

Toxic leadership behaviour of nurse managers on perceived job satisfaction and productivity of nursing workforce in sub-Saharan Ghana: A multi-centre cross-sectional study

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Abstract

Aim: This study aimed at assessing the nature and effect of toxic leadership of nurse managers on the perceived job satisfaction and productivity of the nursing workforce.

Background: Nursing job outcomes such as job satisfaction and productivity are influenced by various factors in the nursing practice environment including leadership. Due to rising health care expenses and depleting material resources, the productivity of nurses that is expected to improve the efficiency of health care organizations is mostly low. Managers' toxic behaviour towards nurses affects their job satisfaction and subsequently low productivity.

Method: A multi-centre, cross-sectional descriptive design was used. Validated tools were used to collect data from participants, and data were analysed using descriptive, correlation, and hierarchical linear regressions.

Results: Registered nurses appraised the leadership behaviour of nurse managers to be toxic, with most managers exhibiting narcissistic leadership behaviour. Though all the components of toxic leadership behaviour of manager and job satisfaction were associated with the perceived productivity of the nurses; only intemperate leadership behaviour of the managers ($\beta = -.301, p < .005$), and job satisfaction ($\beta = .296, p < .001$) significantly predicted perceived productivity among nurses ($R^2 = .238, F_{(7, 922)} = 41.088, p < .001$).

Conclusion: Nurse managers' leadership behaviours were toxic. Nurses' job satisfaction and all components of managers' toxic leadership behaviour influenced productivity.

Implications for Nursing Management: There should be a policy developed to guide the creation and maintenance of efficient nursing leadership to enhance job satisfaction and productivity among nurses.

KEYWORDS

job satisfaction, nurse managers, nursing workforce, perceived productivity, toxic leadership behaviour

1 | INTRODUCTION

Nursing job outcomes such as job satisfaction and productivity are influenced by various factors in the nursing practice environment. Productivity of the nursing workforce is central to the schemes of every health care organization due to its direct link to the provision of quality patient care. Organizational productivity denotes the capacity of the workforce to be efficient and effective in accomplishing task. The nature of leadership in modern health care systems has been modelled to differ from the known predominant hegemonic leadership styles of the time past and can influence the productivity of the workforce.

1.1 | Background

In nursing practice, perceived productivity relates to the nurses' feelings about their capability to execute their work expeditiously (Bautista et al., 2018; Read & Laschinger, 2015). Effective health care organizations preserved most of the hierarchical arrangements and allowed for the development of cultures that appreciates the worth of dynamic systems and the influence of human nature on organizational growth (Mehta & Maheshwari, 2013). Positive leadership styles such as authentic and transformational leadership concentrate on building a healthy workforce and are associated with quality patient care, good nursing job, and organisational outcomes (Labrague, 2021). A strong correlation has also been established between the leadership style of nurse managers and job outcomes, staff productivity, and improved well-being of the nursing workforce (Cummings et al., 2018). However, there still exist various forms of toxic leadership styles that permeate many organizations.

Whicker (1996) first used the term 'Toxic leadership' and associated it with maladaptive leadership behaviours and labelled such leaders as unstable, discontent, and mean individuals whose focus is on fighting to protect and control their interests rather than serving as an inspiration to people they lead. Toxic leaders are described as managers with dysfunctional features and destructive behaviours, who inflict harm on the people they lead (Goldsby et al., 2020; Laguda, 2020). Labrague, Lorica, et al. (2020) ascertain that toxic leadership manifests during supervision, and leaders use planned and persistent destructive activities that harm staff and the organization as a whole. As a modus operandi, toxic leaders often exhibit deliberate disregard for the welfare of subordinates through autocracy, jealousy, intimidation or bullying, nit-picking, micro-managing, favouritism, narcissism, aggression, manipulation, and incompetency (Bakkal et al., 2019; Milosevic et al., 2020; Webster et al., 2016).

It is worth noting that some leaders do not create toxic workplaces on purpose; they place less attention on important aspects of

leadership, and this consequently produces a fertile foundation for toxicity to grow in organizations (Weberg, 2010). The effect of toxic leadership manifests in an inadequate flow of communication, break-in teamwork, and unnecessary internal competition usually precipitated by the unreasonable setting of goals by staff within an organization. From the perspective of staff, toxicity is evidenced by employees' refusal to communicate their opinion, organizational atmosphere of blame, spontaneous hostility among staff, rampant distortion of facts, mistrust in leadership, selfishness among staff, and lack of accountability (Mehta & Maheshwari, 2013) which is quite pervasive among nursing administrations.

In high-resource countries, for instance, toxic leadership has been linked to adverse patient and nursing job outcomes. Thus, there has been a reported association between toxic leadership and quality nursing care and patient safety outcomes (Lavoie-Tremblay et al., 2016). It is worthy to note that the nursing workforce that works with toxic leaders tends to have low work participation (Yang, Yan, et al., 2017), less productivity (Low et al., 2021), and high turnover (Lavoie-Tremblay et al., 2016). Similarly, toxic leadership contributes to increased levels of stress, job dissatisfaction, and increased turnover intention of nurses (Lavoie-Tremblay et al., 2016; Pishgooie et al., 2019). Toxic leadership style in a form of narcissistic behaviour (exhibits positive self-presentation and increased grandiosity) has been identified to contribute to adverse job outcomes such as work disengagement and job dissatisfaction (Ghislieri et al., 2019). Again, prolonged contact with toxic nurse leaders has the possibility of affecting the motivation of nurses with the resultant adverse job consequences of decreased performance, burnout, and recurrent absenteeism (Lavoie-Tremblay et al., 2016; Mullen et al., 2018; Öргеç & Demir, 2019).

In the health care industry, particularly, nursing practice, the leadership style of the manager plays a crucial role in predicting nursing job outcomes (Asamani et al., 2016). Likewise, job satisfaction has been noted to predict increased sick leave and/or absenteeism and low productivity in organizations (Clausen et al., 2014; García-Izquierdo & Ríos-Rísquez, 2012). Though toxic leadership is prevalent in the nursing field, research on the various facets of the concept is still ongoing to elucidate its impact on the nursing profession (Labrague, Lorica, et al., 2020).

In a complex health care system, where the workforce is perceived as an element of interrelated individuals, leaders acknowledge that their followers are more important to organizational sustenance than the position itself. In recognizing that toxic leadership behaviours challenge teamwork efforts and workplace climate, leaders' responsibility of reducing or combating toxicity in the workplace is imminent. The other challenges of toxic leadership can be solved by appreciating the dynamics of the phenomenon through adopting new dimensions

of leadership that offer a lens of a well-recognized trend in organizational communication and behaviour that can delineate a toxic leader from an achieving one (Weberg & Fuller, 2019).

Toxic individuals survive only in a toxic environment. The work environment dynamics and organizational culture play a key role in either endorsing or preventing toxic behaviours. Though much has been studied on toxic leadership in the nursing profession, there are few studies on the impacts of toxic leadership behaviour on job satisfaction and perceived productivity in sub-Saharan Africa, particularly, Ghana. Thus, with the rampant rate of the exodus of nurses amid the COVID-19 pandemic, the subject of leadership's influence on maintaining quality nursing job outcomes cannot be overlooked. As a strategy to retain the nursing workforce and mentor effective leaders, it is imperative to generate data that call for the attention of policymakers, health care managers, and nurse leaders in developing policy strategies to improve job satisfaction and organizational productivity.

1.2 | Aim of the study

The study aimed at assessing the impact of toxic leadership behaviours of nurse managers on perceived job satisfaction and productivity of the nursing workforce. It also ascertained the nurses' perceived level of job satisfaction, productivity, and the leadership behaviour of nurse managers.

2 | DESIGNS AND METHODS

2.1 | Study design and participants

The study adopted a multi-centre cross-sectional descriptive design with self-administered scales. The design was chosen due to researchers' interest in estimating the prevalence of perceived toxic behaviour among nurse managers and the job satisfaction and productivity of registered nurses and its ability to provide snapshot evidence for relationships among variables. The study was conducted across six regions distributed across the coastal, middle, and northern belts of Ghana, comprising Central and Greater Accra, Ahafo and Ashanti, and

Northern and North-East regions, respectively. The STROBE reporting tool was used to organize the study.

The participants for the survey included all categories of nurses who have worked for at least 1 year in the selected public health facilities as presented in Table 1. The participants were selected through convenience sampling from all the shifts at the unit level. According to the Ghana Health Service Annual Report (2020), the population of the nursing workforce for the six selected regions is estimated to be 35,689.

2.2 | Sampling and sample size

A multi-stage sampling method was used to select the participants. Sampling began with a list of all the regions in the coastal, middle, and northern belts. Greater Accra, Central, Ashanti, Ahafo, North East, and Northern regions were conveniently selected due to their heterogeneous characteristics. The six regions served as strata from which two district hospitals each were randomly selected. Nurses in the 12 hospitals were conveniently selected to represent the population. Cochran's formula for calculating sample sizes was used to estimate the sample size of 1240 participants.

2.3 | Data collection procedure

After ethical approval was sought from Noguchi Memorial Institute for Medical Research Institutional Review Board (NMIMR-IRB CPN 010/21-22). Permission was sought formally from the management of the hospitals before data collection commenced. The nurse managers of the facilities were also contacted to plan the date for the administration of questionnaires. With the support of the nurse managers and ward in-charge, prospective participants were contacted and enlisted for the data collection. The scales were personally administered by the researchers from September to December 2021. The participants willingly accepted to be part of the study and were informed about their freedom to exit from the study at any point during the data collection process. Possible risks and benefits of the study were also explained, after which written consent was sought from participants.

TABLE 1 Nursing workforce distribution in the six selected regions

Regions	Cadre		Total
	Community health, general and specialist nurses	Registered midwives	
Ahafo	1887	362	2249
Ashanti	8942	2470	11,412
Central	5276	921	6197
Greater Accra	7564	1915	9479
North East	1251	167	1418
Northern	4228	706	4934
TOTAL	29,148	6541	35,689

Note: Ghana Health Service Annual Report (2020).

Anonymity and confidentiality were also maintained throughout the study. The answered questionnaires were collected by the researchers after participants had completed them.

2.4 | Measures

The measure adopted for the study included three self-report scales made up of the Toxic Leadership Behaviours of Nurse Managers' Scale (ToxBH-NM), the Perceived Productivity Questionnaire, and the Minnesota Satisfaction Questionnaire (MSQ-short version).

2.4.1 | Toxic leadership behaviour of nurse managers

In assessing the perception of nurses about the toxic leadership behaviour of nurse managers, a 30-item ToxBH-NM scale consisting of four subdimensions of toxic leadership, intemperate behaviour (15 items), narcissistic behaviour (9 items), self-promoting behaviour (3 items), and humiliating behaviour (3 items), was used (Labrague, Nwafor, et al., 2020). The scale was rated on a five-point Likert scale (1 = *Not at all* to 5 = *All the time*). The composite score for ToxBH-NM is interpreted as practically non-toxic (1.0–2.2 points), moderately toxic (2.3–3.6 points), and highly toxic (3.7–5.0 points). A higher composite means score for the subscales demonstrates a higher frequency of toxic leadership behaviour. The Cronbach's alpha of ToxBH-NM as reported in this study was .851. The scale has also reported good Cronbach's α that ranges between .625 to .980 in past studies (Labrague, 2021; Örgöv & Demir, 2019).

2.4.2 | Perceived productivity of nurses

The scale was designed for the present study by the researchers to assess the perceived productivity of nurses at the workplace based on the duration of work after a thorough literature review. The participants rated their perceived productivity at the hospital using a nine-item scale on a 3-point Likert scale of 1 (*None or [1 h and less]*), 2 (*Once or [2 h]*), and 3 (*More than once or [more than 2 h]*). The scale had a Cronbach's α estimate of .85 in the current study.

2.4.3 | Job satisfaction of RNs

The Minnesota Satisfaction Questionnaire (MSQ-short version) was used to measure the job satisfaction of nurses. The scale consisted of 20 items with a Likert-type scale between 1 and 5 (1 = *very dissatisfied* and 5 = *very satisfied*); however, 19 items were used for this study. The study had a Cronbach alpha of .86. Previous studies that have used this scale also reported excellent reliability coefficient α ranges of .85 to .91 (Deng et al., 2021; Gedif et al., 2018; Zikusooka et al., 2021).

2.5 | Statistical analysis

Data were analysed through descriptive and inferential statistics using the SPSS software version 26. Means, percentages, and standard deviations were used to describe the data while correlation and multiple linear regressions using the hierarchical approach, were employed to determine the relative influence of toxic leadership behaviours of nurse managers and nurses' job satisfaction on perceived productivity. Data analysis was conducted at an acceptable significance level of $p < .05$.

2.6 | Ethical considerations

Ethical approval was sought from the Noguchi Memorial Institute for Medical Research Institutional Review Board (NMIMR-IRB CPN 010/21-22). Written consent was sought before the questionnaire was administered. Anonymity and confidentiality were maintained throughout the study. The participants were informed about their right to withdraw from the study.

3 | RESULTS

A total of 943 valid scales were received from participants out of the estimated sample size of 1240, representing a response rate of 76.0%. The mean age of participants was 30.4 (± 4.43) years. While close to a third ($n = 678$, 71.9%) of the participants were females, more than half ($n = 267$, 57.8%) were unmarried. Most of the participants were staff nurses ($n = 286$, 30.3%); almost half ($n = 487$, 51.7%) had diploma qualification, and 50.5% ($n = 469$) had worked for 5 years or more at their present facility. Table 2 presents the detailed socio-demographic characteristics of the participants.

3.1 | Nature of toxic leadership behaviour of nurse managers

The results of the toxic leadership behaviour of nurse managers and its components as perceived by nurses are presented in Table 3. Most nurse managers were moderately toxic with the composite mean score of the toxic leadership behaviour of nurse managers of 2.42 (SD: 1.39). The narcissistic behaviour subscale was the highest rated subscale (Mean: 2.53, SD: 1.36). The composite mean score of the other subscales is as follows: humiliating behaviour (Mean: 2.49, SD: 1.45), intemperate behaviour (Mean: 2.40, SD: 1.36), and self-promoting behaviour (Mean: 2.27, SD: 1.38).

3.2 | Job satisfaction and perceived productivity of nurses

Table 4 presents the job satisfaction and the perceived productivity of nurses, with 63.1% (595) of nurses being satisfied with their job

TABLE 2 Socio-demographic characteristics of the participants

Socio-demographic data	N = 943	Percent	Min	Max	Mean	SD
Age			22	59	30.4	4.43
Gender						
Male	265	28.1				
Female	678	71.9				
Marital status						
Married	398	42.2				
Unmarried	545	57.8				
Highest qualification						
Certificate	263	27.9				
Diploma	487	51.7				
Degree	172	18.2				
Masters	21	2.2				
Rank						
Enrolled nurse (Snr/Prin. EN)	269	28.5				
Staff nurse/Snr staff nurse	486	51.6				
Nursing officer	121	21.8				
Senior nursing officer	67	7.1				
Duration at facility						
Less than 1 year	108	11.4				
2–4 years	359	38.1				
5 years and more	469	50.5				

Note: Field data (2021).

TABLE 3 Toxic leadership behaviour of NMs

Scale/subscales	Composite mean	SD
Toxic leadership behaviour	2.42	1.39
Intemperate behaviour	2.40	1.35
Narcissistic behaviour	2.53	1.36
Self-promoting behaviour	2.27	1.38
Humiliating behaviour	2.49	1.45

Note: Field data (2021).

conditions. Although the majority ($n = 789$, 83.5%) of nurses indicated that they have not missed work at least once in the past 30 days, more than two-thirds of the participants ($n = 728$, 77.2%) confirmed that they have either come to work late or had to leave work early at least once in the past month. Accordingly, 449 (61.6%) nurses reported they had missed at most 1 h on average for the days they reported being late to work. On average, nurses were punctual at work as 87.8% ($n = 828$); participants reported that they started work too early at least once in the past 30 days. Meanwhile, close to half (49.8%, $n = 470$) of nurses indicated that they closed from work too late more than once in the past month. About the number of hours nurses overworked,

478 (59.7%) of the participants reported that they work for at least 2 h extra hours on days they close late from work.

3.3 | Correlation between socio-demographic characteristics, perceived productivity, job satisfaction, and toxic leadership behaviour of nurse managers

Using Pearson product moment correlation as presented in Table 5, we explored the relationship between the perceived productivity of

TABLE 4 Job satisfaction and perceived productivity of RNs

Variables	Responses	N	%	Mean (SD)
Job satisfaction	Satisfied	595	63.1	
	Dissatisfied	342	36.9	
Perceived productivity				1.77 (0.79)
The number of days RNs missed work in the past 30 days	None	154	16.3	1.36 (.654)
	Once	696	73.6	
	More than once	93	9.9	
The number of days in the past 30 days RNs came to work late or had to leave work early	None	215	22.8	1.61 (0.788)
	Once	548	58.1	
	More than once	180	19.1	
The number of hours RNs missed on the days they were late or left the work early	1 h or less	449	61.6	1.47 (0.638)
	2 h	221	30.4	
	More than 2 h	58	8.0	
The number of days in the past 30 days that RNs started work too early	None	115	12.2	2.13 (0.928)
	Once	351	37.2	
	More than once	477	50.6	
The number of days in the past 30 days RNs closed from work too late	None	143	15.2	2.15 (0.910)
	Once	330	35.0	
	More than once	470	49.8	
The number of extra hours RNs worked on the days they closed late	1 h or less	322	40.3	1.88 (0.818)
	2 h	253	31.6	
	More than 2 h	225	28.1	

Note: Field data (2021).

TABLE 5 Correlation between age, work experience, perceived productivity, toxic leadership behaviour of NMs, and job satisfaction

Variables	1	2	3	4	5	6	7	8
1. Perceived productivity	1							
2. Intemperate behaviour	-.397**	1						
3. Narcissistic behaviour	-.354**	.936**	1					
4. Self-promoting behaviour	-.341**	.515*	.594**	1				
5. Humiliating behaviour	-.329**	.863**	.879**	.575**	1			
6. Job satisfaction	.430**	-.551**	-.490**	-.139**	-.481**	1		
7. Age of RNs	.123**	.010	.011	.071*	.030	.058	1	
8. Working experience of RNs	.113**	-.134**	-.108**	.036**	-.140**	.139**	.309**	1

* $p < .05$ level (one-tailed test). ** $p < .01$ level (one-tailed test).

nurses and components of toxic leadership behaviour with socio-demographic characteristics. With a correlation between variables less than .70, the data satisfied the assumption of multi-collinearity. Nurses' job satisfaction recorded a moderate but statistically significant positive correlation ($r = .430, p < .01$) with perceived productivity while the age of nurses ($r = .123, p < .01$) and working experience of nurses ($r = .151, p < .01$) had a mild statistically significant positive relationship with perceived productivity. Intemperate behaviour ($r = -.397, p < .01$), narcissistic behaviour ($r = -.354, p < .01$), self-promoting behaviour ($r = -.341, p < .01$), and humiliating behaviour

($r = -.329, p < .01$), however, had moderate but statistically significant negative correlation with perceived productivity of nurses.

3.4 | Effects of toxic leadership behaviour of nurse managers and job satisfaction on perceived productivity

Table 6 shows the hierarchical linear regression analyses of the predictive effects of toxic leadership behaviour of nurse managers and

TABLE 6 Hierarchical multiple linear regression model testing the relationship between toxic leadership, job satisfaction, and perceived productivity

	B	SE	β	T	Sig.
(Constant)	7.857	.707		11.114	.000
Age	0.064	.024	.091	2.656**	.008
Work experience	0.309	.124	.085	2.491*	.013
Model 1 summary: $R^2 = .020$, $F_{(2, 927)} = 9.594$, $p < .05$					
(Constant)	7.088	.747		9.483	.000
Age	0.065	.022	.092	3.010**	.003
Work experience of RNs	0.043	.112	.012	0.384	.701
Intemperate behaviour	-0.047	.014	-.301	-3.409**	.001
Narcissistic behaviour	0.008	.024	.030	0.328	.743
Self-promoting behaviour	0.003	.029	.004	0.116	.908
Humiliating behaviour	0.028	.046	.039	0.616	.538
Job satisfaction	0.049	.006	.296	8.363**	.000
Model 2 summary: $R^2 = .238$, $F_{(7, 922)} = 41.088$, $p < .05$					

Note: Dependent variable: Perceived productivity.

* $p < 0.05$ level (one-tailed test). ** $p < 0.01$ level (one-tailed test).

job satisfaction on the perceived productivity of nurses. In the first model, both age ($\beta = .91$, $p < .05$) and work experience of nurses ($\beta = .085$, $p < .05$) significantly contributed 2.0% to the perceived productivity of the nurses. The final model was also significant, predicting 23.8% of perceived productivity among nurses ($R^2 = .238$, $F_{(7, 922)} = 41.088$, $p < .001$). When the various variables were examined for their contribution to the model, only age ($\beta = .092$, $p < .005$), intemperate behaviour ($\beta = -.301$, $p < .005$), and job satisfaction ($\beta = .296$, $p < .001$) were significant predictors of the model. An increase in nurses' age (0.092 points) was noticed for a unit of increase in the mean score of perceived productivity. A unit of increase in the mean score of toxic leadership behaviour (intemperate) was associated with decreased productivity of nurses by 0.301 points. Likewise, a unit increase in the mean scale score of job satisfaction was also associated with an increase in perceived productivity by 0.296 points. In other words, nurses who perceived an increased level of toxic leadership behaviour (intemperate) in nurse managers were more likely to be unproductive at the workplace while nurses who are satisfied with their job are likely to be more productive.

4 | DISCUSSIONS

The study aimed at assessing the nature and effects of toxic leadership of nurse managers on the perceived job satisfaction and productivity of nurses. It examined the influence of the toxic leadership behaviours of nurse managers on the job satisfaction and productivity of nurses. The findings is anticipated to provide enough grounds for policy to improve the leadership abilities of nurse managers. In a practice environment where there is a collective identity, mutual respect, and good relationship among staff, there are positive patient and nursing job outcomes. Moreover, organizations also reap positive

benefits from such a positive work environment. This elucidates the rationale for developing policy to enhance productive leadership behaviours in organizations.

The nurses in the current study perceived the nature of nurse managers' behaviours as moderately toxic. Though Lavoie-Tremblay et al. (2016) and Labrague (2021) reported opposing findings among nurse managers, the report by Abou-Ramadan and Eid (2020) and Özkan et al. (2022) in Egypt and Turkey, respectively, were consistent with the study findings. It is worth noting that effective leadership behaviour in addition to trust, mutual respect, and honest communication between nurse managers and subordinates are important for maintaining a professional practice environment with positive outcomes of safe and quality care, work engagement, job satisfaction, and increased productivity in the organization (Alkassabi et al., 2018; Field & Brown, 2019; Lei et al., 2022). On the other hand, toxic leadership in an organization is counterproductive (Jiang et al., 2017; Low et al., 2019; Yang, Liu, et al., 2017) as nurses who have experienced abusive or toxic leadership behaviour from nurse managers in the past reported decreased psychological empowerment (Lyu et al., 2019), job dissatisfaction (Senek et al., 2020), poor job performance (Zaghini et al., 2020), and an increased turnover intention from the profession and/or the organization (Lee et al., 2019).

In a toxic work environment, there is evidence of anxiety, psychological distress, frustration, and discontentment among nurses (Hadadian & Sayadpour, 2018). A negative association has been reported between narcissistic leadership and meaningful work in most organizations (Ghislieri et al., 2019). In such environments, support from managers is deficient, and the chances of low work productivity are high. Most nurse managers exhibited narcissistic leadership behaviour in this current study. Narcissistic leaders are, therefore, recommended to have a positive relationship with their followers to avert negative consequences for the organization (Braun, 2017). It is

imperative to note that leaders who do not value or show interest in their subordinates may not just affect the fabric of the health care facility but also the nursing profession as a whole.

Though there was no specific study on the influence of toxic leadership behaviours of nurse managers on nurses' productivity, there is enough evidence on the impact of toxic leadership on the quality of care of patients (Labrague, 2021). This implies that advocating for better leadership behaviour of nurse managers can serve as an effective strategy in improving patients and nursing job outcomes including work productivity. Intemperate leaders lack self-control, and due to fear, subordinates often fawn at all the negative behaviours from leaders and the consequences of low productivity. This position is similar to Karthikeyan (2017) and Roter (2017) who linked meaningless and unproductive work to the toxic organization often created by bad leadership. This implies that the leader's ability to inspire subordinates to be innovative in achieving organizational goals is often lacking, consequently low productivity. Effective leadership boosts the morale of team members to be innovative and share ideas to improve nursing job outcomes thereby advancing nursing practice (Bianchi et al., 2018; Harvey et al., 2019; Heinen et al., 2019). Furthermore, patient and job outcomes such as patient safety (Merrill, 2015), job satisfaction (Boamah et al., 2018), work engagement (Enwereuzor et al., 2018; Lai et al., 2020), burnout (Wei et al., 2020), and turnover intentions (Cheng et al., 2016; Fontes et al., 2019) are all improved with effective nursing leadership.

5 | LIMITATIONS

The design used in this study potentially limits establishing a causal relationship between the variables. The study assessed the toxic leadership behaviour of nurse managers through the perceptions of nurses about their leaders. This approach can present a socially desirable or biased response depending on the nature of the relationship between the nurse manager and their subordinates. The use of a large sample size ($n = 943$) and the multi-stage sampling approach, however, reduced the chances of having skewed responses. Even though nurses' perceptions about their managers may significantly predict their job satisfaction and productivity, other factors such as work environment, collegiate nurse-physician relation, resource adequacy, and nurses' autonomy and involvement in decision-making might also account for it; future research should be aimed at using observational or mixed-method designs to wholly assess the leadership behaviour of nurse managers and other related factors that influence the nurses as a whole. Again, this study has provided baseline results in providing future directions. Future research should also determine other negative outcomes of nurse managers' abusive leadership such as higher turnover, workplace violence, and poor patient outcome.

6 | CONCLUSIONS

In conclusion, new evidence of moderately toxic leadership by nurse managers has been established. The rationale for most nurse leaders

exhibiting toxic behaviour towards their team may not be ill-intentioned; such toxic culture within nursing leadership might have been handed from generation to generation, and most nurse managers may be unconscious of their behaviour. For job productivity, though most nurses lost productive hours to lateness and closing earlier than the required time, some exhibited high work productivity as they worked for additional hours at the workplace. Paying attention to work-related factors such as job satisfaction and the leadership behaviour of the nurse manager may provide a valuable strategy to improve job productivity. As highlighted in the findings, any workplace with toxic or abusive leadership normally brews up job dissatisfaction and low productivity.

7 | IMPLICATIONS FOR NURSING MANAGEMENT

Advocating for nurse managers' use of transformational leadership and other effective leadership styles is the surest way to avoid toxic leadership behaviour. In all endeavours, the 21st-century leadership style has proven worth to organizational growth and positive patient outcomes (Amor et al., 2020; Boamah et al., 2018; Farahnak et al., 2020; Lin et al., 2015). Improving leadership behaviour of nurse managers in organizations can, therefore, be enhanced through the development of institutional protocols and training programmes on quality leadership, assertive communication, workplace abuse, and effective conflict management. Inculcating nurse managers with the value culture of effective leadership and adopting it as a performance measurement for sustainability would help improve nursing leadership in Ghana. In effect, creating and maintaining a culture of transformational, transactional, and authentic leadership among other leadership styles by including and putting premium on leadership in the curriculum of all nursing educational institutions would not just enhance adequate preparation of nurses for leadership roles but produce effective leaders for health organizations. Moreover, introducing a mentorship-focused in-service training programme for nurse managers can chart a new course for nursing leadership. Nurse managers should adopt current practice solutions that will prepare them as transformational leaders including idealized inspiration, extrinsic motivation of followers, and consideration of the individuality of employees. Organizational policies that address a positive professional practice environment and nursing job outcomes should also be enacted and enforced. These may include policies on job satisfaction that values welfare and work-life balance of staff, psychological empowerment, ergonomics, mutual respect and fairness, and appreciation and support for employees. Meanwhile, with the lack of a standardized public service performance benchmark, developing one will effectively improve productivity. Effective supervision by managers can also go a long way to reduce lateness, absenteeism and presenteeism at the workplace, thereby improving productivity.

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CONFLICT OF INTEREST

The authors declare that they have no competing interests.

ETHICS STATEMENT

Ethical approval was sought from the Noguchi Memorial Institute for Medical Research Institutional Review Board (NMIMR-IRB CPN 010/21-22). Written consent was sought before the questionnaire was administered. Anonymity and confidentiality were maintained throughout the study. The participants were informed about their right to withdraw from the study.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available in the supporting information of this article.

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