

Transformational Nursing Leadership Practices, Staff Retention and Promotion of Quality Healthcare Training: Evidence from Nursing Colleges in Ghana

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Abstract

This paper examined the dynamics of transformational leadership practices, staff retention and promotion of quality healthcare training. The study focused on nurses and midwives training colleges in Ghana. The paper employed quantitative analytical procedure and survey design. Questionnaire was used for the collecting the data. Multi-stage sampling technique was used which emphasised cluster and simple random sampling techniques. Sample size of 102 was used. 78 out of the 102 questionnaires were obtained and processed. Mean scale and standard multiple regression were employed for the analyses. The study revealed although the level of perceived transformational leadership practices is low, all the constructs exhibited significant positive effect on staff retention except Intellectual Stimulation (IS) which revealed insignificant positive effect. It was further found that although all the transformational leadership constructs exhibited positive effect, only Inspirational Motivation and Intellectual Stimulation (IS) are significant. However, when moderated by staff retention, all the transformational leadership constructs revealed significant and improved positive influence on perceived quality healthcare training. It is therefore recommended that policy in improving quality healthcare training should integrate both the promotion of transformational leadership and improved staff retention in nurses and midwives training colleges in Ghana.

Keywords: Transformational Leadership, Staff Retention, Promotion of Quality Healthcare Training, Principals

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1. Introduction

Leadership has become more important in today's world of work. The endorsement and application of effective leadership style ensures changes in attitudes, values and behaviours through interactions between leaders and followers (Bass, & Riggio 2006). In fact, leadership cannot be isolated in pursuing any successful endeavour and its value extends beyond pure managerial field to other fields including the healthcare sector. Leadership styles are vital to defining a healthcare facility's culture and provide a favorable environment that encourages freedom, motivation, job satisfaction, and career progress (Marquis & Huston, 2017).

Several studies have demonstrated empirically that nursing profession is one of the stressful occupation in the health fraternity (Baglioni, Cooper, & Hingley, 1990; Brown, & Edelmann, 2000; Su, Boore, Jenkins, Liu, & Yang, 2009). It has been documented that institutional factors such as leadership style can either drive the stress or contribute to the well-being of the staff (Arnetz, & Blomkvist, 2007; Bartram, Joiner, & Stanton, 2004; Lohela, Bjorklund, Vingard, Hagberg, & Jensen, 2009). In fact, the concept of leadership in healthcare have historical undergone several developments, presenting different peculiarities over time and constantly changing environment (Institute of Medicine, 2004).

The stress and work related challenges have not only affected quality of healthcare but also have triggered staff turnover. Studies have proved that there is increased levels of turnover among nurses coupled with fatigue negatively influence the work environment, increase the cost of healthcare, and hinder quality of care patients receive (Adams et al., 2019; Nasurdin et al., 2018; Kaddourah et al., 2018). For instance, the Bureau of Labor Statistics (2020) in United State has estimated that the number of registered nurses is expected to increase by 7%, or 221,900 between 2019 and 2029, which currently outlined the high level of nurses turnover (Nasurdin et al., 2018). The situation is not different in African. Ghana has also documented hostile working environment in hospitals with sometimes outburst of demonstrations against leadership. For instance in 2017, nurses at Ankaful Psychiatric Hospital went on a sit-down strike due to inadequate funding and managerial issues with the head of the facility (Mordy, 2019).

The government responded through managerial training for heads of several hospitals. In effect, they are recognising the critical role of leadership in quality healthcare and staff turnover. An effective leadership could provide a favourable work environment that will create an equal opportunity for progress and satisfaction among staff members. Leadership style is a necessary function in shaping organizational performance in the area of job satisfaction that can ultimately improve patient care (Marquis & Huston, 2017). Among the leadership qualities, transformational leadership is emerging as fundamental for followership well-being, productivity and continuity

(Roux & Hartel, 2018). Nurses managers and principals of nurses training institutions require leadership capable of transforming not only the physical environment, but also the beliefs and practices of nurses. Hence, transformational nursing leadership has been acknowledged as the suitable approach for dynamic evolving situation and learning to facilitate adoption (Bucic et al. 2010; Borkowski et al. 2011).

Transformational leaders display trustworthiness or engage with their followers in pursuit of jointly held goals (Antonakis, 2001; Barker, Sullivan & Emery, 2006). In other words, transformational leadership is the relationship where leaders and followers raise one another to higher levels of motivation and morality. A transformational leader inspires others to develop, implement and encourages enthusiasm among the workers as well as recognised the values employees place on their work. These leaders also recognise areas in which change is needed and they guide and inspire their followers and creating a sense of commitment (Bucic et al. 2010; Borkowski et al. 2011). Thus, endorsement and application of this leadership quality is fundamental in addressing the working challenges, productivity and turnover problem of nurses in the health fraternity (Asif, Jameel, Hussain, Hwang & Sahito, 2019; Higgins, 2015; Magbity, 2018).

Despite the fact that the leadership challenges affect all nurses, a critical evaluation of the empirical literature shows that the focus has been on nurses at hospitals with those in the health training institutions in neglect (Adzei & Atinga, 2012; Asif, et al., 2019; Dawson, 2014; Eisler, 2009; Higgins, 2015; Kouzes & Posners, 2001; Magbity, 2018). Extending the literature to the nurses and midwifery colleges is very critical as they are primary suppliers of the nurses who work in the health facilities. As the adage goes 'Garbage In, Garbage Out' Thus, paucity of literature on the dynamics of transformational leadership practices, staff retention and promotion of quality healthcare training could obscure the direction of policy in dealing with management and quality of training fundamentals in the health training institutions especially the Nurses and midwifery training colleges in Ghana.

The few studies in Ghana such as Adzei and Atinga (2012) focused on motivation and retention of health workers in Ghana's district hospitals. Magbity (2018) also focused on nurse managers' leadership styles and turnover intention among nurses in Brong Ahafo Region - Ghana. Despite the theoretical bases, virtually no study has considered the role of leadership in the quality of healthcare training and the interacting role of staff retention in the dynamics. With the new direction in tertiary education in Ghana, poor working conditions at these training institutions would not only affect promotion of quality of healthcare training negatively but also could push the staff to other institutions. It is against these that this paper seeks to explore the dynamics of principals' transformational leadership, staff turnover and promotion of quality healthcare training in nurses and midwives training colleges in Ghana. The rest of the paper is organised as follows: literature review and hypothesis development, empirical methodology, empirical estimation, empirical results and discussions.

2. Literature Review and Hypothesis Development

This study is grounded in the behavioural leadership theory. It is a management belief that assesses leaders by their engagements displayed at the workplace. Followers of the theory believe that to be an effective leader one has to learn a specific set of behaviors. If the individual is interested in becoming an efficient leader or in instigating a new leadership style, the person can benefit from studying behavioral leadership theory (Roux & Hartel, 2018). Behavioural leadership theory argues that a leader's success is centered on their behaviour instead of their natural attributes. Behavioural leadership theory comprises evaluating and observing a leader's behaviours and actions when they are reacting to a particular situation (Rajbhandari, 2017). The theory considers that leaders are not borne, but made. Proponents of the theory posit that everybody can be an effective leader if the person can study and apply specific behaviours.

The theory supports the notion that all leaders are able to learn and develop by adopting helpful behaviours and execute them in the workplace (Roux & Hartel, 2018). Behavioural leadership theory also inspires leaders to be self-aware of their behaviour and to identify how it impacts the morale and productivity of the team. There are numerous important behavioural leadership styles (Goff, 2003). Each style comprises a diverse set of behaviours and may be relatively effective in specific work environments. One identifiable leadership style which is believed to have positive effect on staff productivity and quality of services is transformational leadership. Transformational leaders labour with followers or team beyond the instant self-interests of the followers to identify desired change, constructing a vision to direct the change by inspiration, influence, and performing the change with dedicated group members; this self-interests change increases the followers' ideal and maturity levels, besides their trepidations for the accomplishment (Odumeru and Ogbonna, 2013). This leader influences followers and motivates the followers to work beyond the supposed capabilities. Transformational leadership motivates individuals to accomplish remarkable or unexpected results (Kwan, 2020).

Workers are provided with self-sufficiency above specific jobs, besides the ability to make decisions once training has been done. This encourages a positive change in the attitudes of followers and organization in general. Transformational leadership can be perceived when followers and leaders advance each other to an advanced motivation and morality level. By the strength of the personality and vision, transformational leaders are competent to encourage followers to change perceptions, motivations and expectations to work towards mutual goals.

Followers have close bond and attachment to transformational leaders and would go extra mile to work with them. Following these theoretical considerations, by practicing transformational leadership in Nurses and Midwifery training colleges, principals would likely draw the staff along. Thus, principals' transformational leadership practice could enhance staff retention. The study therefore follows these assumptions and hypothesise as follows:

H₁: Perceived principals' transformational leadership practices has significant positive influence on the level of readiness to stay (staff retention)

Moreover, transformational leaders labour with followers, influence their team to go beyond their desires to achieve performance goals (Odumeru and Ogbonna, 2013). According to Kwan (2020), a transformational leader motivates individuals to accomplish remarkable or unexpected results (Kwan, 2020). The theoretical implication is that leaders who exhibit transformational qualities are likely to achieve remarkable results. By extension, principals who endorse transformational qualities could also improve quality of healthcare training of students in their schools. The study follows these to formulate its second hypothesis as follows:

H₂: There is a significant positive relationship between perceived principals' transformational leadership practices and promotion of quality healthcare training

Since training is continuity, the quality of training may also be dependent on continuity. Transformational leadership can be perceived when followers and leaders advance each other to an advanced motivation and morality level. By the strength of the personality and vision, transformational leaders are competent to encourage followers to change perceptions, pursue continuity, motivations and expectations to work towards mutual goals. Marrying the critical role of transformational leadership practices to the need for continuity of services through staff retention, this study argues that staff retention could strengthen or weaken the strength of the relationship between perceived principals' transformational leadership practices and promotion of quality healthcare training. The study presents its third hypothesis as follows:

H₃: Staff retention has a significant moderating role on the prelationship between perceived principals' transformational leadership practices and promotion of quality healthcare training

Besides the theoretical discussions, some studies have been conducted in the empirical literature (Adzei & Atinga, 2012; Asif, et al., 2019; Dawson, 2014; Eisler, 2009; Higgins, 2015; Kouzes & Posners, 2001; Magbity, 2018). These studies have largely focused on hospitals which little emphasis place on health training institutions (Adzei & Atinga, 2012; Asif, et al., 2019; Dawson, 2014; Eisler, 2009; Higgins, 2015; Kouzes & Posners, 2001; Magbity, 2018) which are suppliers of the practitioners to the hospitals. As the adage goes 'Garbage In, Garbage Out' Thus, paucity of literature on the dynamics of transformational leadership practices, staff retention and promotion of quality healthcare training could obscure the direction of policy in dealing with management and quality of training fundamentals in the health training institutions especially the Nurses and midwifery training colleges in Ghana. The few studies in Ghana such as Adzei and Atinga (2012) focused on motivation and retention of health workers in Ghana's district hospitals. Magbity (2018) also focused on nurse managers' leadership styles and turnover intention among nurses in Brong Ahafo Region - Ghana. Despite the theoretical bases, virtually no study have considered the role of leadership in the quality of healthcare training and the interacting role of staff retention in the dynamics.

3.1 Empirical Methodology

The study employs quantitative approach and survey design as analytical techniques. The choice of quantitative approach is consistent with the literature which dictates that when the focus of a study is an inquiry that seeks to determine relationship between phenomena measured with higher order statistical procedures (Bryne, 2013; Creswell, 2013). This paper also seeks to investigate possible relationship among transformational leadership, staff retention and quality healthcare which justifies appropriateness of this analytical procedure. The survey design also complements this analytical procedure. The survey design involves the use of standardised questionnaires to produces in-depth data to establish baselines against which future comparisons can be made or analysed. Survey design is appropriate as the paper sought to explore data which are normally not unobservable such as staff opinion and perceptions about transformational leadership, staff retention and quality healthcare constructs (Fraenkel & Wallen, 2001).

Staffs of public Nurses and Midwifery training colleges in Ghana are the target population for this study. Sample size of 102 is used for the study and selected through a multi-stage sampling technique. Two sampling techniques are employed in this multi-stage sampling where first cluster sampling applied to group the colleges in geographical areas and finally simple random to select the allocated samples.

The data are collected through questionnaire administration. All the variables are measured on a 5-point scale. 21 scale items are used to measure transformational leadership with four sub-constructs: Idealised Influence (II); Inspirational Motivation (IM); Intellectual Stimulation (IS) and Individual Consideration (IC). Staff retention (SR) is measured using 9 scale items and perceived quality healthcare training (QHT) is also measured with 11 scale items.

3.2 Empirical Estimation

The paper uses mean scale and standard multiple regression to analyse the data. The mean scale is used to determine the level of the three variables on the scale of 1 to 5 with 2.9 as the cut-off mean and any score lower than this within the 'low region' and greater is within the 'high region' (Dess, Lumpkin & McFarlin, 2005; Yeboah, 2011). Subsequent to determining the levels, the study employs the standard multiple regression to estimate the three hypotheses (H_1 to H_3). The study also checks internal consistency and reliability of the instruments which are requirements for scale instruments.

To avoid spurious regression, the study check possible multicollinearity problem using both 'Tolerance Value (TV)' and 'Variance Inflation Factor (VIF)'. Tolerance value is the inverse value of VIF. The general threshold is that when the tolerance value is less than 0.1 and the VIF is not greater than 10, then it is safe to assume that there is multicollinearity problem. To test the first hypothesis (H_1) which seeks to determine the significant effect of principals' transformational leadership practices on staff retention, the study presents the estimation model as follows:

$$SR_i = \alpha_i + \beta_1 II_i + \beta_2 IM_i + \beta_3 IS_i + \beta_4 IC_i + \beta_5 Age_i + \beta_6 MS_i + \beta_7 Gen_i + \beta_8 WE_i + \beta_9 LE_i + \varepsilon \quad (1)$$

Where: SR is the dependent variable and denotes staff retention

II, IM, IS and IC are Idealised Influence (II); Inspirational Motivation (IM); Intellectual Stimulation (IS) and Individual Consideration (IC) are transformational leadership constructs and they serve as the independent variables.

Age, MS, Gen, WE and LE are vectors of control variables where MS denotes marital status, Gen is gender, WE denotes working experience and LE represents level of education

ε is the error term

$\beta_1, \beta_2, \dots, \beta_9$ denote the sensitivities of SR to the respective variables. The magnitude and the level of significance determine the extent of the relationship between perceived principals' transformational leadership, and staff retention. The nature of the relationship is determined by the direction of β_1 .

It is expected that $\beta_1, \beta_2, \dots, \beta_9 > 0$

The second focus of the paper is to examine the dynamics of transformational leadership practices and perceived quality of healthcare training. Eqn(2) is used to test hypothesis (H_2) based on this nexus. The model is expressed as follows:

$$QHT_i = \alpha_i + \beta_1 II_i + \beta_2 IM_i + \beta_3 IS_i + \beta_4 IC_i + \beta_5 Age_i + \beta_6 MS_i + \beta_7 Gen_i + \beta_8 WE_i + \beta_9 LE_i + \varepsilon \quad (2)$$

Where: QHT is the dependent variable and denotes perceived promotion of quality healthcare training

The rest of the variables remain as described in Eqn(1)

ε is the error term

$\beta_1, \beta_2, \dots, \beta_9$ denote the sensitivities of QHT to the respective variables. The magnitude and the level of significance determine the extent of the relationship between perceived principals' transformational leadership, and perceived quality healthcare training. The nature of the relationship is determined by the direction of β_1 .

It is expected that $\beta_1, \beta_2, \dots, \beta_9 > 0$

The study further seeks to determine the extent to which staff retention could moderates the relationship between perceived principals' transformational leadership, and perceived quality healthcare training. The model for the estimation is specified in Eqn(3)

$$QHT_i = \alpha_i + \beta_1 II_i^{**} + \beta_2 IM_i^{**} + \beta_3 IS_i^{**} + \beta_4 IC_i^{**} + \beta_5 SR_i + \beta_6 Age_i + \beta_7 MS_i + \beta_8 Gen_i + \beta_9 WE_i + \beta_{10} LE_i + \varepsilon \quad (3)$$

Where: The rest of the variables remain as described in Eqn(1) and Eqn(2)

ε is the error term

$\beta_1, \beta_2, \dots, \beta_9$ denote the sensitivities of QHT to the respective variables. The magnitude and the level of significance determine the extent at which staff retention moderates the relationship between perceived principals' transformational leadership, and perceived quality healthcare training. The nature of the relationship is determined by the direction of β_1 .

It is expected that $\beta_1, \beta_2, \dots, \beta_8 > 0$

4.1 Empirical Findings and Discussions

Data properties and pre-diagnostics are presented and discussed prior to the empirical results. It is important to note that out of 102 samples, 78 was received and processed. This leads to response rate of 76.47%. Table 1 presents the data characteristics of the respondents of the study. The results of the age distribution show that more than 73% ($n=58, 74.36\%$) of the participants are aged between 31 – 50 years. Only 15.38% and 10.26% of the participants are aged below 30 years and above 50 years respectively. This implies that they are old and youthful to contribute meaningfully to this study. Majority of the respondents are married. About 61.54% of the respondents fall within this category. This suggests that these staff would need leadership support to commit to their jobs and

engagement making transformational leadership analysis and staff retention crucial. It can also be found in Table 1 that majority (n=43, 55.13%). Females in Africa and Ghana for emphasis play dual roles: managing homes and demands of job. This family-work conflict could increase the stress of these female staff. Therefore, organisational support through sound leadership style is important for their retention decisions. Majority of the respondents have worked for 1 to 10 years (n=58, 74.36%). The youthful age coupled with the working experience implies that these staff have potential long service. More than half of the respondents have first degree as their highest qualification (n=49, 62.82%).

Table 1: Demographic Factors of Respondents

Variables	Freq.	%	Obs
Age			78
<30 Years	12	15.38%	
31-40 Years	21	26.92%	
41-50 Years	37	47.44%	
>50 Years	8	10.26%	
Marital Status			78
Single	16	20.52%	
Married	48	61.54%	
Divorced	7	8.97%	
Widowed	0	0%	
Co-Habitation	7	8.97%	
Gender			78
Female	43	55.13%	
Male	35	44.87%	
Working Experience			78
< 5 Years	23	29.49%	
6 – 10 Years	35	44.87%	
11 – 20 Years	11	14.10%	
>20 Years	9	11.54%	
Level of Education			78
First Degree	49	62.82%	
Second Degree	29	37.18%	
Third Degree	0	0%	

Source: Field survey, Yawson (2021)

4.1.1 Analysis of Internal Consistency and Reliability of the Scale

The paper developed a 5-point scale to measure the three main variables: transformational leadership, staff retention and quality healthcare. Transformational leadership was measured with 21 scale items with four sub-constructs: Idealised Influence (II); Inspirational Motivation (IM); Intellectual Stimulation (IS) and Individual Consideration (IC). Staff retention (SR) was measured using 9 scale items and quality healthcare (QHC) with 11 scale items. The reliability of these scales was based on the Cronbach alpha values. Following the literature inter-item reliability is high when the alpha values are above the recommended threshold level of 0.60 (Meyers et al., 2013). The variables have Cronbach alpha value range of 0.702 to 0.847. This suggests that all the study variables have relatively high inter-item reliability (Meyers et al., 2013). This evidence further shows that there is relatively high convergent validity in the scales for the variables. It is therefore safe to conclude that there is high internal consistency of the data.

Table 2: Reliability and Internal Consistency

Variables	Item No.	Cronbach Alpha Value
II	II1	0.829
	II2	
	II3	
	II4	
	II5	
	II6	
IM	IM1	0.798
	IM2	
	IM3	
	IM4	
	IM5	
IS	IS1	0.772
	IS2	
	IS3	
	IS4	
	IS5	
IC	IC1	0.702
	IC2	
	IC3	
	IC4	
	IC5	
SR	SR1	0.839
	SR2	
	SR3	
	SR4	
	SR5	
	SR6	
	SR7	
	SR8	
	SR9	
QHC	QHC1	0.847
	QHC2	
	QHC3	
	QHC4	
	QHC5	
	QHC6	
	QHC7	
	QHC8	
	QHC9	
	QHC10	
	QHC11	

Source: Field survey, Yawson (2021)

Table 2: Reliability and Internal Consistency

Variables	Item No.	Cronbach Alpha Value
II	6	0.829
IM	5	0.798
IS	5	0.772
IC	5	0.702
SR	9	0.839
QHC	11	0.847

Source: Field survey, Yawson (2021)

4.1.2 Descriptive Statistics

The descriptive properties of the variables have been captured in Table 3. The assessment was based on mean scale with 2.9 as the mean point or cut-off point and scores less than 2.9 are within the low region and above 2.9 are high region (Dess et al, 2005; Yeboah, 2011). It can be observed from the descriptive statistics that all the transformational leadership scores are within the 'Low Region' as none of them crosses the cut-off point of 2.9.

The range for transformational leadership is 2.351 to 2.572 with Inspirational Motivation (IM) and Intellectual Stimulation (IS) exhibiting minimum and maximum mean values respectively. This implies that there is low transformational leadership practices in the nurses and midwifery training school in Ghana. The associated standard deviations are very low suggesting that the individual observations are closely packed around the mean. This collaborates with the coefficient of variations (CoV). The CoVs are in the range of 4.4% to 8.2% suggesting that the observations are closely packed as the deviation is than 4.4% to 8.2%.

The respondents generally want to stay in the profession as evident by the mean score within the ‘High Region’ (m=3.154, SD=0.230). Although the level of staff retention is relatively high, its mean score did not meet the study expectation. Given the uniqueness of the profession with no direct alternative, the study expected the score to be more than 4.0. The standard deviation is very low and the coefficient of variation is just 7.3%. This implies that there is strong similarity in the respondents’ responses. The respondents generally believe that the level of quality health care is high (m=3.342, SD=0.226). This response is not consistent with the study expectation as the mean score less than expected.

Table 3: Descriptive Statistics of Variables of Interest

Variables	Mean	SD	CoV*	Obs.
II	2.532	0.152	0.060	78
IM	2.351	0.104	0.044	78
IS	2.572	0.211	0.082	78
IC	2.478	0.185	0.075	78
SR	3.154	0.230	0.073	78
QHC	3.341	0.226	0.068	78

*CoV denotes coefficient of variation

Source: Field survey, Yawson (2021)

4.1.3 Empirical Results of Transformational Leadership Practices and Staff Retention

The study interrogates how the level of transformational leadership practices in the nurses and midwives colleges in Ghana could enhance staff retention. The staff retention is operationalised as the response variable or the criterion while the transformational leadership constructs are the independent variables or the regressors. The study also introduced respondents’ demographic factors as control variables. The study first checks for multicollinearity problem. Using SPSS, the study employed ‘Tolerance Value and Variance Inflation Factor (VIF)’ to check multicollinearity problem. Tolerance value is the inverse value of VIF. The general threshold is that when the tolerance value is less than 0.1 and the VIF is not greater than 10, then it is safe to assume that there is multicollinearity problem. The results are captured in Table 4. It can be seen from Table 4 that all the study variables have VIF values less than 10 and tolerance values of greater than 0.1. This suggests that the model has not violated the multicollinearity assumption

Table 4: Multicollinearity Analysis

Study Variables	Tolerance Value	VIF	Decision
II*	.447	2.235	No
IM*	.330	3.034	No
IS*	.365	2.742	No
IC*	.311	3.212	No

*Note: II denotes Idealised Influence, IM denotes Inspirational Motivation, IS represents Intellectual Stimulation, and IC is Individual Consideration

Source: Yawson (2021), Field Survey

Having confirmed that there is no multicollinearity problem, the study proceeds to estimate the model. The results are reported in Table 5. The R² (adjusted R²) and the f-statistics are 0.722 (0.705) and 38.067(0.000) respectively. The adjusted R² is in the parenthesis of the R². This implies that the regressors and the control variables explain about 72.2% of the variations in staff retention. This is very high. Moreover, the significant F-statistics depict joint significance of all the regressors. Thus, even though some of the regressors may be not be significant independently but become relevant when they are jointly considered and analysed.

It can be observed from Table 5 that all the four constructs of transformational leadership are exhibiting positive effect on staff retention. Except intellectual stimulation (IS) which exhibit positive but insignificant influence, all the other transformational leadership constructs has significant positive influence on the staff retention. This implies that although the level of transformational leadership practices is low, the practice has significant positive on staff decision to stay. It is therefore critical to train and cause leadership in the nurses and midwifery training colleges to adopt and practice transformational leadership. The findings partly support and partly inconsistent with the study expectation as not all the transformational constructs exhibited significant positive influence. The findings however collaborate with some earlier findings suggesting a link between leadership and staff retention (Adzei & Atinga, 2012; Eisler, 2009)

It can also be found that when staffs are aging, they prefer to stay in the profession with young ones likely to

leave. This makes the need to resource leadership to adopt transformational leadership style very crucial. The youthful age is the class required to sustain quality of services. Unfortunately, this group is more likely to leave the profession. Staff with many years of experience, staff who are married and females are more likely to stay in the profession even though only working experience is significant. Surprisingly, staffs in the colleges with high level of education are more likely to leave. Though surprisingly, the finding may be associated with the fact that higher education would open up alternative opportunities including teaching in other higher education institutions.

Table 5: Empirical Results of Transformational Leadership and Staff Retention Nexus

	Beta	t-stat	Sig.	R ²	f-stat
Model				0.722(0.705)	38.067(0.000)
II	0.0249	1.569	0.099		
IM	0.1933	2.751	0.063		
IS	0.0986	1.387	0.102		
IC	0.0982	2.392	0.084		
Age	0.1652	1.988	0.086		
Marital Status	0.0321	1.276	0.114		
Gender	0.1322	1.312	0.129		
Working Experience	0.0431	1.564	0.098		
Level of Education	-0.1390	-2.987	0.010		

Source: Field survey, Yawson (2021)

4.1.4 Empirical Results of Transformational Leadership Practices and Quality Healthcare

The study further analysed the relevance of transformational leadership practices by determining its implications on the promotion of quality healthcare. This addresses the second hypothesis of this paper. Similar to the model estimated earlier, the investigation includes control variables. Table 5 reveals R², adjusted R² and the f-statistics are 0.631 (0.612) and 26.426(0.001) respectively. The adjusted R² is in the parenthesis. This means that transformational leadership practices could explain about 63.1% (61.2%) of variation in the level of quality healthcare. This predictive power is very high suggesting that the model is sound. The F-statistics are significant. The significant f-statistics show joint significance of all the coefficients of the regressors. This implies that although some of the regressors may not be significant independently but become relevant when they are jointly considered and analysed.

Table 6 reports the coefficient (β) of the individual constructs of principals' transformational leadership and the control variables. The findings reveal that although all the constructs of transformational leadership exhibit positive effect, only Inspirational Motivation and Intellectual Stimulation (IS) are significant. Idealised influence (II) had insignificant positive coefficient ($\beta = 0.1002$; $p = .132$) and individual consideration also had insignificant positive coefficient ($\beta = 0.1191$; $p = .108$). Despite these insignificant coefficients, Inspirational motivation (IM) also had significant positive influence on the level of quality healthcare ($\beta = 0.2241$; $p = .027$). Similarly, intellectual stimulation (IS) also showed significant positive effect on quality healthcare ($\beta = 0.1270$; Sig. = .073).

The findings support the behavioural leadership theory. Consistent with the behavioural leadership theory, the study revealed that leaders who exhibit transformational qualities are likely to achieve remarkable results as evident in positive effect of transformational leadership practices and quality healthcare training (Kwan, 2020; Odumeru & Ogbonna, 2013). Some of the coefficients were not significant which may be attributed to the low level of perceived practice of transformational leadership qualities. Empirically, the results affirm the findings of Asif, et al (2019), Higgins (2015) and Manning (2014). For brevity, the control variables are not discussed except that they exhibit positive effect on quality healthcare other than marital status.

Table 6: Empirical Results of Transformational Leadership and Quality Healthcare Nexus

	Beta	t-stat	Sig.	R ²	f-stat
Model				0.631(0.612)	26.426(0.001)
II	0.1002	1.343	0.132		
IM	0.2241	4.262	0.027		
IS	0.1270	1.773	0.073		
IC	0.1191	1.432	0.108		
Age	0.0775	1.225	0.138		
Marital Status	-0.0821	1.233	0.125		
Gender	0.0212	1.274	0.201		
Working Experience	0.1314	1.669	0.082		
Level of Education	0.3312	4.089	0.019		

Source: Field survey, Yawson (2021)

4.1.5 Moderating Role of Staff Retention on the Effect of Principal Transformational Leadership on Quality Healthcare

The paper proceeds to determine the moderating role of staff retention on the effect of the principal's transformational leadership on quality healthcare as hypothesized in hypothesis 3. Table 7 shows the results of this analysis. It can be observed from Table 7 that the R^2 , adjusted of R^2 and the f-statistics are high. These show fitness of the model. It could be observed from the table that the R^2 and adjusted R^2 of the model are 0.7889 and 0.7640 respectively. This suggests that by introducing staff retention as a moderator, principal transformational leadership constructs explain 78.89% (76.40%) of variations in the level of quality healthcare with the adjusted R^2 in the parenthesis. This means the moderator has increased the predictive powers of principal transformational leadership constructs as these explanatory scores are more than the original R^2 and adjusted R^2 statistics. Table 7 reveals f-statistics of 42.116 (0.000) from the estimation. The statistics inside the parentheses are the p-values of the f-stats. This p-value is less than 1% suggesting that the f-stats found in the estimation are significant at 1%. The implication is that even if the individual constructs are not significant, they are jointly significant when employed collectively in explaining the level of quality healthcare.

It can also be seen from Table 7 that all the individual constructs of principals' transformational leadership as moderated by staff retention are significant. The findings show that all the principals' transformational leadership moderated by staff retention has significant effect on the level of quality healthcare. Idealised influence as moderated by staff retention (II**) had significant coefficients ($\beta = 0.3155$; $p = .029$). Inspirational motivation as moderated by staff retention (IM**) also had significant positive influence on the level of quality healthcare ($\beta = 0.4263$; $p = .006$). Similarly, intellectual stimulation moderated by staff retention (IS**) also showed significant positive effect on quality healthcare ($\beta = 0.3782$; Sig. = .008) and individual consideration moderated by staff retention also had significant positive coefficient ($\beta = 0.2978$; $p = .021$). Staff retention also showed significant positive coefficient ($\beta = 0.3021$; $p = .007$). For brevity, the control variables are not discussed.

The significant coefficients revealed in Table 7 suggest that the study rejects all the null hypotheses that principals' transformational leadership constructs moderated by staff retention do not have a significant effect on the level of quality healthcare. It is therefore concluded that all the transformational leadership constructs moderated by staff retention have a significant influence on the level of quality healthcare. The findings imply that an increase in the level of idealised influence (II**), Inspirational motivation (IM**), intellectual stimulation (IS**) and individual consideration (IC**) would lead to 0.3155, 0.4263, 0.3782 and 0.2978 points increase in the level of quality healthcare respectively and vice-versa. Thus, the level of idealised influence, intellectual stimulation, inspirational motivation and individual consideration as moderated by staff retention are desirable antecedents of perceived quality healthcare. Staff retention, the moderator would lead to 0.3021 increase in the level of perceived quality healthcare.

Overall, the findings suggest that improving staff retention coupled with practice of transformational leadership in nurses and midwifery training colleges in Ghana would significantly promote an improve quality healthcare training. This also supports some of the earlier studies (see Asif et al, 2019; Higgins, 2015).

Table 7: Estimation Moderating Role of Staff Retention on Principal's Transformational Leadership and Quality Healthcare Nexus

	Beta	t-stat	Sig.	R^2	f-stat
Model				0.7889(0.7640)	42.116(0.000)
II**	0.3155	3.986	0.029		
IM**	0.4263	5.743	0.006		
IS**	0.3782	4.834	0.008		
IC**	0.2978	4.015	0.021		
SR	0.3021	5.022	0.007		
Age	0.0986	1.658	0.048		
Marital Status	0.1010	1.533	0.085		
Gender	0.0567	1.632	0.060		
Working Experience	0.1210	2.098	0.037		
Level of Education	0.2212	3.689	0.031		

Note: **denote individual transformational leadership constructs moderated by staff retention

Source: Field survey, Yawson (2021)

5.1 Conclusions and Implications

This paper examined the dynamics of transformational leadership practices, staff retention and promotion of quality healthcare training. The study focused on nurses and midwives training colleges in Ghana. This study was conceived from the fact that although leadership has been identified as fundamental for effective work engagement and productivity of nurses, most of the studies have concentrated on only the hospitals neglecting the health training institutions. The paper employed quantitative analytical procedure and survey design. Questionnaire was

used for the collecting the data. Multi-stage sampling technique was used which emphasised cluster and simple random sampling techniques. Mean scale and standard multiple regression were employed for the analyses.

The study revealed although the level of perceived transformational leadership practices is low, all the constructs exhibited significant positive effect on staff retention except Intellectual Stimulation (IS) which revealed insignificant positive effect. It was further found that although all the transformational leadership constructs exhibited positive effect, only Inspirational Motivation and Intellectual Stimulation (IS) are significant. However, when moderated by staff retention, all the transformational leadership constructs revealed significant and improved positive influence on perceived quality healthcare training. It is therefore recommended that policy in improving quality healthcare training should integrate both the promotion of transformational leadership and improved staff retention in nurses and midwives training colleges in Ghana.

The findings imply that transformational leadership practices are antecedents of improved staff retention. This suggests that policy makers could promote the practice of transformational leadership among principals in nurses and midwifery training colleges to relieve stresses and deepen retention rate. Additionally, the practice of transformational leadership within staff support to improve continuity (staff retention) could also improve and promote quality healthcare training. It is therefore recommended that policy in improving quality healthcare training should integrate both the promotion of transformational leadership and improved staff retention in nurses and midwives training colleges in Ghana.

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