



# Organisational tenure and safety perceptions: a comparative analysis

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A lot of attention has been focused on workers' perceptions of workplace safety but relatively little or no research has investigated the impact of organisational tenure on safety climate. The present study examined this relationship, as well as workers' job satisfaction, compliance with OHS management systems (OHSMS), and involvement in workplace safety incidents (analysis of variance was used in these comparative analyses). The results revealed that long-tenured workers, relative to their short-tenured counterparts, have a positive and constructive view on safety climate, express more job satisfaction, are more committed to OHSMS and, subsequently, tend to have lower injury/illness rates.

## KEYWORDS

- ORGANISATIONAL TENURE
- SAFETY CLIMATE
- OHS MANAGEMENT SYSTEMS
- SAFETY PERCEPTIONS
- INJURY/ILLNESS RATES

## Effect of organisational tenure on safety perceptions

### Introduction and literature review

Research on workers' perceptions of workplace safety began in the early 1980s with Zohar's ubiquitous study, and has since received considerable attention in both the organisational behaviour and psychological literature. Safety climate denotes workers' shared attitudes, values, norms and beliefs regarding risk and safety in the work environment.<sup>1,4</sup> Given the critical importance of safety climate in the work environment, the extent to which safety perceptions differ among different work groups, companies and institutions has been meticulously examined for the past 30 years. This analysis has been carried out in healthcare settings, in the manufacturing sector, in airport ground handling operations, on construction sites, in clerical and service organisations, and in road administration.<sup>1,4,12</sup> Other studies have involved comparative analyses between managers' and employees' workplace safety perceptions, high- and low-incident rate organisations, individual-level and organisational-level safety perceptions, and blue-collar workers' and white-collar workers' safety perceptions.<sup>1,4,13-15</sup>

Recently, research has demonstrated that safety perception is an important indicator of organisational climate, and has established that safety perception is linked to safety performance, the frequency of safety incidents, and compliance with OHS management systems (OHSMS).<sup>2,14,16-19</sup> The conceptual foundation for these studies has been drawn from the understanding that safety perception is constructed from causal features of the working environment, organisational climate and workers' idiosyncrasies. Among the demographic variables, organisational tenure has been noted as one that significantly relates to hazard report rates and incident frequency.<sup>20-22</sup> Unfortunately, prior research has not adequately addressed the tenure-safety relationship but has mostly concentrated on the tenure-incident frequency relationship. Accordingly, the present study was designed to address this problem. It empirically investigated the impact of organisational tenure on

workers' safety perceptions, job satisfaction, compliance with OHSMS, and involvement in workplace safety incidents.

### Organisational tenure

Researchers of organisational behaviour have frequently analysed the relationship between demographic/organisational variables and workers' performance. Demographic characteristics such as age, sex, tenure and education have been related to job performance and hazard identification in the work environment.<sup>20,23-25</sup> Despite this trend, there is a surprising lack of studies regarding the empirical relationship between organisational tenure and safety perception. Thus:

Hypothesis 1: Due to a lack of evidence that bears directly on the relationship between organisational tenure and workers' perceptions of safety, this relationship is tested but no formal hypothesis is offered.

### Organisational tenure and job satisfaction

Much of the theoretical and empirical research devoted to organisational loyalty has been based on the assumption that loyalty develops with tenure.<sup>26,27</sup> Through this link, organisational tenure has been found to be a strong predictor of job satisfaction.<sup>23,28,29</sup> The argument for this observation is that longevity at work builds up a psychological link between workers and their organisations through which long-tenured workers identify with their organisations and experience more positive feelings about their job assignments and work conditions. Accordingly, relative to their short-tenured colleagues, long-tenured workers have expressed greater job satisfaction.<sup>30,31</sup> However, other research has found that longevity at the workplace does not necessarily engender or indicate loyalty, commitment and job satisfaction.<sup>27,32-34</sup> For example, in their recent study on the relationship between job outcomes (that is, satisfaction, absenteeism and tenure) and measures of state (job boredom scale) and trait (boredom proneness scale), Steven et al found that dissatisfied and bored workers had significantly longer organisational

tenure.<sup>32</sup> Their argument was that longevity may be due to workers being “ground down” at their workplaces and “whiling away the time”, or to the lack of suitable job alternatives. In essence, longevity cannot be regarded as a consistent indicator of organisational loyalty and job satisfaction. There is therefore no obvious basis to expect long-tenured workers to express greater job satisfaction than their short-tenured counterparts. Thus:

Hypothesis 2: Due to the conceptual and empirical inconsistencies regarding the relationship between organisational tenure and job satisfaction, this relationship is tested but no formal hypothesis is offered.

#### **Organisational tenure and compliance with OHSMS**

Research in the organisational literature has revealed a positive association between organisational tenure and loyalty/commitment. The findings have shown that organisational tenure is a strong predictor of loyalty and commitment.<sup>23,33,34</sup> According to this research, long-tenured workers tend to be more committed and loyal to their organisation than their short-tenured counterparts. Meta-analyses have supported this stance.<sup>23,35</sup> Workers’ compliance with OHSMS has been shown to be a function of socio-cultural influences, as well as work environmental factors.<sup>36</sup> While it might be logical to assume that organisational tenure, via organisational loyalty and commitment, would encourage compliance with OHSMS, the inconsistencies in these relationships noted above indicate otherwise (moreover, empirical research on this relationship is limited). Thus:

Hypothesis 3: Due to a lack of ample evidence that bears directly on the relationship between organisational tenure and compliance with OHSMS, no formal hypothesis is offered.

#### **Organisational tenure and frequency of workplace safety incidents**

Research findings on the relationship between organisational tenure and the frequency of workplace safety incidents are conflicting and inconsistent. Some researchers have found job

tenure to be inversely related to work injuries.<sup>21,22,37,38</sup> According to these experts, the experience acquired from longevity reduces the rate of injury occurrence for long-tenured workers. In contrast, other researchers have found organisational tenure to be positively related to workers’ injuries.<sup>39,40</sup> They have noted that the more experienced long-tenured workers tend to be assigned jobs with greater skill requirements and risk potential that expose them to injuries and disease. Other researchers have not found any relationship between organisational tenure and work injuries.<sup>41,42</sup> Thus:

Hypothesis 4: Due to the inconsistencies regarding the relationship between organisational tenure and workplace safety incidents, this relationship is tested but no formal hypothesis is offered.

#### **The present article**

This article is part of a larger explorative study that examined safety perception among Ghanaian industrial workers. Its primary aim was to investigate the impact of organisational tenure on workers’ perceptions of safety in their workplace. The major instrument used in the analyses was Hayes et al’s work safety scale.<sup>43</sup> This scale effectively captures all of the dimensions identified by safety experts that influence workers’ perceptions of workplace safety. These are: management values; management and organisational OHS policies and procedures; communication; workers’ involvement in workplace health and safety; workers’ concerns about, or indifference to, safety; and the level of safety measures in the company. Specifically, the study compared the safety perceptions of short-tenured workers with those of their long-tenured counterparts. Follow-up analyses involved item-by-item assessments between the two categories of workers on this scale. Further comparative analyses examined the workers’ level of job satisfaction and compliance with OHSMS, and the frequency of safety incidents. The study was designed to meet the need for more research on the link between organisational tenure and safety perception, and on organisational safety in developing nations (particularly Africa).

**Effect of organisational tenure on safety perceptions**

## Methodology

### Participants

Letters requesting permission to undertake a safety survey as part of an academic program were sent to the Ghanaian Chief Inspectorate of Factories and Mines. A list of companies, factories and mines that had expressed interest in the study was provided. Apart from a sizeable number of workers who had been involved in a safety incident and who were selected into the sample, participation in the study was voluntary.

Of the 320 Ghanaian industrial workers who participated in this study: 65% were male and 35% were female; 75% were subordinate workers and 25% were supervisors; 40% were single and 60% were married; and 13% had been at the workplace for less than a year, 22% between one and four years, 21% between five and 10 years, 25% between 11 and 14 years, and 19% over 15 years.

The interview questionnaire was presented to participants during lunch breaks. To ensure the accuracy of responses, it was emphasised to participants that the study was an academic work and that no one who was affiliated with their organisation was involved. Interview duration varied from 15 to 20 minutes, depending on the context in which they were conducted and on the participants' level of education. The questionnaire was presented in English but, where respondents were illiterate or semi-illiterate and had difficulty understanding English, the services of an interpreter were sought and the local dialect was used. The supervisors were educationally sound and filled in the questionnaire on their own. Self-reported measures have been commonly and successfully used in safety analyses and organisational behaviour studies.<sup>10,44-48</sup> While epidemiological reports have been found to be faulty, biased and deficient because of poor documentation, research reports have found self-reported incident rates to be closely related to documented incident rates.<sup>49-51</sup>

### Measures, questionnaire scoring and reliability

#### *Perceptions of safety climate*

Perceptions of safety climate were measured with the 50-item work safety scale developed by Hayes et al.<sup>43</sup> This instrument assesses employees' perceptions of workplace safety and measures five factorially distinct constructs: (1) job safety; (2) co-worker safety; (3) supervisor safety; (4) management's commitment to safety; and (5) satisfaction with OHSMS. In the study by Milczarek and Najmiec, this scale was shown to have good psychometric properties.<sup>52</sup> The sample items were: "Safety policies and procedures are effective", "Supervisors enforce safety rules", and "Management provides safe work conditions". The authors reported a coefficient alpha of .91 for job safety, .91 for co-worker safety, .95 for supervisor safety, .95 for management's commitment to safety, and .93 for satisfaction with safety policies and procedures. Responses to this scale in the current study produced satisfactory reliability of .96 for job safety, .80 for co-worker safety, .97 for supervisor safety, .94 for management's commitment to safety, and .86 for satisfaction with safety policies and procedures. The total coefficient alpha score was .87. Participants responded on a five-point scale ranging from not at all to very much.

#### *Job satisfaction*

Job satisfaction was measured with Porter and Lawler's one-item global measure of job satisfaction.<sup>53</sup> This measure was chosen because single-item measures of overall job satisfaction have been considered to be more robust than scale measures.<sup>54</sup> In addition, it has been used extensively in the organisational behaviour literature.<sup>55-57</sup> The measure has five response categories ranging from extremely dissatisfied to extremely satisfied, corresponding to the five-point response format in the present study. The scores were coded so that higher scores reflected higher levels of job satisfaction, and lower scores reflected lower levels of job satisfaction or job dissatisfaction.

### **Organisational tenure**

Organisational tenure represents the number of months/years that workers have held their current job. It was measured by participants' responses to the question: "How long have you worked in this company?" Response options were: (1) one to 12 months; (2) one to four years; (3) five to 10 years; (4) 11 to 14 years; and (5) 15+ years. Following previous studies, one to four years was categorised as short-tenured, and five years and above as long-tenured.

### **Items for compliance with safe work behaviour**

Items for compliance with safe work behaviour were pooled from the extant literature.<sup>43</sup> They comprised four questions which assessed workers' compliance with safe work behaviour. Sample items were: "Follow safety procedures regardless of the situation" and "Encourage co-workers to be safe". Participants responded on a five-point scale ranging from never to always.

### **Frequency of safety incidents**

Participants were asked to indicate the number of times that they had been involved in workplace safety incidents in the past 12 months. All cases studied were those classified as "serious" by the safety inspection authorities.

### **Data analyses**

Statistical analyses of the data were done with SAS Version 8.0.<sup>58</sup> Using organisational tenure as an independent variable, differences in the workers' perceptions were identified by analysis of variance (ANOVA). Thus, item-by-item analyses for the two categories of workers were computed for all 50 items on the work safety scale. In order to further examine the relationship between the two categories of workers, the sum variables of the subscales were calculated and subjected to ANOVA. This provided the statistical differences in the workers' perceptions. Participants' responses to questions relating to job satisfaction, safe work behaviour and incident frequency were subjected to a similar procedure. Levels of significance were set at  $p < 0.05$ ,  $p < 0.01$  and  $p < 0.001$ . Items that were not completed by

the participants were coded as missing values and excluded from the analyses.

## **Results**

The hypotheses in this study focused on the relationships between organisational tenure, safety perception, job satisfaction, safe work behaviour and the frequency of workplace incidents. Scores on the five subscales are presented first. This is followed by the item-by-item analyses (set out in Table 1). Regarding hypothesis 1, the results revealed a positive association between organisational tenure and safety perception. Long-tenured workers expressed more positive and constructive views than their short-tenured counterparts. The ANOVA revealed differences of statistical significance between the two categories of workers on all five subscales of the work safety scale.

Regarding perceptions on the work safety subscale, long-tenured workers (particularly those with 15+ years tenure) significantly had a more constructive view than their short-tenured counterparts ( $f(4, 296) = 90.55, p < 0.0001$ ). The short-tenured workers (particularly those with one to 12 months tenure) were the least enthusiastic about the safety level of their job assignments. They had the highest mean scores for nine out of the 10 items that alluded to negativity and disapproval on the work safety subscale. They significantly perceived their job assignments to be dangerous ( $f(4, 303) = 35.38, p < 0.0001$ ), hazardous ( $f(4, 302) = 29.84, p < 0.0001$ ), unhealthy ( $f(4, 302) = 73.38, p < 0.0001$ ), unsafe ( $f(4, 302) = 78.01, p < 0.0001$ ), or scary ( $f(4, 300) = 67.77, p < 0.0001$ ), and they felt that they could get hurt ( $f(4, 302) = 62.27, p < 0.0001$ ), they feared for their health ( $f(4, 302) = 68.42, p < 0.0001$ ), and they felt that they could die ( $f(4, 302) = 61.67, p < 0.0001$ ). Workers with one to four years tenure significantly perceived their work assignments to be risky ( $f(3, 302) = 60.03, p < 0.0001$ ). Interestingly, long-tenured workers (15+ years tenure) significantly perceived their job assignments to be safe ( $f(4, 303) = 31.80, p < 0.0001$ ) — the only item that denoted some positivity on the subscale.

## Effect of organisational tenure on safety perceptions

**TABLE 1**  
**Means and standard deviations on work safety scale and organisational tenure**

	Short-tenured (< 4 years)		5-10 years		Long-tenured (4-15+ years)		15+ years		Statistically significant ANOVA	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD		
<b>A. Work safety</b>										
1. Dangerous	4.00	1.32	3.65	1.46	3.27	1.27	1.96	1.28	1.57	***
2. Safe	1.89	1.43	2.14	1.43	3.18	1.25	3.60	1.24	4.22	***
3. Hazardous	3.32	1.63	3.34	1.41	2.43	1.28	1.60	1.01	1.49	***
4. Risky	3.66	1.55	3.78	1.25	2.06	1.18	1.75	0.82	1.36	***
5. Unhealthy	3.86	1.36	3.72	1.23	2.12	0.96	1.59	0.72	1.47	***
6. Could get hurt	3.84	1.36	3.76	1.17	2.05	1.13	1.59	1.03	1.54	***
7. Unsafe	4.11	1.01	3.91	1.21	2.28	1.13	1.65	0.83	1.60	***
8. Fear for health	3.84	1.35	3.81	1.20	2.26	1.19	1.58	0.77	1.49	***
9. Chance of death	3.73	1.48	3.56	1.30	2.07	1.13	1.40	0.71	1.43	***
10. Scary	3.79	1.44	3.65	1.13	2.06	1.17	1.64	0.82	1.34	***
<b>B. Co-worker safety</b>										
1. Ignores safety rules	3.44	1.22	3.12	1.23	2.45	0.93	1.98	0.95	1.70	***
2. Doesn't care about others' safety	3.34	1.49	3.21	1.22	2.25	1.05	2.01	1.11	1.58	***
3. Pays attention to safety rules	2.28	1.14	2.51	1.27	3.22	1.05	3.79	0.87	3.93	***
4. Follows safety rules	1.11	1.20	2.50	1.15	3.52	1.08	4.25	0.80	4.45	***
5. Looks out for others' safety	2.05	1.18	2.56	1.32	3.77	1.15	4.40	0.73	4.44	***
6. Encourages others to be safe	2.00	1.01	2.41	1.08	3.30	0.89	3.83	0.76	4.18	***
7. Takes chances with safety	3.43	0.73	2.34	1.09	2.88	1.04	3.41	1.12	1.82	***
8. Keeps work area clean	2.00	0.96	1.36	1.11	3.20	0.98	3.86	0.75	4.10	***
9. Is safety oriented	1.89	1.24	2.37	1.16	3.55	1.14	4.20	0.89	4.38	***
10. Doesn't pay attention	2.18	0.89	2.57	0.99	2.71	1.16	2.38	1.17	2.46	ns
<b>C. Supervisor safety</b>										
1. Praises safe work behaviour	2.56	0.79	2.64	0.88	3.44	0.77	3.68	0.63	4.25	***
2. Encourages safe work behaviour	2.20	0.80	2.31	1.04	3.48	1.05	3.92	0.70	4.21	***
3. Keeps workers informed about safety rules	1.87	0.97	2.38	0.99	3.21	0.97	3.93	0.88	4.22	***
4. Rewards safe work behaviour	1.85	0.96	2.03	1.14	2.90	1.03	3.71	1.01	3.95	***
5. Involves workers in setting safety goals	1.86	1.01	2.16	1.20	2.95	1.11	3.89	0.89	4.13	***
6. Discusses safety issues with others	2.10	1.11	2.16	1.10	3.09	1.20	3.96	0.72	4.36	***

**TABLE 1 (continued)**

	Short-tenured (< 4 years)			Long-tenured (4–15+ years)			Statistically significant ANOVA			
	1–12 months	1–4 years	5–10 years	11–14 years	15+ years	p <	ANOVA			
<b>C. Supervisor safety</b>	Mean	SD	Mean	SD	Mean	SD	Mean	SD	p <	
7. Updates safety rules	2.07	0.98	2.29	1.03	3.29	1.24	4.03	0.89	0.91	***
8. Trains workers to be safe	1.84	1.01	2.34	1.14	3.47	1.26	4.07	0.75	0.88	***
9. Enforces safety rules	1.97	0.98	2.26	1.18	3.50	1.22	4.23	0.79	0.91	***
10. Acts on safety suggestions	2.18	1.14	2.32	1.25	3.67	1.17	4.36	0.81	0.79	***
<b>D. Management safety</b>	Mean	SD	Mean	SD	Mean	SD	Mean	SD	p <	
1. Provides enough safety program	2.02	1.06	2.38	0.99	3.95	0.98	3.44	0.99	0.84	***
2. Conducts frequent safety inspections	1.66	0.95	2.07	1.01	2.54	1.06	3.02	1.07	1.05	***
3. Investigates safety problems	1.58	0.85	1.94	0.91	2.57	0.93	3.06	1.04	1.01	***
4. Rewards safe work behaviour	1.69	0.73	2.01	0.92	2.40	1.04	2.76	1.87	1.00	***
5. Provides safe equipment	1.71	0.85	2.02	0.98	2.79	1.08	3.28	0.98	0.84	***
6. Provides safe working conditions	1.85	0.96	2.07	0.95	2.90	1.03	3.36	0.98	1.07	***
7. Responds to safety concerns	2.02	1.03	2.10	0.95	2.95	1.10	3.42	1.08	1.16	***
8. Helps maintain clean area	2.00	1.00	1.95	1.17	3.03	1.29	3.50	1.10	0.94	***
9. Provides safety information	1.97	1.11	2.25	1.06	3.26	1.31	3.82	1.15	1.07	***
10. Keep workers informed about hazards	1.92	1.15	2.16	1.08	3.14	1.31	3.82	1.12	1.21	***
<b>E. OHSMS</b>	Mean	SD	Mean	SD	Mean	SD	Mean	SD	p <	
1. Worthwhile	2.05	1.10	2.73	1.15	3.54	1.05	4.03	0.93	0.83	***
2. Help to prevent incidents	1.97	1.13	1.96	0.96	3.34	1.10	4.05	0.94	0.76	***
3. Useful	1.71	1.02	1.83	1.22	3.48	1.27	4.23	0.77	0.89	***
4. Good	1.79	1.12	1.78	1.18	3.41	1.30	4.23	0.85	0.93	***
5. First-rate	1.74	1.04	1.87	1.10	3.18	1.09	4.01	0.94	0.98	***
6. Unclear	3.39	1.07	3.00	1.07	2.62	1.00	2.15	1.21	1.36	***
7. Important	1.87	1.03	1.90	1.15	3.39	1.16	3.74	0.98	0.94	***
8. Effective in reducing injuries	1.82	0.82	1.93	1.20	3.39	1.32	4.05	0.88	0.94	***
9. Do not apply to my workplace	3.30	1.05	2.77	0.93	2.10	1.08	2.30	1.77	1.37	***
10. Do not work	2.56	1.22	2.80	0.98	2.21	1.14	2.20	1.36	1.40	ns

ns = no statistical significance.  
\*\*\* = p > 0.001.

### Effect of organisational tenure on safety perceptions

Differences of statistical significance were observed on the co-worker safety subscale ( $f(4, 290) = 63.48, p < 0.0001$ ). Short-tenured workers (particularly those with one to 12 months tenure) expressed more negativity with regard to how they perceived their co-workers' contribution to safety. They alleged that their co-workers tended to ignore safety rules ( $f(4, 301) = 26.53, p < 0.0001$ ), did not care about the safety of other workers ( $f(4, 300) = 24.02, p < 0.0001$ ), and took chances with safety ( $f(4, 298) = 57.42, p < 0.0001$ ). Meanwhile, their long-tenured counterparts (15+ years tenure) had more positive views on their co-workers' contributions to safety. They perceived their work colleagues as workers who paid attention to safety rules ( $f(4, 300) = 26.57, p < 0.0001$ ), followed safety rules ( $f(4, 301) = 57.22, p < 0.0001$ ), looked out for the safety of others ( $f(4, 300) = 57.69, p < 0.0001$ ), encouraged others to be safe ( $f(4, 298) = 53.33, p < 0.0001$ ), kept the work area clean ( $f(4, 297) = 20.61, p < 0.0001$ ), and were safety oriented ( $f(4, 297) = 52.50, p < 0.0001$ ). Differences with regard to "don't pay attention" were not of statistical significance ( $f(4, 294) = 1.59, ns$ ).

Perceptions regarding the extent to which supervisors encouraged safety indicated differences that were of statistical significance ( $f(4, 302) = 92.39, p < 0.0001$ ). Long-tenured workers (particularly those with 15+ years tenure) significantly had more constructive views than their short-tenured colleagues. They noticed that their supervisors tended to praise safe work behaviour ( $f(4, 307) = 50.80, p < 0.0001$ ), encouraged safe work behaviour ( $f(4, 307) = 56.17, p < 0.0001$ ), kept workers informed on safety issues ( $f(4, 307) = 61.17, p < 0.0001$ ), rewarded safe work behaviour ( $f(4, 307) = 48.63, p < 0.0001$ ), involved workers in setting safety goals ( $f(4, 307) = 61.06, p < 0.0001$ ), discussed safety issues with others ( $f(4, 307) = 56.75, p < 0.0001$ ), updated safety rules ( $f(4, 307) = 63.29, p < 0.0001$ ), trained workers to be safe ( $f(4, 307) = 68.82, p < 0.0001$ ), enforced safety rules ( $f(4, 307) = 69.18, p < 0.0001$ ), and acted on safety suggestions ( $f(4, 306) = 53.15, p < 0.0001$ ).

Perceptions regarding management's attitude to safety indicated differences of statistical significance ( $f(4, 300) = 45.25, p < 0.0001$ ). Consistent with the above observation, long-tenured workers (particularly those with 11 to 14 years and 15+ years tenure) had positive and constructive views regarding management's role in maintaining a safe workplace. Workers with 15+ years tenure noted that management provided adequate safety programs ( $f(4, 307) = 23.11, p < 0.0001$ ), safety equipment ( $f(4, 305) = 31.77, p < 0.0001$ ), and safety information ( $f(4, 305) = 35.54, p < 0.0001$ ), and that management responded to safety concerns ( $f(4, 305) = 28.20, p < 0.0001$ ), helped to maintain a clean work area ( $f(4, 305) = 35.84, p < 0.0001$ ), and kept workers informed about hazards ( $f(4, 305) = 38.33, p < 0.0001$ ). Workers with 11 to 14 years tenure also noted that management conducted frequent safety inspections ( $f(4, 306) = 13.95, p < 0.0001$ ), investigated safety problems ( $f(4, 306) = 20.57, p < 0.0001$ ), rewarded safe work behaviour ( $f(4, 304) = 9.79, p < 0.0001$ ), and provided safe working conditions ( $f(4, 305) = 30.09, p < 0.0001$ ).

Perceptions on the OHSMS subscale indicated differences of statistical significance ( $f(4, 255) = 83.02, p < 0.0001$ ) in which long-tenured workers (particularly those with 15+ years tenure) were appreciably enthusiastic about OHSMS. They considered OHSMS to be worthwhile ( $f(4, 305) = 53.90, p < 0.0001$ ), useful ( $f(4, 304) = 86.76, p < 0.0001$ ), good ( $f(4, 304) = 81.42, p < 0.0001$ ), first-rate ( $f(4, 304) = 72.89, p < 0.0001$ ), and important ( $f(4, 303) = 55.91, p < 0.0001$ ), and felt that OHSMS helped to prevent incidents ( $f(4, 304) = 76.89, p < 0.0001$ ) and were effective in reducing injuries ( $f(4, 301) = 62.77, p < 0.0001$ ). Interestingly, it was the short-tenured workers who expressed negativity and disapproval with regard to the OHSMS (particularly those with one to 12 months tenure). They saw OHSMS as being unclear ( $f(4, 298) = 12.02, p < 0.0001$ ) and not applicable to their workplaces ( $f(4, 277) = 19.48, p < 0.0001$ ).

Differences regarding the relationship between workers' organisational tenure and job satisfaction (hypothesis 2) were of statistical significance ( $f(4, 304) = 43.73, p < 0.0001$ ). As reflected in Table 2, the long-tenured workers expressed more job satisfaction than their short-tenured colleagues.

Perceptions regarding compliance with the OHSMS (hypothesis 3) indicated a difference of highly statistical significance ( $f(4, 296) = 78.21, p < 0.0001$ ). Long-tenured workers were more compliant with OHSMS than their short-tenured counterparts. Workers with 15+ years tenure were the most compliant with OHSMS, while workers with one to 12 months tenure were the least compliant.

Perceptions regarding the rate of involvement in workplace safety incidents (hypothesis 4) indicated a difference of statistical significance ( $f(4, 299) = 79.22, p < 0.0001$ ). The short-tenured workers had a relatively higher rate of incident involvement than their long-tenured colleagues. As reflected in Table 2, and consistent with the results in hypothesis 3, the incident frequency was highest among workers in their first year of tenure, and lowest among workers with 15+ years tenure.

## Discussion

The present study investigated the influence of organisational tenure on safety perceptions by comparing short- and long-tenured workers' perceptions. It also examined the relationships between organisational tenure and job satisfaction, compliance with OHSMS, and rate of involvement in safety incidents. The major finding was a positive association between organisational tenure and safety perception. The longer the tenure, the more positive and constructive were workers' views regarding workplace safety. Long-tenured workers appear to hold more constructive views and have more positive attitudes to safety than their short-tenured counterparts. Workplace longevity seems to have a positive effect on workers' safety perceptions, job satisfaction, compliance with OHSMS and, subsequently, on their injury/illness rate.

These observations at a highly significant level of  $p < 0.0001$  give credence to the findings of, and corroborate, previous research. The short-tenured workers, particularly the newly recruited, were the least enthusiastic about workplace safety. Not surprisingly, they were the least compliant with OHSMS and consequently registered the highest rate of injury/illness.

Two possibilities may account for the current observation. The first relates to the strong association between job experience and organisational tenure. According to the findings of previous studies, safety consciousness, sensitivity to hazardous situations, diligence and assiduousness tend to increase with job experience and tenure.<sup>21,37</sup> Long-tenured workers are often equipped with skills and greater organisational knowledge of OHSMS which may enhance their job performance and job satisfaction. Thus, in contrast to their inexperienced and newly recruited counterparts, the experience and compensatory skills of long-tenured workers made handling seemingly hazardous and dangerous situations less problematic in the present study. Ultimately, the explicit and tacit organisational knowledge gained through organisational tenure and experience increased their safety consciousness and decreased their incident risk propensity. This study therefore corroborates previous studies which have found injury rates and involvement in industrial safety incidents decrease as tenure and work experience increase.<sup>21,22,59,60</sup>

The second explanation relates to the positive relationship between organisational tenure and loyalty/commitment and the privileges that are gained with increasing tenure. According to the literature, in order to compensate for this loyalty, long-tenured workers benefit from privileges and extrinsic rewards that are often denied their short-tenured counterparts.<sup>23,34</sup> The newly recruited and the short-tenured Ghanaian workers did not qualify for such longevity-based privileges. They were mostly casual and inexperienced workers who were assigned tedious and hazardous assignments which generated a stressful and unpleasant job atmosphere and which increased their susceptibility to injuries and safety

## Effect of organisational tenure on safety perceptions

**TABLE 2**  
Descriptive statistics on work safety scale, safe work behaviour,  
incident frequency and job satisfaction

	Short-tenured				Long-tenured						Statistically significant ANOVA
	1–12 months		1–4 years		5–10 years		11–14 years				
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	
WSSA	36.05	9.47	35.35	8.89	22.88	7.56	18.39	4.91	17.54	5.52	***
WSSB	23.13	4.94	26.12	5.10	30.80	5.04	34.17	3.45	34.85	4.35	***
WSSC	20.52	7.81	22.94	9.19	33.03	9.24	39.83	5.39	43.03	6.93	***
WSSD	18.46	7.63	21.00	7.93	28.57	8.46	33.48	7.68	33.49	6.89	***
WSSE	19.11	6.36	19.96	7.61	30.50	8.00	37.39	6.43	38.13	6.25	***
Safe work behaviour	10.45	4.33	12.35	4.63	17.06	4.03	20.13	2.91	21.17	3.61	***
Incident frequency	3.15	0.97	2.73	0.89	1.64	0.98	1.17	0.44	1.10	0.45	***
Job satisfaction	1.92	1.38	2.29	1.26	3.56	0.94	3.88	0.99	4.25	1.16	***

n = 244-306.

\*\*\* = p < 0.001.

WSSA = work safety; WSSB = co-worker safety; WSSC = supervisor safety; WSSD = management safety; WSSE = OHSMS.

incidents. On the other hand, the seniority of the long-tenured Ghanaian workers was respected. They quite often deputised for supervisors, had greater autonomy and discretion, and assigned themselves (or were assigned) less demanding jobs with little or no exposure to hazards and risks.

Drawing from the social exchange theory and the reciprocity theory, the treatment of workers in this way by management creates a feeling of indebtedness, and a corresponding sense of obligation, in workers so that they respond positively in return.<sup>61,62</sup> As such, the long-tenured workers were eager to reciprocate with pro-social organisational behaviour (for example, by complying with OHSMS), and subsequently recorded a relatively lower rate of incident involvement. This finding reinforces the social exchange theory and the norms of reciprocity as a basis for workers' safety-related behaviour.<sup>63,64</sup> It also emphasises why some researchers have always found a strong and positive relationship between organisational tenure and job satisfaction, and an inverse relationship with work injuries.<sup>21,22,28,29,37,38</sup>

### Implications of study findings

A significant and practical implication of the findings in the present study is that interventions aimed at

improving safety management policies should be directed at workers during their early months in a job. The available data re-emphasise the vulnerability of inexperienced and newly recruited workers to injuries and incidents.<sup>59</sup> As noted, the injury/illness rate was highest for workers who had been employed for less than a year. Clearly, there is a need for special safety programs to be designed for this group of workers. The organisational behaviour literature is satiated with programs that can positively impact on workers' perceptions of safety, including: ways to increase workers' levels of job satisfaction; implementing fairness perception measures; instituting job enrichment programs; providing the means for workers to acquire safety skills; and showing a commitment to workers beyond what is formally stated in the contractual agreement.<sup>63-72</sup>

### Limitations

The major limitation of this research was the need for participants to recall workplace safety incidents. Retrospective incident analysis always entails the risk of memory error. However, as the incidents had occurred less than a year before the interviews, it is assumed that recall distortion was minimal. Prospective examinations of incident processes

could be viable alternatives to such retrospective studies. Another limitation was the use of self-reported measures. Responses might have been affected by intentional distortions and misinformation. To counter this threat, participants were promised anonymity and confidentiality. In addition, guarantees were given that no member of their organisation was involved in the study in any way. Notwithstanding these limitations, this research adds to our understanding of the impact of organisational tenure on workers' perceptions of safety, job satisfaction, compliance with the OHSMS, and incident involvement rates.

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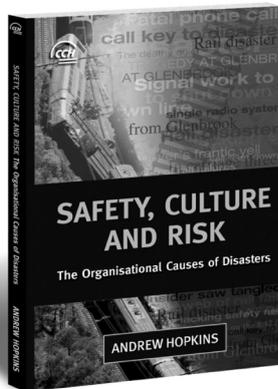
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