

The Mediating Role of Trust in Manager in The Effect of Leader-Member Exchange on Job Satisfaction in Nursing*

Hemşirelerde Lider-Üye Etkileşiminin İş Doyumuna Etkisinde Yöneticiye Güvenin Aracı Rolü

Nazlıhan Efe Sayan¹, Aysun Türe²

¹Bandırma 17 Eylül University, Faculty of Health Sciences, Department of Nursing Management, Balıkesir, Türkiye

²Eskişehir Osmangazi University, Faculty of Health Sciences, Department of Nursing Management, Eskişehir, Türkiye

* This article is derived from Nazlıhan Efe Sayan's master's thesis entitled "The mediating role of trust in the effect of leader-member interaction on job satisfaction nurses working in a university hospital", conducted under the supervision of Aysun Türe.

Cite as: Efe Sayan N, Türe A. The mediating role of trust in manager in the effect of leader-member exchange on job satisfaction in nursing. Journal of Health and Nursing Management. 2024;11(3):442-452.

DOI: 10.54304/SHYD.2024.65471

Abstract

Aim: The aim of the study is to determine the mediating role of trust in manager in the effect of leader-member exchange on job satisfaction of nurses working in a university hospital.

Method: The sample of the study consists of 422 nurses working in a university hospital in Eskişehir province. The data of the study were collected in January-October 2020 with the "Leader-Member Exchange Scale", "Nurse Job Satisfaction Scale", "Trust in Manager Scale". The data obtained were analyzed using SPSS for Windows 25.0 and AMOS 23.0 programs.

Results: As a result of the analysis, it was determined that leader-member exchange had a significant and positive effect on job satisfaction ($\beta=0,766, p<0,05$), leader-member exchange had a significant and positive effect on trust in manager ($\beta=0,883, p<0,05$), trust in manager had a significant and positive effect on job satisfaction ($\beta=0,496, p<0,05$) and trust in manager partially mediated the effect of leader-member exchange on job satisfaction (0,204, 0,689).

Conclusion: The mediating role of trust in manager in the effect of leader-member exchange on job satisfaction in nurses helps us to understand the importance of nurses' relationships with managers in the organization on job satisfaction. At the same time, the leader-member exchange variable is important in increasing job satisfaction and trust in managers in nurses with professional roles and responsibilities.

Keywords: Nurse, leader-member interaction, job satisfaction, trust in manager.

Öz

Amaç: Araştırmanın amacı bir üniversite hastanesinde görev yapan hemşirelerin lider-üye etkileşiminin iş doyumuna etkisinde yöneticiye güvenin aracı rolünü belirlemektir.

Yöntem: Eskişehir ilinde bulunmakta olan bir üniversite hastanesinde çalışan 422 hemşire araştırmanın örneklemini oluşturmaktadır. Çalışmanın verileri "Lider-üye Etkileşim Ölçeği", "Hemşire İş Doyum Ölçeği", "Yöneticiye Güven Ölçeği" ile Ocak-Ekim 2020 yılında toplanmıştır. Elde edilen verilerin analizi SPSS for Windows 25.0 ve AMOS 23.0 programları kullanılarak yapılmıştır.

Bulgular: Bir üniversite hastanesinde görev yapan hemşirelerin lider-üye etkileşiminin iş doyumunu ($\beta=0,766, p<0,05$), lider-üye etkileşiminin yöneticiye güveni ($\beta=0,883, p<0,05$), yöneticiye güvenin iş doyumunu ($\beta=0,496, p<0,05$) anlamlı ve pozitif yönlü etkilediği ve lider-üye etkileşiminin iş doyumuna etkisinde yöneticiye güvenin kısmen aracı rolü (0,204, 0,689) yaptığı yapılan analizler sonucunda belirlenmiştir.

Sonuç: Hemşirelerde lider-üye etkileşiminin, iş doyumuna etkisinde yöneticiye güvenin aracılık rolü yapması, örgüt içerisinde hemşirelerin yöneticiler ile ilişkilerinin iş doyumunu üzerindeki önemini anlamamıza yardımcı olmaktadır. Aynı zamanda lider üye etkileşimi değişkeni, profesyonel rol ve sorumlulukları olan hemşirelerde iş doyumunu yöneticiye güveni arttırmada önemlidir.

Anahtar Sözcükler: Hemşire, lider-üye etkileşimi, iş doyumunu, yöneticiye güven.

Corresponding author / Sorumlu yazar: Nazlıhan Efe Sayan ▪ nazlihan.efe@gmail.com

Received / Geliş: 15.03.2024 ▪ **Accepted / Kabul:** 18.11.2024 ▪ **Published Online / Online Yayın:** 31.12.2024

Introduction

Today, one of the biggest demands of organizations is to follow the changes and developments in business life and achieve the determined goals (Berktaş and Oraklıbel, 2021). There is a need for qualified leaders who are open to development and innovation, who can take responsibility and take ownership of the goals of the organization in the development, self-renewal and achievement of the organization's goals (İşcan and Tanrıbil, 2016). It is stated that leaders in organizations significantly affect individual and organizational performance (Şeşen et al., 2019). Leader-member exchange, which was developed as an alternative approach to understand the impact of leaders on employees, focuses on the bilateral relationships established by the leader with each member and the results of these relationships (Dansereau et al., 1975). It differs from other leadership styles by focusing on the level of mutual communication between the leader and the member (Sürücü, 2021). According to the leader-member exchange theory, the attitudes and behaviours of the leader, whose exchange with his/her members is different and who derives his/her power from his/her exchange with his/her members, are different towards his/her subordinates. The main factor determining these attitudes and behaviours is individual relationship and mutual exchange (Duman and Çalık, 2021; Martin et al., 2023). Research on leader-member exchange shows that managers establish a quality exchange with employees, and this exchange has a positive effect on job satisfaction and performance (Sökmen, 2020). High quality leader-member exchange positively affects the motivation and performance of employees, thus increasing their job satisfaction (Kışmir and Irge, 2020).

Policy makers in healthcare sector consider leaders in healthcare organizations as 'representatives of the new era'. Leaders have an important role in increasing job psychology criteria such as job satisfaction, organizational trust, commitment and citizenship of valuable healthcare professionals (Türesin Tetik & Köse, 2017). Job satisfaction is the degree to which employees perceive how and to what extent the organization they work for meets what they consider important. Studies have found a positive relationship between leader-member exchange and job satisfaction (Büyükkaymakçı and Sundu, 2021). As the responsibilities, expectations and sharing between leaders and members increase, the quality of leader-member exchange also increases. Since sharing also increases depending on the quality of leader-member exchange, the leader assigns employees to the appropriate positions and jobs that are more suitable for their skills and performance. The job satisfaction of employees assigned to appropriate positions increases (Kim and Yi, 2019). When leader-member exchange increases, the manager provides the necessary material and intellectual support to the employee in making work-related decisions, gives feedback about the work and creates a collaborative environment, thus increasing the job satisfaction of the employees (Sökmen, 2020). In addition, interpersonal trust positively affects employee performance, increases individual commitment to the organization and job satisfaction (Demirtaş and Bal, 2023). Establishing trust-based relationships in organizations increases individuals' job satisfaction (Yorulmaz ve Karabacak, 2020). With a sense of trust, employees achieve job satisfaction faster and with higher quality (Duman and Çalık, 2021). In addition, employees' trust in their manager helps to increase the workplace commitment and motivation, and high-quality leader-member exchanges foster mutual trust, respect, commitment and interaction between the manager and the employee (Artar et al., 2019). In other words, trust is an important antecedent for a quality leader-member exchange (Duman and Çalık, 2021). When evaluated in this context, managers' fair behaviours, guided by openness and honesty policies, enhances employees' trust and, thus, their job satisfaction (Demirtaş and Bal, 2023). It is thought that leader-member exchange, job satisfaction, and trust in the manager affect employees' perspectives on the job and the organization they work for and thus their performance. The concept of trust in the manager is considered a mediating variable to understand its importance in leader-member exchange and job satisfaction. The starting point of this study is that there is a limited number of studies in both national and international literature on leader-member exchange, job satisfaction, and trust in manager. Therefore, this study examines these three concepts together in the field of health and on nurses.

Background

The relationship between leader-member exchange and job satisfaction:

As stated in the leader-member exchange theory, the relationship between managers and employees can have different dimensions. There is a high- or low-quality exchange between managers and employees. According to studies in the literature, the quality of this exchange affects employees' job satisfaction, performance, commitment to the organization and turnover rate (Sökmen, 2020). Effective leader-member exchange constitutes an effective leadership process that creates many beneficial results for both leaders and members. Effective leader-member exchange is said to improve the relationships between members and leaders, while an effective leadership process leads to positive outputs for the organizations and employees and increases job satisfaction (Günel and Duyan, 2022; Poetz and Volmer, 2022; Zhou et al., 2021). In the literature, it has been determined that there is a positive relationship between leader-member exchange and job satisfaction, and that a quality leader-member relationship increases job satisfaction. In studies on leader-member exchange, high quality leader-member exchange ensures that employees have high job satisfaction and job performance outcomes (Kim and Yi, 2019; Nguyen, 2020).

Similar results were found in studies conducted on nurses in the literature. Laschinger et al. (2007) found that the level of leader-member exchange was positively correlated with job satisfaction among 141 nurse managers in Canada. In a study conducted with nurses, high-quality leader-member exchange was found to have a positive effect on job satisfaction (Zhou et al., 2021). In this context, Hypothesis 1 was developed based on theory and studies.

The relationship between leader-member exchange and trust in the manager:

When there is a high-quality exchange between employees and managers in terms of leader-member exchange, the relationship between managers and employees progresses within the framework of mutual trust, exchange, respect and commitment. Elements of trust and respect are important for the realisation of a high-quality exchange (Gökalp et al., 2015). In the studies in the literature, a positive and significant relationship was found between trust in the manager and leader-member exchange. When there is a quality relationship between the leader and the member, a trust relationship is also ensured in the sensory context. In other words, the quality of leader-member exchange affects the concept of trust between employees and managers (Duman and Çalık, 2021; Türe Yılmaz et al., 2019).

Similar results were found in studies conducted with nurses in the literature. Chen et al. (2008) conducted a study with 200 nurses working in three regional hospitals and three medical centres in Taiwan and found that the quality of leader-member exchange affects trust in the manager. Uğurluoğlu et al. (2015) found that effective leadership behaviours positively affect trust in managers in a study conducted with 268 healthcare workers in Istanbul. In this context, Hypothesis 2 was developed based on theory and studies.

The relationship between trust in manager and job satisfaction: When the studies in the literature are examined, it is stated that as the sense of trust in the organization increases, so does the communication between managers and employees and the participation of employees in decisions. Therefore, trust and job satisfaction of employees are related. (Yorulmaz and Karabacak, 2020). It has been revealed that when employees trust their managers, they participate more in decisions and show higher performance. When there is a sense of trust in organizations, employees feel responsible for performing at a higher level and exhibit more positive behaviours (Bilginoğlu et al., 2019; Ndlovu et al., 2021). Studies in the literature show that there is a relationship between trust in the leader and job satisfaction (Sarıkaya and Kara, 2020).

Similar results were found in studies conducted with nurses in the literature. Gibson and Petrosko (2014), in their study with a total of 294 nurses working in hospitals in two health institutions, stated that job satisfaction will increase as a result of high trust in the leader in the organization, and that leaders who are not successful in creating and maintaining an environment of trust will encounter negative consequences in job satisfaction. In this context, Hypothesis 3 was developed based on theory and studies.

The mediating role of trust in the manager:

Based on the studies conducted in this context, it is thought that employees with high leader-member exchange quality will experience more job satisfaction, high leader-member exchange quality will increase trust in the manager, and trust in the manager will increase job satisfaction. Trust in the manager is expected to play a reinforcing role between the concepts of leader-member exchange and job satisfaction. Significant relationships between these three variables are strong indicators that trust in managers will play a mediating role. In this context, Hypothesis 4 was developed based on theory and studies.

Therefore, the following theoretical model is proposed in this paper (see Figure 1).

Method

Aim and Type of the Research: This study was designed in a descriptive design to investigate the mediating role of trust in managers in the effect of leader-member exchange on job satisfaction.

Research Hypotheses: The research hypotheses are as follows:

Hypothesis 1: Leader-member exchange positively and significantly affects job satisfaction.

Hypothesis 2: Leader-member exchange positively and significantly affects trust in managers.

Hypothesis 3: Trust in managers has a positive and significant effect on job satisfaction.

Hypothesis 4: Trust in managers has a mediating role in the effect of leader-member exchange on job satisfaction.

The model of the research hypotheses is shown in Figure 1.

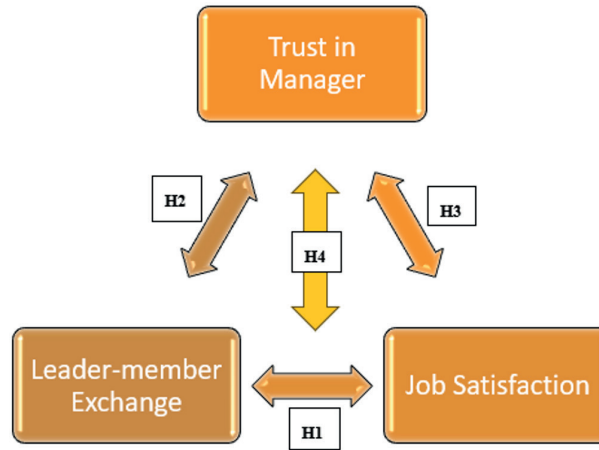


Figure 1. Research model

Place and Time of the Research: The research was carried out on nurses working at a university hospital in Eskişehir. The survey was carried out between February and May 2020.

Study Population and Sample: The research population consisted of nurses (N=923) working in a university hospital in the city center of Eskişehir (Turkey). It was aimed to reach all of the nurses who agreed to participate in the study without selecting the sample. 430 nurses agreed to participate in the study, and 422 of the questionnaires were found suitable for analysis. The response rate was found to be 45.7%. Power analysis was performed using the G*Power (v3.1.9) software to determine the sample size. As a result of the analysis, the effect size was found to be 0.796, and the power of the study calculated as post-hoc was calculated to be 1.00. Considering that the minimum required power value for post-hoc analysis is 0.67 (Cohen, 1988), the power analysis performed was found to be at an acceptable level.

Data Collection: Four distinct data collection tools were used to obtain research data. The data were collected by interviewing nurses who volunteered to participate in the research between February and May 2020. "Personal Information Form", "Leader-Member Exchange Scale", "Trust in Manager Scale", and "Nurse Job Satisfaction Scale" were used as data collection tools.

Personal Information Form: It consists of 7 questions to determine the socio-demographic and working life characteristics of the participants such as age, gender, marital status, educational status, time spent in the profession, time spent in the institution, and the clinic they work in.

Leader-Member Exchange Scale: Leader-member exchange scale developed by Graen et al. (1982). The scale consists of 5 items. The scale items were scored using a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Scores ranging from 5 to 25 can be obtained from the scale, with higher scores indicating greater leader-member interaction. The scale has no reverse-scored items. The validity and reliability of the scale in Turkish were investigated by Çalışkan et al. (2011), who found that the scale's overall Cronbach Alpha reliability coefficient was 0.89.

Trust in Manager Scale: Podsakoff et al. (1990) developed a 5-item scale to determine the level of trust in managers in organizations. The responses were collected using a 5-point Likert scale (1=strongly disagree, 5=strongly agree). Scores ranging from 5 to 25 can be obtained from the scale and higher scores indicate greater trust in the manager. As a result of the reliability analysis, Turunç and Çelik (2012) found the total Cronbach alpha reliability coefficient of the scale to be 0.86. According to the reliability analysis conducted by Podsakoff et al. (1990), the Cronbach alpha reliability coefficient of the scale was found to be 0.90.

Nurse Job Satisfaction Scale: It was developed by Muya et al. (2014) in Japan to determine the job satisfaction levels of nurses. The Turkish validity and reliability of the scale was performed by Türe Yılmaz and Yıldırım (2016). The scale consists of 28 items and four subdimensions.

The Cronbach Alpha reliability coefficient of the scale was determined to be $\alpha=0.94$ and $\alpha=0.81-0.91$ for its subdimensions. The Cronbach Alpha reliability coefficient of the original scale was found to be $\alpha=0.94$ and $\alpha=0.81-0.91$ for its subdimensions. Türe Yılmaz and Yıldırım (2016) found that one item (item 4) had a low factor load as a result of the analyses and removed it from the scale. As a result, the scale was found to be a valid and reliable scale consisting of 27 items and 4 subdimensions ("Positive feelings about work", "Appropriate support from superiors", "Perceived importance at work" and "Pleasant

working environment") with a total Cronbach's alpha value of $\alpha=0.90$ and $\alpha=0.74-0.93$ for subdimensions. The scale items were scored on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The 7th and 21st items of the 27-item scale are scored in the opposite direction. The scale has no cut-off point. The higher the score toward 5, the higher the job satisfaction and the lower the score toward 1, the lower the job satisfaction.

Data Collection Method: The inclusion criteria were to be voluntary and willing to participate in the study, to be open to communication and co-operation, and to be working as a nurse in the hospital included in the study. The research data were collected after obtaining the approval of the relevant ethics committee in the institution where the research was conducted. The nurses participating in the study were asked to consider their closest supervisors as managers when answering the scale of trust in the manager and to answer the scale accordingly (for example, if they are a nurse working in the clinic, the responsible nurse; if they are a nurse working in the administrative unit, the health care services manager). Eight people who did not fully complete the questionnaire forms were excluded from the study.

Data Analysis: Data were analyzed using SPSS for Windows 25.0 (Statistical Package for the Social Sciences version 25.0, IBM SPSS; Armonk, NY, USA) and AMOS 23.0 software. Cronbach's alpha coefficient, descriptive statistics, percentage, and frequency distributions were used in descriptive data. Confirmatory Factor Analysis (CFA) was performed on the scales used in the study, and the effect between the variables of the study was analyzed with structural equation modeling.

Ethical Considerations: Permission to use the scales in the study was obtained from the owners of the scales via e-mail. The ethics committee approval of the study was obtained from the Eskişehir Osmangazi University Non-Interventional Clinical Research Ethics Committee with decision numbered 25403353-050.99-E.144549 on 16/12/2019. Necessary permissions were obtained from the university hospital. A consent form was obtained from the nurses who participated in the study, stating that they volunteered before the survey.

Limitations of the Research: The fact that the research was limited to the sample included in the research and could not be generalized was considered among the limitations of the study. Another limitation of the research is the use of interviews as a data collection method. Because sometimes people may not be able to express their thoughts accurately and clearly.

Results

According to the research findings; 73.7% of the nurses ($n=311$) were woman, 58.1% ($n=245$) were married, and 49.1% ($n=207$) had a bachelor's degree. The average age of the sample was 32.24 ± 8.44 years, the average of working years in the profession was 10.22 ± 7.64 years and the average of working years in the institution was 6.94 ± 5.72 . First, confirmatory factor analysis was performed for each of our scales. The reliability of the measurement model was tested by looking at the mean explained variance (AVE) and composite reliability (CR) values. The composite reliability value of the latent variables in the measurement model should be higher than 0.70 (Churchill and Iacobucci, 2005), and the mean explained variance value should be higher than 0.40 (Fraering and Minor, 2006).

It is desirable that the factor loads are not less than 0.30 (Harrington, 2009). When the correlations between the variables are examined, it is seen that the factor loads of the items are above 0.30 and all correlation relations are significant.

According to the model findings of the confirmatory factor analysis, the leader-member exchange scale has an AVE value of 0.68 and a CR value of 0.91; the trust in management scale has an AVE value of 0.65 and a CR value of 0.90; the nurse job satisfaction scale has an AVE value of 0.65 and a CR value of 0.52; favorable thoughts about work has an AVE value of 0.52, a CR value of 0.83; appropriate support from superiors has an AVE value of 0.60 and a CR value of 0.90; the perceived significance of the workplace subdimension has an AVE value of 0.46 and a CR value of 0.85; and the pleasant working environment subdimension has an AVE value of 0.41 and a CR value of 0.74 (see Table 1).

Table 1. The goodness of fit values of the scales as a result of factor analysis

Variables	X ²	Df	GFI ≥.85	CFI ≥.90	SRMR	RMSEA ≤.08
Lead Member Exchange Security	12.05	4	0.98	0.99	0.01	0.06
Trust in Manager	6.27	3	0.99	0.99	0.01	0.05
Nurse Job Satisfaction Scale	1058.17	288	0.81	0.85	0.09	0.07

According to the results of the reliability analysis calculation of the leader-member exchange scale, the total reliability was 0.918. According to the results of the reliability analysis of the trust in the manager scale, the total reliability was 0.902. According to the results of the reliability analysis of the nurse job satisfaction scale, the total reliability for the first dimension was 0.835; 0.898 for the second dimension; 0.898 for the second dimension; 0.836 for the third dimension; 0.692 for the fourth dimension; and the total reliability was 0.901. It was found to have an acceptable level of reliability. The goodness of fit values of the scales as a result of factor analysis are presented in Table 1. It was determined that all variables had acceptable goodness of fit values.

Table 2. Descriptive statistical values of the scales used in the study

	Minimum	Maksimum	Median	Average	Standard deviation
Leader Member Exchange Scale	1.00	5.00	3.40	3.28	0.89
Trust In Manager	1.00	5.00	3.40	3.43	0.86
Nurse Job Satisfaction Scale	1.85	4.92	3.46	3.41	0.54
Positive feelings about work	1.17	5.00	3.50	3.40	0.81
Appropriate support from superiors	1.75	5.00	3.75	3.65	0.65
Perceived importance at work	1.00	5.00	3.00	2.91	0.73
Pleasant working environment	1.00	5.00	3.57	3.49	0.72

In the second stage, the means and standard deviations of the participants' leader-member exchange, job satisfaction, and trust in the manager were analyzed. The results are presented in Table 2. According to Table 2, the level of "leader-member exchange" (Mean=3.28, SD=0.89), "trust in the manager" (Mean=3.43, SD=0.86), and "nurse job satisfaction" of the nurses participating in the study were above the average (Mean=3.41, SD=0.54) and the subdimensions of "positive feelings about work" (Mean=3.49, SD=0.72), "appropriate support from superiors" (Mean=3.40, SD=0.81), "perceived importance in the workplace" (Mean=3.65, SD=0.65), and "pleasant working environment" (Mean=2.91, SD=0.63), which are sub-dimensions of "nurse job satisfaction", were above the average.

Table 3. Results regarding the mediating role of trust in manager in the effect of leader-member exchange on nurse job satisfaction

Effect	Prediction	Standard Error	t	p	Conclusion
Leader Member Exchange → Nurse Job Satisfaction	0.766	0.049	9.154	0.033*	Accept
Leader Member Exchange → Trust In Manager	0.883	0.055	17.166	0.014*	Accept
Trust In Manager → Nurse Job Satisfaction	0.496	0.061	3.897	0.015*	Accept
Direct Influence	Prediction	Standard Error	t	p	Result
Leader Member Exchange → Trust In Manager → Nurse Job Satisfaction	0.326	0.061	2.711	0.001**	Accept
Indirect Influence	Prediction	Confidence Interval			
Leader Member Exchange → Trust In Manager → Nurse Job Satisfaction	0.438	(0.204, 0.689)			Meaningful

Compliance Indexes: χ^2/df : 2.732, RMSEA: 0.064, GFI: 0.803, CFI: 0.885, SRMR: 0.083

*p<0.05; **p<0.01

Finally, before looking at the mediating role in the model, it was examined whether the independent variable had an effect on the dependent variable. It was found that leader-member exchange had a statistically significant and positive effect on nurse job satisfaction ($\beta=0.766$, $p<0.05$). Therefore, H1 was accepted (Table 3). The independent variable of the study is leader-member exchange, and the dependent variable is job satisfaction. While the effect of the independent variable on the dependent variable was significant, it was examined whether there was a mediating role in this effect. According to the results of the model obtained, the fact that the values in the 95% confidence interval do not include 0 indicates that there is a mediating role in the model (0.204, 0.689) (Table 3). After it was decided that there was a mediating role, it was checked whether the direct effect was significant or not in order to decide the type of this mediating role. As a result, it was decided that the direct effect was significant, but the effect coefficient decreased and the mediator was a partial mediator ($\beta=0.326$, $p<0.05$) (Table 3). Therefore, H4 is accepted. It was observed that leader-member exchange had a statistically

significant and positive effect on trust in the manager ($\beta=0.883$, $p<0.05$). Therefore, H2 is accepted. (Table 3) Trust in manager has a statistically significant and positive effect on nurse job satisfaction ($\beta=0.496$, $p<0.05$). Therefore, H3 was accepted (Table 3). It is seen that the goodness of fit values in the model are at an acceptable level.

Discussion

The analyses revealed a positive and significant relationship between leader-member exchange, job satisfaction and trust in the manager among nurses, and that trust in the manager acts as a mediator in the model. It is important that there is no research that deals with these factors together in a sample of nurses who have important roles and responsibilities in the effectiveness of health service delivery, and that the study is the first study to address these three concepts as mediators. The study is also expected to bring an innovative perspective to the field of nursing due to the scarcity of mediating role studies in the field and to contribute to the field due to the small number of studies on the concepts of leader-member exchange, job satisfaction, and trust in managers in healthcare organizations.

As a result of our analyses, the overall mean score of the "Leader-Member Exchange Scale" was above the average (Table 2). This finding is similar to the studies (Alev, 2020; Demir, 2019). As a result of effective leader-member exchange, leaders create positive benefits such as providing help and encouragement to their employees, providing flexibility for their individual needs and leading the creation of strong business relationships, including and encouraging member nurses in the decision-making process. These positive results are expected to increase job satisfaction (Ürek and Uğurluoğlu, 2015).

The overall mean score of the nurses in the "Trust in Manager Scale" is above the average (Table 2). This finding is similar to the study conducted by Akgündüz et al. in 2016. In order to establish high trust relationships in the institution and to use financial resources more effectively, the role of nurses in providing high quality patient care should be accepted and an organizational structure with trust in the manager should be established. Trust in the manager in the work environment is an indicator that nurse managers show good leadership, are flexible and accessible, and maintain a supportive relationship with member nurses (Dinç and Gastmans, 2012; Rowe and Calnan, 2006).

As a result of the analyses, nurses' scores in the general dimension of the "Nurse Job Satisfaction Scale" (3.41 ± 0.54) and its sub-dimensions "Positive Emotions Related to Work Dimension" (3.49 ± 0.72), "Appropriate Support from Superiors Dimension" (3.40 ± 0.81), and "Perceived Importance in the Workplace Dimension" (3.65 ± 0.65) were above the average, while scores in the "Pleasant Working Environment Dimension" (2.91 ± 0.63) were below the average. The findings of the studies on nurses' job satisfaction in the literature are similar to our results (Ergözen and Uğurlu, 2019; Ghawadra et al., 2019; Katıtaş, 2019).

According to the analysis results of the study, it was found that leader-member exchange had a significant and positive effect on job satisfaction ($\beta=0.766$, $p<0.05$) (Table 3). This finding is consistent with similar studies (Eryılmaz, 2019). When there is effective leader-member exchange, employees' job satisfaction increases and their performance increases (Demirci and Seçilmiş, 2020). Quality leader-member exchange leads to employees receiving more support from their supervisors. It also enables people to have higher levels of job satisfaction and performance (Lee and Ji, 2018). It is stated that quality leader-member exchange created by nurse leaders positively affects participation in personal knowledge transfer, job satisfaction and job commitment, increases opinions on knowledge transfer and individual participation, and makes a significant contribution to professional competence (Cindiloğlu et al., 2017; Çiçek and Deniz, 2017; Eryılmaz, 2019). The bilateral relationships established between leaders and employees are considered to have a great impact on the perceptions and attitudes of individuals towards their organizations and jobs. The interaction with the leader ensures that the employee is satisfied with his/her job, and with this satisfaction, the employee can identify with the culture and values of the organization and see it as an important part of his/her life.

According to the analysis results of the study, it was determined that leader-member exchange had a significant and positive effect on trust in the manager ($\beta=0.883$, $p<0.05$) (Table 3). In a study conducted by Uğurluoğlu et al. (2015) in Istanbul with 268 healthcare workers (medical and administrative staff), it was found that effective leadership behaviours positively affect trust in managers. In a study conducted by Chen et al. (2008) with 200 nurses working in 3 regional hospitals and 3 medical centres in Taiwan, it was found that leader-member exchange quality affects trust in the manager. Employees who have a higher level of leader-member exchange with their managers may be expected to have a higher level of trust, contribution, influence, loyalty and professional respect.

According to the analysis results of our study, it was found that trust in manager had a significant and positive effect on job satisfaction ($\beta=0.496$, $p<0.05$) (Table 3). In the literature, in a study conducted by Gibson and Petrosko (2014) with a total of 294 nurses working in hospitals in two health institutions, it was stated that job satisfaction would increase as a result of high trust in the leader in the organization, and job satisfaction of employees decreased in organizations with leaders who were not successful in creating and maintaining an environment of trust. This finding is consistent with similar studies (Kıranlı Güngör, 2018; Tekingündüz et al., 2014; Uğurluoğlu et al., 2015). If it is desired to increase the performance of the employees, it should be ensured that all employees have in-group and out-group mobility; employees should be given the opportunity to improve themselves. Only if such an organizational environment can be created, employees will be able to trust their managers and work in line with organizational goals.

Our hypothesis H4, which we formed based on the strong indications that trust in the manager can play a mediating role in the significant relationships between these three variables, was accepted as a result of the analyses. It was determined that the mediating role of trust in the manager in the effect of leader-member exchange on job satisfaction among nurses had direct ($\beta=0.326$) and indirect ($\beta=0.438$) effects. The findings obtained as a result of the analyses were found to support the theoretical assumptions. In the literature, it has been determined that there is a relationship between leader-member exchange and job satisfaction (Lee and Ji, 2018) and trust in the manager (Uğurluoğlu et al., 2015). It was also found that there is a relationship between trust in the manager and job satisfaction (Gibson and Petrosko, 2014).

Conclusion and Suggestions

As a result of our study, it was found that leader-member exchange in nursing affects job satisfaction and trust in manager; trust in manager positively affects job satisfaction and trust in manager plays a mediating role in the effect of leader-member exchange on job satisfaction. It is thought that the concepts of leader-member exchange, job satisfaction and trust in the manager of nurses, who are an important workforce in healthcare organizations, are important in terms of individual and organizational outcomes. The effectiveness of these concepts among nurses influences the quality of patient care, which affects the patient's length of stay, nurse turnover rate, infection rate, intention to leave work, and many important organizational outcomes. Nursing is a profession in which teamwork is important, and the existence of a safe and healthy communication environment is very important because it generally requires interpersonal exchange. In this context, the study concluded that the exchange between leaders and members is important for nursing outcomes. It is necessary to establish and maintain a safe and effective relationship between leaders and members. Developing and maintaining good relationships and creating positive outcomes for nurses positively affects health care outcomes. In particular, job satisfaction, which we examined in our study, is important in terms of reducing resignations and thus ensuring the continuation of health care services.

It is recommended to determine the quality of leader-member exchange in professional nurses who have independent roles and responsibilities in delivering quality and safe health services in health care institutions, to improve the quality of exchange to examine the effects of leader-member exchange, job satisfaction and trust in the manager on patient outcomes, to create a model with different concepts and mediating variables and examine it in the nurse sample, to provide counselling to nurses about their work areas, to increase their participation in decisions, and to support and encourage them. In addition, it is recommended that training programs be organized for nurse managers to gain competencies in forward-looking vision, strategic management competencies, creative and flexible thinking, financial management, clinical care management, personnel and quality management, leadership and communication skills, education and ethics.

Author Contribution: The authors confirm contribution to the paper as follows; study conception and design: NES, AT; data collection: NES, AT; analysis and interpretation of results: NES, AT; draft manuscript preparation: NES, AT. All authors reviewed the results and approved the final version of the manuscript.

Ethics Committee Approval: Eskişehir Osmangazi University Non-Interventional Clinical Research Ethics Committee approval was obtained (Date: 16.12.2019 - Number: 25403353-050.99-E.144549).

Conflict of Interest: The authors declare that there is no conflict of interest.

Funding: The authors declare that the study has no financial support.

Informed Consent: Informed consent of the participants were obtained.

Yazarlık Katkısı: Yazarlar makaleye katkılarını şu şekilde beyan etmektedir; çalışma fikri ve tasarımı: NES, AT; veri toplama: NES, AT; sonuçların analizi ve yorumlanması: NES, AT; aday makalenin hazırlanması: NES, AT. Tüm yazarlar sonuçları gözden geçirdi ve makalenin son halini onayladı.

Etik Kurul Onayı: Eskişehir Osmangazi Üniversitesi Girişimsel Olmayan Klinik Araştırmalar Etik Kurulu tarafından onaylanmıştır (Tarih: 16.12.2019 - Karar No: 25403353-050.99-E.144549).

Çıkar Çatışması: Yazarlar herhangi bir çıkar çatışması olmadığını beyan ederler.

Finansal Destek: Yazarlar çalışmanın finansman desteği olmadığını beyan ederler.

Katılımcı Onamı: Katılımcıların bilgilendirilmiş onamları alınmıştır.

References

- Akgündüz, Y., Güzel, T. & Harman, S. (2016). Yöneticiye güven ve dağıtımsal adalet çalışanların işe gömülmüşlüğüne nasıl etkiler?. *Ege Academic Review*, 16(2), 351-362.
- Alev, S. (2020). Okullarda örgütsel sinizmin yordayıcısı olarak lider-üye etkileşimi. *Trakya Eğitim Dergisi*, 10(2), 347-360. <https://doi.org/10.24315/tred.618955>
- Artar, M., Adıgüzel, Z., & Erdil, O. (2019). Örgütlerde yöneticiye duyulan güvenin, psikolojik sözleşme ihlali, örgütsel dışlanma ve iş tatmini arasındaki ilişkilerin incelenmesi. *İşletme Araştırmaları Dergisi*, 11(3), 1417-1432. <https://doi.org/10.20491/isarder.2019.680>
- Berktaş, S. & Oraklıbel, R. D. (2021). Sanayi devrimi ile gelen değişim: İş bölümü ve yabancılaşma. *Atlas Sosyal Bilimler Dergisi*, 1(6), 112-121.
- Bilginoğlu, E., Yozgat U. & Artan, İ. E. (2019). Respect and trust in organizations: a research about their effect on job satisfaction. *OPUS International Journal of Society Researches*, 12, 527-543.
- Büyükkaymakçı, Y. & Sundu, M. (2021). The moderating role of psychological capital in the effect of leader-member exchange on job satisfaction and turnover intention. *OPUS International Journal of Society Researches*, 18(42), 5276-5313.
- Chen, C. H. V., Wang, S. J., Chang, W. C. & Hu., C. S. (2008). The effect of leader-member exchange, trust, supervisor support on organizational citizenship behavior in nurses. *Journal of Nursing Research*, 16(4), 321-328.
- Churchill, G. A. & Iacobucci, D. (2006). *Marketing research: methodological foundations*. New York: Dryden Press.
- Cindiloğlu, M., Polatçı, S., Özçalık, F. & Gültekin, Z. (2017). The effect of workplace loneliness on job and life satisfaction: the mediating role of leader-member exchange. *Aegean Academic Review*, 17(2), 191-200. <https://doi.org/10.21121/eab.2017225198>
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. New Jersey: Lawrence Erlbaum Associates.
- Çalışkan, A., Akkoç, İ. & Turunç, Ö. (2011). The role of motivational behaviors in increasing organizational performance: The mediating role of innovation and entrepreneurship. *Süleyman Demirel University Faculty of Economics and Administrative Sciences Journal*, 16(3), 363-401.
- Çiçek, B. & Deniz, M. (2017). Value-based approach to leaders and organizations: A research on the relationship between value-centered leadership and ethical climate. *Journal of Business Research*, 9(2), 150-168.
- Dansereau, J. R., Graen, F. & Haga, G. W. J. (1975). A vertical dyad linkage approach to leadership within formal organizations: A longitudinal investigation of the role making process. *Organizational Behavior And Human Performance*, 13(1), 46-78. [https://doi.org/10.1016/0030-5073\(75\)90005-7](https://doi.org/10.1016/0030-5073(75)90005-7)
- Demir, S. (2019). Lider-üye etkileşiminin öğretmen stres, tükenmişlik ve depresyonu üzerindeki rolü. *Ege Eğitim Dergisi*, 20(1), 291-304. <https://doi.org/10.12984/eggefd.512319>
- Demirci, B. & Seçilmiş, C. (2020). The effect of role stress and leader-member exchange on turnover intention in restaurant businesses. *Anatolia: Journal of Tourism Research*, 31(3), 228-238. <https://doi.org/10.17123/atad.714948>
- Demirtaş, Z. & Bal, M. S. (2023). Examining the relationship between secondary school teachers' job satisfaction and organizational trust perceptions. *Abant İzzet Baysal University Faculty of Education Journal*, 23(2), 625-642. <https://doi.org/10.17240/aibuefd.2023.-1122906>
- Dinç, L. & Gastmans, C. (2012). Trust and trustworthiness in nursing: An argument-based literature review. *Nursing inquiry*, 19(3), 223-237. <https://doi.org/10.1111/j.1440-1800.2011.00582.x>
- Duman, S. A. & Çalık, T. (2021). Structural empowerment, trust in the manager, and leader-member exchange as predictors of psychological empowerment in secondary school teachers. *The Journal of Academic Social Science Studies*, 13(82), 61-96. <https://doi.org/10.29228/JASSS.42894>
- Ergözen, Ö. & Uğurlu, Z. (2019). Hemşirelerin mizah tarzlarının iş doyumları üzerine etkisi. *Türkiye Klinikleri Hemşirelik Bilimleri*, 11(3), 281-294. <https://doi.org/10.5336/nurses.2018-64308>

- Eryılmaz, I. (2019). The moderating role of political ability in the relationship between social power, leader-member exchange and job satisfaction: A research in the banking sector. *Atatürk University Journal of Economics and Administrative Sciences*, 33(1), 373-393.
- Fraering, M. & Minor, M.S. (2006). Sense of community: An exploratory study of US consumers of financial services. *International Journal of Bank Marketing*, 24(5), 284-306. <https://doi.org/10.1108/02652320610681738>.
- Ghawadra, S. F., Abdullah, K. L., Choo, W. Y. & Phang, C. K. (2019). Psychological distress and its association with job satisfaction among nurses in a teaching hospital. *Journal of Clinical Nursing*, 28(21-22), 4087-4097. <https://doi.org/10.1111/jocn.14993>
- Gibson, D. & Petrosko, J. (2014). Trust in leader and its effect on job satisfaction and intent to leave in a healthcare setting. *New Horizons in Adult Education and Human Resource Development*, 26(3), 3-19. <https://doi.org/10.1002/nha3.20069>
- Gökalp, S., Kaya, O., Angay, A. & Akgün, F. (2015). Okul müdürüne güvenin iş tatmini üzerindeki etkisinde lider-üye etkileşiminin aracı rolü. *Bitlis Eren Üniversitesi Sosyal Bilimler Dergisi*, 4(2), 0-0.
- Graen, G. B., Liden, R. C. & Hoel, W. (1982). Role of leadership in the employee withdrawal process. *Journal of Applied Psychology*, 67(6), 868– 872. <https://doi.org/10.1037/0021-9010.67.6.868>
- Günel, I. & Duyan, M. (2022). The relationship between leader-member exchange and job satisfaction: A study on coaches. *International Online Journal of Educational Sciences*, 14(4), 1075-1089. <https://doi.org/10.15345/iojes.2022.04.012>
- Harrington, D. (2009). *Confirmatory factor analysis*. New York: Oxford University Press.
- İşcan, Ö. F. & Tanrıbil, S. (2016). Vizyoner liderlik davranışlarının çalışanların örgütsel bağlılıklarına ve adalet algılarına etkisi. *Atatürk Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 20(3), 1021- 1032.
- Katıtaş, S. (2019). *İstanbul' da evde bakım hemşirelerinin iş doyumu, yaşadığı güçlükler ve çözüm önerileri* (Yüksek Lisans Tezi). Marmara Üniversitesi Sağlık Bilimleri Enstitüsü, İstanbul.
- Kıranlı Güngör, S. (2018). The relationship between leader-member exchange and organizational trust. *Electronic Turkish Studies*, 13(19), 1147-1162. <https://doi.org/10.7827/TurkishStudies.14181>
- Kim, M. H. & Yi, Y. J. (2019). Impact of leader-member-exchange and team-member-exchange on nurses' job satisfaction and turnover intention. *International Nursing Review*, 66(2), 242-249. <https://doi.org/10.1111/inr.12491>
- Kişmir, Ş. & İrge, N. T. (2020). The effect of compassion fatigue level on employees' motivation and job satisfaction: An application on healthcare workers. *R&S-Research Studies Anatolia Journal*, 3(1), 1-18. <https://doi.org/10.33723/rs.672142>
- Laschinger, H.K.S., Purdy, N. & Almost, J. (2007). The impact of leader-member exchange quality, empowerment, and core self-evaluation on nurse manager's job satisfaction. *The Journal of Nursing Administration*, 37(5), 221- 229. <https://doi.org/10.1097/01.NNA.0000269746.63007.08>
- Lee, E. K. & Ji, E. J. (2018). The moderating role of leader-member exchange in the relationships between emotional labor and burnout in clinical nurses. *Asian Nursing Research*, 12(1), 56-61. <https://doi.org/10.1016/j.anr.2018.02.002>
- Martin, R., Ono, M., Legood, A. & Dello Russo, S. (2023). Leader-member exchange (LMX) quality and follower well-being: A daily diary study. *Journal of Occupational Health Psychology*, 28(2), 103-116. <https://doi.org/10.1037/ocp0000346>
- Muya, M., Katsuyama, K., Ozaki, F. & Aoyama, H. (2014). Development of a scale measuring the job satisfaction of Japanese hospital nurses. *Japan Journal of Nursing Science*, 11(3), 160-170. <https://doi.org/10.1111/jjns.12017>
- Ndlovu, T., Quaye, E. S. & Saini, Y. K. (2021). Predicting organisational commitment: The role of line manager communication, employee trust and job satisfaction. *South African Journal of Business Management*, 52(1), a2355. <https://doi.org/10.4102/sajbm.v52i1.2355>
- Nguyen, T. H. (2020). Impact of leader-member relationship quality on job satisfaction, innovation and operational performance: A case in Vietnam. *The Journal of Asian Finance, Economics and Business (JAFEB)*, 7(6), 449-456. <https://doi.org/10.13106/jafeb.2020.vol7.no6.449>
- Podsakoff, P. M., MacKenzie, S. B., Moorman, R. H., & Fetter, R. (1990). Transformational leader behaviors and their effects on followers' trust in leader, satisfaction, and organizational citizenship behaviors. *The Leadership Quarterly*, 1(2), 107-142. [https://doi.org/10.1016/1048-9843\(90\)90009-7](https://doi.org/10.1016/1048-9843(90)90009-7)
- Poetz, L. & Volmer, J. A. (2022). Diary study on the moderating role of leader-member exchange on the relationship between job characteristics, job satisfaction, and emotional Exhaustion. *Frontiers in Psychology*, 13, 812103. <https://doi.org/10.3389/fpsyg.2022.812103>
- Rowe, R. & Calnan, M. (2006). Trust relations in health care: developing a theoretical framework for the "new" NHS. *Journal of Health Organization and Management*, 20(5), 376-396. <https://doi.org/10.1108/14777260610701777>
- Sarıkaya, Ş. & Kara, B. K. (2020). Organizational trust and organizational support as a predictor of job satisfaction. *International Journal of Curriculum and Instruction*, 12 (Special issue), 435-466.
- Sökmen, A. (2020) The relationship between leader-member exchange, job satisfaction and organizational identification: An empirical study in hotel businesses in Ankara. *Journal of Tourism & Gastronomy Studies*, 8(3), 2132-2143. <https://doi.org/10.21325/jotags.2020.652>
- Sürücü, L. (2021). Lider üye etkileşimi: Literatür taraması. *Uluslararası Yönetim İktisat ve İşletme Dergisi*, 17(1), 257-277.
- Şeşen, H., Sürücü, L. & Maşlakçı, A. (2019). On the relation between leadership and positive psychological capital in the hospitality industry. *International Journal of Business*, 24(2), 182-197.

- Tekingündüz, S., Aydın, M. & Polat, H. (2014). Kamu sektöründe örgütsel adalet, örgütsel güven ve iş tatmini arasındaki ilişkilerin incelenmesi: Bir devlet hastanesi örneği. *Journal of Turkish Court of Accounts/Sayıstay Dergisi*, 94, 53- 72.
- Turuñ, Ö. & Çelik, M. (2012). The moderating role of distributive justice in the relationship between job satisfaction-person-organization fit and trust in supervisor-person-organization fit. *Work, Power. The Journal of Industrial Relations & Human Resources*, 14(2), 57-78. <https://doi.org/10.4026/1303-2860.2012.0199.x>
- Türe Yılmaz, A. & Yıldırım, A. (2016). Validity and reliability of the Nurse Job Satisfaction Scale in Turkish. *Journal of Health and Nursing Management*, 3(3), 158-168. <https://doi.org/10.5222/SHYD.2016.158>
- Türe Yılmaz, A., Kök Eren, H. & Yıldırım, A. (2019). Hemşirelerde yöneticiye güvenin kişi-örgüt uyumuna etkisi. *Afyon Kocatepe Üniversitesi Sosyal Bilimler Dergisi*, 21(4), 1205-1215. <https://doi.org/10.32709/akusosbil.512015>
- Türesin Tetik, H. & Köse, S. (2017). Psikolojik sermayenin lider-üye etkileşimi üzerindeki etkisinin hizmet sektöründe araştırılması. *Süleyman Demirel University Journal of Faculty of Economics & Administrative Sciences*, 22(2), 341-378.
- Uğurluođlu, Ö., Köse, S. D. & Köse, T. (2015). The impact of healthcare professionals' servant leadership perceptions on leader-member exchange and organizational trust. *Turkish Journal of Social Research*, 19(2), 239-262.
- Ürek, D. & Uğurluođlu, Ö. (2015). Sağlık çalışanlarının lider-üye etkileşim düzeylerinin çeşitli özellikler açısından değerlendirilmesi. *Sosyoekonomi*, 23(25), 7-30. <https://doi.org/10.17233/se.27289>
- Yorulmaz, Ü. M. & Karabacak A. (2020). The relationship between organizational trust and job performance in port workers: The role of job satisfaction and organizational commitment. *Balkan & Near Eastern Journal of Social Sciences (BNEJSS)*, 6(2), 121-130.
- Zhou, X., Rasool, S. F, Yang, J. & Asghar, M. Z. (2021). Exploring the relationship between despotic leadership and job satisfaction: The role of self efficacy and leader-member exchange. *International Journal of Environmental Research and Public Health*, 18(10), 5307. <https://doi.org/10.3390/ijerph18105307>