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# Occupational Health and Safety Dimensions and Work Outcomes in the Mental Hospitals in Ghana: The Moderating Effect of Job Satisfaction

Michael Asiedu Gyensare<sup>1(✉)</sup>, Olivia Anku-Tsedé<sup>2</sup>,  
and Lucky Enyonam Kumedzro<sup>1</sup>

<sup>1</sup> Department of Business Education, University of Education, Winneba,  
P.O. Box 25, Winneba, Ghana  
magyensare@uew.edu.gh

<sup>2</sup> Department of Organisation and HRM, University of Ghana Business School,  
P.O. Box LG 78, Legon, Accra, Ghana

**Abstract.** Like high risk industries such as aviation and mining, occupational health and safety issues in the mental hospitals cannot be underestimated. For instance, although some conceptual and empirical studies have focused on patient safety in mental hospitals, the safety and health management of nurses in the mental health sector has largely been ignored. This paper seeks to examine the relationship between occupational health and safety management and two work outcomes such as engagement and turnover intention in a large mental hospital in Ghana. Results of the correlation coefficient indicated a positive relationship between occupational health and safety and engagement, and a negative relationship with turnover intention. The hierarchical regression results revealed a positive influence of safety procedure and safety leadership on mental health nurses engagement. In addition, only safety supervision and safety leadership had negative effect on the mental health nurses' turnover intention. Finally, job satisfaction of the mental health nurses moderated the relationships between safety supervision and safety leadership, and intention to turnover.

**Keywords:** Occupational health and safety · Policy · Job satisfaction · Employee engagement · Turnover intention · Mental hospitals · Ghana

## 1 Introduction

Unlike hazardous sectors such as aviation, mining, quarrying and fishing, occupational health and safety (OHS) in the mental hospitals has received less research attention from both academics and practitioners. In advance countries, the health and safety of healthcare workers (HCWs) in general are safeguarded through risk assessment, safe working practices, containment of hazards, usage of personal protective equipments and immunization. However, the case of mental hospitals in Ghana is very different. For example, mental health nurses who suffer physical injury due to

aggression from mental patients are supposed to cater for themselves with their own health insurance at a registered healthcare facility or hospital.

In addition, nurses working in the mental hospitals are exposed to various forms of physical, chemical, biological, mechanical and psychosocial risk factors [37]. Hence, although mental hospitals provide healthcare facility to mental patients, the health and safety of healthcare nurses are not guaranteed due to the lack of a comprehensive and stakeholder focused laws on OHS-related issues. The few scattered pieces of legislation are not enforced due to prevailing inefficient and costly legal systems. Further, unlike some developed countries in Europe, North America and part of Asia where OHS laws have been enacted to guarantee safe and healthful working conditions for working men and women [17], the case of Ghana is extremely different. For example, in Ghana, with the exception of some statutes such as the Labour Act, 2003 (Act 651); Factories, Offices and Shops Act, 1970 (Act 328); Workmen's Compensation Act, 1999 (Act 526) and the Ghana Health Service and Teaching Hospitals Act, 1996 (Act 525), and a number of industry specific legislations which make provisions for health and safety at work, there seem to be no detailed piece of law regulating and ensuring the enforcement of health and safety standards at work. Hence, mental health nurses have no choice but to engineer their own health and safety measures to ensure their well-being and quality of life at work.

Available statistics show that 2.3 million workers die each year due to work-related injuries, and 350,000 of these deaths are attributable to occupational accidents [18]. Besides, the ILO estimates that there are 264 million nonfatal accidents each year. Furthermore, it has been estimated that globally, 3.35 million workers in the healthcare sector experience percutaneous injuries with a contaminated sharp object every year [32]. Finally, the [40] estimates that healthcare workers in Africa, the Eastern Mediterranean and Asia average about four needlestick injuries per year. Given the considerable attention and care provided by nurses to mental patients, the health of such nurses should not be taken for granted. Moreover, it should not be the responsibility of employers only but also the wider stakeholder group, including health, work and environment authorities.

Despite the fact that some empirical and conceptual studies on OHS management have been conducted in diverse sectors such as manufacturing [31], mining [5, 6], construction [41], oil and gas extraction [8, 27], small and medium-sized enterprises [23], waste management [10], and wood processing [29], there still remains to be seen a similar empirical study in the mental health sector (for exception see [21]). This study is not just timely but also imperative since it seeks to examine the relationship between OHS management and work-related outcomes in a large mental hospital in Ghana. Furthermore, it is the first study to examine the moderating effect of mental health nurses' satisfaction on the relations between OHS management dimensions and engagement as well as turnover intention in the mental hospitals in Ghana.

The rationale for choosing nurses as participants for our study is because, from an ethical standpoint, nurses have a direct interest in health and safety issues since they run the major risks of injury if provisions of the law fails to protect them. To augment the aforementioned rationale, [19] opined that employees often know more about the hazards associated with their workplace than anyone else does, as they recurrently work with them. Finally, [39] also stated that research from many countries demonstrates the positive benefits of worker participation in occupational health and safety issues.

OHS management is a multidisciplinary concept that influences both private and social lives of employees in all spectrums of work [28]. Therefore, the rationale for a good health and safety management system is to improve work conditions and employees' health in the workplace. For instance, apart from the legal obligation, all organisations have a moral duty to ensure that employees and other stakeholders affected by the actions and inactions of the organization remain safe at all times and costs [28]. Finally, in this study we assume [24] description of OHS as a multidimensional construct which includes leadership, facilities/equipment, supervision and procedure. The main research questions underpinning this study are: is there a linkage between OHS and engagement and turnover intention? Will nurses' job satisfaction affect the nexus between OHS management and work outcomes?

## 2 Theory and Hypotheses Generation

Drawing on social exchange theory [11], we argue that mental health nurses perception of OHS management policies and practices will influence their level of engagement and turnover intention. However, job satisfaction can also buffer this relationship so much that the more satisfied mental health nurses are with their jobs due to proper OHS management policies and practices, the more likely they are to be engaged with their organisation and the less likely they are to quit their organisation. The social exchange theory is based on the norm of reciprocity, which refers to the tendency of employees to respond to a beneficial action by returning a benefit and to harmful by returning a harm. For instance, [11] considers interpersonal relationship from two perspectives, economic and social exchange. In this context, the social exchange theory helps to explain and understand the moderating role of job satisfaction among the perceptions of nurses regarding the relationship between OHS management, employee engagement and turnover intention.

### 2.1 Occupational Health and Safety, and Employee Engagement

Occupational health and safety management is imperative because it helps reduce expenses related to injury and illness among workers like medical care, sick leave [36] and compensation benefit associated with vicarious liability. Furthermore, [16] stated that the legal reasons for OHS encompass preventive, punitive and compensatory effects of regulations that protect employees' safety and health related issues at work. Hence, the desire of every organisation is to improve upon the health and safety of its workers.

Engagement as a construct gained popularity after the seminal work of [20]. Kahn defined engagement as "the harnessing of organisation members' selves to their work roles..." (p. 694). Thus, when employees are engaged, they bring all three aspect of themselves – cognitive, emotional and physical – into performing their work roles. The above descriptions of engagement according to [15] show that an engaged employee is intellectually and emotionally bound to the organisation, feels passionate about its goals and is committed to live by its values. Hence, nurses who perceive their

workplaces as safe and healthful are more likely to develop a strong sense of passion and involvement in embarking on their assigned task.

Further, empirical findings reveal that OHS management is effective in predicting numerous employee and organisational outcomes. For example, using a sample of 300 woodworkers from a Timber Processing Firm in Ghana, [29] reported a positive nexus between woodworkers willingness to use personal protective equipments and their awareness of safety and health implications on their occupation. Similarly, using a sample of 370 employees from the mining sector in Ghana, [5] found a significant impact of occupational health and safety on affective, normative and continuance commitment. The authors concluded that management within the mining sector of Ghana must recognize the fact that workers, who feel healthy and safe in the performance of their duties, develop emotional attachment and a strong sense of obligation to their organisation and are more likely committed to the organisation. Elsewhere in Spain, [14] found a positive relationship between OHS management and company performance. OHS management has also been reported as a key factor of a firm's reputation and image among its stakeholders [13].

However, despite the aforementioned studies from Ghana and beyond, there remains a gap in the literature on OHS management. A careful review of the literature shows that only a few studies have attempted to examine the relationship between OHS management and employee engagement in sub-Saharan Africa, particularly in the mental hospitals. For example, [26] opined that organisations invest significant efforts and resources to attract and retain proactive and engaged employees; hence, the need for empirical research directed at identifying factors that best promote positive employee attitudes and behaviour in the mental hospitals. Against this background and the identified research gap, we propose the following hypothesis.

*H1. Occupational health and safety management is positively related to mental health nurses' engagement.*

## **2.2 Occupational Health and Safety and Turnover Intention**

OHS management in the Ghanaian mental health sector has caught the attention of health practitioners and other key stakeholders in mental health due to the low interest among nursing trainees to specialize in psychiatry nursing. This low interest has emerge due to the various work-related injuries and diseases associated with the sector, which present a serious and costly problem to healthcare workers in general. Again, nurses in the mental hospitals also do push for transfers into other areas of nursing leading to a shortage of nursing staff in the mental hospitals in Ghana.

Although some empirical studies on OHS have been conducted in Ghana [e.g., 2, 4, 5, 8, 29], arguably, few of them have examined the relationship between OHS management and employee turnover intention. For instance, in an empirical research in the Ghanaian mining sector, [6] found a negative relationship between the dimensions of OHS management and employee turnover intention. The authors further argued that safety leadership and safety facility were the most significant predictors of miners' turnover and hence concluded that safety leadership in particular was crucial in the

administration of OHS in an endeavour to lessen turnover in the mining sector. Besides, [4] opined that OHS encapsulates the mental, emotional, and physical well-being of employees in relation to the conduct of their work and as such represents a vital subject of interest that affects both positive and negative employee and organisational level outcomes. Making working conditions healthy and safe in the mental hospitals is because of the interest of stakeholders particularly employees, employers and government. However, it is imperative to note that the small number of empirical studies linking OHS to turnover intention implies a lack of knowledge in the area and as [30] rightly indicated, a call for more studies is justifiable in investigating the relationship between OHS management and turnover intention in different sectors in sub-Saharan Africa. In line with this clarion call and the absence of empirical research on the OHS-turnover intention nexus in the mental hospitals in Ghana, we propose the following hypothesis.

*H2. Occupational health and safety management is negatively related to mental health nurses' turnover intention.*

### **2.3 The Moderating Effect of Job Satisfaction**

Job satisfaction has received extensive research attention as antecedent, consequence and a third variable [38]. The earnest desire of every organisation is to encourage improvements in the safety and health of its workers [33] predominantly in an effort to enhance their satisfaction, which implies that an important task of every organisation is to prevent the occurrence of occupational accidents and injuries. For instance, [34] in a study on healthcare workers found a relationship between leading and lagging indicators of OHS and the moderating impact of middle management safety leadership on the direct relations between leading and lagging indicators. Similarly, an empirical study by [13] found OHS management as a major determinant of a company's reputation and its image among the broad stakeholder groups especially employees. Despite the presence of some studies [e.g., 5, 14] in the literature on OHS management, little or no attention has been given to the extent to which occupational health and safety interacts with job satisfaction to influence employee engagement. This study, thus, proposes that proper OHS management policies and practices can increase mental health nurses' job satisfaction, which in turn will influence their levels of engagement within the organisation. Against this backdrop, we formulate the following hypothesis.

*H3. Job satisfaction moderates the positive link between occupational health and safety and nurses' engagement.*

Furthermore, although the relationship between OHS management and turnover intention has been established mainly in the mining sector, the extent to which job satisfaction has a strong contingent effect on this relationship is yet to be established in the mental hospitals in Ghana. For instance, nurses' perception of the lack of OHS management policies in the mental hospitals is likely to trigger frustration, lassitude and lethargy and finally increase their intention to quit. Research in the healthcare sector has shown that bloodborne pathogen exposure (BPE) which sometimes results

from percutaneous injuries (PIs) sustained through needle and other sharp objectives poses a risk of transmission of HIV, hepatitis B and other pathogens to health workers [22, 32]. Similarly, [21] studied occupational exposure to bloodborne pathogens among 1,624 health workers in Botswana. The authors found that 62% of the HCWs perceived themselves to be at high risk for bloodborne pathogenic exposure. Therefore, when these health and safety issues are not properly addressed, it may likely affect the job satisfaction of nurses, which invariably will increase their turnover intention or request for transfer into other sectors in the healthcare sector. In line with the foregoing discourse, we propose the following hypothesis.

*H4. Job satisfaction moderates the negative nexus between occupational health and safety and nurses' turnover intention.*

### 3 Method

#### 3.1 Participants and Procedures

This cross-sectional survey drew samples of registered nurses from a large mental sickbay in Ghana. The rationale for selecting nurses as participants is because, from an ethical standpoint, workers have a direct interest in occupational health and safety because they run the major risks of injury if the law fails to protect them. Furthermore, workers often know more about the hazards associated with their workplace than anyone else does, because they regularly work with them [19, 39]. Data were collected from 263 nurses from Accra Mental Hospital. Prior to the data collection exercise, we explained the purpose of the study and assured the nurses that their participation in this study was strictly voluntary and that all identifying information would be removed once the data were coded. In addition, to ensure that we got relevant responses from the nurses, only those who have worked with the hospital for more than six months were eligible to participate in the study.

The demographic data of our respondents show that of the 263 registered nurses, 60.4% were female. In addition, they had an average age of 26.23 years ( $SD = 3.28$ ) and an average tenure of 4.18 years ( $SD = 1.98$ ) with the hospital. Furthermore, 72.9% were single and 27.1% married whereas 72.3% of the nurses had obtained at least a certificate.

#### 3.2 Measures

**Occupational Health and Safety.** Following previous research in Ghana [6, 29], we examined OHS by considering a 6-item, 4-dimension measure. The four dimensions of OHS were measured with [24] 28-item Safety Management Perception Questionnaire. These four empirically distinct dimensions were safety leadership ( $\alpha = .78$ ), safety facilities or equipment ( $\alpha = .79$ ), supervision ( $\alpha = .76$ ) and procedure ( $\alpha = .71$ ). Sample items include "Facilities, equipment and work stations are designed with safety

in mind” and “employees are sufficiently trained if safety procedures.” Responses were anchored on a 5-point Likert scale from *1 strongly disagree* to *5 strongly agree*.

**Job Satisfaction.** Job satisfaction refers to a pleasurable or positive emotional state resulting from the appraisal of one’s job or job experience [25]. A 6-item scale by [1] was used. Sample item included “I am satisfied with my job”. The Cronbach’s alpha reliability was 0.87.

**Employee Engagement.** Employee engagement was assessed using ISA Engagement Scale [35]. The ISA engagement scale is a 9-item, 3-dimension measure. The dimensions are intellectual, social and affective engagement. Following previous empirical studies, we combined the dimensions to get a composite score of engagement. Sample items included “I focus hard on my work”, “I share the same work values as my colleagues” as well as “I feel energetic in my work”. The Cronbach’s alpha reliability was 0.85.

**Turnover Intention.** Nurses’ turnover intention were assessed using 3-item scale by [12]. A sample item include “I frequently think of quitting my job”. All items were anchored on a 5-point Likert scale ranging from *1 strongly disagree* to *5 strongly agree*. The internal consistency score for turnover intention was 0.88.

**Controls.** Following previous research on engagement and turnover intention [e.g., 6, 15], we controlled for the effect of age, gender and tenure which could account for a variation in the outcome variables.

## 4 Results

### 4.1 Confirmatory Factor Analysis

Prior to the hypothesis testing, we conducted a confirmatory factor analysis to verify the fit of our hypothesized model. The fit of the CFA model was evaluated based on chi-square ( $\chi^2$ ) goodness-of-fit test and four other fit indices recommended by [9]. The results of the confirmatory factor analysis show that the hypothesized seven-factor model had an excellent fit to the data ( $\chi^2$  (278) = 423.42,  $\chi^2/df$  = 1.52, RMSEA = 0.04, SRMR = 0.05, NNFI = 0.93, CFI = 0.94, GFI = 0.91). The fit indices indicate a superior fit to the data as compared to the alternative models presented in Table 1. Therefore, the hypothesized seven-factor model was used for the hypotheses testing (Table 3).

### 4.2 Hypothesis Testing

The hypotheses for the study were tested using hierarchical linear modelling (HLM) analytical technique. To start with, the correlation coefficient as shown in Table 2 depict a significant positive link between safety procedure ( $r = 0.29$ ,  $p < 0.001$ ), safety supervision ( $r = 0.18$ ,  $p < 0.01$ ), safety leadership ( $r = 0.36$ ,  $p < 0.001$ ), safety facility/equipment ( $r = 0.28$ ,  $p < 0.001$ ) and employee engagement. Additionally, a significant negative nexus was found between safety procedure

**Table 1.** Fit indices for measurement model

CFA model	$\chi^2$	df	$\chi^2/df$	RMSEA	SRMR	NNFI	CFI	GFI
Hypothesized seven factor measurement model <sup>††</sup>	423.42***	278	1.52	0.04	0.05	0.93	0.94	0.91
Four factor measurement model (OHS; JS; EE; TI)	727.48**	296	2.46	0.07	0.07	0.84	0.78	0.86
Three factor measurement model (OHS; JS + EE; TI)	1020.86**	299	3.41	0.09	0.08	0.76	0.78	0.81
Two factor measurement model(OHS; JS + EE + TI)	1396.86**	301	4.64	0.10	0.10	0.66	0.68	0.76
One factor measurement model (OHS + JS + EE + TI)	1997.24**	303	6.59	0.13	0.14	0.45	0.48	0.69

<sup>††</sup> This comprises of occupational health and safety (leadership, procedure, supervision and equipment), job satisfaction, employee engagement and turnover intention.

**Table 2.** Mean, standard deviation, zero-order correlation among study variables and reliability coefficients

Variables	Mean	SD	1	2	3	4	5	6	7	8	9	10
1. Age	26.23	3.28	–									
2. Gender	0.34	0.32	0.16**	–								
3. Tenure	4.18	1.98	0.39***	–0.07	–							
4. Safety procedure	3.80	0.82	0.04	0.02	–0.01	(0.78)						
5. Safety supervision	3.40	0.66	0.13*	0.13*	0.14**	0.35***	(0.79)					
6. Safety leadership	3.90	0.77	0.13*	0.08	0.09	0.57***	0.49***	(0.76)				
7. Safety equipment	3.49	0.61	0.07	0.01	0.11*	0.39***	0.38***	0.56***	(0.71)			
8. Job Satisfaction	2.01	0.61	0.05	0.03	–0.04	0.18**	0.04	0.12*	0.18**	(0.78)		
9. Engagement	2.58	0.62	0.05	0.14*	0.06	0.29***	0.18**	0.36***	0.28***	0.28***	(0.85)	
10. Turnover intention	3.01	1.01	–0.07	–0.04	0.09	–0.14**	–0.13*	–0.15**	–0.32*	–0.43***	–0.19***	(0.88)

Note. N = 263; \*p < .05; \*\*p < .01; \*\*\*p < .001. Internal consistency measures are in (parenthesis) along the diagonal.

( $r = -0.14$ ,  $p < 0.01$ ), safety supervision ( $r = -0.13$ ,  $p < 0.05$ ), safety leadership ( $r = -0.15$ ,  $p < 0.01$ ), safety facility/equipment ( $r = -0.32$ ,  $p < 0.05$ ) and turnover intention. Again, mental health nurses job satisfaction was positively related to their engagement ( $r = 0.28$ ,  $p < 0.001$ ) and negatively related to their turnover intention ( $r = -0.43$ ,  $p < 0.001$ ). Finally, a significant negative nexus was found between engagement and turnover intention ( $r = -0.19$ ,  $p < 0.001$ ).

Regarding engagement model in Table 3, the HLM shown that after age, gender and tenure were controlled for, safety procedure ( $\beta = 0.13$ ,  $p < 0.05$ ), safety leadership ( $\beta = 0.24$ ,  $p < 0.01$ ), and safety facility/equipment ( $\beta = 0.11$ ,  $p < 0.10$ ) contributed significantly to explaining 17% of the variance in mental health nurses engagement. However, safety supervision did not contribute any significant effect on employee engagement ( $\beta = 0.04$ ,  $p > 0.05$ ). Besides, when job satisfaction was introduced into

Model 3, only safety leadership was a strong determinant of engagement ( $\beta = 0.25$ ,  $p < 0.001$ ) and accounted for 21% of the variance in the engagement model. Hence, Hypothesis 1, which sought to examine the relationship between the dimensions of OHS and nurses' engagement, was partially supported. Hypothesis 2 stated that OHS is negatively related to turnover intention. We examined this hypothesis using HLM approach. Regarding the turnover intention model in Table 3, the HLM result showed that neither of the dimensions of OHS had a significant effect on nurses' turnover intention. However, when job satisfaction was introduced into the model, safety supervision ( $\beta = -0.10$ ,  $p < 0.10$ ) and leadership ( $\beta = -0.41$ ,  $p < 0.05$ ) were deemed as strong determinants of turnover intention. Thus, Hypothesis 2 was partially supported.

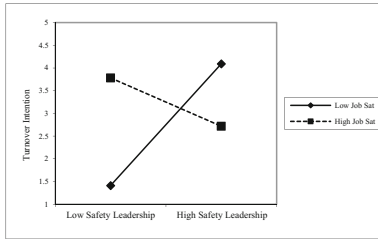
Again, we examined the moderating effect of satisfaction on the nexus between the OHS and engagement. Concerning employee engagement model, job satisfaction had a significant effect on nurses engagement ( $\beta = 0.22$ ,  $p < 0.001$ ). However, the interaction effect of job satisfaction and OHS had no significant effect on engagement. This implies that job satisfaction had no contingent effect on the relation between OHS management and engagement. Therefore, Hypothesis 3 was not supported. Similarly, regarding the turnover intention model in Table 3, the HLM results under Model 3

**Table 3.** Hierarchical linear modelling for employee engagement and turnover intention

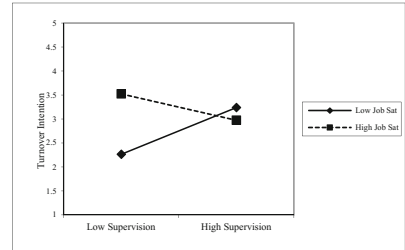
Variables	Employee engagement model				Turnover intention model			
	Model 1 $\beta$	Model 2 $\beta$	Model 3 $\beta$	Model 4 $\beta$	Model 1 $\beta$	Model 2 $\beta$	Model 3 $\beta$	Model 4 $\beta$
<i>Controls</i>								
Age <sup>a</sup>	-.01	-.04	-.06	-.05	-.12*	-.11†	-.08	-.05
Gender <sup>a</sup>	.14*	.13*	.12*	.13*	-.01	.01	.02	.02
Tenure	.07	.06	.07	.08	.13*	.15*	.12*	.12*
<i>Predictors</i>								
Safety procedure		.13*	.10	.05		-.06	.01	-.14
Safety supervision		.04	.03	.01		-.07	-.10†	-.11
Safety leadership		.24**	.25***	.45*		-.04	-.05	-.41*
Safety facility/equipment		.11†	.07	.16		-.07	.01	-.13
<i>Moderator</i>								
Job satisfaction (JS)			.22***	.53			-.41***	-.25
<i>Interaction terms</i>								
Procedure $\times$ job satisfaction				.28				-.27
Supervision $\times$ job satisfaction				.03				-.38†
Safety leadership $\times$ job satisfaction				.42				-.94**
Equipment $\times$ job satisfaction				.21				-.24
R2	.02†	.17***	.21***	.22	.02†	.05*	.21***	.21*
$\Delta R2$	.02+	.15***	.05***	.01	.02†	.03*	.16***	.03*
F	2.49†	9.33***	10.94***	7.47***	2.22†	2.59*	11.03***	8.39***
df	3,330	7,326	8,325	12,321	3,330	7,326	8,325	12,321

Note. N = 263. †p < .10; p < .05; \*\*p < .01; \*\*\*p < .001. Reported regression coefficients are standardized estimates only

<sup>a</sup>1 = male; 0 = female



**Fig. 1.** Interaction effect of safety leadership and job satisfaction on turnover intention



**Fig. 2.** Interaction effect of supervision and job satisfaction on turnover intention

revealed that job satisfaction had a significant effect on turnover intention ( $\beta = -0.41$ ,  $p < 0.001$ ). Again, under Model 4 of the turnover intention model, job satisfaction has a strong contingent effect on the link between safety supervision ( $\beta = -0.38$ ,  $p < 0.10$ ) and leadership ( $\beta = -0.94$ ,  $p < 0.01$ ) and turnover intention. The amount of variance explained by the interaction effect was 3% in turnover intention. Hence, hypothesis 4 was partially supported. Figures 1 and 2 present the results of the plotted interaction effect. Following [3], we conducted a simple slope analysis to show that nurses' perception of safety supervision and safety leadership are negatively linked to their quit intention when their job satisfaction has a strong positive effect.

## 5 Discussion

The primary objective of this study was to examine the relations between occupational health and safety management, employee engagement and turnover intention in the mental hospitals in Ghana. Additionally, the study also looked at the extent to which mental health nurses job satisfaction moderate the already mentioned relationship. Despite the fact that some empirical studies have focused on OHS management in the oil and gas sector [8], timber-processing sector [29] and mining sector [5] in Ghana, our paper set out to be among the first empirical studies to examine OHS within the mental health sector. Next, results of our study revealed that safety procedure, safety leadership and safety equipment were significant predictors of mental health nurses engagement in Ghana. However, among these dimensions, safety leadership was the most significant determinant of mental health nurses engagement. This finding is consistent with [6] who reported similar findings in the mining sector in Ghana using turnover intention as their outcome.

Furthermore, results of the HLM showed safety supervision and safety leadership as strong determinants of nurses' turnover intention when job satisfaction was high and vice versa. Finally, our result highlights the relevance of job satisfaction in the nexus between safety leadership and safety supervision, and turnover intention. Hence, with appropriate OHS management policy in place that promotes positive working environment to safeguard employees from sustaining injuries and illness at the mental hospitals, mental health nurses will be unwilling to quit their organisation.

## 5.1 Practical Implications of the Study

This study highlights safety leadership and supervision as the most predominant predictors of employee engagement and turnover intention. It is imperative to indicate that establishing OHS management policy alone cannot address the health and safety issues in the mental hospitals in Ghana because the sector requires the need for increased efficiency, quality management and effectiveness of OHS management [10]. For instance, the positive linkage between safety leadership and supervision and employee engagement illustrates that promoting an OHS policy through proper monitoring and supervision will strengthen and energize mental health nurses to work hard towards achieving the goals of the hospital. To this end, [7] emphasized that engagement occurs naturally when the wellbeing and safety of workers are the topmost priority of management in the organisation.

Based on social exchange theory, when leaders demonstrate genuine care and attention for the health and safety of employees, they are more likely to improve their sense of belonging to the organisation. Hence, management of the mental hospitals in Ghana should pay specific attention to safety leadership and supervision of health and safety issues of their nurses since engaged nurses are intellectually and emotionally bound to the hospital, feels passionate about its goals and are committed to live by its values.

Furthermore, understanding OHS management and turnover intention in the mental hospitals is imperative since mental health nurses willingness to quit the organisations has both direct and indirect cost and efficiency implications. Promoting a good OHS policy is an important way to increase workers perceptions of the organisation's approach to safety and wellbeing and thus reduce their turnover intention. This implies that a good OHS management can reduce workplace injury rates as well as employee turnover intention. Moreover, most accidents and injuries at the mental hospitals are because of exposure to risk and equipment failure. All of these largely do affect productivity, talent management and retention of employees in the mental hospitals. Poor safety leadership in occupational health and safety management will increase nurses' turnover intention. Therefore, management in the mental hospitals should engage in attitudes and behaviours that promotes the safety and wellbeing of its workers.

## 5.2 Limitations and Future Research Direction

This research is not without some limitations. Firstly, the small sample size makes it practically difficult to generalize the results, and this may have influenced the results. The above notwithstanding, the sample size was representative of the mental health sector in Ghana. Secondly, we were unable to establish causality due to the cross-sectional nature of the data. The study could not examine whether mental health nurses perception of the existence of suitable OHS management policy causes them to be physically, psychologically and emotionally engaged or less likely to quit their organisation. Furthermore, the paper relied on self-report measures for the data collection, which might result in the issue of common method bias. The direction for future research is to focus on this line of research by exploring other potential

moderating variables on the effect of occupational health and safety (OHS) management on engagement and turnover intention in other sectors in Ghana as well as the sub-region. Again, this study analysed the moderating role of job satisfaction on the nexus between OHS management and employee engagement and turnover intention. However, empirical evidence shows that OHS management affect other outcome variables such as affective commitment [5] and job performance [10]. Therefore, future researchers could look at the extent to which OHS management does influence both affective commitment and job performance in the psychiatry hospitals with responses from not only nurses but also administrators, medical doctors and laboratory technicians. Finally, researchers can also establish the causality between the variables used in our model by adopting more statistically robust and rigorous analytical techniques.

## 6 Recommendations and Conclusions

This study examined the moderating effect of job satisfaction in the relationship between OHS management and work outcomes such as engagement and turnover intention in the mental hospitals in Ghana. Results of the study show that safety leadership and supervision were strong determinants of mental health nurses engagement. It was further observed that an absence of a comprehensive OHS policy or law in Ghana has resulted in a laissez-faire attitude and an unwillingness to go the extra mile as mental health nurses may not be appropriately compensated for certain injuries or risks in the absence of clear guidelines or policy. There is therefore the need for the enactment of an OHS policy or law backed by an efficient enforcement and compliance mechanism to empower management to safeguard employees from exposure to accidents and injuries in the workplace. By so doing, it will enhance the physical, cognitive and emotional commitment of nurses in the mental health sector. Our descriptive cross-sectional study specifies that the social exchange theory may be a suitable framework for OHS management especially in the mental health sector. Furthermore, job satisfaction was a salient construct in that it had a strong contingent effect on the relationship between OHS management and turnover intention. Thus, the more satisfied mental health nurses are with the health and safety policy of their hospitals, the less likely they are to leave their workplace and vice versa. In conclusion, this is the first study to examine the moderating effect of mental health nurses' job satisfaction on the relations between OHS management dimensions and engagement as well as turnover intention in the mental hospitals in Ghana.

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