



Leadership styles in nursing management: implications for staff outcomes

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ABSTRACT

Introduction: Nursing is a people-centred profession and therefore the issue of leadership is crucial for success. Nurse managers' leadership styles are believed to be important determinant of nurses' job satisfaction and retention. In the wake of a global nursing shortage, maldistribution of health workforce, increasing healthcare costs and expanding workload, it has become imperative to examine the role of nurse managers' leadership styles on their staff outcomes. Using the Path-Goal Leadership theory as an organising framework, this study investigated the leadership styles of nurse managers and how they influence the nursing staff job satisfaction and intentions to stay at their current workplaces.

Methods: The study employed a cross-sectional survey design to collect data from a sample of 273 nursing staff in five hospitals in the Eastern Region of Ghana. Descriptive and regression analyses were performed using SPSS version 18.0.

Results: Nurse managers used different leadership styles depending on the situation, but were more inclined to the supportive leadership style, followed by the achievement-oriented leadership style and participative leadership style. The nursing staff exhibited moderate levels of job satisfaction. The nurse managers' leadership styles together explained 29% of the variance in the staff job satisfaction. The intention to stay at the current workplace was low (2.64 out of 5) among the nursing staff. More than half (51.7%) of the nursing staff intended to leave their current workplaces, and 20% of them were actively seeking the opportunities to leave. The nurse managers' leadership styles statistically explained 13.3% of the staff intention to stay at their current job position.

Conclusions: These findings have enormous implications for nursing practice, management, education, and human resource for health policy that could lead to better staff retention and job satisfaction, and ultimately improve patient care.

Keywords: Nurse manager; leadership style; job satisfaction; intention to stay; staff outcomes; nursing leadership

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INTRODUCTION

Health care has become complex and faced with many challenges including staff shortages, increasing workload and rising cost of care. As one of the largest group of health professionals, nurses and



midwives are often at the centre of these issues. Consequently, nursing leadership is constantly evolving in search of better approaches to improve both patient and staff outcomes (1–3). In addressing the myriad of nursing staff and care delivery issues, nurse managers must use a specific leadership style or a combination of different styles in order to be effective (4–6).

Leadership occur anytime a person attempts to influence the beliefs, opinions, or behaviours of individuals or groups (7,8). According to Wehrich (9), leadership is also defined as influence, that is, the art or process of influencing people so that they strive willingly and enthusiastically toward the achievement of the goals of the group. However, while leadership itself is a process, it is often exhibited in different styles. Leadership styles refer to the behaviour patterns of a leader or an individual who attempts to influence others (6). Nurse managers have a responsibility for retaining their nursing staff once they are recruited. The leadership styles displayed by nurse managers play a major role in nurses' decision to stay in their current workplaces, to leave through transfer, or to seek new employment elsewhere or outside of the nursing profession altogether (10). Again, managers' leadership styles tend to have a significant influence on the level of job satisfaction of nursing staff. In addition, staff retention also appears to be highly linked with job satisfaction. Several studies have buttressed the point that nursing staff who are satisfied with their jobs are more likely to stay in the job (and the profession) than the less satisfied staff (2,10–12).

Job satisfaction is described as an attitude that employees have about their jobs and the organizations in which they work (13). Generally, job satisfaction is seen as a multidimensional concept that encompasses aspects of employees' contentment about their managers' leadership behaviour, the payment, professional opportunities, benefits, organizational practices, and relationships with their co-workers (14). On the other hand, the intention to stay is a proxy for staff retention and is defined as the likelihood of a worker to stay in his/her present job (10).

Globally, health care is experiencing a transition due to changing disease patterns and the shortage of

essential healthcare professionals (15) compounded by turbulent economic conditions. As a result, the health workforce levels in many developing countries, including Ghana, are below the international benchmarks. However, the governments are constantly warned against massive recruitment. The World Health Organisation recommends a 2.02 to 2.54 (average 2.3) Essential Health Workers density (16). Nevertheless, Ghana, which is accorded a lower middle income country, has about 1.24 density, suggesting a 61% deficit (15,17). This type of shortage of health professionals, particularly nurses, in Africa have largely been blamed on massive emigration, a phenomenon known as brain drain (18). This has led to increased responsibilities of the nurse managers to retain their competent staff and keep them satisfied, in order to deliver quality patient care with limited resources (19).

With dwindling resources, nurse managers could retain their staff and keep them satisfied with their job in a cost effective manner, by exhibiting the 'right leadership styles'. Guided by the Path-Goal Leadership theory (20) as an organising framework, this study described leadership styles adopted by nurse managers and examined the relationship between nurse managers' leadership styles and nursing staff job satisfaction, and their intention to stay at their current workplaces.

METHODS

This study employed a quantitative approach using a cross-sectional survey design to collect data from nurses about their perception of their nurse managers' leadership styles and how these styles influence their staff outcomes.

The study was carried out in five hospitals in the eastern region of Ghana. Hospital A is a Government owned secondary care hospital. Hospitals B and C are Government owned district (primary care) hospitals, while hospitals D and E are large faith-based hospitals that are comparable to district hospitals. The health facilities were selected to represent both primary and secondary hospitals as well as the Government and mission hospitals in the Eastern Region of Ghana.

The five hospitals had a total of 591 nurses and midwives (21) which was used as the accessible

population. At an alpha level of 0.05, the sample size was calculated using the Yamane (22) simplified sample size formula. The sample size was calculated to be 239 but 15% was added to cater for non-response and possible bias. The sample size was therefore rounded to 275 participants. A multistage sampling strategy was used to recruit the participants. Each of the five hospitals was given a proportional quota based on their nursing and midwifery staff population. In each facility, a proportional quota was used to allocate the required sample from that health facility to the various wards/units. In each ward/unit, a convenience sampling strategy was used to recruit the participants who met the inclusion criteria and consented to participate in the study. Out of the 275 participants who were recruited for the study, 273 completed and returned the questionnaire representing a response rate of 99.3%.

Standard tools were adapted and modified to suit the methodology and objectives of this study. The questionnaire was divided into the following sections: Section A collected Socio-demographic data; section B contained the Path-Goal Leadership Questionnaire which has 20 items that measure Nurse Managers' leadership styles on a 5-point Likert's scale. Section C contained a 7-itemed job satisfaction scale to measure job satisfaction of the nurses. Section D also contained 4 items that elicited the nurses' intention to stay in their current jobs or workplaces. To enhance reliability, a pre-test of the research instrument was performed with 15 nurses in a different hospital, to identify and modify any areas of misunderstanding in the instrument. The Cronbach's alpha coefficient of the reliability of the instrument was also determined. The overall Cronbach's alpha of the research questionnaire was 0.701, which is considered acceptable (23). The constituent scales also yielded acceptable levels of the alpha coefficients. In the current study, the Path-Goal Leadership style questionnaire yielded a Cronbach's alpha coefficient of 0.831; the job satisfaction scale yielded 0.754; the intention to stay scale yielded 0.695.

Statistical analysis

Statistical Package for Social Sciences (SPSS) version 18.0 was used to conduct descriptive,

correlation and regression analyses. The leadership styles of the nurse managers were assessed by their subordinates using the Path-Goal Leadership styles questionnaire. Each leadership style was measured using five items with scores ranging from 5 to 25. Scores below 12 indicated non-use of a particular leadership style; scores above 16 showed a moderate use and scores above 20 showed a typical (high) use of a particular leadership style.

A job satisfaction scale comprised of 7 items. The Likert's scale response was used to measure the level of job satisfaction of the nursing staff on a 5-point scale. Higher scores indicated higher level of job satisfaction of the participants. The staff intention to stay at their current workplaces (hospitals) was measured using a 5-point scale, where higher scores reflected a higher intention to stay. Multiple regression analyses were used to determine the extent to which the various leadership styles predict the nursing staff job satisfaction and the intentions to stay. The study received ethical approval from the University of Ghana Ethics Committee for the Humanities (ECH) and was also permitted by the Management of the study hospitals.

RESULTS

Socio-demographic characteristics

The mean age of the participants was 29.6 (SD = 6.70) years with a modal age of 28 years. The majority of the participants (52%) were from the district hospitals. Most of the participants (78.0%) were females and only 21.3% were males. The participants in the senior staff grade (Senior Staff Nurse/Senior Staff Midwife) constituted the majority (37.7%), while those in the principal grade constituted only 1.5% of the sample. In addition, the majority of the participants (16.8%) worked in the medical wards, and only 4.4% worked in the maternity wards. The details of the demographic characteristics of the participants are presented in Table 1.

Nurse managers' leadership styles

The results showed that the mean score for the directive leadership style was 13.15 (SD = 2.52), which is moderate and indicates occasional use by the nurse managers. Similarly, the mean score for the

TABLE 1. Socio-demographic characteristics of the participants

Variable	Frequency	Percent
Type of hospital		
Regional	116	42.5
District	142	52.0
Missing data	15	5.5
Total	273	100
Age (years)		
20-29	157	57.5
30-39	51	18.7
40-49	8	2.9
50-59	8	2.9
60 and above	2	0.8
Missing data	47	17.2
Total	273	100
Gender		
Male	58	21.3
Female	213	78.0
Missing data	2	0.7
Total	273	100.0
Professional rank		
Staff nurse/midwife	54	19.8
Senior staff nurse/midwife	103	37.7
Nursing officer/midwifery officer	17	6.2
Senior nursing officer/senior midwifery officer	12	4.4
Principal nursing officer/principal midwifery officer	4	1.5
Enrolled nurses	77	28.2
Missing data	6	2.2
Total	273	100
Unit/ward		
Emergency	30	11.0
Maternity	12	4.4
Surgical	38	13.9
Medical	46	16.8
Children	35	12.8
Theatre	16	5.9
Out patient department	27	9.9
Specialized units	18	6.6
Others (antenatal clinic, postnatal clinics etc.)	43	15.8
Missing data	8	2.9
Total	273	100.0

supportive leadership style was 16.70 (SD = 3.90), which was also moderate and indicates occasional

use by the nurse managers. Furthermore, the nurse managers moderately used the participative leadership style (mean = 15.07, SD = 3.17) as well as the achievement-oriented leadership style (mean = 16.55, SD = 3.59).

Even though the moderate scores were recorded for all the leadership styles, according to the frequency of the style usage, the nurse managers used the supportive leadership style (mean = 16.70, SD = 3.903) more than any other style. This was followed by the achievement-oriented leadership style (mean = 16.55, SD = 3.592) and the participative leadership style (mean = 15.07). The least used leadership style was the directive style (mean = 13.15, SD = 2.521). In accordance with the interpretation of the Path-Goal tool for leadership styles, the nurse managers were situational users of the leadership styles, applying each leadership style as and when the situation demanded. The details of the analysis are shown in Table 2.

Nursing staff job satisfaction

The staff level of job satisfaction ranged from 1 to 5, with an average of 3.13 (SD = 0.69). This means that the nursing staff in this study showed moderate levels of job satisfaction. The nurses exhibited higher satisfaction with their relationship with the nurse managers ($M = 3.65$, $SD = 1.01$), however they were the least satisfied with working at their current workplaces until their retirement ($M = 2.40$, $SD = 1.24$). The details are shown in Table 3.

Relationship between the leadership styles and nursing staff job satisfaction

The results of the Pearson's correlation analysis show that there was a weak but significant negative correlation between the directive leadership style and the staff level of job satisfaction ($r = -0.263$, $P < 0.001$). Furthermore, the supportive leadership style of the nurse managers was positively correlated with the staff levels of job satisfaction ($r = 0.462$, $P < 0.001$). Similarly, the participative leadership style showed a positive and significant but moderate association with the staff job satisfaction levels ($r = 0.402$, $P < 0.001$). The achievement-oriented leadership style also correlated positively with the staff job satisfaction levels ($r = 0.399$, $P < 0.001$).

TABLE 2. The leadership styles used by the nurse managers

Leadership style and its characteristics	Minimum	Maximum	Mean	SD
Directive leadership style (total score)	4	18	13.15	2.521
The nurse manager let subordinates know what is expected of them	1	5	2.67	1.092
The nurse manager informs subordinates about what needs to be done and how it needs to be done	1	5	2.66	1.064
The nurse manager asks subordinates to follow standard rules and regulations	1	5	3.03	0.917
The nurse manager explains the level of performance that is expected of subordinates	1	5	2.37	1.227
The nurse manager gives vague explanations of what is expected of subordinates on the job (reversed scored)	1	5	2.42	1.292
Supportive leadership style (total score)	6	25	16.70	3.903
The nurse manager maintains a friendly working relationship with subordinates	1	5	3.98	1.087
The nurse manager does little things that make it pleasant to be a member of the team	1	5	3.12	1.174
The nurse manager says things that hurt subordinates' personal feelings (reversed scored)	1	5	3.59	1.209
The nurse manager helps subordinates overcome problems that stop them from carrying out their tasks	1	5	3.00	1.213
The nurse manager behaves in a manner that is thoughtful of subordinates' personal needs	1	5	3.01	1.202
Participative leadership style (total score)	5	25	15.07	3.168
The nurse manager consults with subordinates when facing a problem	1	5	3.28	1.157
The nurse manager listens receptively to subordinates' ideas and suggestions	1	5	3.46	1.163
The nurse manager act without consulting his/her subordinates (reversed scored)	1	5	2.58	1.180
The nurse manager asks for suggestions from subordinates concerning how to carry out assignments	1	5	3.08	1.073
The nurse manager asks subordinates for suggestions on what assignments should be made	1	5	2.67	1.181
Achievement oriented leadership style (total score)	7	25	16.55	3.592
The nurse manager let subordinates know that he/she expect them to perform at their highest level	1	5	3.97	1.148
The nurse manager set goals for subordinates' performance that are quite challenging	1	5	2.86	1.184
The nurse manager encourages continual improvement in subordinates' performance	1	5	3.64	1.154
The nurse manager shows that he/she have doubts about subordinates' ability to meet most objectives (reversed scored)	1	5	3.54	1.158
The nurse manager consistently set challenging goals for subordinates to attain	1	5	2.54	1.254

Notes: Total score is a sum of the scores of the leadership style characteristics (higher score indicates a regular use of the leadership style). The scores of the leadership style characteristics are based on a 5-point scale

A multiple linear regression analysis was used to determine if the demographic characteristics (model 1) and the nurse managers' leadership styles (model 2) significantly accounted for the levels of the staff job satisfaction.

In the first model, the nurses demographic characteristics (age, basic qualification, unit/ward of work, and gender) jointly explained 5.2% of the variance in the staff level of job satisfaction [$R^2 = 0.052$, $F_{(4, 226)} = 3.089$, $P = 0.017$]. When the predictors were evaluated for their individual contributions to

the model, only the age and basic qualification were significant predictors in the model.

Furthermore, the nurse managers leadership styles (directive, supportive, participative, and achievement-oriented) together significantly predicted the levels of the staff job satisfaction and explained 29% of the variance in the levels of the staff job satisfaction [$R^2 = 0.29$, $F_{(8, 222)} = 11.790$, $P < 0.001$]. The supportive leadership style, participative leadership style, and achievement-oriented leadership style contributed 20.8%, 16.1%, and 16.8% respectively

to the model. (B = -0.112, p = -0.084). On the other hand, the directive leadership style did not significantly contribute to the model. The details of the analysis are indicated in Table 4.

TABLE 3. Summary of the job satisfaction scores

Aspects of nurses job satisfaction	Min.	Max.	Mean	SD
Nurses' level of job satisfaction (total score on a 5-point scale)	1	5	3.13	0.69
I am very satisfied with my job	1	5	3.56	1.06
I feel that my co-workers are satisfied with their jobs	1	5	3.16	0.93
I feel i would be happy to work here until i retire	1	5	2.40	1.24
I feel that the health care facility provides a supportive work environment	1	5	2.67	1.21
I am very satisfied with my nurse manager's ability to coordinate activities in the ward	1	5	3.34	1.06
I am very satisfied with my nurse manager's leadership style	1	5	3.12	1.09
I am very satisfied with my relationship with my nurse manager	1	5	3.65	1.01

Note: Higher mean score reflects higher level of job satisfaction

Nurse managers' leadership styles and the staff intention to stay at the current workplace

The study examined the staff intentions to stay at their current workplaces and the extent to which that intention is explained by their nurse managers' leadership styles. The results indicated that the mean intention to stay was 2.65 (SD = 0.817) on the 5-point scale. This means that the staff had low intentions to continue to stay at their workplaces. However, a descriptive summary of the constituent sub-scales of the intention to stay tool indicated that 19.8% (n = 54) were definite about their intention to leave the current workplace. Also, 31.9% (n =87) reported that they would probably leave their current workplaces in the future. On the other hand, only 13.2% (n = 36) reported that they would probably not leave and 9.9% (n = 27) were firm that they would definitely not leave. Furthermore, 20.1% (n = 55) were presently looking for the opportunities to leave and another 46.9% were seriously considering leaving in the future. Only 10.3% (n = 28) intended to stay at their workplaces and another 4.4% (n = 12) were unlikely to ever consider leaving their current workplaces.

TABLE 4. Relationship between the leadership styles and staff level of job satisfaction

Predictors	Unstandardized coefficients		Standardized coefficients	t	p value	Correlations r
	B	Std. error	Beta			
Model 1						
(Constant)	2.882	0.227		12.673	<0.001	
Age	0.017	0.007	0.167	2.568	0.011	0.155
Basic qualifications	-0.127	0.060	-0.137	-2.109	0.036	-0.121
Unit/ward	-0.002	0.003	-0.055	-0.836	0.404	-0.028
Gender	-0.008	0.005	-0.092	-1.415	0.158	-0.084
Model 1 summary: R ² =0.052, F _(4,226) =3.089, p=0.017						
Model 2						
(Constant)	0.720	0.331		2.173	0.031	
Age	0.016	0.006	0.158	2.763	0.006	0.155
Basic qualifications	-0.085	0.055	-0.092	-1.547	0.123	-0.121
Unit/ward	-0.001	0.002	-0.030	-0.527	0.598	-0.028
Gender	-0.004	0.005	-0.047	-0.825	0.410	-0.084
Directive leadership style	-0.031	0.018	-0.112	-1.737	0.084	-0.263
Supportive leadership style	0.037	0.014	0.208	2.642	0.009	0.462
Participative leadership style	0.035	0.016	0.161	2.233	0.027	0.402
Achievement oriented leadership style	0.033	0.013	0.168	2.433	0.016	0.399
Model 2 summary: R ² =0.29, F _(8,222) =11.790, p<0.001						

Note: Dependent variable: Level of job satisfaction criterion level: 0.05

In addition, 37.7% (n = 103) of the participants preferred not to continue to work at their current workplaces, while 24% (n = 67) preferred to continue to work there. About 34.1% (n = 93) felt it was of some importance for them to personally continue to work in their respective hospitals. The details are shown in Table 5.

Relationship between the nurse managers' leadership styles and nursing staff intentions to stay at the current position

The results of the Pearson's correlation analysis show that there was a weak but significant positive correlation between the supportive leadership style and the staff intentions to stay ($r = 0.221$, $P < 0.001$).

Similarly, the participative leadership style showed a positive and significant correlation with the staff intentions to stay ($r = 0.243$, $P < 0.001$). Furthermore, the achievement-oriented leadership style also correlated positively with the staff intention to stay in their current workplaces ($r = 0.184$, $P = 0.003$). However, there was no significant correlation between the directive leadership style and the staff intentions to stay at their current workplaces.

A multiple linear regression analysis was used to determine if the leadership styles of the nurse managers significantly predicted their staff intentions to stay. Both the dependent variable (intentions to stay) and independent variables (nurse managers' leadership styles – directive, supportive, participative, and

TABLE 5. Aspects of the staff intentions to stay

Aspects of staff intention to stay	Frequency (n)	Percentage
Choose the statement that most clearly reflects your feelings about your future with your organisation		
I definitely will leave	54	19.8
I probably will leave	87	31.9
I am uncertain	69	25.3
I probably will not leave	36	13.2
I definitely will not leave	27	9.9
Total	273	100.0
How do you feel about leaving your hospital?		
I am presently looking and planning to leave	55	20.1
I am seriously considering leaving in the future	128	46.9
I have no feelings about this one way or the other	50	18.3
I intend to stay with my current hospital	28	10.3
It is very unlikely that i would ever consider leaving this hospital	12	4.4
Total	273	100.0
If you are free to choose would you prefer to continue working with the hospital?		
I prefer very much not to continue working here	29	10.6
I prefer not to continue working here	103	37.7
I don't really care whichever way	53	19.4
I prefer to continue working here	67	24.5
I prefer very much to continue working here	21	7.7
Total	273	100.0
How important is it to you personally to continue to work with this hospital?		
It is of no importance to me	27	9.9
I have mixed feelings about its importance	80	29.3
It is of some importance	93	34.1
It is fairly important	48	17.6
It is very important for me to continue to be in this hospital	23	8.4
Missing data	2	0.7
Total	273	100.0

achievement-oriented) were measured on interval scales. The demographic characteristics of the participants (age, basic qualification, unit of work, and gender) were first examined to find out if they significantly predicted the staff intention to stay. The results indicated that the demographic characteristics (age, basic qualification, unit/ward of work, and gender) jointly explained 7.6% of the variance in the staff intentions to stay [$R^2 = 0.076$, $F_{(4, 226)} = 4.627$, $P = 0.001$]. However, when the predictors were evaluated for their individual contributions to the model, only the age and basic qualification were significant predictors in the model. Furthermore, the nurse managers leadership styles (directive, supportive, participative, and achievement-oriented) together significantly predicted the staff intentions to stay and explained 13.3% of the variance in the staff intentions to stay [$R^2 = 0.133$, $F_{(8, 222)} = 4.263$, $P < 0.001$]. However, only the participative leadership style significantly contributed to the model, accounting for 17.4% of the variance in the staff intentions to stay ($B = 0.174$, $P = 0.036$). Further details of the relationships are shown in Table 6.

DISCUSSION

Socio-demographic characteristics

The mean age of the participants was approximately 30 years (SD = 6.70) with a modal age of 28 years. This is consistent with the average age of nurses in Ghana which is estimated between 25 and 35 years (GHS annual report, 2013). Following acute shortage of nurses and midwives in Ghana during the late 1990s and early 2000s due to massive brain drain (24), there has been an extensive liberalization of nursing training, culminating in a large cohort of young nurses. Even though this has brought about exuberance in the nursing profession, experience and quality appear to suffer. It also implies that many nurse managers might be in the same age bracket with little or no managerial experience or training.

The current study found that the participants in the senior grade (Senior Staff Nurse, Senior Staff Midwife, or Senior Enrolled Nurse) who might have only 3-5 years of the working experience, constituted the majority (37.7%) of the sample while

TABLE 6. Relationship between the nurse managers' leadership styles and staff intentions to stay

Predictors	Unstandardized coefficients		Standardized coefficients	t	p value	Correlations r
	B	Std. error	Beta			
Model 1						
(Constant)	9.219	1.057		8.726	0.001	
Age	0.098	0.031	0.202	3.141	0.002	0.192
Basic qualifications	-0.792	0.279	-0.183	-2.836	0.005	-0.170
Unit/department of work	0.000	0.013	0.002	0.036	0.971	0.035
Gender	-0.032	0.025	-0.081	-1.264	0.208	-0.072
Model 1 summary: $R^2=0.076$, $F(4,226) = 4.627$, $p=0.001$						
Model 2						
(Constant)	4.457	1.731		2.574	0.011	
Age	0.098	0.031	0.201	3.165	0.002	0.192
Basic qualifications	-0.702	0.286	-0.162	-2.450	0.015	-0.170
Which unit are you working in?	0.002	0.013	0.008	0.120	0.904	0.035
Gender	-0.023	0.025	-0.058	-0.920	0.358	-0.072
Directive leadership style	0.044	0.093	0.034	0.469	0.640	0.074
Supportive leadership style	0.036	0.073	0.043	0.496	0.620	0.221
Participative leadership style	0.174	0.083	0.169	2.106	0.036	0.243
Achievement oriented leadership style	0.046	0.070	0.051	0.663	0.508	0.184
Model 2 summary: $R^2=0.133$, $F(8,222) = 4.263$, $p<0.0001$						

Note: Dependent variable: Intentions to stay criterion level: 0.05

those in the penultimate grade (Principal Nursing Officer, Principal Midwifery Officer, or Principal Enrolled Nurse) constituted only 1.5% of the sample. This indicates the need for the health sector in Ghana to focus on building the competencies of the large cohort of young nursing staff through training and mentorship by the few experienced nurses and midwives.

The majority of the participants (52%) were working in the 4 district level hospitals, while 48% were working in the one regional hospital that was included in the study. Even though this result is not conclusive about the distribution pattern of the nurses in Ghana, it further fuels concerns that staff distribution in the health sector is skewed towards higher level facilities and those in urban areas (15).

Most of the participants (78.0%) were females and only 21.3% were males. This finding is consistent with the widely held view that nursing and midwifery are female dominated professions. However, it also suggests that this perception might be changing gradually with many males taking up nursing as a career.

Nurse managers' leadership styles

Leadership is an important concept in nursing since nursing service operation, even in a small agency, is immensely complicated (19). Thus appropriate leadership styles are required to avoid waste, confusion, and error.

The study found that the nurse managers used all the four leadership styles of the Path-Goal Leadership theory, depending on the situation. However, the supportive leadership style was the most frequently used followed by the achievement-oriented leadership style. Participative leadership style and the directive leadership style were the least used by the nurse managers. This means that the nurse managers exhibited a situational leadership approach without sticking to a particular leadership style. This approach has long been identified as being useful in nursing settings with the justification being that the delivery of nursing care is a dynamic process. In order to be successful the situational leadership style is required to deal with specific circumstances as and when they arise (6). This possibly explains why the nurse managers exhibited all the four leadership

styles (supportive, achievement-oriented, participative, and directive) in this study. In addition, it is common for nurse managers to assist and support their subordinates like a mother, just as they would exhibit such caring attitudes towards their clients. This was further strengthened by the fact that the nursing staff demonstrated higher levels of satisfaction with their relationship with the nurse managers ($M = 3.65$, $SD = 1.01$).

This finding is also in line with recent evidence that Ghanaian nurse managers exhibit variable leadership styles but are more inclined towards the supportive (transformational) leadership behaviour (25). The researchers (25) also concluded that the use of the directive leadership was limited among the nurse managers in Ghana as the relationship between the nursing staff and nurse managers was that of a mother-daughter or father-son relationship.

Furthermore, the inclination towards the use of the supportive and achievement-oriented leadership styles by the nurse managers seen in the current study, also corroborates the work of many researchers in nursing leadership who have emphasised that nurses were gradually moving away from the directive leadership behaviours towards the supportive (transformational) and achievement-oriented (transactional) leadership styles (26–31).

However, the limited use of the directive leadership style found in the current study appears to contradict the claims made by Azaare and Gross (4) who suggested that the nurse managers in Ghana largely exhibit autocratic (directive) and less effective leadership styles. Even though the current study and that of Azaare and Gross (4) are both of Ghanaian origin, the current study employed a quantitative approach while Azaare and Gross (4) adopted a qualitative approach and therefore the methodological difference might have accounted for the contrasting findings.

The leadership styles and job satisfaction

Staff satisfaction is an important determinant of staff retention, motivation, and performance (11,13,25). The current study found that the nursing staff level of job satisfaction was moderate (mean = 3.13, $SD = 0.69$), with higher satisfaction for their relationship with the nurse managers. They were the

least satisfied with working at their current workplaces until the retirement.

There are a myriad of challenges facing Ghanaian nursing staff at the workplace, including poor working environment, inadequate and obsolete equipment, and insufficient remuneration with increasing workload (17,32). These partly explain why the nurses exhibited only moderate levels of job satisfaction. This finding is similar to the findings of a Saudi study (10) which reported that job satisfaction among nurses was generally moderate. Similar findings have also been reported among nurses in China (33). In addition, one Singaporean study (11) found lower levels of job satisfaction (mean = 2.4) among the nurses in that country. Therefore, it appears that nurses/midwives are generally not satisfied with their jobs across many countries, a situation that can potentially reduce the productivity and/or exacerbate the current shortage of nurses and midwives.

The current study found a weak but significant negative correlation ($r = -0.263$) between the directive leadership style and the staff level of job satisfaction. This means that a unit increase in the use of the directive leadership style by the nurse managers culminated in a corresponding decrease in the staff level of job satisfaction by 26.3% and vice versa. This finding affirms the assertion of Azaare and Gross (4) that Ghanaian staff nurses were dissatisfied with the autocratic (directive) leadership style of their nurse managers. The opportunity to feel part of the process of making work-related decisions has always been seen as a critical component of the factors that influence job satisfaction of workers (13). Therefore it is not surprising that the participants in the current study exhibited significant dissatisfaction with the directive leadership style used by the nurse managers.

The deepening democratic values of Ghanaians also play a role in employees' dissatisfaction with the directive or autocratic leadership styles. This implies that in addition to the known extrinsic means of increasing staff job satisfaction, including pay raise, stimulating work environment, and professional development among others, nurse managers could improve the job satisfaction of their staff by limiting the use of the directive leadership tendencies.

On the other hand, the supportive, participative, and achievement-oriented leadership styles positively correlated with the staff levels of job satisfaction by 46.2%, 40.2%, and 39.9% respectively. This means that more frequent use of one, or a combination of the supportive, participative, and achievement-oriented leadership styles by the nurse managers, would lead to a corresponding increase in the nursing staff level of job satisfaction. This finding is in line with the work of earlier researchers which concluded that nursing staff job satisfaction was enhanced by the supportive and participative leadership styles (3,10,12,13).

The current study revealed that the nursing staff demographic characteristics (age, gender, basic qualification, and unit of work) explained 5.2% of the differences in the staff levels of job satisfaction. However, only the age and basic qualifications significantly contributed to the regression model. While the older nursing staff exhibited a higher level of job satisfaction, those with a higher qualification showed rather lower levels of job satisfaction. This may be because the older nursing staff might have reached or are near the peak of their career with accompanying higher level of professional autonomy. By virtue of this, older staff are likely to have higher levels of salary as compared to their younger counterparts and so would seem more satisfied with their jobs. On the other hand, the nursing staff with higher basic qualification, such as a bachelor's degree, tend to easily feel frustrated by the Ghanaian nursing system that limits their autonomy in relation to the patient care. In addition, the managers also prefer employing those with lower qualifications, for economic reasons. In the African context, a number of studies have assigned similar reasons for lower levels of job satisfaction among the nurses/midwives (12,34). Others also found a similar relationship between demographic characteristics such as age and nurses level of job satisfaction (33).

Furthermore, AbuAlRub and Alghamdi (10) reported that 32% of the nursing staff job satisfaction in Saudi Arabia was explained by the achievement-oriented and supportive leadership styles. In the current study, the nurse managers' leadership styles statistically explained 29% of the variance in the staff job satisfaction with the supportive, participative, and achievement-oriented leadership

styles accounting for 20.8%, 16.1%, and 16.8% respectively of the predictive power of the regression model. Similarly, the landmark study by Foong Loke (11) reported that 29% of job satisfaction among Singaporean nurses was explained by leadership behaviours of their nurse managers. This means that nurse managers can increase nearly one-third of the level of the job satisfaction of their nursing staff by just manipulating their leadership behaviours. Thus, the leadership styles appear to be one of the most important tools for improving job satisfaction without huge recurrent financial implications.

However, there are growing concerns that many nurse managers in Ghana tend to lack the requisite educational preparation for their leadership roles because they are appointed into such positions based on seniority and long service rather than academic preparation and competence (19). If this is the case, then the nurse managers might not have the appropriate knowledge of manipulating their leadership behaviours to enhance the job satisfaction of their subordinates. This view, which was alluded to by Azaare and Gross (4), could be addressed by the nursing administration and policy makers by putting together 'a budget for regular management and leadership training for Nurse Managers [and potential Nurse Managers]' (25).

The leadership styles and staff intentions to stay

Staff intention to stay is often used as a proxy of staff retention or attrition. This study found that the staff had low intentions to continue to stay at their current workplaces ($M = 2.65$, $SD = 0.82$). This means that the nursing staff may or may not wish to stay at their current workplaces depending on the circumstances. The majority (51.7%) intended to leave their current workplace, and 20% of them were actively seeking the opportunities to leave. Even though the potential attrition associated with this finding is likely to be internal (from one health facility or region to another within the public health sector), it has the potential of exacerbating the lingering problem of maldistribution of health workers in Ghana.

However, the 51.7% of the nursing staff who intend to leave in this study, is relatively small compared to 67.5% of the nurses reporting an intent to leave within the next 1 to 3 years, in Lebanon (35). This

give credence to the assertion that nurses are constantly on the lookout for the opportunities to leave their current jobs (2,36). It is also consistent with the findings of an Ethiopian study in which only 39.8% of the nurses intended to stay at their existing workplaces (34). The lack of professional autonomy as well as low and variable levels of salary are reportedly responsible for the low intent to stay among the Ethiopian nurses. In the Ghanaian context, the nurses and midwives also grapple with limited professional autonomy, but unlike Ethiopia, the salary and remuneration are similar across the public health sector. Thus, leaving one health facility to another might not necessarily lead to improved remuneration. However, nursing staff tend to seek transfer to other facilities in the urban areas where they can explore other opportunities such as part time work and education for themselves or their children.

However, the phenomenon of low intention to stay or high intention to leave appear to be similar across many countries especially in Saudi Arabia, India, United Kingdom, and Canada among others (10,36-39).

The current study found a weak but significant positive correlation between the supportive ($r = 0.221$), participative ($r = 0.243$), and achievement-oriented leadership styles ($r = 0.184$) and the staff intentions to stay. However, these findings are in contrast with other studies in which no significant relationship between the leadership styles and nurses intention to stay (10,40) was observed. The contrast between the current study and these earlier studies could be attributed to the differences in the sample characteristics, work environment and the cultural context of each country.

The demographic characteristics of the staff (age, basic qualification, unit of work, and gender) jointly explained 7.6% of the nursing staff intent to stay but only the age and basic qualification were statistically significant predictors in the model. The older staff exhibited higher intentions to continue to stay at their current workplaces indicating that they do not wish to leave their workplaces soon. This might be due to the fact that they have built their family lives in those places and are also preparing themselves for upcoming or future positions (succession planning). On the other hand, the younger staff appears to be

easily dissatisfied with their workplaces, especially if their spouses or partners are in different locations. This is substantiated by the Ghana Health Service report (2014) which show that the most transfers within the Ghana Health Service is usually on marital grounds. Other studies also found similar patterns of younger nurses with higher levels of turnover intention (41).

Again, the current study found that the staff with higher education had lower intentions to stay at their current workplaces. This finding is consistent with the findings of a Jordanian study which reinforces the claim that the staff with higher qualifications tend to seek better job opportunities with higher remuneration and recognition (42). In Ghana, the nursing staff with higher education are sometimes encouraged by the peers and employers to take up teaching jobs rather than clinical jobs. It is therefore not surprising that the staff intention to stay negatively correlated with the higher academic qualification.

Furthermore, the nurse managers' leadership styles (directive, supportive, participative, and achievement-oriented) jointly explained significant portion (13.3%) of the nursing staff intentions to stay but only the participative leadership style significantly contributed to the model. This means that the nursing staff would be more willing to stay at their current workplaces if the nurse managers exhibited more of the participative leadership style. Unlike other studies that discounted the influence of the leadership styles on the nursing staff intentions to stay (10,40), the current study strengthens the view that nurse managers can improve staff retention in a cost effective manner by exhibiting more participatory leadership.

This finding also corroborates the assertion by Sanford (43) that any investment in nursing leadership development is a legitimate cost for retention of nursing experts in healthcare facilities.

Implications for nursing practice, nursing management, and human resources for health (HRH) policy

The study found that different leadership styles are required to achieve different outcomes; hence there is no one leadership style ideal for all situations. For

instance, while the three leadership styles (supportive, participative, and achievement-oriented) significantly predicted the staff job satisfaction, only the participative leadership style explained a significant portion of the staff intention to stay and the achievement-oriented leadership style was the only predictor of perceived productivity levels (44). These findings imply that nurse managers need to understand their own leadership styles and constantly assess their subordinates' need for a particular leadership style to maximise staff job satisfaction, retention, and productivity (44). Furthermore, a significant portion of the nurse managers had not received any training in management prior to or after their appointment as the nurse managers. This implies that these nurse managers might not have sufficient knowledge and competence to navigate between the various leadership styles for optimum staff outcomes. This situation necessitates the training of the current and future nurse managers in the area of management and leadership.

This study has significant implications for policy making in the area of human resources for health. We found that a total of 51.7% of the nursing staff intended to leave their current workplaces, and 20% of them were actively seeking the opportunities to leave. This implies a high tendency of nursing staff attrition within the health sector. Even though this type of attrition is likely to be internal (movement from one health facility or region to another health facility or region), it has the potential of exacerbating the lingering maldistribution of the health workforce in Ghana. An innovative policy intervention is thus needed to enhance effective leadership in nursing to address the issue of retention of nurses and midwives at their workplaces and also streamline inter-facility and inter-regional transfers.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

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