



The Correlation between Organizational Culture, Leadership Behavior, and Job Satisfaction: A Cross-sectional Study of General Hospital Nurses in Nigeria

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Authors' contributions

This work was carried out in collaboration between both authors. Author OA wrote the protocol, performed preliminary data analysis, interpreted the data, managed the literature searches and produced the initial draft. Author OOA designed the study, anchored the field study and gathered the initial data. Both authors read and approved the final manuscript.

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ABSTRACT

Aims: This study assessed the correlation between organizational culture, leadership behavior and job satisfaction of Nurses.

Background: Organizational culture means the beliefs and values that exist in an organization over time. Leadership behavior influences employees' job satisfaction.

Materials and Methods: A cross-sectional study among 176 general hospital nurses in Ogun State, Nigeria was undertaken. Data as collected with structured self-administered questionnaires. The reliability of the instrument was assessed using the Cronbach α coefficient. Correlation analysis was used to assess the association between organizational culture, leadership behavior, and job satisfaction. The level of significance was set at 0.05.

Results: Organizational culture was correlated with leadership behavior ($r = 0.496$; $p = 0.000$) and

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job satisfaction ($r = 0.424$; $p = 0.000$). Leadership behavior was also correlated with job satisfaction ($r = 0.418$; $p = 0.000$).

Conclusion: The Leader who shows support for teamwork enhances group relationships, and promotes positive emotions in the workplace. This increases nurses' work effectiveness and so, improve job satisfaction.

Implications for Nursing Management: Openness about and adherence to values within the scope of the organizational culture is required of nurse managers. They have to be open about their values and to be seen to act on these values within the scope of the organizational culture.

Keywords: Job satisfaction; leadership behavior; Nigeria; nurses; organizational culture.

ABBREVIATIONS

CNO : Chief Nursing Officer

RNs : Registered Nurses

1. INTRODUCTION

The organization consists of the staff, whose behaviors affect organizational outputs and outcomes. Organizational culture is regarded as the common values, beliefs, and perceptions that are held by staff within an organization [1]. Organizational culture is, therefore a reflection of the various values, viewpoints, and norms that guide employees in an organization in their dealings. Hence, it influences the outlook and behavior of the employees [2]. Understanding an organization's core values can mitigate the effect of internal conflict within an organization [3]. Previously, the approach to organizational culture research was largely functional. Hence, research has been focused towards finding proofs to support the role of organizational culture in improving organizational performance. It is a key function of the management to recognize the dimensions of its organization's culture and how it affects the employees' performance, commitment and job satisfaction [4-6].

Health workers in every nation work very hard in challenging settings in order to deliver optimal care to escalating numbers of patients. These challenges are greater in developing countries where health workers are in short supply, and remunerations are very poor. The management systems in these developing countries are grossly inadequate and the workload is often burdensome [7].

In its broadest sense, the word leadership means authority. It implies much more than the power to wield the stick. Leadership is based on individual managerial ability and personal qualities. The importance of these individual characteristics is

dependent on the clinical context and setting [8]. Good leadership can go a long way in mitigating the effect shortage of nurses that is currently being experienced in clinical care [9]. Good nurse leadership can also contribute in no small measure to the overall organizational success in health care settings. This underscores the need for more effective leadership skills in clinical nursing [5,8]. High patient and staff satisfaction underscore the need for good leadership behaviors in order for health care institutions to function effectively. Effective nurse leaders are critical to the growth and crucial to the development and success of health care institutions [10,11].

Since nurses are the most populous group of professionals in the health sector, there is a need for more attention to be given to nursing job satisfaction by healthcare organizations and managers. The impact of this on the quality of care, turnover, productivity, and patient outcomes is significant [12-14].

Organizational culture is the beliefs and values that an organization has built and adopted over a long period of time. These beliefs and values influence the attitude and values of the employees. Managers are expected to moderate their behavior in order to achieve organizational goals. The adjustments in the managers' behaviors have significant influences on the employees' job satisfaction. Therefore, it is vital to comprehend the relationship between organizational culture, leadership behavior, and job satisfaction among employees. Only a few researches have been done on the relationship between organizational cultures, leadership behavior and job satisfaction outside Europe and the USA [13]. Indeed, none of such study exists in Nigeria. There is a paucity of cultural research in nursing [8]. Hence, there is a need for the evaluation of the effect of cultural influences on the nurses' behaviors; and the effect of nurses' behaviors on health care organizational

outcomes. The main purpose of the study was to assess the correlation between organizational culture, leadership behavior, and job satisfaction. The objectives of the study were to assess the perception of nurses about organizational culture, leadership behavior, and personal job satisfaction and to assess the relationship between socio-demographic characteristics and job satisfaction among general hospital nurses.

2. MATERIALS AND METHODS

2.1 Study Design

A cross-sectional design was carried out in nine general hospitals in Ogun State, Nigeria.

2.2 Study Area and Population

This study was conducted in three general hospitals each across the three health zones in Ogun state, Nigeria. There are 35 general hospitals spread across three health zones (Ijebu, Egba, Yewa) in Ogun State.

A registered nurse (RN) is a graduate of a Nursing program who has passed a national licensing exam to obtain a Nursing license [15]. RNs are employed in Ogun state general hospitals in a variety of professional settings, sometimes in specialized fields of practice. They are responsible for supervising care delivered by other health care workers. They rank from nursing officers, senior nursing officer, and principal nursing officer to the chief nursing officers (CNO) and their assistants. There are about 136,000 RNs in Nigeria. Nigeria is ranked 7th of the 57 countries facing a critical shortage of health workers, with an estimated shortage of about 144,000 [16]. There were 707 RNs working in general hospitals in Ogun State at the time of the study.

2.3 Sampling

The sample size was derived using the formula for estimating proportions in a cross-sectional study by Cochran [17]; assuming 95% confidence interval; the desired level of precision of 0.05; and prevalence of 84.1% which is the proportion of health workers with job satisfaction (84.1%) in rural parts of Ogun State, Nigeria [18]. The calculated sample size was 160.

Simple random sampling by balloting was used to select three general hospitals from each health zone (making a total of nine general hospitals) in

Ogun State Nigeria. All the RNs (209) within the nine selected hospitals were then invited to take part in the study at their mandatory monthly general meeting. Nine (9) of the nurses could not be reached throughout the duration of the study and were excluded from the study. The goal of the study was explained to the participants by the researchers and a written informed consent was obtained from each participant. Two hundred questionnaires were distributed while 176 were returned. This gave a response rate of 88%. This generated a number of samples that exceeded the calculated sample size (160), thus increasing the validity of the study results.

2.4 Inclusion Criteria

All consenting RNs who had worked for at least six months in general hospitals in Ogun State, Nigeria were eligible to take part in the study.

2.5 Exclusion Criteria

The exclusion criteria include Nurses who were on leave or unavoidably absent or had not been in the employment for at least six months, National Youth Service Corp (NYSC) nurses, and those who did not give their consent to take part in the study.

2.6 Data Collection

Data was collected between April 19 and June 15, 2015. The data for the study was obtained with structured, self-administered questionnaire that included questions on respondent demographics (Age, sex, marital status, level of education, duration of practice and current nursing cadre). The questionnaire was compiled based on similar earlier studies [8,19-21]. The questionnaire was validated (face and content validity) by three CNOs and pretested among 20 nurses in a general hospital in Oyo State. Suggestions, including those about clarity and appropriateness, were incorporated. Data collection was carried out during the mandatory quarterly nurses meetings. Each consenting RN was handed the questionnaire and duly filled questionnaires were returned to the investigators.

2.7 Measurement

Twenty-four items across five domains of organizational culture were adapted from Tsui et al. [19], a study based on two groups of MBA students from two universities in Beijing, China.

This research focused on clinical nurses in hospitals; therefore, corrections, as made by Tsai [8] were made to the questionnaire originally designed by Tsui et al. [19] to meet the research goal. The domains on emphasis on responsibility and emphasis on cooperation were then merged into a single domain; emphasis on responsibility and cooperation because the items within were found by the nurses to be essentially the same. Thus, 18 items under three domains (employee orientation, customer focus and emphasis on responsibility and cooperation) were used to assess organizational culture after the pre-test.

Thirty items on leadership behavior were taken from Strange and Mumford [20]. The questions were re-ordered after the pre-test. Twenty-six items under four domains (leader's encouragement and support to subordinates, leader's clarification of vision to his/her subordinates, consistency of leader's behavior with his/her vision, and leader's persuasiveness in convincing subordinates to accept his/her vision) were then used to assess leadership behavior after the pre-test.

Vroom [21] classified job satisfaction into 7 dimensions, namely; organizational, promotion, job content, superior, reward, working environment and working partners. After piloting, twelve items were used to assess four of these job satisfaction dimensions (working partners, reward, and welfare, superior and job recognition). Items were removed from the leadership behavior and job satisfaction domains after the pretest in order for the tools to be relevant to the context and setting.

A 5-point Likert-type scales (1='strongly disagree' and 5='strongly agree') was to assess all the domains across organizational culture, leadership behavior, and job satisfaction; as used by Tsai [8]. Cronbach α coefficient were 0.901 for organizational culture domains; 0.923 for leadership behavior domains and 0.933 for job satisfaction domains. These were consistent with findings from another study [8].

All responses were coded appropriately to ensure easy measurement of outcomes. The questionnaires were written in English.

2.8 Data Analysis

Data were analyzed using the Statistical package for Social Science (SPSS) version 21. Data were summarized using the relevant summary statistics (proportions, means and standard deviation) and presented with tables. Pearson's

correlation analyses were used to test the relationship between organizational culture, leadership behavior and job satisfaction. Two-tailed tests of significance were done. The independent student t-test was used to test the relationship between the socio-demographic characteristic and a harmonized job satisfaction score. For this purpose, the socio-demographic factors were dichotomized and all the mean scores for the job satisfaction domains were summed and an average job satisfaction score was derived. P value was set at 0.05.

2.9 Ethical Consideration

Ethical approval was obtained from the Ogun State Human Research Ethics Board (OGHREB/079/15). Permission was obtained from hospitals' administrators and nursing leaders. They were free to decline or withdraw their participation at any stage during the study. The anonymity of study participants and confidentiality of their responses was ensured. Data collected was used only for research purposes and were kept confidential. Names and addresses were not included in the data-collection instrument and thus collected data would not be leaked to any person. The findings were communicated to the host management. Advocacy efforts were instituted at departmental levels. No harm was done to any participants as a result of this study.

3. RESULTS

The mean age of respondents was 34.99 years with a standard deviation of 8.20 years. About two-fifth (38.6%) of the nurses were aged between 21 and 30 years. They were mostly women (94.3%) and married (84.7%). The mean duration of practice was 9.74 years with a standard deviation of 8.48 years. Most (62.5%) of the respondents had been in practice for less than 10 years. They were mainly graduates (53.4%), of the nursing officer level (43.2%). More than half (56.8%) had nursing specialty training while the remaining 43.2% had only general nursing training. The majority of the nurses that participated were non-managers (86.4%).

Table 1 shows the relationship between socio-demographic characteristics of the respondents and the overall mean score for job satisfaction among them. There was a statistically significant relationship between the nursing ranks and average job satisfaction score. It suggests that

nursing in the management cadre were 3.5 times more likely to have better job satisfaction than those who were non-managers ($p < 0.001$). Whereas, there was no statistically significant relationship ($p > 0.05$) between the other factors that were considered and mean job satisfaction score.

Table 2 shows how nurses perceive the organizational culture within the hospitals where they work. The mean score for nurses' perception about organizational culture ranged between 3.47 and 4.11. The perception that 'client is regarded as number one' (4.11) followed by 'client service is sincere' (4.10) had the highest score. The perception that the 'individual development of employee is important' had the lowest score.

According to Table 3, the average score for the various items under leadership behavior domains ranged between 3.28 and 4.21. The perceptions that 'the leader expresses high-performance expectations' (4.21) and 'effective leadership depends on factors that make followers open to the leader and his/her vision' (4.04) had the highest mean scores. The lowest mean score was recorded by the perception that followers were devoted and unquestioning of the leader.

Table 4 shows how personal job satisfaction is perceived by the respondents. The mean job satisfaction perception scores were generally high. It ranged between 3.34 and 4.09 out of a highest possible score of five for the various domains that were assessed. The nurses were least satisfied with their pay (3.34) while they were mostly satisfied with inter and intra-departmental communication (4.09).

Table 5 shows the summary of the mean scores for all the participants across the domains that were assessed. Under organizational culture, the perception of an emphasis on cooperation (4.07) was the best. This was followed by an emphasis on responsibility (3.95) and then customer focus (3.94). The employer's orientation had the lowest mean score (3.62). Under leadership behavior, the perception that the leader encouraged and supported their subordinates was highest (3.83). This was followed closely by the consistency of leadership behavior with vision (3.82). The domain with the least score was the perception that leaders clarified their visions to their subordinates (3.50). The table also shows that the nurses were most satisfied with their working partners (4.02), followed by satisfaction with their superiors (3.89). They were least satisfied with their workplace reward and welfare (3.54).

Table 1. Relationship between socio-demographic characteristics and job satisfaction

Socio-demographic characteristics	Freq (%)	Mean job satisfaction score (SD)	T	p value
Age				
Young (≤ 40 years)	124 (70.5)	3.75 (0.70)	1.545	0.124
Middle age (41 - 60 years)	52 (29.5)	3.93 (0.68)		
Sex				
Female	166 (94.3)	3.83 (0.69)	1.725	0.086
Male	10 (5.7)	3.44 (0.83)		
Marital status				
Presently married	149 (84.7)	3.79 (0.67)	-0.613	0.541
Presently unmarried	27 (15.3)	3.88 (0.86)		
Duration of practice				
< 10 years	107 (60.8)	3.77 (0.72)	-0.87	0.386
≥ 10 years	69 (39.2)	3.86 (0.66)		
Level of education				
Diploma	73 (41.5)	3.88 (0.53)	1.241	0.216
Graduate or more	103 (58.5)	3.75 (0.79)		
Post basic nursing training				
No	76 (43.2)	3.81 (0.72)	0.106	0.916
Yes	100 (56.8)	3.80 (0.68)		
Nursing cadre				
Manager	24 (13.6)	4.26 (0.13)	3.549	< 0.001*
Non manager	152 (86.4)	3.73 (0.72)		

SD = standard deviation *statistically significant at $p = 0.05$

Table 2. Nurses' perception about organizational culture

Organizational culture domains	Strongly agree n (%)	Agree n (%)	Neither agree nor disagree n (%)	Disagree n (%)	Strongly disagree n (%)	Mean score (standard deviation)
Perception about employee orientation						
Individual development of employee is important	30 (17.0)	66 (37.5)	48 (27.3)	23 (13.1)	9 (5.1)	3.47 (1.07)
Opinions from employees are highly regarded.	23 (13.1)	90 (51.1)	17 (9.7)	37 (21.0)	9 (5.1)	3.47 (1.13)
High-tech is adopted bravely.	23 (13.1)	96 (54.5)	10 (5.7)	41 (23.3)	6 (3.4)	3.51 (1.09)
A clear standard on praise and punishment exists	23 (13.1)	91 (51.7)	24 (13.6)	29 (16.5)	9 (5.1)	3.51 (1.07)
A comprehensive system and regulations exist.	27 (15.3)	117 (66.5)	13 (7.4)	16 (9.1)	3 (1.7)	3.82 (0.83)
Clear goals are set for employees.	32 (18.2)	120 (68.2)	11 (6.3)	7 (4.0)	6 (3.4)	3.94 (0.84)
Perception about customer focus						
Client service is sincere.	57 (32.4)	93 (52.8)	17 (9.7)	7 (4.0)	2 (1.1)	4.10 (0.83)
Client is regarded as number one.	55 (31.3)	94 (53.4)	22 (12.5)	1 (0.6)	4 (2.3)	4.11 (0.81)
First class service is provided to customers.	45 (25.6)	97 (55.1)	13 (7.4)	16 (9.1)	5 (2.8)	3.91 (0.97)
Customer benefit is emphasized extremely.	49 (27.8)	65 (36.9)	32 (18.2)	24 (1.6)	6 (3.4)	3.72 (1.11)
New products/services are continuously developed	41 (23.3)	83 (47.2)	33 (18.8)	13 (7.4)	6 (3.4)	3.82 (0.97)
New changes are readily accepted	58 (33.0)	78 (44.3)	27 (15.3)	7 (4.0)	6 (3.4)	3.98 (0.98)
Perception about emphasis on responsibility and cooperation						
Consideration among employees exist	41 (23.3)	107 (60.8)	20 (11.4)	6 (3.4)	2 (1.1)	4.03 (0.76)
Customer needs are satisfied at the largest scale.	35 (19.9)	116 (65.9)	7 (4.0)	14 (8.0)	4 (2.3)	3.93 (0.87)
Innovations are emphasized	35 (19.9)	100 (56.8)	25 (14.2)	14 (8.0)	2 (1.1)	3.87 (0.86)
Workplace disciplines are strictly adhered to	50 (28.4)	98 (55.7)	18 (10.2)	7 (4.0)	3 (1.7)	4.06 (0.830)
Social responsibility is demonstrated	33 (18.8)	102 (58.0)	24 (13.6)	11 (6.3)	6 (3.4)	3.82 (0.92)
Economic and social profits are emphasized	47 (26.7)	89 (50.6)	22 (12.5)	11 (6.3)	7 (4.0)	3.98 (0.87)

Table 3. Nurses' perception about leadership behavior

Leadership behaviour domains	Strongly agree n (%)	Agree n (%)	Neither agree nor disagree n (%)	Disagree n (%)	Strongly disagree n (%)	Mean (Standard deviation)
Perception of leader's encouragement and support to subordinates						
Leader expresses high performance expectations	67 (38.1)	93 (52.8)	9 (5.1)	4 (2.3)	3 (1.7)	4.21 (0.83)
Leader communicates a high degree of confidence in the followers' ability to meet expectations.	27 (15.3)	124 (70.5)	13 (7.4)	5 (2.8)	7 (4.0)	3.90 (0.83)
Leader arouses vision related achievement, power, and affinitive motives of followers	49 (27.8)	86 (48.9)	24 (13.6)	11 (6.3)	6 (3.4)	3.89 (1.00)
Leadership occurs through articulation of the vision and vision related accomplishments	37 (21.0)	111 (63.1)	12 (6.8)	10 (5.7)	6 (3.4)	3.94 (0.88)
Followers are attracted to the leader	26 (14.8)	84 (47.7)	39 (22.2)	20 (11.4)	7 (4.0)	3.58 (1.01)
Effective leadership depends on factors that make followers open to the leader and her/his vision.	45 (25.6)	105 (59.7)	18 (10.2)	4 (2.3)	4 (2.3)	4.04 (0.82)
Leader gives followers autonomy to make decisions that are in line with his/her vision	33 (18.8)	106 (60.2)	11 (6.3)	20 (11.4)	6 (3.4)	3.85 (1.05)
Leader backs up orders with justification based on the goodness of her/ his vision.	47 (26.7)	95 (54.0)	17 (9.7)	13 (7.4)	4 (2.3)	3.89 (0.89)
Followers are directly influenced by the leader and their personal relationship with her/him.	30 (17.0)	116 (65.9)	14 (8.0)	13 (7.4)	3 (1.7)	3.89 (0.86)
Leader cares about his/her image and plays to the desires of followers.	30 (17.0)	93 (52.8)	28 (15.9)	21 (11.9)	4 (2.3)	3.69 (0.99)
Leader takes an interest in all current and potential followers.	44 (25.0)	80 (45.5)	24 (13.6)	22 (12.5)	6 (3.4)	3.76 (1.07)
Followers are devoted and unquestioning of the leader.	24 (13.6)	55 (31.3)	49 (27.8)	43 (24.4)	5 (2.8)	3.28 (1.07)
Perception about leader's clarification of vision to his/her subordinates						
Leader negotiates her/his ideas when it benefits her/his image or her/his vision.	28 (15.9)	68 (38.6)	49 (27.8)	21 (11.9)	10 (5.7)	3.47 (1.07)
Leader uses positive rewards and reinforcement with her/his followers.	21 (11.9)	98 (55.7)	26 (14.8)	22 (12.5)	9 (5.1)	3.57 (1.02)
Leader may change her/his vision to meet the needs/wants of the followers and the organization.	30 (17.0)	85 (48.3)	20 (11.4)	30 (17.0)	11 (6.3)	3.53 (1.15)
Leader exudes confidence, dominance, and a sense of purpose.	21 (11.9)	93 (52.8)	35 (19.9)	20 (11.4)	7 (4.0)	3.57 (0.98)
Leader motivates the followers to act upon ideas already in place in society.	32 (18.2)	85 (48.3)	30 (17.0)	24 (13.6)	5 (2.8)	3.63 (1.03)
Leader will be narcissistic and wish to bring power and attention to her/ him.	21 (11.9)	76 (43.2)	30 (17.0)	39 (22.2)	10 (5.7)	3.34 (1.11)
Leader interacts with followers- social distance is low.	29 (16.5)	61 (34.7)	42 (23.9)	40 (22.7)	4 (2.3)	3.41 (1.08)
Perception about consistency of leader's behavior with his/her vision						
Leader acts according to certain vision that specifies a better future state.	43 (24.4)	92 (52.3)	20 (11.4)	20 (11.4)	1 (0.6)	3.82 (0.96)
Leader strives toward distal rather than proximal goals.	18 (10.2)	107 (60.8)	21 (11.9)	26 (14.8)	4 (2.3)	3.72 (0.89)
Leader communicates messages that contain references to her/his overall vision.	34 (19.3)	110 (62.5)	17 (9.7)	12 (6.8)	3 (1.7)	3.91 (0.85)
Leader behaviorally role models the values implied by the vision by personal example.	39 (22.2)	90 (51.1)	31 (17.6)	13 (7.4)	3 (1.7)	3.84 (0.92)
Perception about leader's persuasiveness in convincing subordinates to accept his/her vision						
Leader excels at persuading people to agree with her/him.	34 (19.3)	79 (44.9)	28 (5.9)	30 (17.0)	5 (2.8)	3.56 (1.08)
Leader tries to persuade those who disagree with her/his vision to agree with it.	20 (11.4)	108 (61.4)	20 (11.4)	20 (11.4)	8 (4.5)	3.64 (0.98)
Leader delegates authority for the attainment of her/his vision.	60 (34.1)	73 (41.5)	24 (13.6)	13 (7.4)	6 (3.4)	4.00 (1.01)

Table 4. Job satisfaction among nurses in Ogun State, Nigeria

Job satisfaction domains	Strongly agree n (%)	Agree n (%)	Neither agree nor disagree n (%)	Disagree n (%)	Strongly disagree n (%)	Mean score (Standard deviation)
Nurses' perception about their working partners						
Communication status between colleagues within my department is satisfactory	41 (23.3)	104 (59.1)	21 (11.9)	8 (4.5)	2 (1.1)	4.00 (0.81)
Communication status between my department and other departments is satisfactory	60 (34.1)	91 (51.7)	11 (6.3)	11 (6.3)	3 (1.7)	4.09 (0.90)
I am satisfied with the team I work within and outside my department	47 (26.7)	94 (53.4)	14 (8.0)	20 (11.4)	1 (0.6)	3.97 (0.91)
I am satisfied with the team formed within my own department.	61 (34.7)	80 (45.5)	20 (11.4)	11 (6.3)	4 (2.3)	4.02 (0.97)
Nurses' perception about workplace reward and welfare						
I am satisfied with my remuneration because I have less workload than others.	55 (31.3)	34 (19.3)	20 (11.4)	46 (26.1)	21 (11.9)	3.34 (1.44)
The welfare provided by the hospital is satisfactory	45 (25.6)	77 (43.8)	25 (14.2)	16 (9.1)	13 (7.4)	3.74 (1.14)
Nurses' perception about their superiors						
Whenever I require assistance, a supervisor is always there to help.	61 (34.7)	78 (44.3)	15 (8.5)	16 (9.1)	6 (3.4)	4.01 (1.04)
A particular supervisor will always listen to and assist me in resolving those issues.	29 (16.5)	116 (65.9)	7 (4.0)	19 (10.8)	5 (2.8)	3.78 (0.97)
Until now I am very satisfied with my job.	44 (25.0)	90 (51.1)	11 (6.3)	23 (13.1)	8 (4.5)	3.88 (1.06)
Nurses' perception about job recognition						
I will be recognized when I perform outstandingly.	45 (25.6)	75 (42.6)	22 (12.5)	16 (9.1)	18 (10.2)	3.67 (1.22)
I will be rewarded if I provided good service to the patients.	61 (34.7)	75 (42.6)	14 (8.0)	16 (9.1)	10 (5.7)	3.94 (1.13)
My role is considered very important to some people	30 (17.0)	113 (64.2)	7 (4.0)	19 (10.8)	7 (4.0)	3.73 (1.03)

Table 5. Mean score for organizational culture, leadership behavior and job satisfaction domains

	Mean	Standard deviation
Organizational culture (OC)		
Perception about employee orientation (OC1)	3.62	0.77
Perception about customer focus (OC2)	3.94	0.73
Perception about emphasis on responsibility (OC3)	3.95	0.66
Perception about emphasis on cooperation (OC4)	4.07	0.74
Leadership behaviour (LB)		
Perception of leader's encouragement and support to subordinates (LB1)	3.83	0.61
Perception about leader's clarification of vision to his/her subordinates (LB2)	3.50	0.73
Perception about consistency of leader's behavior with his/her vision (LB3)	3.82	0.65
Perception about leader's persuasiveness in convincing subordinates to accept his/her vision (LB4)	3.74	0.84
Job satisfaction (JS)		
Nurses' perception about their working partners (JS1)	4.02	0.75
Nurses' perception about workplace reward and welfare (JS2)	3.54	1.11
Nurses' perception about their superiors (JS3)	3.89	0.82
Nurses' perception about job recognition (JS4)	3.78	0.90

Table 6. Correlation between the domains of organizational culture, leadership behaviour and job satisfaction

	Organizational culture (OC)				Leadership behaviour (LB)				Job satisfaction (JS)			
	OC1	OC2	OC3	OC4	LB1	LB2	LB3	LB4	JS1	JS2	JS3	JS4
Organizational culture (OC)												
OC1	1											
OC2	0.650*	1										
OC3	0.521*	0.677*	1									
OC4	0.451*	0.556*	0.823*	1								
Leadership behaviour (LB)												
LB1	0.455*	0.481*	0.494*	0.529*	1							
LB2	0.441*	0.425*	0.204*	0.259*	0.514*	1						
LB3	0.406*	0.418*	0.261*	0.280*	0.500*	0.525*	1					
LB4	0.257*	0.364*	0.072	0.158*	0.526*	0.460*	0.643*	1				
Job satisfaction (JS)												
JS1	0.241*	0.247*	0.270*	0.305*	0.226*	0.160*	0.347*	0.252*	1			
JS2	0.135*	0.231*	0.207*	0.301*	0.369*	0.240*	0.276*	0.417*	0.144	1		
JS3	0.349*	0.325*	0.397*	0.418*	0.216*	0.146	0.269*	0.169*	0.467*	0.422*	1	
JS4	0.156*	0.280*	0.317*	0.365*	0.289*	0.077	0.317*	0.330*	0.388*	0.592*	0.761*	1

*Correlation is significant at $P=0.05$ (2 tailed)

Table 6 shows the correlation between the various domains of organizational culture, leadership behavior, and job satisfaction. The scores of the various domains were correlated. Most of the domains were shown to be positively correlated ($p < 0.05$). The correlations were mostly weak, although there were some moderately correlated domains. The OC3 domain had a strong positive correlation with the OC4 domain ($r = 0.823$; $p < 0.05$). However, the JS3 and JS4 domains were not correlated with LB2 domain ($p > 0.05$). The OC3 and LB4 were also not correlated ($p > 0.05$).

Analysis of the overall mean scores showed positive correlations between organizational culture and leadership behavior ($r = 0.496$; $p = 0.000$); organizational culture and job satisfaction ($r = 0.424$; $p = 0.000$); and leadership behavior and job satisfaction ($r = 0.418$; $p = 0.000$).

4. DISCUSSION

The result of the study showed that organizational culture, leadership behavior, and job satisfaction were correlated. The various sub-domains were also positively correlated; majority of which were positively correlated ranging from moderate to weak correlations. However, few domains did not statistically significantly correlate with other domains in other dimensions, and, there were no negative correlations.

The study hypothesized that organizational structure is positively correlated with leadership behavior. The result of the study showed that the majority of the domains of organizational culture were positively correlated (moderately) with leadership behavior which is consistent with findings by Tsai [8]. However, the leader being persuasive in convincing subordinates to acknowledge his or her vision does not have a statistical significance with emphasizing the responsibilities of the organization which could mean that nurses perceive that their managers are either not open about their values or nurses do not see that their managers act on their true values about the organization. Nurse Managers often have to implement actions determined by the overall organization which may not be consistent with their personal values [22]. However, it may also be that there are organizational policies around information and opportunities for support that may not be under the decisional domain of the nurse manager or these may be minimal or nonexistent.

Casida and Pinto-Zipp [5] explored how nurses felt about the relationship between leadership styles and organizational culture and found them to be correlated. According to Ravasi and Schultz [23], organization culture is a set of common viewpoints which regulates the internal dealings within an organization by setting guidelines for every circumstance.

Leadership behavior is viewed as an important determinant of organization effectiveness and job satisfaction [8]. This research also discovered that leadership behavior will influence job satisfaction. The positive correlation between leadership behavior and job satisfaction is consistent with the findings by Waigner et al. [24]. If nurses see their managers demonstrating desired behaviors, they are more likely to have greater access to information, opportunities, support, and resources to do their work. Furthermore, if nurses are happy in their work overall, they are less likely to contemplate leaving their jobs. In order to sustain an open exchange of ideas and better coordination as well as avoid possible conflict, leaders must be relied upon to motivate the followers to meet the organizational goal [5,8,24]. In this study, it was found out that the encouragement and support of leaders, consistent behavior, and their ability to convince their subordinate to acknowledge their vision can all influence employee job satisfaction. However, leaders giving subordinate his/her clear vision had no significant effect on employee job satisfaction. Apart from the influence of the working environment, the achievement of job satisfaction is also influenced by interaction among employees, team behavior, and team dynamics. Consistent with other studies, job satisfaction is related to prevailing work conditions and environment, and the individual expectations on the provisions of the job [12,14].

The study hypothesized that organizational culture has a positive correlation with job satisfaction. Jacobs and Roodt [25] found a positive correlation between organizational culture and factors like an employee turnover plan, commitment, behavior, and job satisfaction. Tsai [8] also found a positive correlation between organizational culture and employees' job satisfaction, all consistent with the findings of this research. Healthy organizational culture and positive employee attitude are essential ingredients for the creation of a good work environment [26].

The relationship between nursing cadre and job satisfaction as we found in this study is one that

has been established in different occupations [27]. It is possible that because the more senior nurses are likely to have spent more time in the profession, they have become more realistic with their expectations and have become more satisfied with their achievements than relatively more junior staff. These could be responsible for the higher levels of job satisfaction that was noted among the managerial cadre nurses than the others. Other demographic factors that have been identified by other studies as being associated with job satisfaction include age, sex, level of education, leadership training, years of professional experience and title [27-29].

5. LIMITATIONS OF THE STUDY

The study is cross-sectional in design; therefore, causality cannot be established. The use of self-reported data connotes that the accuracy of the data cannot be confirmed especially with the sensitive nature of the subject.

A wide range of variables was included in the study. It was anticipated that the response rate might be low. To mitigate this, a high number of participants were invited to take part in the study.

6. CONCLUSION

The organization consists of the staff, whose behaviors affect outcomes. The current study strengthens existing knowledge from Europe and America that organizational culture, leadership behavior, and job satisfaction are positively correlated among nurses. The findings of this study suggest that nurse leaders are instrumental in creating conducive environments that contribute to job satisfaction among nurses. Therefore, a focus on developing good leadership skills among nurse leaders will promote the creation and adoption of organizational culture that promotes job satisfaction.

In summary, when there is a good working relationship between leaders and subordinates, there will be a healthy organizational milieu to meet the set goals and mission of the organization thereby enhancing job satisfaction. The expectation is that the leader who shows support for teamwork enhances group relationships, and promotes positive emotions in the workplace which increases nurses' work effectiveness and so, improves job satisfaction [22].

7. IMPLICATIONS FOR NURSING MANAGEMENT

In healthcare settings, there is a need for leaders to create supportive work environments that will increase nurse job satisfaction. Openness about and adherence to values within the scope of the organizational culture is required of nurse managers. It is important for nurse managers to be open about their values and to be seen to act on their true values about the organization.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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