

Safety Climate as a Predictor of Quality of Worklife: An Empirical Study among Miners in Ghana

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Abstract

This study investigated the influence of safety climate factors; management value for safety, supervisory practices, safety training, safety communication and safety systems, on quality of worklife (QWL) among employees in a multinational mining company in Ghana. Using a cross-sectional design, 235 employees conveniently selected from the mining company completed questionnaires on safety climate and QWL. The results showed positive relationships between the five safety climate factors and QWL. However, multi-linear regression analysis showed supervisory practices and safety systems as the significant predictors of QWL. The results are discussed in the framework of Needs Satisfaction of QWL model, and the implications for both research and practice are discussed.

Keywords: Safety climate, Predictor, Quality of worklife, Miners, Ghana.

Introduction

Working adults spend at least a quarter to a third of their working life at work (Harter, Schmidt & Keyes, 2003). So QWL issues in organisations such as the mines, that involve hazardous working conditions, should be of interest to all stakeholders and researchers. However, occupational health and safety issues have received very little research attention in Ghana (Puplampu & Quartey, 2012). Specifically, studies linking safety climate to quality of worklife are generally lacking. Safety climate represents 'individual perceptions of policies, procedures and practices relating to safety in the workplace' (Neal & Griffin, 2006; pp. 946–947). These perceptions reflect the priority that employees believe the organisation gives to safety issues in relation to other organizational concerns such as productivity (Clarke, 2010). Safety climate thus represents the attitudes of the individual toward safety and is formed through the individual's interaction with his/her environment specifically the safety-specific characteristics of the organizational environment (Weyman, Clarke & Cox, 2003). It is through this interactive process that the individual develops perceptions, attitudes, and beliefs about organizational safety, which combine to form the safety climate. Hence, safety climate provides a framework for the interpretation of organizational events and processes in relation to personal and organizational safety values and reflects the appropriateness of safety-related behaviour (Clarke, 2010).

However, while there is some evidence to suggest a relationship between safety climate and safety outcomes, such as unsafe acts and accidents (e.g., Cigularov, Chen & Rosecrance, 2010; Fernández-Muñiz, Montes-Peón & Vázquez-Ordás, 2011; Hofmann & Stetzer, 1996), very little attention has been given to the relationship between safety climate and other established constructs (Zohar, 2010) such as quality of worklife. Quality of worklife (QWL) is the degree to which the workforces are able to satisfy important personal needs through their experiences in their organization (Hackman & Shuttle, 1977). QWL in a deeper sense refers to the quality of life of individuals in their working organizations (Data, 1999). In the present study, we operationalized QWL based on Sirgy, Efraty, Siegel and Lee's (2001) need satisfaction of QWL. They define QWL as "employee satisfaction with a variety of needs through resources, activities and outcomes stemming from participation in the workplace. Thus, need satisfaction resulting from workplace experiences contributes to job satisfaction and satisfaction in other life domains. Satisfaction in the major life domains (e.g., work life, family life, home life, leisure life) contributes directly to satisfaction with overall life" (Sirgy, et al., 2001, p. 242). Sirgy et al. (2001) further developed a measure of QWL based on need satisfaction and spill over theories. The measure was designed to capture the extent to which the work environment, job requirements, supervisory behaviour, and ancillary programs in an organization meet the needs of the workforce. They explained that QWL differs from job satisfaction noting that job satisfaction is construed as one of many outcomes of QWL. Besides, QWL does not only affect job satisfaction itself but also satisfaction in other life domains (Sirgy et al., 2001). It is in this regard we tried to investigate whether or not safety climate; comprising management value for safety, supervisory practices, safety communication, safety training and safety systems suitability will have any influence on employees' quality of worklife.

Problem Statement

Over thirty (30) years after the classical work of Zohar (1980), there have been enormous achievements in validating safety climate as a robust leading predictor of safety outcomes across industries and countries but

much more is needed to expand the safety climate theory (Zohar, 2010). Constructs need to be augmented through testing safety climate relationships with antecedents, moderators and mediators, as well as its relationships with other established constructs (Zohar, 2010) such as QWL.

Considering that working adults spend at least a quarter to a third of their waking life at work (Harter, Schmidt & Keyes, 2003) and that supervisory behaviour (a dimension of safety climate) is found to contribute significantly to employees' wellbeing over and above the effects of stressful work and social support (Gilbreath & Benson, 2004), QWL issues in organisations such as the mines, that are classified as dangerous working environments, should be of interest to all employers, researchers and policy-making bodies. Despite this, studies linking safety climate to quality of worklife are lacking and this paucity in the safety climate literature need to be addressed.

In Ghana, the situation is pathetic because of lack of effective interventions from qualitative and quantitative action-researches couple with poor attitudes by employers towards occupational health and safety (OSH) practices (Puplampu & Quartey, 2012). Even the few studies that look at OSH issues especially in the mining sector are conceptual and hence need empirical backing. Amponsah-Tawiah et al. (2013) examination of psychosocial and physical hazards in the Ghanaian industry is an exception. The situation is more worrisome following the recent influx of oil and gas, mining, construction and other foreign companies into the country. For a poor country like Ghana exacerbated by high rate of unemployment, people are prepared to sacrifice their lives to earn a living (Amponsah-Tawiah & Dartey-Baah, 2011). It is therefore imperative to examine safety climate and its impact on quality of worklife in the Ghanaian context.

Objectives of the study

The study aimed to determine;

- the relationship between workers' perceptions of safety climate and their quality of worklife.
- the element(s) of safety climate that is/are important predictor(s) of quality of worklife.

Literature Review

Theoretical Framework

The link between safety climate and QWL is explained using Sirgy et al.'s (2001) Need Satisfaction QWL model, developed from need satisfaction and spill over theories. The basic tenet of this model is that people have basic needs they seek to fulfil through work. Employees experience satisfaction from their jobs to the extent that their jobs meet these needs. According to Sirgy et al. (2001), Need satisfaction - an index of congruence between organizational resources and personal needs is the consequent of absolute difference between "is" (organizational resources) and "should" (need) scores. However, need-based theories on quality of work have mainly been criticized because of the assumption that lower-order needs (e.g. pay, security) have a stronger predominance than higher-order needs (e.g. autonomy, self-esteem), and only if lower-order needs are fulfilled higher-order needs will become salient to the individual (Sirgy et al., 2001).

Spill over theory states that psychological states (positive or negative) experienced in one domain may affect psychological states experienced in another domain (Staines, 1980). The spillover approach to QWL posits that satisfaction in one area of life may influence satisfaction in another. For example, Sirgy et al. (2001) citing several studies stated that satisfaction with one's job may influence satisfaction in other life domains such as family, leisure, social, health and finance. Sirgy et al. (2001) further distinguished between types of rewards and sources of rewards. For instance supervision is termed as a source of reward, whereas pay, security, social relations at work, and opportunities for growth are referred to as types of rewards. Drawing on Maslow's need hierarchy theory Sirgy et al. (2001) expanded the types of rewards to include a variety of extrinsic and intrinsic needs, namely health and safety needs, economic and family needs, social needs, esteem needs, actualization needs, knowledge needs, and aesthetics needs. The authors then classify the work environment, job requirements, supervisory behaviour, and ancillary programs as sources of rewards. Consequently, the current researchers expect the mine workers' perceptions (positive or negative) of their work environment to affect their quality of worklife. That is, if workers perceive a congruence between safety climate and their personal needs they may experience high quality of worklife.

Related Studies

The term 'quality of work life' (QWL) emanated from open socio-technical system designed in the 1970s to help ensure autonomy in work, interdependence, and self-involvement with the idea of 'best fit' between technology and social organizations. The open socio-technical system assumes that ideal system performance and the 'right' technical organization match with job conditions under which, the social and psychological needs of the workers are satisfied (Bolweg, 1976).

Harrison (2000), Kerce and Booth-Kewley (1993), Newell (2002) and Stein (1983) all agreed that safe and healthy work conditions have a significant impact on QWL. According to Newell (2002), QWL involves making employees' workplace more conducive by improving the physical working conditions under which they operate. Stein (1983) earlier advocated this view by advising that decent working condition is necessary for QWL though it is sometimes overlooked. Additionally Kerce and Booth-Kewley (1993) suggested that a high QWL is more likely to occur when amongst other factors democratic supervision and a safe working environment is

experienced. Harrison (2000) focusing on the measurement of QWL found that asking employees their opinions surrounding their satisfaction or dissatisfaction with their work environment, leads to an increased sense of belonging to the organization, and predicted overall perception of QWL when combined with other factors.

Cohen (1992) studied the quality of working life in the Philadelphia Department of Human Services. A written survey completed by 388 child welfare staff, explored four major areas: the job itself, work relationships, organizational structure, and organizational effectiveness. Only 18% of the respondents rated the overall quality of working life as excellent or good, while 82% rated it as either fair or poor. While most staff were satisfied with specific characteristics of their jobs (e.g. meaningfulness, challenge, variety, autonomy), they were dissatisfied with many aspects of the work environment, including the high workload, inability to influence how the work was performed, poor communications among work units, and little knowledge of the actual results of their labour.

Considerably less frequent in the workplace safety literature is the consideration that safety climate might affect non-safety aspects of work outcomes, organizational outcomes and other life domains. Relatively few studies have found relationship between safety climate and job satisfaction- one aspect of QWL (Sirgy et al., 2001). Morrow and Crum (1998) drawing on the theory of Work Adjustment (Dawis & Lofquist, 1984), predicted that safety, which is an important environmental need affects workers' perceptions that their working conditions are favourable, and predicts enriched organizational attitudes, including job satisfaction. Moreover, Morrow and Crum (1998) in a cross-sectional study found that safety climate positively predicted employees' intentions to remain within the organization. Similarly, Michael, Evans, Jansen and Haight (2005) found safety climate to be a predictor of job satisfaction and withdrawal behaviours. Fernández-Muñiz, Montes-Peón and Vázquez-Ordás, (2011) proposed that safety behaviour and involvement in the firm's safety improve workers' satisfaction and reduce absenteeism because the workers feel as important part of the organisation and that the organisation values their opinions and contributions.

Data (1999) construed QWL as 'the favourableness or unfavourableness of a job environment for individuals conducive to living with human values' (p. 136). He further stated that, when the job environment encourages individuals to work more and more with human values, it implies that the QWL is improving. On the contrary if the job environment compels individuals to work more and more with disvalues, it implies that the QWL is deteriorating. The former for him falls in the domain of material wellbeing and the latter is a subjective feeling of the individuals. Data (1999) claimed that improvement or deterioration of QWL in an organization usually starts from the top and not from the bottom. Granted that Data's (1999) views are through, the current researcher expects employees' perceptions of their top management and supervisors to affect their perceived quality of worklife.

Some researchers have examined the quality of employees' worklife in relation to some attitudinal outcomes such as morale. Johnsrud and Rosser (1999) for instance examined QWL of middle level administrators in their quest to identify work-related issues that explain the morale of administrators. The findings indicated that perceptions regarding recognition, discrimination, external relations, and mobility explain the morale of midlevel administrators.

The social context of the organization - socially responsible work culture, relationships and interactions with co-workers and supervisors, and support from one's supervisor and co-workers are important determinants of quality of working life (Beham, Drobnič & Verwiebe, 2006). Some studies (e.g. Clark, 1998) have found that the relationships between the nature of working relationships of employees, their co-workers as well as their supervisors affect employees' wellbeing, health and satisfaction. Some other QWL studies (e.g. Thompson, Beauvais & Lyness, 1999) have indicated that, a supportive work culture and social support provided by the direct supervisor mitigated worklife conflict, stress and facilitated worklife integration.

Sirgy et al. (2001) in their study found that employees' need satisfaction of QWL was predicted by employees' need satisfaction stemming from the work environment, job requirements, supervisory behaviour, and ancillary programs. Sirgy et al. (2001) explained further that an employee need satisfaction is determined by the employee's perceptions of four organizational sources of need satisfaction, namely the work environment, job requirements, supervisory behaviour, and ancillary programs. Satisfaction of a particular need is directly related to perception of aspects of the work environment, job requirements, supervisory behaviour, and ancillary programs that address that need (Sirgy et al., 2001). Specifically, the average composite scores of health and safety needs, social needs, and esteem needs were significantly predicted by all four organizational sources of need satisfaction - the work environment, job requirements, supervisory behaviour, and ancillary programs. Economic and family needs, actualization needs, and knowledge needs were predicted by work environment, job requirements, supervisory behaviour, but not ancillary programs. In contrast, aesthetics needs were predicted by the work environment, job requirements, and ancillary programs, but not supervisory behaviour.

Drawing from these studies, we anticipate that the mine workers' satisfaction of, for example, safety in their workplace should be related to their perceptions of a particular aspects of their work environment (e.g. perceptions regarding management value, supervisor practices, safety communication, safety training and safety

systems) that satisfy that particular need. Thus employees' perceptions of safety climate in their workplace should be directly related to their QWL. Furthermore, from the spillover theories, the researcher proposed safety climate to be related to QWL since workers satisfaction or dissatisfaction of one job domain can extend or spill over to other work or life domains. Consequently the researcher hypothesised a significant positive relationship between safety climate and QWL.

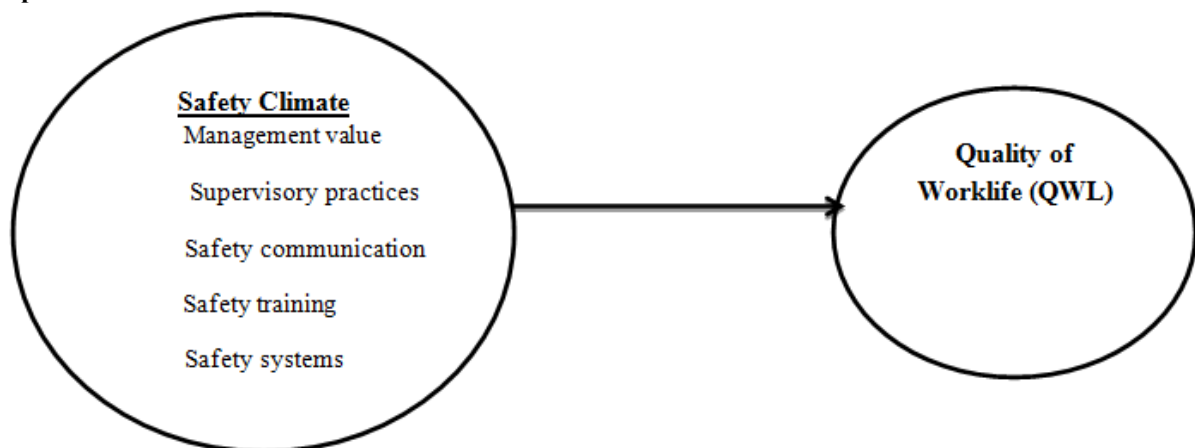
Statement of Hypotheses

1. Safety climate will significantly and positively relate to quality of worklife.
2. Supervisory practices will be the strongest predictor of quality of worklife compare to the other dimensions (management value, Safety communication, safety training and safety systems) of safety climate.

Figure 1: Hypothesised Model of Relationship between the Study Variables

Independent Variable

Dependent Variable



Methodology

Population/Sample size and sampling technique

The respondents were employees of a multinational mining company in Ghana which has health and safety management system and safety policy in place. The population was chosen because it has established safety management systems of which the investigators seek to examine employees' perceptions about these systems and other safety specific characteristics of their work environment. That is the safety climate concept. The convenience sampling technique was used in selecting both the organization and the respondents. The respondents cut across all departments and job levels excluding senior managers and newly employed employees (less than three months) as they have not yet familiarised themselves with the work environment. **Table 1** below presents the sample characteristics.

Table 1 indicates that majority of the respondents were males (197) representing 84% of the sample as against 16% of females (38). This is not surprising because the mining environment has always been dominated by males probably because of the harsh working environment. Their ages ranged from 20 to 51 and above with majority of the respondents are in the age category of 26 to 40 (63%) and only 8 (3%) respondents being 51 years and above.

On education, only 11 (5%) have attained a postgraduate qualification, 91 (39%) had either secondary, technical or a qualifications below these and one (1) person reported not having formal education at all. With regard to pattern of work, 143 (61%) work straight day while 91 (39%) work on a shift basis. The nature of work has been categorised into two – operations and administrative. Out of the total sample, 172 (73%) are in operations and 63 (27%) are into administrative work. For tenure, 9 (4%) respondents had worked in the mine for 21 years or more, 52 (22%) had work experience of about 6 to 10 years. Majority of the respondents – 107 (46%) had work experience of 1 to 5 years. On the basis of the sampling technique and the distribution of the sample characteristics, the sample is considered adequate and representative of the population characteristics.

Table 1: Demographic Characteristics of the Respondents (N=235)

| Demographic | Frequency | Percentage |
|-------------------------------------|-----------|------------|
| Sex | | |
| Male | 197 | 83.8 |
| Female | 38 | 16.2 |
| Marital Status | | |
| Single | 125 | 53.2 |
| Divorced | 5 | 2.1 |
| Married | 102 | 43.4 |
| Other | 3 | 1.3 |
| Number of Children | | |
| 0 | 117 | 49.8 |
| 1- 3 | 78 | 33.2 |
| 4- 6 | 35 | 14.9 |
| 7- 9 | 3 | 1.3 |
| 10 | 2 | 0.9 |
| Age | | |
| 18 – 25 | 50 | 21.3 |
| 26 – 40 | 147 | 62.6 |
| 41 – 50 | 30 | 12.8 |
| 51 – above | 8 | 3.4 |
| Highest Education level | | |
| No education | 1 | 0.4 |
| Primary | 5 | 2.1 |
| JHS | 28 | 11.9 |
| Secondary/Technical | 58 | 24.7 |
| University/Polytechnic | 132 | 56.2 |
| Post graduate | 11 | 4.7 |
| Nature of Work | | |
| Operations | 172 | 73.2 |
| Administrative | 63 | 26.8 |
| Pattern of Work | | |
| Straight day | 143 | 60.9 |
| Straight night | 1 | 0.4 |
| Shift pattern | 91 | 38.7 |
| Work Experience in the mines | | |
| Less than 1 year | 45 | 19.1 |
| 1 – 5 | 107 | 45.5 |
| 6 – 10 | 52 | 22.1 |
| 11 – 15 | 12 | 5.1 |
| 16 - 20 | 10 | 4.3 |
| 21- above | 9 | 3.8 |

Research Design

The design for the study was a cross-sectional survey using quantitative questionnaire in collecting the data. A cross-section of mine workers' perceptions of safety climate was assessed at a given time and analysed carefully (Bless, Higson-Smith & Kagee, 2006). This method facilitates asking a large number of mine workers their opinions in a relatively short time and cost effective manner. Also, the numbers of mine workers were large and spread across the various departments and units, but literacy was not a problem making the questionnaire survey the most suitable method for collecting this data. The fact that psychometric questionnaire studies make the safety climate concept more practical (Hale & Hovden, 1998), confirms that the questionnaire survey was the most suitable method in exploring these issues in the present situation.

Measures/Instruments

Safety climate: This has five components; management value for safety (4 items, $\alpha = .90$), safety communication (5 items, $\alpha = .80$), safety training (4 items, $\alpha = .74$), safety systems (3 items, $\alpha = .75$) from Griffin and Neal's (2008) and Supervisory practices (7 items, $\alpha = .90$) from Zohar (1980) safety climate scale adopted, modified and

used by Lu and Tsai (2011). A few more changes by way of rewording were done to some items. For example, the item “My supervisors like to consult us on safety issues” was changed to “My supervisors like to consult me on safety issues”. Scores ranged from 23 to 115 where high scores on safety climate mean more positive perceptions of safety climate.

Quality of worklife: The 16-item need satisfaction QWL scale (Sirgy et al. 2001) was adopted for this research. The QWL scale was conceptualized as a summation of satisfaction of seven categories of needs consisting of 16 items relating to the 16 need satisfaction dimensions of the seven needs - one item for each dimension. Sample item: I feel physically safe at work ($\alpha = .78$). Scores are between 16 and 80 where high scores signify high QWL and low scores mean low or poor QWL. All scales were on a five point Likert type scale ranging from strongly agree (coded 5) to strongly disagree (coded 1).

Data collection Procedure

After getting acceptance and access into the organization and seeking the consent of employees who willingly participated in the study, questionnaires were distributed to the respondents by the researchers. Newly employed workers who were going through induction were eliminated from the study as they were not yet acquainted with the mining environment. Instructions for completing the questionnaire and the objective of the study were clearly stated in the first part of questionnaire followed by demographic information of participants and the measures for the study. Participants were assured of the privacy, anonymity and confidentiality of data collected. Ethics of justice and fairness, objectivity and respecting the dignity of all participants were adhered to.

Pilot Study

This was to determine whether participants could easily understand and respond to the questionnaire and whether the scales measure what they are supposed to measure. Fifty (50) sample questionnaires were distributed and 46 were correctly completed and used for the analysis. The analysis of the piloted questionnaires indicated good reliabilities of the scales. Reliability coefficients of the subscales range from .81 to .98. Based on comments from the pilot study some minor changes were made to arrive at the final questionnaire. Changes comprised rewording of some items for clarity and comprehension and correcting few typographical errors. The pilot study gave the researcher the assurances that the design was appropriate and that participants could easily complete the questionnaire.

Results

Descriptive statistics of the variables studied were computed. Normality test for skewness and kurtosis was done to ascertain the use of parametric statistical analyses. The results presented in **Table 2** revealed no problems.

Table 2:

Means, Standard Deviations, Skewness, Kurtosis and Alpha values of the study variables (N= 235)

| Variable | Mean | SD | Skewness | Kurtosis | α |
|-----------------------|-------|-------|----------|----------|----------|
| Management value | 18.34 | 2.08 | -0.98 | 0.97 | .83 |
| Supervisory practices | 26.97 | 5.87 | -0.56 | 0.03 | .88 |
| Safety communication | 21.73 | 2.78 | -0.48 | -0.62 | .74 |
| safety training | 16.86 | 2.66 | -0.99 | 0.98 | .80 |
| Safety systems | 12.62 | 2.11 | -0.92 | 0.97 | .74 |
| QWL | 60.61 | 10.42 | -0.80 | 0.95 | .89 |

Table 3:

Intercorrelations between the study Variables (N = 235)

| Variable | 1 | 2 | 3 | 4 | 5 | 6 | 12 |
|--------------------------|-------|-------|-------|-------|-------|-------|----|
| 1. Management value | — | | | | | | |
| 2. Supervisory practices | .49** | — | | | | | |
| 3. Safety communication | .60** | .65** | — | | | | |
| 4. Safety training | .48** | .60** | .68** | — | | | |
| 5. Safety systems | .30** | .30** | .34** | .35** | — | | |
| 6. Safety Climate | .69** | .87** | .84** | .79** | .59** | — | |
| 12. QWL | .42** | .68** | .55** | .49** | .38** | .69** | — |

**P < .01

Hypothesis 1 states a significant positive relationship between safety climate and quality of worklife. From the

correlation matrix (**Table 3**), the results show that safety climate has a significant positive relationship with QWL on the zero-order correlations $r = .69, p < .01$. That is the more positive employees' perceptions of safety climate were the higher their quality of worklife. Thus workers who perceived the work environment concerning safety to be favourable experienced high quality of worklife. Hence Hypothesis 1 which predicted positive perceptions of safety climate to positively relate to high quality of worklife is supported.

Hypothesis 2 predicted supervisory practices to be the strongest predictor of QWL compare to the other safety climate factors. The predictive strength of the individual component factors of safety climate on QWL were investigated using Standard regression and the results presented in **Table 4**.

Table 4: Standard Regression Coefficients of Safety Climate Factors Predicting QWL

| Variable entered | B | SEB | B |
|-----------------------|-------|------|--------|
| (Constant) | 14.73 | 4.68 | |
| Management value | 0.20 | 0.30 | .04 |
| Supervisory practices | 0.93 | 0.11 | .52*** |
| Safety communication | 0.44 | 0.28 | .12 |
| safety training | 0.06 | 0.26 | .02 |
| Safety systems | 0.52 | 0.16 | .16*** |

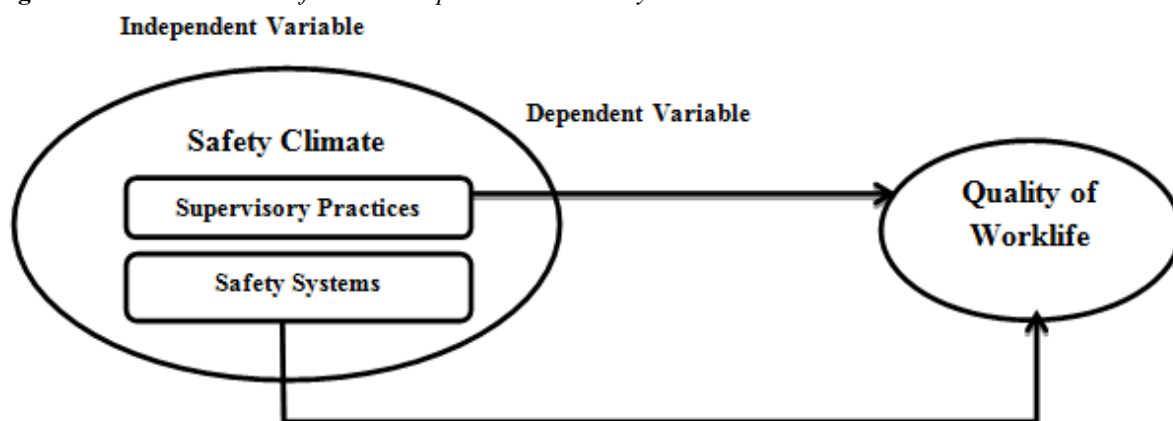
Note: $R^2 = .51, ***p < .001$

When QWL was regressed on the safety climate factors as individual predictors, only two factors; supervisory practices ($\beta = .52, p < .001$) and Safety systems ($\beta = .16, p = .001$) significantly predicted QWL. Nonetheless, the model as a whole accounts for 51% ($R^2 = .51$) of the variability in QWL ($F_{(5,229)} = 46.85, p < .001$). The contributions of management value ($\beta = .04, p > .05$), safety communication ($\beta = .12, p > .05$) and safety training ($\beta = .02, p > .05$) in predicting employees' QWL were statistically not significant, though both safety communication ($r = .55, p < .01$) and safety training ($r = .49, p < .01$) showed significant positive correlations with QWL on the zero-order correlations (**Table 3**).

Discussion

This study explored the influence of safety climate on quality of worklife (QWL) among employees in a multinational mining company in Ghana. The main objective was to determine whether or not employees' perceptions of their work environment regarding management value for safety, supervisory practices, safety communication, safety training and safety systems will affect the quality of their worklife. Based on the set objectives and previous studies, two hypotheses were formulated and tested using Pearson Product-Moment correlation and a standard regression model. On the whole, the results show that safety climate relate positively with QWL. **Figure 2** provides the observed model of relationships between the study variables.

Figure 2: Observed Model of Relationship between the Study Variables



The current work indicated that safety climate is positively related to quality of worklife confirming hypothesis 1. The more employees perceive their work environment to be congruent with the requirement to work safely, the higher their perceived need satisfaction of quality of worklife. However, further assessment of the impact of the individual components factors of safety climate revealed that only supervisory practices and safety systems significantly influenced workers perceptions of their QWL supporting the second hypothesis. Employees' perceptions of management value for safety, safety communication and safety training had non-significant influences on their perceived QWL.

The current finding supports Beham et al.'s (2006) study which found socially responsible work culture, the

relationship between supervisors and subordinates and their co-workers to be important predictors of QWL. Michael et al. (2005) also found safety climate to be a predictor of job satisfaction and withdrawal behaviours. Similarly, Sirgy, et al. (2001) in their study found that employees' need satisfaction of QWL was predicted by their need satisfaction stemming from the work environment, supervisory behaviour, and ancillary programs. Safety climate researchers (e.g. Fernández-Muñiz, Montes-Peón & Vázquez-Ordás, 2011; Griffin & Neal, 2000; Lu & Tsai, 2010) have established its relationship with safety performance and other work outcomes. For example, Fernández-Muñiz et al. (2011) found that safety behaviour and involvement in the company's safety activities improve workers' satisfaction because the workers feel that they are an important part of the organisation and that the organisation values their contributions. Thus workers who perceive positive safety climate are likely to report engaging more in compliance type behaviour and or participating in safety related behaviours and hence more likely to experience high QWL.

Limitation

The findings presented in this study, generally imply that a positive safety climate encourages high quality of worklife. However, other factors could have influenced the results because of the cross-sectional nature of the study. Accidents occurrence right before the study may have influenced employees' perceptions of safety climate and their quality of worklife. However, this best fit the safety climate concept because it is contingent upon the work environment conditions relating to safety that prevail at any particular time.

Another limitation of the study is its generalizability to other organizations. The results of this study were based on questionnaire responses from employees of one multinational mining company in one geographic area and may not be necessarily generalizable to other mining companies.

Contribution

The findings of the current work indicated that safety climate is positively related to quality of worklife. Thus as employees perceive their work environment to be congruent with the requirement to work safely, they experience high need satisfaction of quality of worklife. Specifically, the study suggests that the strong climate created by supervisors and safety systems in the workplace help shape the quality of worklife of employees and its resulting consequences. Practitioners and human resource managers should take into consideration supervisors' behaviours and the safety policies and procedures in the workplace in designing programs meant to improve employees' quality of worklife.

Indeed, the study has extended the safety climate literature by linking it to quality of worklife. The presentation of detailed investigation of topical safety climate factors in relation to quality of worklife in the mines rouses concerns and promotes a platform for addressing safety climate and quality of worklife issues.

Implication

On the whole, the study establishes a positive relationship between safety climate and quality of worklife. This implies that as employees' perceive the safety climate in their workplace to be positive and supportive of safe execution of their duties or jobs they experience high quality of worklife. That is their satisfaction with the work environment regarding their safety is likely to extend or spill over to their satisfaction with other aspects of their life both on the job and outside the workplace.

Supervisory practices and safety systems are the only predictors of quality of worklife among the safety climate factors investigated. This means that supervisors play a significant role in determining employees' satisfaction with the job and other major life domains such as family life. Also the strong relationship between safety systems and quality of worklife suggest that when employees are aware that the organisation has in place policies meant to improve their worklife they will feel good and satisfied with their job which may extend to other life domains or their overall life.

Management value for safety did not predict employees' quality of worklife probably because they did not have direct contact with employees at the shop floor level. Management may be key formulators of workplace policies but might not be directly involved in workers daily activities or address workers daily work concerns hence the lack of relationship between management value and quality of worklife of employees.

Recommendation

This study, being among the first to examine the influence of safety climate factors on quality of worklife, has identified supervisory practices and safety systems as distinct factors that are significant determinants of QWL. The next step will be to see whether these factors can be confirmed as predictors in future studies investigating the relationship between safety climate and QWL. Furthermore, future researchers should consider using a mixed method approach that includes qualitative data to investigate the relationship. Studies with more diverse samples are recommended to investigate the safety climate and quality of worklife relationship.

Conclusion

The current work investigated the relationships between safety climate and QWL among employees of a multinational mining company in Ghana. The results revealed positive relationships between safety climate and QWL. However, though the results show a direct relationship between safety climate and QWL, some safety climate factors made non-significant contribution in explaining the variance in QWL. Further investigation of the

relationship between safety climate and quality of worklife indicate only supervisory practices and safety systems as direct significant predictors of quality of worklife. This suggests that organisational policies and procedures and supervisors who are the interpreters of these systems are the most influential dynamics that management should consider in ensuring the good quality of worklife. The researchers therefore recommend further investigations by organisational researchers using both qualitative and quantitative methods in various settings.

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