

ORIGINAL ARTICLE**RELATIONSHIP BETWEEN LEADERSHIP STYLES OF NURESE MANAGERS AND NURSES' JOB SATISFACTION IN JIMMA UNIVERSITY SPECIALIZED HOSPITAL****Nebiat Negussie¹, Asresash Demissie²****ABSTRACT**

BACKGROUND: Leadership style of nurse managers plays a significant role in nurses' job satisfaction. However, there is limited literature in areas related to nurses' manager leadership style. The objective of this research was thus to investigate the relationship between leadership style of nurse managers and nurses' job satisfaction in Jimma University Specialized Hospital.

METHODS: The study was conducted at Jimma University Specialized Hospital from January to June 2012 and used a non-experimental correlation design. All full time, non-supervisory nurses with an experience of more than one year in nursing profession were participated in the study. The Multifactor Leadership Questionnaire and Minnesota Satisfaction Questionnaire were used to collect data. Data were entered and analyzed using SPSS version 16.0 statistical software. The results were analyzed through descriptive statistics followed by the application of inferential statistics on the variables. Significance level was considered when $p < 0.05$.

RESULTS: A total of 175 copies of the questionnaires were returned out of 186 copies distributed to respondents. The result indicated that nurses can prefer transformational leadership style over transactional leadership style and had moderate-level intrinsic ($M=2.72$, $SD=0.71$) but low level of extrinsic job satisfaction ($M=1.83$, $SD=0.68$). Furthermore, from transactional leadership, only contingent reward was found to be statically significant and correlated with extrinsic ($B=0.45$, $p < 0.01$) and intrinsic job satisfaction ($B=0.32$, $p < 0.05$) while all five dimension of transformational leadership style were statistically significant and correlated with both intrinsic and extrinsic job satisfaction.

CONCLUSION: Nurses tended to be more satisfied with the transformational leadership than transactional leadership style. Therefore, nurses' managers should use transformational leadership style in order to increase nurses' job satisfaction.

KEYWORDS: Leadership, Nurses, Job satisfaction, Jimma University Specialized Hospital

INTRODUCTION

Leadership is the ability to influence and pursue the follower by guiding, motivating and directing to achieve organizational effectiveness (1). Many health management literatures emphasize that effective leadership is highly related to nurse staff work satisfaction (2) and that satisfied nurses are more likely to stay not only in the profession but

also in the health care organization which they are satisfied with (3).

There are various styles of leadership that nurse managers have demonstrated to lead staff nurses in hospital (4), but before the introduction of transformational leadership style, the transactional leadership style was perceived by most nurses' managers as the most effective style in health care organizations (4).

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Since the early 1990s, transformational leadership style has been preferred over transactional leadership style (5) because health care environment demands leaders who inspire others with the vision of what can be accomplished (6). There is a limited literature in areas related to Nurse managers' leadership styles. The objective of this study was thus to investigate the relationship between leadership styles of nurse managers and nurses' job satisfaction at Jimma University Specialized Hospital. The theoretical framework guiding this study was the Transformational Leadership Theory first developed by Burns in 1978(5) and later expanded by Bass (5) to provide a useful model for effective nursing leadership in modern health care settings (Figure 1).

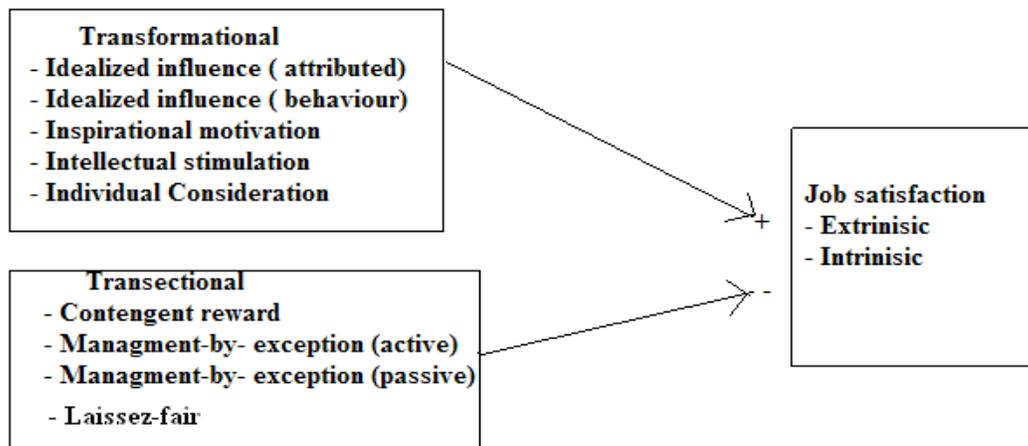


Figure 1: Bass' theoretical framework of transformational and transactional leadership styles in health care organization

MATERIALS AND METHODS

Study Area and Study Design: This study was conducted at Jimma University Specialized Hospital (JUSH) from January to June 2012. Jimma University Specialized Hospital is located in Jimma Town, 352 km southwest of Addis Ababa. This hospital is the only teaching and referral hospital in the southwestern part of the country, and provides specialized clinical services to about 12 million inhabitants (7).

The study adopted a quantitative research approach using a non-experimental correlational design. All nurses who were working at Jimma University Specialized Hospital and fulfilled the four criteria, i.e. more than one years working experience in nursing profession, graduation with diploma, BSc, or MSc degree in nursing, non-supervisory management position, and working under the direct supervision of a head nurse were included in the study. Based on the data obtained from the Hospital's Human Resource Office, there were 186 nurses who fulfilled these four criteria during the study time. This study used census

instead of sample since the population size was small (8).

Data Collection: Data were collected by using two standardized questionnaires. The purpose and significance of the study were explained to all participants. Furthermore, all the participants were informed that participation was completely voluntary. Then data collectors distributed copies of the questionnaires to volunteers and asked them to seal the completed questionnaire in the enclosed envelop and return to data collectors within 7 days.

The Minnesota Satisfaction Questionnaire (MSQ) short form was used to measure the dependent variable of job satisfaction of staff nurses. The Minnesota Satisfaction Questionnaire (MSQ) developed by Weiss (9) measures two dimensions of job satisfaction namely: internal (intrinsic) and external (extrinsic) job satisfaction. The questionnaire has 18 items that measure the intrinsic and extrinsic job satisfaction using a five-point Likert Scale. The Likert Scale consists of rating options ranging from 1 to 5 (1 = very

dissatisfied, 2 = dissatisfied, 3 = neither satisfied nor dissatisfied, 4= satisfied, 5= very satisfied).

In the Minnesota Satisfaction Questionnaire Test-retest reliabilities are between 0.70 and 0.80 (10), with an alpha coefficient of 0.96 and an acceptable mean inter-item correlation of 0.22 (11). The second instrument used for data collection was the Multifactor Leadership Questionnaire (MLQ). This questionnaire was used to distinguish between perceived leadership styles of transformational and transactional dimensions among nurse managers in the hospital. The transformational dimensions measured in this study included: (a) Idealized Influence (attributed), (b) Idealized Influence (behavior), (c) Inspirational Motivation, (d) Intellectual Stimulation, and; (e) Individual Consideration. The Transactional dimensions measured in this study included (a) Contingent Reward, (b) Management-by-Exception (passive), (c) Management-by-Exception (active), and; Laissez-Faire. The MLQ consists of 45 items using a Likert Scale ranging from 0 to 4 (0 = not at all, 1 = once in a while, 2 = sometimes, 3 = fairly often, and 4 = frequently, if not always). It has an acceptable Cronbach's coefficient alpha's ranged from .74 to .94 (12).

Data were collected by three diploma holder nurses after they were provided a thorough training on data collection procedure. A strict supervision was made by the researchers during the data collection. Face validity of the instrument was ensured by having the questionnaires reviewed on clarity in wording, relevance of the items, clarity of instruction, absence of biased words and phrases, use of standard English and formatting (13). The questionnaires were reviewed by one PhD holder in Public Administration and one PhD candidate in Public Health. To measure the reliability, the questionnaires were pre-tested on 18 nurses who were working at Jimma University Specialized Hospitals. Based on the pre-test result and the reviewers' comments, appropriate modifications were made on the questionnaires before the actual data collection.

Data Analysis: After data were collected, the questionnaires were checked for the completeness and consistency of responses during data clearing, and on this basis, incomplete questionnaires were excluded. Then data analysis was made using SPSS for window version 16. The result of the study was analyzed by using descriptive statistics

such as frequency distribution, percentage, means and standard deviation; and inferential statistics such as Principal Component Analysis, Person Product-Moment Coefficient and Multiple Regression.

Prior to Principle Component Analysis, full-scale internal consistency (Cronbach's α coefficient) and item-total correlation was calculated. The correlation matrix for the nine items was computed first, and the Kaiser-Meyer Olkin value was found to be 0.84, exceeding the recommended value of 0.70 (16). Bartlett's Test of Sphericity (17) reached statistical significant level ($p < 0.05$). Scree plot criteria were used to determine the number of factors to be extracted. Based on Nunnally and Bernstein's (18) recommendation, loadings higher than 0.4 were retained in factors. Oblique Oblimin rotation was performed in order to help interpretation.

Analysis of descriptive statistics and Pearson's correlation analysis were conducted to analyze the constructs and the usefulness of the data as recommended by Yaacob (19). Finally, multiple regression analysis was used to assess the magnitude of each independent variable and to vary the mediating variable in the relationship between more than one independent variables and one dependent variable (20). The statistical significant difference targeted was 0.05 alpha level which is typical in most researches (21). The following operational definitions were used in the study:

Job satisfaction: An evaluative judgment about the degree of pleasure an employee derives from his/her job that consists of both affective and cognitive components (14). Registered staff nurses' job satisfaction is a dependent variable with components of: A) the intrinsic component of job satisfaction which is dependent on personal perception and internal feeling and includes factors such as recognition, advancement, and responsibility and B) the extrinsic components which are external job related variables that would include salary, supervision, and working conditions (15).

Transformational Leadership: The process in which leaders and subordinates raise one another to higher levels of motivation and morality (5). Transformational leadership, an independent variable, includes A) attributed idealized influence that describes behaviors that encourage staff to

think highly of their managers, B) behavioral idealized influence which refers to actions managers take to demonstrate values, beliefs, and sense of organizational mission, C) inspirational motivation that describes managers who are optimistic about the organization's vision of the future, D) intellectual stimulation in which the leader articulates new ideas that prompt followers to rethink conventional practice and thinking and E) individual consideration that is demonstrated by mentoring and recognizing the unique needs and abilities of staff members (2).

Transactional Leadership: Is mostly characterized by a desire to preserve the organization's existing culture, policies, and procedures (5). Transactional leadership, an independent variable, includes A) contingent rewards in which the leader provides rewards that are either tangible like financial rewards or intangible rewards like verbal form of recognition based on subordinates performance, B) active management by exception that represents managerial behaviors that focus on finding faults in the work of subordinates, C) passive management by exception which involves responding or becoming involved only when a problem occurs, and D) laissez-faire behaviors which demonstrate a lack of involvement in which managers purposely fail to become involved in important decisions (2).

Ethical clearance was obtained from Ethical Review Committee of Jimma University, College of Business and Economics and a formal

letter was written to the hospital. Verbal consent was obtained from every one of the participants before the data collection. Additionally, names of participants were not used in the study and confidentiality of the respondents' information was maintained.

RESULTS

In this study, out of a total of 186 nurses who were working at Jimma Specialized Hospital and fulfilled the selection criteria were provided the standard questionnaires and they filled out and returned 175 copies of the questionnaires were. Response rate was 94%, which was considered as very good (22). Six individuals were unable to communicate during the data collection while five respondents returned incomplete copies of the questionnaires, which accounts for 11(6%) of the target population. The demographic data were analyzed using descriptive statistic (N=175). The age range of the subjects was 20-60, with the highest percentage (51% falling between ages of 20 and 30 years of age. The literature indicated that nurses work force in health sectors are mostly females (23); likewise, at Jimma University Specialized Hospital, (55%) of the nurses were females and the remaining (45%) were males. Seventy-nine percent of the respondents had diploma in nursing while the rest 21% had BSc degree in the same field of study. Among these respondents, 75% had 1-10 years of work experience (Table 1).

Table 1: Demographic characteristics of respondents (N=175)

Variables	Frequency	Percentage
Age	18-20	5
	20-30	90
	30-40	25
	40-50	45
	50-60	10
Gender	Male	79
	Female	96
Educational Qualification	Diploma	139
	BSc Degree	36
Work Experience	1-5	86
	5-10	36
	10-15	26
	15-20	6
	20-25	11
	>25	10

The nine items of the Multiple Leadership Questionnaire (MLQ) were subjected to a Principal Component Analysis (PCA) using Statistical Package for the Social Science (SPSS). Principal Component Analysis was performed in order to ascertain whether the nurses were able to distinguish transformational and transactional leadership styles.

Table 2 shows that the cronbach's α coefficient was 0.82, indicating strong internal consistency and appropriate item homogeneity (11,18). Item total correlation results also revealed acceptable coefficients for all variables ($P < 0.05$), ranging from 0.66 to 0.81(19). The examination of the eigenvalue > 1 criteria allowed up to 3 components, but the scree plot identified 2 components to be extracted. For the non-rotated

elucidation, two components accounted for 77% of the total variance. After Oblimin rotation, all items showed prominent standardized regression coefficients for one of the two retained Components. Table 2 also shows that all transformational leadership characteristic were loading on component one with a loading range of 0.85-0.94. The unexpected finding was that one of the transactional characteristic, contingent rewards, was loaded to the transformational component with loading of 0.85. All the other transitional leadership characteristics were loaded to transactional components with loading range of 0.42-0.91. This finding indicates that nurses who participated in this study considered contingent reward as a transformational leadership characteristic.

Table 2: Item-total correlation, internal consistency, and component pattern matrix after direct Oblimin rotation from principal component analysis of the Multifactor Leadership Questionnaire (N=175).

Items	Component 1	Component 2	h^2	Item-total correlation
Idealized influence(Behavior)	0.94		.84	0.81
Idealized Influence (attribute)	0.91		.82	0.75
Individual Consideration	0.91		.82	0.77
Inspirational Motivation	0.87		.76	0.71
Intellectual Stimulation	0.86		.75	0.72
Contingent reward	0.85		.72	0.67
Management by exception (active)		0.91	.69	0.68
Management by exception(passive)		0.42	.70	0.67
Laissez-fair		0.42	.69	0.66
% Percent of Variance Explained*	64%	13%	77%	
Correlation between factors				
Component 1	1			
Component 2	0.35	1		
Cronbach alpha of Leadership Dimensions				0.82

h^2 = final communality estimate *Non-rotated solution

Descriptive statistics of the leadership and job satisfaction variables are shown in Table 3. The means range from 1.71 to 2.91. The mean result indicated that nurses were more satisfied with transformational leadership style with inspirational

motivation dimension ($M=2.91$, $SD=0.81$). The mean score of job satisfaction indicated that nurses demonstrated moderate-level intrinsic satisfaction ($M=2.72$, $SD=0.71$) but low level of extrinsic satisfaction ($M=1.83$, $SD=0.68$).

Table 3: Descriptive statistics for dimensions of transformational leadership, transactional leadership and job satisfaction .

Dimensions	Mean	Standard Deviation
Idealized influence(Behaviour)	2.57	0.71
Idealized influence (Attribute)	2.41	0.69
Inspirational Motive	2.91	0.81
Intellectual stimulation	2.42	0.76
Individual Consideration	2.22	0.77
Contingent reward	1.81	0.68
Management by Objective (Active)	1.71	0.71
Management by Objective (Passive)	1.22	0.72
Laissez fair	1.25	0.75
Intrinsic satisfaction	2.72	0.71
Extrinsic satisfaction	1.83	0.68

Table 4 shows that there is a statically significant positive correlation between intrinsic job satisfaction and transformational leadership dimensions: Idealised Influence (Behaviour) ($r=0.31, p<0.01$), Idealised Influence(attribute) ($r=0.45, p<0.01$), Inspirational Motivation ($r=0.51, p<0.01$), Intellectual Stimulation ($r=0.45, p<0.01$), Individual Consideration ($r=0.38, p<0.01$). Among the five dimensions of transformational leadership style, inspirational motivation dimension has strong relationship ith wintrinsic job satisfaction. On other hand, there is a statistically significant but weak correlation between extrinsic job satisfaction and dimensions

of transformational leaderships: Idealised Influence (Behaviour) ($r=0.19, p<0.01$), Idealised Influence(attribute) ($r=0.27, p<0.01$), Inspirational Motivation ($r=0.21, p<0.01$), Intellectual Stimulation ($r=0.32, p<0.01$) and Individual Consideration ($r=0.25, p<0.01$). In transactional leadership style, only contingent reward statically significant correlated with extrinsic ($r=0.45, p<0.01$) and intrinsically job satisfaction ($r=0.32, p<0.05$). The table also indicates that the cronbach alpha of the intrinsic and extrinsic dimensions are 0.90 and 0.94 respectively, greater than the recommended standard >0.7 (11).

Table 4: Inter-correlations among dimensions of transactional and transformational leadership with nurses' job satisfaction (N=175).

Dimensions	Contingent Reward	Management by exception (Passive)	Management by exception (Active)	Laissez Fair	Idealized Influence (Behaviour)	Idealized Influence (attribute)	Inspirational Motivation	Intellectual Stimulation	Individual Consideration	Cronbach alpha
Intrinsic job satisfaction	0.32*	0.21	0.18	0.23	0.31**	0.45**	0.51**	0.45**	0.38**	0.90
Extrinsic job satisfaction	0.45*	0.04	0.19	0.37	0.19**	0.27**	0.21**	0.32**	0.25**	0.94

** Correlation is significant at the 0.01 level (2 tailed),* correlation is significant at the 0.05 level (2 tailed)

Multiple regression analysis was performed to test the relationship between the dimension of leadership style and job satisfaction dimension. As depicted in Table 5, there was a direct effect of the predictors that significantly explained 69% of the variability in job satisfaction. The result indicated that contingent reward was positively related to both intrinsic job satisfaction ($B=0.15$, $p<0.01$) and extrinsic job satisfaction ($B=0.39$, $p<0.01$). Management by exception (active) had statistically significant but weak relationship with intrinsic ($B=0.06$, $p<0.05$) and extrinsic ($B=0.08$, $p<0.05$) job satisfactions, while management by exception (passive) had significant but negative relationship with intrinsic ($B= -0.05$, $p<0.05$) job satisfaction. On the other hand, it had significant but weak relationship with extrinsic ($B=0.07$, $p<0.05$) job satisfaction. Laissez-faire style had

statistically significant but negative relationship with both intrinsic ($B=-0.19$, $p<0.05$) and extrinsic ($B=-0.15$, $p<0.05$) job satisfactions. All the five dimensions of transformational leadership were found to be positively related with intrinsic: Idealized Influence(Behaviour) ($B=0.32$, $p<0.01$), Idealized Influence(Attribute) ($B=0.29$, $p<0.01$), Inspirational Motive ($B=0.49$, $p<0.01$), Intellectual Motive($B=0.49$, $p<0.01$), Inspirational Stimulation ($B=0.31$, $p<0.01$), and Individual Consideration ($B=0.35$, $p<0.01$) as well as extrinsic: Idealized Influence (Behaviour) ($B=0.19$, $p<0.05$), Idealized Influence (attribute) ($B=0.21$, $p<0.05$), Inspirational Motivation($B=0.19$, $p<0.05$), Intellectual Stimulation ($B=0.42$, $p<0.05$) and Individual Consideration ($B=0.17$, $p<0.05$) job satisfactions.

Table 5: Regression analysis of transactional and transformational leadership and job satisfaction (N=175).

Dimensions	Intrinsic Job Satisfaction	Extrinsic Job satisfaction
Contingent reward	0.15**	0.39**
Management by Objective (Active)	0.06*	0.08*
Management by Objective (Passive)	-0.05*	0.07*
Laissez-fair	-0.19*	-0.15*
Idealized influence(Behaviour)	0.32**	0.19*
Idealized influence (Attribute)	0.29**	0.21*
Inspirational Motive	0.35**	0.22**
Intellectual stimulation	0.49**	0.42*
Individual Consideration	0.35**	0.17*
R ²	0.69	
AdjR ²	0.67	
R ² Change	0.66	
F Value	42.55**	

** Correlation is significant at the 0.01 level (2 tailed),* correlation is significant at the 0.05 level (2 tailed)

DISCUSSION

The result indicated that nurses who were working at Jimma University Specialized Hospital during the study can distinguish between transformational leadership style and transactional leadership style. Furthermore, staff nurses preferred transformational leadership style rather than transactional leadership style. The finding is consistent with previous researches done in USA by Jordan and those conducted at China Hospitals (24, 25, 6, 26). The other important finding appeared in the result of this study was that nurses

considered Contingent Reward as a transformational leadership characteristic feature. Previous research results showed that nurses viewed contingent reward as a feature of transformational leadership style (5, 10). According to Bass and Avolio (12), contingent reward involves leaders who give subordinates what they want in exchange for their support and make clear what the latter can receive if performance meets prescribed standards. Bass's study conducted in 1985 (27) on industrial managers indicated that contingent reward is one of the characteristics of transactional leadership

style while nurses considered it as one of the characteristics of transformational leadership style. Medley and Larochelle (6) explained major difference between nurse and industrial leaders involved in contingent reward emphasizing that in nursing it is unusual for an individual to receive special recognition or to be rewarded tangibly for outstanding performance.

The mean scores of transformational and transactional leadership styles indicated that nurses appeared to be more satisfied with transformational leadership style especially with inspirational motivation and idealized behavior influence. Leaders adopting inspirational motivation behavior have an ability to strengthen their followers' responses and explain important ideas in simple ways (28). Idealized Influence (behavior) also helps the leader to instill pride and faith in the follower by overcoming obstacles and confidently expressing dissatisfaction with the status quo (24,29,30). The mean score of nurses' satisfaction also indicated that nurses had low level of extrinsic satisfaction. Findings of previous studies revealed that nurses working in public hospitals in Sub-Saharan African countries did not have extrinsic job satisfaction due to low remuneration, lack of educational opportunity and poor working conditions (31, 32). On the other hand, the finding revealed that nurses had moderate level of intrinsic job satisfaction. Previous researches indicated that nurses are intrinsically satisfied due taking interest in helping others and because of professional gratification (32, 33, 34).

The result of this research also revealed that all dimensions of transformational leadership were more positively correlated with intrinsic job satisfaction than extrinsic job satisfaction. This finding is consistent with the finding of a study done in a Jordanian private hospital (24). Transformational leadership promotes employees' empowerment in implementing organizational functions (24). Employees' empowerment has played a significant role on employee self-efficiency which in turn promotes employees' intrinsic satisfaction. (29).

Multiple regression analysis results revealed that except contingent reward, other dimensions of transactional leadership styles had either weak or negative relationship with both intrinsic and extrinsic job satisfaction. Findings of previous

studies indicated that management by exception (passive) and laissez-fair styles are the least effective forms of leader behavior (35) and are likely to have negative relation with job satisfaction (36). The reason why both management by exception (passive) and laissez-faire dimensions have negative relation with job satisfaction is that passive management by exception puts the subordinate under pressure in order to make him/her follow the desired standards, but it does not support individual resources (37) while Laissez-faire leaders do not attempted to make agreements with employees, to motivate them, to set standards or to give feedback (38).

On the other hand, all dimensions of transformational leadership style were significantly and positively correlated with both intrinsic and extrinsic job satisfaction. Comparison of beta coefficients of transformational leadership dimensions indicated that intellectual stimulation had the strongest correlation with both intrinsic and extrinsic job satisfaction. Previous research findings also showed that there is a statically significant positive relationship between transformational leadership and job satisfaction (24, 39).

The result of this study indicated that nurses who were working at Jimma University Specialized Hospital preferred managers who are transformational leaders. This implies that transformational leadership style promotes job satisfaction of nurses leading to improved performance and reducing the turnover of nurses. McClosky and McCain (40) found out that nurses' job performance increased proportionally with increased job satisfaction. Therefore, nurses managers should consider the following important points:

- The mission and vision of the hospital should be clear to each nurse in order to enable him/her transform the mission and vision into ward objectives;
- Nurses should understand the jointly set goals and the nurse manager should foster innovative thinking to consider the existing working standard in a new way so as to improve individual and team productivity;
- Nurse managers should develop more trust and confidence in their nurses and it is

necessary that the former strive to empower the latter.

- Nurse managers should be good role models for their nurses and avoid applying both management by exception (active and passive), and laissez-faire components because these have either little or adverse contribution to nurses' job satisfaction.

Furthermore, hospital administrators should facilitate training programs for nurse managers on leadership styles and their effects on job satisfaction in order to enable them to understand the components of effective nursing leadership style. Finally, further investigation on the relationship between transformational and transactional leadership styles and nurses' job satisfaction in private and public hospitals in Ethiopia in order to critically examine the effects of these two leadership styles on nurses' job satisfaction is recommended.

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