

# **Environmental Factors and Affective Well-Being Influence on Mine Workers Absenteeism in South Africa**

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## **Abstract**

Human resources remain the most important and valuable assets of every organisation. In effect, the strategic monitoring and management of related environmental factors and employees' affective well-being for continued presence at work are becoming increasingly fundamental. The mining industry is characterised with different environmental factors and affective well-being puzzle that may likely affect employees' turnaround time at work. While available studies have largely investigated how environmental factors predict employee's well-being, what is unclear is how environmental factors and affective well-being determines employee's absenteeism from work. Using a quantitative study, this study examines how environmental factors and affective well-being influence workers absenteeism in South African mine industry. A total of 280 mineworkers were randomly selected using a descriptive survey of the probability sampling technique. The retrieved data were analysed using both the simple and multivariate regression analysis. The findings revealed that both environmental factors and affective well-being do not predict mine workers absenteeism, although environmental factors show more variation in employee's absenteeism than affective well-being. Similarly, the different environmental factors including exposure to noise, dust, vibration, temperature and heavy lifting do not show any evidence to have predicted mine workers turnaround time at work, except hazardous materials. The study concludes that mitigating the consequence provoked by hazardous materials on mine workers will significantly increase employees' presence at work. Thus, the study makes a case for the revitalisation of the

South African mining industry, especially in the area of setting out modalities for the control of strenuous environmental factors, particularly hazardous materials in the workplace.

**Keywords:** environmental factors, well-being, absenteeism, mining industry, workers

## Introduction

Human resources remain the most important and valuable assets of every organisation. In effect, the strategic monitoring and management of related environmental factors and employees' affective well-being for continued presence at work are becoming increasingly fundamental. With evidence of increasing environmental degradation, the business environment is becoming highly susceptible to volatility, with ascending puzzles for organisations to remain competitive. One of the most fundamental effects of the changes emanating from the work environment is particularly evident on the functions and performance of human resources. In other words, the work environment possesses essential indicators that can engender either positive or negative consequences for the functionality of the human resources (El-Zeiny, 2013). The conceptual understanding of the environment conveyed an explicit interpretation of man's abrupt surrounding which he tends to employ for his advantage (Ajala, 2012). However, in the instance of wrongful engagement, the environment becomes hazardous and tend to obstruct both the wellness and performance of employees in the context of an organisation (Ajala, 2012; Kehinde, 2011). Making sense from this, it suffices to allude that the work environment is a marker for not only ensuring the safety of employees in the workplace but also connected to increasing the productivity of organisations. No doubt, the concept of environmental work factors' has been shown to neatly relate to employees motivation, physical and emotional well-being, and the success of the organisation (Mohd, Shah & Zailan, 2016).

The plethora of studies on work environmental factors have hardly resonated with employees' turnaround time at work, specifically within the mining industry. For instance previous studies have investigated workplace environment factors and employee's performance (Lankeshwara, 2016), workplace environment factors influence on employee engagement in a telecommunication company (Mohd, Shah & Zailan, 2016), impact of working environment and training and development on organisation performance through mediating role of employee engagement and job performance (Chaudhry, et al, 2017), and work environmental factors and performance of Liberians (Amusa, Iyoro & Olabisi, 2013). Evidence from these array of studies shows a gap in the link between work environmental factors and absenteeism. Similarly, the absence of literature has offered diverse analysis towards providing explanations to the conundrum of absenteeism in the workplace. To be

sure, a large chunk of these studies have identified absenteeism as a bane for organisational performance (Sigh & Karodia, 2016), the impact of job satisfaction on absenteeism (Kehinde, 2011), and impact of staff absenteeism on patients satisfaction (Ducklay et al., 2014). However, what remains largely unknown is the tie between work environmental factors and employees absenteeism. Thus, one of the major contributions of this study is to provide an empirical explanation for the nexus between work environmental factors and absenteeism.

The concept of affective well-being is conceptualised as a divide between an individual positive and negative mood and emotions (Sageer, Rafat & Agarwal, 2012). The concern of being in a positive or negative affective well-being can be extended to provoke an understanding of employees stress level and workplace recognition (Kong & Zhao, 2013). In other words, ensuring employees' are in the right frame of affective well-being possess dual advantage for both the employees and the organisation (Drake, Sheffield & Shingler, 2011). Traditionally, the affective well-being discourse portends essential consequences for employees work performance. For instance, extant studies on the psychology of well-being are increasingly recognising the role of affective well-being as a precursor to organisational growth (Ducklay et al., 2014; Madden, 2009). Therefore, the contention about affective well-being has established that work situation and the processes of adjustment are crucial indicators of negative affective well-being (Zeidner, Matthews & Roberts, 2012). There is a shared assumption that employees' with high negative affective well-being such that is explained by an alteration in moods or emotions can keep them away from work, yet, this assumption is lacking in empirical evidence. In essence, it is apposite to contend that people may ordinarily stay out of work due to other factors without having to do with the interplay between their moods and emotions. To support this position, existing studies on affective well-being have widely extended research exertions to understanding the nexus between affective well-being and work experience (Fernández-Berrocal et al., 2017), emotional intelligence (Sánchez-Álvarez, Extremera & Fernández-Berrocal, 2015) and work performance (Madden, 2009) with sparse focus on absenteeism.

Making sense from the above explanation, the main contribution of this study is to galvanise and interrogate environmental factors influence on absenteeism and affective well-being impact on absenteeism on the one hand, and the different types of environmental factors influence on absenteeism on the other. By advancing this discourse, it is possible to provide a more distinct understanding of the link between these variables with a view to chronicling a fresh perspective different from available studies. The mining industry is characterised with different environmental factors and affective well-being puzzle that may likely affect employee's turnaround time at work. Although with the composition and hazardous threat of the mining industry, hardly are there studies conducted not only on this discourse but with a narration from the mining industry. In view of this, the paper examines the rising influence of work environmental factors and affective well-being, and their effect on work absence

through the lens of the mining industry. After a succinct background statement, the study presented empirical discussions. The third unpacks issues of methodology and design towards addressing the research problem. While the results of the study are explained in the fourth section, conclusions and policy implications are presented in the last section.

### **Literature review**

The reality of environmental factors influence on employees' turnaround time at work has continued to create various contentions among researchers, health commentators and other allied professionals. While the multifaceted environmental factors remains an undisputed influence on employees' absenteeism from work, recognising the most influential of these factors remain an ongoing academic exercise. More so, there can be no doubt, the verity that environmental factors influence workers differently as no human is the same. Thus the extent of influence is likely to exude disparity. Widely considered as a fundamental discourse, environmental factors have come to be classified as the most pivotal driver of organisational growth and employees work complacency (Amusa, Iyoro & Olabisi, 2013). Again, the affective well-being of employees' characterised by a swing between a positive and negative mood and emotions can undeniably influence their work outputs, but with little evidence to affect their presence at work (Sageer, Rafat & Agarwal, 2012). Put together, this section of the paper seeks to unpack the debates of environmental factors and its influence on employees' absenteeism from work on the one hand and the extent to which affective-welling affects employees' absenteeism from work on the other through empirical discussions.

### **Interrogating environmental factors and employees' absenteeism**

The attention on environmental factors or work environment has continued to provoke debates concerning its merit for an appealing workplace settings. Scholars have therefore make exertions to conceptualise the *leitmotif* of the work environment for a proper appreciation of its effects on employees' propensity to be absent from work or otherwise. There are also a substantial number of intellectual debates with respect to the context in which the concept of work environment should be used in the understanding of organisational growth, employees' commitment to work and subsequently the frequency of their presence or absence from work (Kehinde, 2012; Banks, Patel & Moola, 2012). For instance, Madsen, Tripathu, Borritz and Rugulies (2014) in their conceptualisation of work environment explain the concept as the constellation of the physical settings, job description and culture that characterised the environment in which people perform their daily work routine. However, each of these constructs has a nuanced effect on both the employees and the organisation. Again, an employee might be affected by the change in culture than the influence of physical work setting. In a similar but distinct perspective, Sageer, Rafat and Agarwal (2012) conceive work environment as the cluster of social, psychological, mental and physical settings that influences how people work. McCoy and Evans (2005) position

refer to the work environment to a somewhat affable work area that engenders comfort and works complacency. Having this definition in mind, it is appropriate to clarify that a work environment characterised with the hazardous and unpleasant workspace cannot provoke a pleasant work experience, but instead, produce a debilitating work experience for workers. Going through extant literature, it is clear that the conceptualisation of work environment encompasses different constructs including but not limited to culture (language, beliefs, values and norms), employees job description, work conditions and physical settings. However, this study only focuses on the work conditions components of the environment such as exposure to noise, dust, vibration, temperature, heavy lifting and hazardous materials. The identification of these different components aptly justifies the choice of the mining industry in this study, which in no small extent, is characterised by exhaustive environmental conditions.

In a bid to narrow the concept of environmental factors to physical work settings, several research evidence have shown that environmental factors such as uncontrollable workplace noise, harmful dust, unhealthy vibrations and other hazardous materials have significantly impacted employees' commitment to work (Mike, 2010; Smith, 2011). Similarly, other allied studies have revealed the significant impact of the physical environment on the psychology and health of employees, as well as employees' performance output in the organisation (Amusa, Iyoro & Olabisi, 2013). For instance, Dilani's (2012) study explains that the physical work environment within the context of the manufacturing industries has shown to significantly influence the wellness of employees. Although, the mining industry is characterised with hazards related work, yet the need to ensure that the physical work settings are appropriately controlled for improved employees' health and continued presence at work cannot be overemphasized. McCoy and Evans (2005) highlighted the nexus between employees' consistent exposure to vibration and workplace temperature on the one hand and their physical, physiological and mental wellness on the other. In other words, this could, in turn, affect employees' social relationship and level of interactions in the workplace. To be sure, work environment studies have shown how the array of work environmental factors affects employees' attitude and other behavioural dispositions in the workplace (Briner, 2000; Leblebici, 2012). Again, workplace noise and untidiness have both been proved as a lead environment condition engendering job stress and waning productivity (Cristofoli, Turrini & Valotti, 2011). To place this assertion fittingly, the extreme level of distractions provoked by workplace noise such as uncontrollable work equipment, a high volume of music by employees has attracted severe productivity lost for many organisations.

Naharuddin and Sadegi (2013) rightly confirm the negative effects of music on work productivity. In addition, Ajala (2012) conceptualises that aside from the challenge of discomfort, exposure to noise within the workplace has been proved as a source of stress and distraction to achieve optimal organisational productivity. In contrast, it is

not far-fetched to assert that although exposure to noise tends to provoke discomfort and stress, on the one hand, noise emanating from music could be utilised as a stress relieving mechanism. To support this claim, Padmasiri and Dhammika (2014) thesis exude significant relationship between music (in this context, background music) and employees' improved productivity. Thus, what should be conceived as exposure to noise seems unclear. Perhaps, the choice of loud music can be conceived as exposure to noise in this instance. Chandrasekar (2011) reports that exposure to high work temperature has a significant effect on workers mood and energy to reports for work. To be sure, while exposure to severe work temperature has not only affected employees' psychological and physical attributes, it has also coalesced with the bane of increased turnover rate (Ajala, 2012).

In a related argument, other work environment studies have also shown how poorly constructed workstations, poor ventilation from closed offices and lack of safety measures have affected workers propensity to work (Naharuddin & Sadegi, 2013; Roeloeofsen, 2002). Accordingly, the conditions of the physical settings in the workplace have been shown as a great consideration with regard to employees continued presence at work (De Klerk & Mostert, 2010). This is sufficed to argue that the physical work environment plays a fundamental and sacrosanct role in determining the wellness and frequency of employees to work. Rich, Lepine and Crawford's (2010) study explain that the role and commitment of organisations to a conducive physical work environment can be employed to achieve a working and supportive work environment for improved job involvement on the part of the working people. In effect, to determine the extent of how employees are involved with their job on the one hand, and their willingness to always be present at work on the other, the physical work environment must be well situated. While several studies have revealed the significance of reward as a motivational tool for employees improved productivity and continued presence at work, Ayres's (2005) study adds to the existing contention by exuding that the environmental factors possess important attributes not only to motivate employees to work but more importantly to align with the goals of the organisation by supporting the organisations strategic objective. In other words, it is important that managers are able to identify the most crucial of the physical work settings within the structure of an organisation that could deter employees continued presence at work (Chaudhry et al., 2017). Thus, the work environmental factors must be managed in such a way that aligns with the needs of workers for continued work presence.

The role of employees in ensuring a conducive work environment can also not be overemphasized. While the remit of the organisation are important contributions to ensuring workers are not deterred from the workplace due to poor organisation work settings, the input of the workers is also important milestones. For instance, Eisenger's (2013) study identified the importance of employees' participation and communication as crucial measures of safeguarding the safety of the work environment. Therefore, participating in issues of workplace safety and

communicating about them possess numerous advantage for averting negative effects of environmental factors on the working people (De Klerk & Mostert, 2010). Having discussed the subject of environmental factors and absenteeism, the next section of the review unpacks affective-wellbeing and absenteeism.

### **Affective well-being and absenteeism discourse**

The conceptualisation of affective well-being is generally understood as a swing between an individual mood and emotions. Specifically, the concepts explicate the nexus between having a positive or negative mood and emotions, which can be triggered by situational factors. However, they have been different clarifications on what it means to be in a particular mood or emotional state. For instance, being in a particular mood can be explained by generalised affective states (Indregard, Knardahl & Nielsen, 2016). Precisely, while the constellation of factors may be present to influence an individual mood, the mood itself is not fixed on any exact object (Fernández-Berrocal, Gutiérrez-Cobo, Rodríguez-Corrales & Cabello, 2017). This been said, emotions, in contrast, can be understood as some responses to specific situations (Hülshéger & Schewe, 2011). The literature is awash with discussion on factors that can predispose employees to be absent from work. The absence literature on its own is replete with discussions, both internal and external, to the organisation as probable factors of absenteeism (Zapf, 2002).

Nevertheless, in the discourse of employees mood and emotions (affective well-being), sparse research exertions are reported in the literature. Although existing studies on this subject have attempted to establish a spotlight on how affective well-being can be a condition for employees' absence from work. However, this on-going contention remains unending as the conceptualisation of affective well-being concerning the determinants of an individual moods or emotions remains largely ambiguous.

In contrast, a growing number of studies have rightly reported that workers mood in the workplace may directly or indirectly determine their appearance (Mérida-López & Extremera, 2017; Madden, 2009). This position can further be explained by the analogy that employees' with a good feeling about their selves on the one hand, and the accompanying good feeling that nourishes their presence at work on the other hand are crucial indicators that could propel them to come to work. Empirical studies have established that as humans, we always strive to attain positive affective well-being by avoiding negative affective states (Sánchez-Álvarez, Extremera & Fernández-Berrocal, 2015). This conveys the conviction that people ordinarily work towards avoiding situations that could engender negative affect. Rajbhandary and Basu's (2010) study on working conditions and absenteeism found out that when employees experience positive affect at work, they are more probable to come to work, and less of being absent. The study further argued that the magnitude of employees experience of negative affects at work, the more likely it is that they could be absent from work. However, this, to an extent, does not largely explain that

employees' mood or emotions (affective well-being) are predictors of work absenteeism. The absence literature in itself is confounded with an array of possible factors causing work absenteeism. Furthermore, other related studies have tend to express that the need for a well-grounded understanding of affective well-being is neatly tied to personality (De Boer, Bakker, Syroit & Schaufeli, 2002). For instance, alteration in individual's mood or emotions have been occupying the literature on personality studies. In effect, an individual personality forms a major predictor of how his or her affective well-being can be controlled in the workplace (Ducklay et al., 2014). In addition, Ducklay et al.'s study highlighted the lack of effective control of our personality as a poser for bad affective well-being (Ducklay et al., 2014).

Absenteeism discourse within the context of work explains an individual's inability to show up for work as planned (John, 2010). Employees' absence from work has the as a major contributor to dwindling workplace growth with ensuing consequences for the individual worker, the organisation and society at large (Gaudine & Gregory, 2010). With evidential consequences of absenteeism, the understanding of variables other than those within the contextualization of internal and external factors is crucial for a robust appreciation of why people fail to report to work. Related studies have shown that emotional or mood affect (which to an extent may not be provoked by work-related issues) may further reduce the necessary resources employees' require to carry along with the array of workplace emotional demands (Lokke, Eskildsen & Jensen, 2007). Taken together, therefore, employees may become emotionally exhausted due to the discrepancy between emotional demands and the existing resources to manage and control such demands (Kim & Garman, 2003). To be sure, regulating and controlling emotions and mood (affective well-being) no doubt entails a process that does not only drain employees mentally but includes the possibility of becoming strain at work (Zapf, 2002). Maybe then, this assumption can be somewhat positioned as an argument that employees are likely to be absent from work owing to emotional strain as a result of exposure to workplace strain. However, the debates concerning the understanding of what makes up individual emotions or mood (affective well-being) as a predictor of absenteeism are somewhat inconclusive.

### **Methodology and Methods**

This section of the paper explicates the different methodological approach and methods used to understand how environmental factors and affective well-being influence mine workers absenteeism. The study intensifies on the importance of establishing the nuance between methodology and methods as erroneously used interchangeably in peer-reviewed journals. Therefore, research methodology, as used in this study, explains the complete procedural steps through which the complete study is undertaken (Saunders, Lewis & Thornhill, 2009). The methodological issues in this study shoulders on the question of what, when and the how of the investigation on the one hand (Sekeran & Bougie, 2016).

On the other hand, the research methods evidence in this study captures different techniques, including data instrument and the various analytical tool (s) (Wilson, 2010). The study adopts the descriptive survey design and relies only on the quantitative research method. The descriptive survey was employed to sample the population of mine workers. Specifically, a large population of mineworkers requires a representative sample wherein generalisation of findings can be engrossed in the entire study population (Quinlan, 2011). To this end, the assumption of the descriptive survey design aptly corroborate with this intention and correspondingly justifies its adoption in this study. The study population comprised of mineworkers selected across the different strata of the organisation without preference to any particular units of the organisation. This lends credence to the adoption of the simple random technique in the recruitment of participants for this study. To do this, a total of 280 mineworkers were randomly selected from the population of mineworkers in which preference was not accorded to any particular worker to be selected as a sample. In other words, the 280 sample of participants reflects a saturation after exhaustive fieldwork exercise. Thus, this number is justified and suffice to make generalisation ensuing from the findings of the study on the entire population of mineworkers under study (Babbie, 2010). The research instruments consist of three measuring scales employed to measure environmental factors, affective well-being and absenteeism.

The two independent variables (environmental factors and affective well-being) were extracted from the fatigue management questionnaire (Ergomax, 2015). For this study, only six (6) inter-item environmental factors constructs including exposure to noise, dust, vibration, temperature, heavy lifting and hazardous materials were utilized with three (3) Likert scale measurement of low, medium and high, while the affective well-being scale consists of 12 inter-item constructs with five (5) Likert scale of measurement including rarely, not often, sometimes, rather often and very often (Copper & Schindler, 2008). On the other hand, the behaviour absenteeism questionnaire developed by Isaksson et al. (2003) was employed to measure employees work absenteeism. The behaviour absenteeism questionnaire consists of four (4) items spread on a five (5) Likert scale of measurement. In ensuring the reliability of the different constructs (independent variables), the Cronbach Alpha was employed to ascertain the internal consistency of all the items contained in both the environmental factors and affective well-being scales. The reliability index for both variables shows inter-item reliability of 0.759 and 0.863, respectively. These reliability coefficients according to the rule of thumb are satisfactory, good and reliable (Konting, 2004; Pallant, 2011). Accordingly, data gathered were analysed with the Statistical Package for the Social Sciences (SPSS). Specifically, both simple and multiple regression analyses were employed to test the different degrees of research propositions. On the one hand, the simple regression was utilised to analyse the influence of environmental factors on absenteeism; on the one hand, and the influence of affective well-being on absenteeism the other hand. Besides, the

multivariate analysis was utilised to understand how the different environmental factors (exposure to noise, dust, vibration, temperature, heavy lifting and hazardous materials) predict absenteeism.

## Results

Table 1 explains how environmental factors and affective well-being predict mineworkers' absenteeism from work. From the analysis conducted, and specifically in Model 1, environmental factors does not predict mine workers absenteeism from work ( $p>0.05$ ). This is suffice to highlights that work environmental factors in the mining industry does not determine employees' absence from work or prove as criteria to measure their frequency at work. To be clear, although the familiar axiom that the mining industry working environment possesses severe threats to employees' cannot be substantiated from this result. What is clear, however, is the position that the threats or otherwise emanating from the mining industry work environment does not in any way predict employees' absence from work, except can otherwise be explained by other factors including job description, culture of the organization (Tripathu, Borritz & Rugulies, 2014), and other issues related to employees social, psychological and mental wellness (Sageer, Rafat & Agarwal, 2012). In addition, in examining if employees' affective-well-being predict their absence from work, Model 2 equally shows that affective well-being does not influence employees absence from work ( $p>0.05$ ). Therefore, employees' absence from work cannot be explained by their moods and emotions (affective well-being). While the literature cannot precisely explain the cause of mood or emotional swing, it is logical likewise to argue that mine workers absence from work cannot be explained by issues of mood or emotional affect. Although, this findings exude a departure from prevailing studies, it has however, somewhat provide empirical support and a nuanced perspective that mineworkers absence from work can be explained by other contingency such as the experience provoking from work situations and employees personality among other variables (Sánchez-Álvarez, Extremera & Fernández-Berrocal, 2015; Ducklay et al., 2014 ).

**Table 1**

Regression analysis with absenteeism as a dependent variable, environmental factors and affective well-being as independent variables Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	4.810	1.024		4.698	.000
Environmental factors	.070	.030	.157	2.355	.019
2 (Constant)	2.180	1.243		1.754	.081
Affective wellbeing	.064	.029	.143	2.194	.029

\*Statistically significant at  $p<0.05$

Dependent variable: absenteeism

Table 2 shows how absenteeism is regressed against the different levels of environmental factors. From this result, Model 1, 2, 3, 4 and 5 (exposure to noise, dust, vibration, temperature and heavy lifting) does not show any prediction of mineworkers absenteeism from work ( $p > 0.05$ ), while only Model 6 (hazardous materials) explains a prediction in mine workers absence from work ( $p < 0.05$ ). However, only exposure to noise and vibration exude the largest contribution to the model ( $\beta = .192, p > 0.05$ ) and ( $\beta = .134, p > 0.05$ ). Making sense from this, it can be explained that exposure to noise and vibration jointly show the lowest prediction of the possibility of mineworkers absenteeism from work. This finding further explains that the traditional workings of the mining industry characterised with noise and vibration emanating from rock blasting and other mining operations can hardly keep workers away from work. Again, evidence ensuing from this study negate the position of other related studies where exposure to noise, dust, vibration, temperature and heavy lifting are presented as likely influence on absenteeism (Mike, 2010; Smith, 2011). The finding showing hazardous materials influence on mine workers absenteeism is largely supported by relevant studies (Dilani 2012; Kehinde, 2011). Therefore, the position that hazardous materials influences mining workers absenteeism from work to an extent is not far-fetched as work execution in the mining industry is characterised with heavy blasting and geographical extraction of minerals such that it engenders hazardous materials.

**Table 2**

Multiple regression analysis with absenteeism as a dependent variable, exposure to noise, dust, vibration, temperature, heavy lifting and hazardous materials as independent variable (environmental factors)

Coefficients							
Model	R	R Square	Adjusted R Square	F	Standardised Coefficients Beta	t	Sig.
1	.192 <sup>a</sup>	.037	.033	10.670	.192	3.267	.175
2	.211 <sup>b</sup>	.044	.037	2.152	.109	1.467	.144
3	.237 <sup>c</sup>	.056	.046	3.495	.134	1.870	.063
4	.244 <sup>d</sup>	.059	.046	.914	.059	1.956	.340
5	.262 <sup>e</sup>	.069	.052	2.774	.106	1.665	.097
6	.274 <sup>f</sup>	.075	.055	1.849	-.089	-1.360	.001*

\*Statistically at  $p < 0.05$

a. Dependent Variable: Absenteeism

**Discussion**

On examining the impact of environmental factors and affective well-being on mine workers absenteeism, and evaluating how the different environmental factors predict

absenteeism, the finding relating to the influence of environmental factors on mine workers absenteeism emerged as the most crucial contributions of this study. While available studies have predicted environmental factors including exposure to noise, dust, vibration, temperature and heavy lifting as probable suggestion for work absenteeism, the current study explains a departure from these studies. However, the case of hazardous materials tends to equally exude a different research outcome. To be sure, in this study, while other environmental factors could not explain mine workers absence from work, hazardous materials, however, shows great prediction of absenteeism behaviour among mine workers. Another positive reflection of this study is niched with the argument that investing in the management and control of hazards in the South African mining industry can help reduce the rate of mine workers' absenteeism. Yet, among the constellation of environmental factors, this study highlighted that mine workers exposure to noise and vibration shows the least prediction of absenteeism. These result reflects yet another important finding. For instance, with the structure and work arrangement of the mining industry characterized with rock blasting, it is expected that this process engender noise and vibration such that could have an impact on the working people, to extent that can make them stay away from work. Furthermore, findings relating to affective well-being and mine workers absenteeism cannot be established. After all, this finding supports other empirical contention that absence from work has little or nothing to do with employees' state of affective well-being. This finding goes further to validate the position that employees' mood or emotional affect is inconsequential to the frequency of work absence. Although, it can be argued that issues not related to affective well-being including work description and employees' personality could account for their absence from work. Moreover, as argued earlier, there is a need for a fuller concentration on issues of organizational context including how work are being executed and other workplace recognition for a reduction in mine workers absence from work than an exposition of mood or emotions.

### **Conclusions, recommendations and further research**

The constellation of issues around employees' absence from work has continued to attract debates. These array of issues have remained unable to provide empirical supports for why people are absent from work. The present study extends the frontiers of this discussion by examining how environmental factors and affective well-being influence a mine workers absenteeism. The mining industry is, to an extent, characterised by different work configurations such that could engender a somewhat unpleasant working conditions. The range of issues addressed in this study include a scrutiny of how environmental factors influence mine workers presence or absence from work, how mineworkers mood or emotional affect (affective well-being) explains their absenteeism from work, and the identification of different levels of environmental factors (exposure to noise, dust, vibration, temperature heavy lifting and hazardous materials) influence on mineworkers absence from work. The finding uncovered, however, explains a somewhat different argument from existing

studies. The mineworkers mainly explained that environmental factors do not explain their reason for being absent from work. The study concluded that mine workers absence from work is somewhat not related to issues arising from the workplace environmental factors; perhaps this can be explained by more personal issues such as employees' social and psychological states.

Similarly, affective well-being explained by mine workers mood or emotional state does not explain their absence from work. This revelation supports the argument that being in a certain mood or emotion cannot be explained by any known factor. As such, the expectation that mine workers mood or emotional state can prevent them from showing up for work cannot be equally linked. In other words, this study concluded that why mood or emotions are intrinsically explained, it could have less influence on why people should be absent from work than other extrinsic causatives factors. However, other evidential explanations such as employees' attitude and personality disposition can keep them away from work. Besides, the different levels of environmental factors manipulated in this study, except hazardous materials do not show evidence to influence mine workers absenteeism from work. Again, this brings to mind that being absent from work is largely explained by factors not related to environmental factors concerning the mining industry. Of course, the conclusion on hazardous materials influence on mine workers absence from work can be validated by the composition of work in this industry. The different elements, materials and minerals are no doubt composite of hazardous materials capable of harming the human physiology. Thus, the need for investment in the management of the frequency of hazards from mining elements and materials will dwindle mine workers absence from work.

Taking together, the study concluded with the position that all environmental factors should be measured in terms of their influence on mine workers turnaround time at work, but the bane of hazardous materials should be given prime attention. The study therefore indorse the revitalization of the South African mining industry with respect to setting out workable modalities for the control of hazardous materials in the workplace. Besides, the management of the South African mining industry should support a more hazard free workplace with a focus on improving not just workers presence at work, but for a healthier workplace. The mining industry should sets a canon for the effective monitoring function of occupational accident arising from hazardous materials that are likely to make workers stay away from work. This recommendation is no doubt fundamental given the structure of work that characterise the mining industry. Lastly, with evidence that the South Africa economy is largely dependent on the activities and proceeds from the mining industry, this study recommend a tauter disciplinary measures by the Department of Mineral Resources for organisations who fail in complying with safety practices for the prevention of hazards in the mining industry. Future research should be conducted with consideration to other variables that could likely predict absenteeism. Variables such as employees' social, psychological and personality disposition can be looked at

with a view to understanding them as predictors of absenteeism in the mining industry.

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