

Leader Member Exchange and Its Influence on Job Involvement among Staff Nurses

Nora Magdy Ibrahim Ahmed*, Prof. Dr. Rabab Mahmoud Hassan** and Dr. Laila Ahmed Abd El-hamid***

* B.CS of Nursing, 2017, ** Professor of Nursing Administration-Faculty of Nursing -Ain Shams University, *** Lecturer of Nursing Administration-Faculty of Nursing Ain Shams University

Abstract

Background: Leader member exchange is the quality of the exchange relationship between supervisor and the nurses of an agency. This relation had its outcome in staff and organization. **Aim:** This study aimed to assess the Influence of leader member exchange on Job Involvement among staff nurses. **Research design:** A descriptive correlational design was used in this study. **Setting:** The study was conducted in cardiovascular hospital, which affiliated to Ain-Shams University Hospitals. **Subjects:** The study sample consisted of 119 staff nurses. **Tools of data collection:** Data were collected by using two tools namely; Leader Member Exchange Survey and Job involvement Scale. **Results:** Displays that, more than one quarter of the studied staff nurses had high total perception level regarding leader member exchange while, more than half of them had moderate level of Job involvement. **Conclusion:** there was highly statistically significant positive correlation between total studied staff nurses' perception regarding leader member exchange and their total job involvement level. **Recommendation:** Enhance mutual relationship between leader and member which help them to express their feeling and introduce their work problem and share in solving it.

Key words: Job Involvement, Leader Member Exchange & Staff Nurses.

Introduction

Leader member exchange (LMX) is a factor affects employees' perception about different aspects of the organization. LMX affects perception of organizational support, good relationships that should be established between managers and followers to achieve competitive advantages. Furthermore, supervisor and subordinate should set mutual work-related goals which will develop a higher quality relationship between supervisor and subordinates. Exchange relationship demonstrates the relationship between supervisors and subordinates during the work (Liniger et al., 2019).

A positive LMX was positively associated with job satisfaction, job performance, commitment to organizational change, trust between leader and follower, work climate, willingness to help coworker, and satisfaction with leadership, LMX support effective communication, (Mugira, 2022), leader-member exchange positively related to the feeling of energy for employees, which later related to the involvement in high-level

innovative work, and also innovative behavior (Heidari et al., 2022).

Organization with LMX has employees with high degree of job involvement. People put their best to the job and report good performance (Niswaty et al., 2021). An organization achieves a sense of competence and matches their skills with requirements of the job and views the jobs as satisfying the needs of achievement and recognition. This reduces absenteeism and turnover, thus, saving organizational costs of recruiting and training replacements (Tesi et al., 2019).

Job Involvement is strongly influenced by the perception towards work. Job Involvement is more associated with psychological identification of worker's opinion on job. It plays a vital role in determining the job performance of staff nurses. Employee job involvement has been predicted to have a significant impact on numerous organizationally important outcomes. Job involvement contributes importantly to organizational effectiveness, productivity, and morale by engaging employees deeply in their work and

making it a meaningful and fulfilling experience (Gopinath & Kalpana, 2019).

Job Involvement is the degree to which an employee identifies with his or her job, actively participates in it. It considers his or her job performance to be important to his or her self-worth. Employees with a high level of this involvement strongly identify with and really care about the kind of work they do. Their positive attitude leads them to contribute to their work in positive ways (Carius & Job, 2019).

High levels of this involvement have been found to be related to fewer absences, lower resignation rates, (Kahn, 2020), and higher employee engagement with work. It enhances individuals' work performance by motivating them to exert greater effort and use their creativity to solve problems and work intelligently (Frank et al., 2022).

LMX affects job involvement, sense of competence, job satisfaction, and job performance. A favorable LMX results in positive consequences of these factors. Let us see how LMX affects these. Job involvement indicates the extent of people's identification with, or ego involvement, in the job. Job involved people spend more time on job and turn out better performance. Challenging jobs influence employees to get involved with their jobs. Similarly, people with high need for achievement and high work ethic feel involved in jobs (Sahmueller et al., 2022).

Significance of the study

Now days, staff nurses are vital to the effectiveness of the organizational change and play an important role in achieving the organization goals. Leader-member exchange has gained a lot of attention from researchers because of its consequence on employees work performance during the hospital round, the researcher observed that there is a conflict between nurse manager and their subordinates which affect their relationship. Nurse manager not give change for staff nurses to take part in decision making, not cares about their satisfaction at work, ignore any complain from them, not cares about their general satisfaction at work (Gottfredson et al., 2020). Building a good relations and supervisor is the only way to

make the staff nurses feel that his goals are aligned with the goals of the organization. They will be obliged to do their best for achieving organizational definite success. So it is important to finding out the relationship between leader-member exchange and job involvement among staff nurses.

Aim of the Study

This study aimed to assess the Influence of leader member exchange on Job Involvement among staff nurses, through:

- Assessing leader-member exchange level among staff nurses,
- Assessing job involvement level among staff nurses
- Finding out relationship between leader-member exchange and job involvement among staff nurses.

Research Question

What is the Influence of leader member exchange on Job Involvement among staff nurses?

Subjects and Methods

Research Design:

A descriptive correlational design was used to carry out this study. This design was used to determine the association between leader -member exchange and job involvement of staff nurses.

Research setting:

The study was conducted at cardiovascular hospital, affiliated to Ain Shams University hospitals. The study was conducted at 9 units in cardiovascular hospital. This units are (emergency department, operation department (cardiothoracic surgery, chest surgery, catheter lab), ICU (adult, pediatric), CCU, inpatient units, 6th and 7th floor). The hospital total beds capacity 150 beds.

Subjects

The study subject consisted of all staff nurses working in a formentioned the settings at

the time of data collection. This number was 119 staff nurses.

Sample criteria

All Staff nurses were eligible to be participated in the study sample with no exclusion criteria.

Data collection tools:

Two tools were used to collect data for the current study namely; Leader Member Exchange Survey and Job involvement Scale.

Tool I: Leader Member Exchange survey:

It was consisted of two parts:

Part 1: Personal and Job characteristics of staff nurses:

This part was used for the collection of data related to the personal and job characteristics of staff nurses including: age, gender, marital status, level of education, and years of experience, in addition to the hospital and work unit.

Part 2: This part aimed to assess staff nurses' perception about leader member exchange, was developed by **Liden & Maslyn, (1998)** and adopted from **Moustafa, (2019)**.

It consisted of 39 items divided into four dimensions; affect (10 items), loyalty (10 items), contribution (9 items) and professional respect (10 items).

Scoring system

Staff nurses' responses were measured on a five points likert scale ranging from strongly agree = 5, Agree = 4, Neutral = 3, Disagree =2, strongly disagree =1. Negative statements given reverse score. Items scores are added together to get a dimension score for every participant; then a mean score is calculated for each dimension in total of each dimension.

- A mean % score is calculated for each dimension by dividing the total dimension score by the number of items in the dimension *5 (max. score).

- Low perception <60% (<117)

- Average perception 60% -≤75% (117-146)

- High perception >75% (147-195)

Tool II: Job involvement Scale:

This tool aimed to measuring job involvement level among staff nurses, It developed by **Kanungo (1982)**, and adopted from **Bader (2017)**.

It consisted of 30 items divided into four dimensions: Work as a central life interest (7 items), Active participation in the job (11 items), Performance as central to self-esteem (7 items) and Performance compatible with self-concept (5 items).

Scoring system:

Staff nurses' responses were measured on 3point Likert scale ranging from Always =3, Often=2, Rarely =1.

A mean % score is calculated for each dimension by dividing the total dimension score by the number of items in the dimension *3 (max. score).

- Low perception < 60% (<54)

- Average perception 60% ≤75% (54-67)

- High perception > 75% (68-90)

II. Operational Design:

The operational design of this study included three phases namely: preparatory phase, pilot study and field work.

Preparatory phase:

This phase started at the beginning of December 2022 to and was completed at the end of January 2023. In this phase, the researcher reviewed the national, international, current, and past related literature, and used textbooks, articles, journals, and the internet to be acquainted with the topic of the study, subjects of the study, and tools.

Pilot study:

The pilot study was conducted on 12 staff nurses who were selected randomly and

represented about 10% of the main study subjects.

The pilot study aimed to examine the applicability of the tool, and clarity of language, and assess the feasibility and suitability of the designated tools. It also served to estimate the time needed to fill in the forms by each study subject and identify potential obstacles and problems that may be encountered during data collection.

The pilot study took two weeks in December 2022. It showed that the staff nurses took 25-30 minutes to fill in the questionnaire sheets.

Data obtained from the pilot study was analyzed, and no modifications were made. So, the study subjects who participated in the pilot were included in the main study sample.

Field work:

The fieldwork started after getting official permissions to conduct the study. It took three months starting at the beginning of February 2023 and completed at the end of April 2023. The researcher visited the study setting, met with the hospital's nursing directors to explain the study's aim, and got their approval and cooperation. The researchers introduced herself to staff nurses in the workplace to explain the aim and components of the tools, invited staff nurses to participate in data collection, and instructed them on how to fill them in.

Data was collected three days per week on the morning and afternoon shifts. The appropriate time for data collection was according to staff nurses work schedule and workload, the researcher collected about 13 to 15 questionnaires every week. Filled sheets were distributed to the participants at their workplace. Then the filled sheets were collected by the researcher on the same or next day. The filled sheets were handed back to the researchers to check each one to ensure its completion.

Ethical Considerations:

Prior to the study conduction, the study protocol was approved by the Scientific Research Committee at Faculty of Nursing - Ain Shams University. In addition; all subjects were informed that participation in the study was voluntary and that the collected data would be treated confidentially. Anonymity of each participant was assured by allocation of a code number to the questionnaire sheets. Subjects were informed that the collected data were used for the research purpose only. Each participant was also informed that he/she has right to withdraw from the study at any time without giving reason.

III. Administrative design:

Official letters requesting permission to conduct the study were directed from the Dean of Faculty of Nursing - Ain Shams University to the medical and nursing directors of- Ain Shams Hospital to obtain their approval to carry out this study. These letters clarified the aim of study and its procedures. A photocopy of data collection forms was attached to the request letters.

IV. Statistical design:

Data entry and Statistical analysis were performed on SPSS 20.0 software package. The results were presented using descriptive Statistics. Cronbach alpha coefficient was calculated to assess the reliability of two scales. Data were presented using descriptive statistics in form of numbers and percentages, mean, standard deviation. Chi square test was used to examine the relationship between two qualitative variables but when the expected count is less than 5 in more than 20% of the cells; Fisher's Exact Test was used. Pearson Correlation Coefficient (**r**): Correlation was used as a measure of the strength of a linear association between two quantitative variables. Statistical significance was considered to be Significant at $P < 0.05$ and highly significant at $P < 0.001$.

Results

Table (1): Shows that most studied nurses (92.5%) had age from < 30 years with mean 29.98 ± 8.73 , more than half of them are female and single (58% & 51.3%) respectively and less than half of participants (47.9%) had bachelor degree in nursing. Also, less than two thirds of them (64.7%) worked at critical care unit majority of them (89.9%) had less than 10 years and nearly two thirds of them (66.4%) not attending training course

Figure (1): Indicates that more than one quarter of the studied nurses (26%) had high total perception level regarding leader member exchange. While less than half of them (47%) had low total perception level regarding leader member exchange

Figure (2): Indicates that less than one quarter of the studied nurses (22%) had high Job involvement level, while more than half of them (52%) had moderate level.

Table (1): Distribution of personal characteristics of staff nurses in study sample (n= 119).

Personal characteristics	No.	%
Age (year)		
< 30 years	110	92.5
30-40 Years	6	5.0
>40 years	3	2.5
Mean± SD	29.98±8.73	
Gender		
Female	69	58
male	50	42
Marital status		
Single	61	51.3
Married	58	48.7
Qualification		
Nursing school Diploma	7	5.9
High-average diploma	55	46.2
Bachelor degree in nursing	57	47.9
Workplace unit		
Critical care unit	77	64.7
Non critical care unit	42	35.3
Years of experience		
<10 years	107	89.9
10 years to 20 years	7	5.9
>20 years	5	4.2
Mean± SD	9.64±7.68	
Attended training courses about		
Yes	40	33.6
No	79	66.4

Table (2): Shows that there was high statistically significant relation between total perception level regarding Leader member exchange of the studied nurses and their qualification and there was statistically significant relation between total perception level regarding Leader member exchange of the studied nurses and their Attended any training courses and Workplace unit.

Table (3): indicates that there were statistically significant relations between total job involvement level of the studied nurses and their all personal characteristics except their age.

Table (4): indicates that that there was high statistically significant positive correlation between studied nurses' perception regarding leader member exchange and their job involvement.

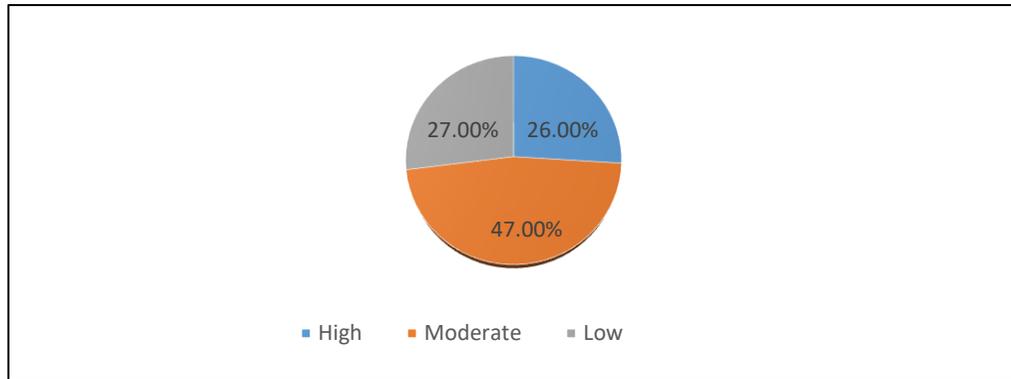


Figure (1): Staff nurses total perception level regarding leader member exchange (n= 119)

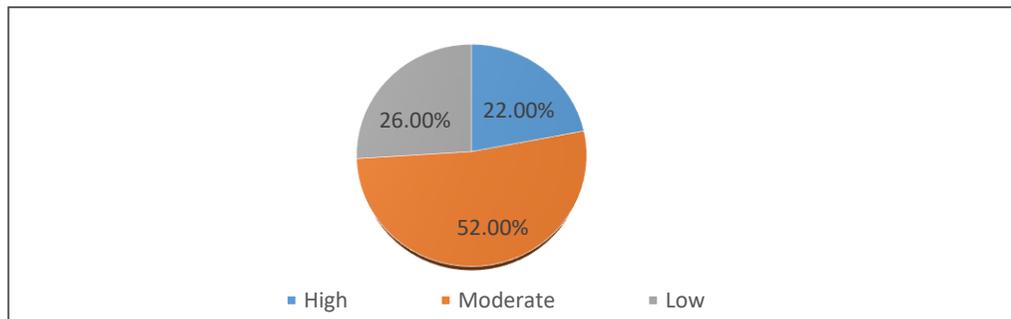


Figure (2): Total Job involvement level among staff nurses (N= 119)

Table (2): Relationship between staff nurses’ personal characteristics and their perception level regarding leader member exchange (n=119).

Personal characteristics	Staff nurses perception level regarding Leader member exchange						X2	P.value
	High		Moderate		Low			
	No.	%	No.	%	No.	%		
Age (years)								
< 30 years	25	21	50	42	35	29.5	1.063	.064
30-40 Years	1	0.8	3	2.5	2	1.7		
More than 40 years	1	0.8	1	0.8	1	0.8		
Gender								
Female	14	11.8	30	25.2	25	21	8.80	.003
Male	5	4.2	30	25.2	15	12.6		
Marital status								
Single	11	9.2	25	21	25	21	.061	.970
Married	8	6.7	20	16.8	30	25.2		
Qualification								
Nursing Diploma	1	0.8	6	5	0	0	6.420	.009**
Above average degree	5	4.2	30	25.2	20	16.8		
Bachelor degree	2	1.6	30	25.2	25	21		
Years of experience								
Less than 10 years	7	5.9	50	42	50	42	1.305	.059
10 - 20 years	0	0	5	4.2	2	1.6		
More than 20 years	1	0.8	1	0.8	3	2.5		
Attended any training courses								
Yes	10	8.4	10	8.4	20	16.8	4.201	.010*
No	9	7.5	50	42	20	16.8		
Workplace unit								
Critical care unit	4	3.7	6	5	10	8.4	4.077	.011*
Non critical care unit	5	4.2	5	4.2	5	4.2		

(*) statistically significant at p<0.05 (***) high statistically significant at p<0.01

Table (3): Relationship between staff nurses' personal characteristics and job involvement (n=119).

Personal characteristics	Mean	SD	X2	P.Value
Age (years)				
< 30 years	30.54	15.31	0.233	.054
30-41 Years	30.72	15.46		
More than 40 years	33.00	15.27		
Gender				
Female	29.97	14.77	7.50	.013*
Male	30.97	15.43		
Marital status				
Single	30.96	15.17	1.014	.001*
Married	30.60	15.51		
Qualification				
Nursing Diploma	30.83	15.20	2.020	.007*
Above average degree	29.39	15.51		
Bachelor degree	32.37	15.57		
Years of experience				
Less than 10 years	30.57	15.31	3.064	.023*
10 -20 years	30.70	15.55		
More than 20 years	33.00	15.27		
Attended any training courses				
Yes	31.52	14.07	2.001	.000*
No	32.49	13.72		
Workplace unit				
Critical care unit	30.52	15.17	5.201	.011*
Non critical care unit	31.79	15.82		

(*) statistically significant at $p < 0.05$

Table (5): Correlation between total leader member exchange and job involvement among staff nurses

Correlation	Leader member exchange
job involvement	Pearson Correlation
	Sig. (2-tailed)
	.172
	.000**

** . Correlation is significant at the 0.01 level (2-tailed).

(**) Highly statistically significant at $P < 0.001$

Discussion

The relationship between supervisor and subordinates is one of the keys of increased nurses' work engagement and job performance. Therefore, supervisor must know how to build good relationships with subordinates, and vice versa. Leader Member Exchange (LMX) is positively correlated with some desired results, including subordinate involvement, job satisfaction, and organizational commitment. This happens because the supervisor understands how far the potential possessed by subordinates and assigns tasks to subordinates according to their abilities. It can make subordinates who carry out these tasks will not feel burdened by the task given (Tanskanen et al., 2022).

Concerning staff nurses total perception level regarding leader member exchange the current study indicated that more than one

quarter of the studied staff nurses had high total perception level regarding of leader member exchange. While, less than half of them had low total perception level regarding of leader member exchange. This may be attributed to the highly need to respectable mutual relationship.

These results were incongruent with a study among nurses which entitled organizational support and leader member exchange as perceived by staff nurses showed that slight more than three fifth of studied staff nurses had moderate perception toward leader member exchange (Moustafa et al., 2022). Also, these findings disagreed with a study on leader member exchange and intention to quit among staff nurses, which conducted by (Badran, 2022), who revealed that more than two thirds of staff nurses had moderate perception level regarding leader member exchange.

Regarding total job involvement level among staff nurses the present study indicated that less than one quarter of the studied staff nurses had high level regarding total job involvement level, while more than one quarter of them had low total of job involvement level. This may be due to the support of management system and the appreciation from supervisors which increases staff nurses loyalty and job involvement.

This result was incompatible with a study on the relationship between job involvement and organizational citizenship behavior among nursing personnel, and concluded that more than two-thirds of the studied participants had high level of job involvement (**Abd El Gaid et al., 2023**). Moreover, this result was incongruent with study on role modeling effects: how leader's job involvement affected follower creativity, and reported that, more than two thirds have high level of job involvement (**Hu et al., 2023**).

Regarding relationship between staff nurses' personal characteristics and their perception regarding leader member exchange perception the present study showed that there was high statistically significant relation between total perception level regarding Leader member exchange of the studied staff nurses and their qualification and there was statistically significant relation between total perception level regarding Leader member exchange of the studied staff nurses and their Attended any training courses and Workplace unit. This may be due to with high qualification nurses point of view changes to better and also make more excuses to their supervisors' behaviors, beside the training program increases the knowledge and awareness of nurses toward the importance of mutual relationship with supervisors.

These findings were incompatible with a study on bidirectional leader-member exchange and the impact on middle manager job satisfaction, and found that showed that there were no significant correlations between any of the demographic characteristics and leader member exchange (**Collera, 2022**). In addition, these results were in contrast with study about leader-member exchange, feelings of energy, and involvement in creative work, and reported that there was no statistical significant relation

between participants perception of leader member exchange of the studied nurses and their educational level (**Atwater & Carmeli, 2020**).

As regards relationship between staff nurses' personal characteristics and job involvement the current study indicated that there was high statistically significant relation between total job involvement level of the studied staff nurses and their marital status and attended any training courses. Also, there was statistically significant relation between total job involvement level of the studied staff nurses and their gender, qualification, years of experience and workplace unit. This may be because the years of experience and long working period help staff nurses improve relationship with others, team work, and cooperation that help increasing loyalty and job involvement.

These results were supported by they reported that, there were highly significant relations between total job involvement of studied nurses and years of experience. While, there were significant relation with age, gender and qualification (**Abd Elmohsen et al., 2022**). In addition, the current study findings supported by the study on impact of job involvement towards organizational commitment and job satisfaction, and revealed that there were statistical significant relations among job involvement, age and gender (**Shenbaham & Manonmani, 2020**). Moreover, these results, agreed with a study on nurses' job involvement and its relation to their organizational citizenship behavior, and found that there was no statistical significance difference between job involvement and social demographic characteristics except with years of experience (**Mabrouk & El-Shrief, 2021**).

As regards the correlation between total leader member exchange and job involvement among staff nurses the current study indicated that that there was highly statistically significant positive correlation between the total studied staff nurses leader member exchange and the total studied nurses job involvement. This may be explained by the fact that the respectable mutual supervisor-subordinates relationship and being appreciated make nurses do their best to prove to their supervisors that they are

responsible which increases their job involvement.

These results were supported by a study on relationship between leader member exchange, high-involvement and employee resilience on extra-role performance: mediating role of employee engagement, and revealed that that all the leader member exchange had a positive influence on employees' extra role performance through staff nurses engagement (Gupta & Sharma, 2021). In addition, these findings were in the same line with a study about incidence of leader-member exchange quality, communication satisfaction, and employee work engagement on self-evaluated work performance, and showed that staff nurses work engagement was significantly predicted by leader-member exchange quality (Banderali & Alvarado, 2022). Moreover, in line with these results a study on leader-member exchange, organizational identification and the mediating role of job involvement for staff nurses, demonstrated that job involvement mediates the positive effects of leader-member exchange quality on organizational identification (Katrinli et al., 2020).

Conclusion:

The study findings lead to the conclusion that, more than one quarter of the studied nurses had high total perception level regarding of leader member exchange, and more than one quarter of them had moderate level, while less than half of them had low total perception level regarding of leader member exchange. Also, less than one quarter of the studied nurses had high total of job involvement level, and more than half of them had moderate level, while more than one quarter of them had low total of Job involvement level. In addition, there was high statistically significant positive correlation between the total studied nurses' leader member exchange and the total studied nurses job involvement.

Recommendations:

- Nurse Managers have to develop respectful, friendship relation with their staff.

- Continuously meet with staff nurses to discussion their problems and give them feedback about their performances

- Provide equally incentives system for appreciating positive behaviors of employees.

- Delegate some tasks for staff nurses in level of their abilities to increase staff nurses to increase their involvement and participation in work.

- Enhance mutual relationship between leader and member which help them to express their feeling and introduce their work problem and share in solving it

At research level:

- Further research is proposed to assess the relation between leader member exchange and organizational citizenship behaviors

- Effect of educational program for nurses manager about leader-member exchange on staff nurses job involvement

- The generalizability of the findings of this study, it would be useful to replicate this study in other different settings.

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