THE INFLUENCE OF SAFETY CLIMATE AND MOTIVATION IN ENHANCING GRADUATE PERFORMANCE IN SMES IN PLATEAU STATE NIGERIA

[1]Dyek, K.D, [2]Adeyelu, H.R, [3]Lidimma, B.G. (Ph.D) & [4]John Iliya

[1,2]Department of Industrial Technical Education, University of Nigeria, Nsukka
kanengdyek@gmail.com
08131523464, 08167659880
[3]Department of Technical Education, Federal College of Education Pankshin, Plateau State
07038113303
[4]Plateau State Ministry of Science and Technology

ABSTRACT
This study examined the influence of safety climate and motivation in enhancing graduate performance in Small and Medium Enterprises (SMEs) in Plateau State, Nigeria. Anchored on Herzberg's Two-Factor Theory of Motivation, the study explored how safety as a hygiene factor and motivation as an intrinsic driver jointly affect graduates' productivity. A correlational research design was employed, with a sample of 342 graduate employees selected from 40 SMEs across the state using Taro Yamane's sampling formula. Data were collected through a validated and reliable structured questionnaire and analyzed using mean scores and Pearson's correlation coefficient. Findings revealed a moderately positive safety climate, marked by regular safety briefings and supervisor-led enforcement, though limited employee involvement in safety decisions was noted. Motivational practices, while present, often resulted in high-pressure work conditions that risked burnout. A significant positive relationship was found between safety climate, motivation, and graduate performance, confirming that both factors are critical for enhancing employee outcomes. The study concluded that integrating participatory safety strategies with supportive motivational policies can substantially improve graduate productivity in SMEs. Recommendations included fostering inclusive safety decision-making, moderating workload pressures, and adopting holistic approaches that link safety and motivation to optimize graduate performance.

Keywords: Safety Climate, Motivation, Performance, SMEs.

Introduction

Substantial research has shown that safety climate improves safety outcomes in organizations such as healthcare, manufacturing, mining, transport and energy production. Safety climate is the perceived value placed on safety in organization at a particular point in time. These perceptions and beliefs can be influenced by the attitudes, values, opinions and actions of other workers and stakeholders in an organization, and can change with time and circumstances. Safety climate is a multidimensional and multilevel construct: perception about many aspects of the work environment can be shared across teams, organizations, and other collectives. More than 35 years ago, Zohar (1980, p. 101) described safety climate as "the molar and unified set of cognitions (held by workers) regarding the safety aspects of their organization". This influential statement positioned safety climate as a specific form of organizational climate based on individuals' evaluation of their experiences of safety in the work environment. A lot of scholars have divergent views about the meaning of safety. A more general view of the concept was captured by Schneider *et. al* (2013) that organization safety climate is a collective phenomenon designed by shared perceptions of the procedures, practices and kinds of behaviour that get rewarded and supported with regard to a specific strategic focus.

The shared nature of this perception is critical for distinguishing safety climate from other safety constructs such as personal attitudes towards safety, even though both are based on individual perceptions. Whereas psychological climate refers to individual perceptions of the work environment, safety climate emerges only when these perceptions are shared by individuals within a work group or organization. The content of shared perceptions typically concerns the safety policies, procedures, and practices in the organization (Griffin & Neal, 2000). Zohar (2010) emphasized that these perceptions can serve as a collective frame of reference for employees that can provide cues about expected behaviour and outcome contingencies related to safety.

Clarke (2006) states that much of the scientific research on safety climate has focused much attention on assessing empirical models rather than developing theoretical frameworks about the content and effects of safety climate. The empirical issues include the dimensionality of safety climate such as the factor structure of measurement scales and their predictive validity for a variety of safety outcomes. Safety climate is a key analyst of safety outcomes such as work-related diseases, accidents, and injuries. The theoretical fundamentals of safety climate explore

how the construct can be applied to different levels of analysis. Safety climate influences individual processes of sense-making, motivation, and work behaviour. The vast majority of industrial accident and diseases are generated by dangerous unsafe behaviour. The safety behaviour belongs to individual levels, while the safety climate belongs to the organization level (Wang *et. al*, 2018). Giles (2011) suggested that particular workers must be acknowledgeable of individual safety climate because the corporation working environment can be dangerous and inconvenient.

An employee who works in safety pleasant surroundings is more incentive in the direction of his work and gives better performance (Christian *et. al*, 2009). ILO (2015) reported that the issues related to safety climate are more inspected in the developing countries rather than developed countries due to poor working sources. Job performance Muhammad (2015) has stated that job satisfaction impacts vividly and significantly on job performance in the organisation. According to Kappagoda (2014), the performance of an employee plays a vital role to meet and achieve the goals of any organization because in an organization, the performance of the worker is one of the important concepts which directly influences work stead needs to be said (Arvey & Murphy, 1998). Job performance is a worker's ways of conduction in their organization to complete their duties. The performance of an employee plays a vital role in organization successes (Wang *et. al*, 2015). When the safety climate of an organization are improved, the following benefits can be achieved: enhancing employees safety knowledge and their motivation to behave safely, increase the uptake of safety related policies and programmes, improve employee perception of more support available from management, reduces the perception amongst employees of exposure to a hazardous environment, and reduces the number of incidents by employees and work groups.

Organization success depends on several factors, but some factors play a more significant role in this regards. Researchers over the years have shown interest in the study to explore the factors that can significantly contribute to organizations success and performance. However, employees have deemed the most influential predictors in this perspective. However, employees will not perform well until they are satisfied and feel safe in the workplace. Conversely, situation-related factors include safety climate and leadership (Christian *et. al*, 2009). According to Neal and Griffin (2006), a safety climate is a shared awareness of procedures, wisdom and practices related to safety in the workplace. It is an individual-level variable expected to be

widely shared within organizational units. More specifically, regarding Small and Medium Enterprises (SMEs) several studies revealed that the dimensions of safety climate (represented by management commitment, safety training, regulations, communication, and worker involvement) have a direct effect on safety behavior (Hon, Surienty, and Hung, 2011; Saat, Subramaniam, and Shamsudin, 2016). This means that in SMEs, these dimensions directly affect safety behaviour. However, these studies did not include safety knowledge and motivation in their models.

SMEs have a unique safety climate, which is why their safety behaviour characteristics may also be unique and influenced by the relationship between workers, as well as their relationship with their employers owners), in order to avoid social hierarchy (Croucher, Stumbitz, Quinlan, and Vickers, 2013). As a less industrial hub state, the number of accidents in Plateau State is still high, and increases have been reported during the last few years, which seems to be related to poor safety measures (Kitgak'ah, Dasen, and Datughum, 2022). In this study, the researchers focused on automobile related SMEs, which were selected due to their significant contribution to the state's economic growth. Additionally, the number of accidents that occur in this industry is quite high which is mostly due to lack of safety behaviour on the workers' part (Ansori, Widyanti, and Sutalaksana, 2018).

Statement of the Problem

Despite increasing recognition of the importance of safety climate in shaping safety outcomes across various sectors, there remains a significant gap in understanding how safety climate and motivation specifically influence graduate employee performance in the context of Small and Medium Enterprises (SMEs) in developing economies such as Nigeria. While prior studies have established that dimensions of safety climate—such as management commitment, communication, and worker involvement—impact safety behaviour, these models often overlook the role of personal factors like safety knowledge and motivation. In Plateau State, where SMEs, especially in the automobile sector, play a vital role in economic development, there is a worrying trend of persistent workplace accidents and injuries attributed to poor safety practices. This is exacerbated by informal working conditions, limited regulatory oversight, and a lack of structured safety frameworks. Furthermore, little is known about how recent graduates employed in these SMEs perceive safety climate and how this perception translates into their motivation, compliance, and overall performance. Without empirical data to establish these links, efforts to improve productivity and reduce workplace hazards in Plateau State SMEs remain speculative

and inadequately informed. Therefore, this study seeks to fill this critical knowledge gap by investigating the influence of safety climate and motivation on graduate performance within automobile-related SMEs in Plateau State, Nigeria.

Aim and Objectives of the Study

The aim of this study is to examine the influence of safety climate and motivation in enhancing graduate performance in SMEs in Plateau State Nigeria. The specific objectives of the study are:

1. To examine the extent of a positive safety climate in SMEs in Plateau State.
2. To identify the common motivational practices experienced by graduates in SMEs in Plateau State.
3. To determine the relationship between safety climate, motivation, and graduate performance in SMEs in Plateau State.

Research Questions

The study is guided by the following research questions:

1. What is the extent of a positive safety climate in SMEs in Plateau State?
2. What are the common motivational practices experienced by graduates in SMEs in Plateau State?
3. What is the relationship between safety climate, motivation, and graduate performance in SMEs in Plateau State?

Hypotheses

The study was guided by the following hypotheses which was tested at 0.05 level of significance:

H_a: There is a significant relationship between safety climate, motivation, and graduate performance in SMEs in Plateau State.

H_o: There is no significant relationship between safety climate, motivation, and graduate performance in SMEs in Plateau State.

Conceptual Model

This study adopted the model by Neal *et. al*, in Ansari, Widyanti, and Yassierli (2021) as shown in Figure 1. The model states that safety climate influences knowledge, motivation, and participation. On the other hand, it has an indirect influence on compliance and performance. It

should be noted that this model was developed based on a large-scale industry in Australia, and an adjustment should be made for the field under study.
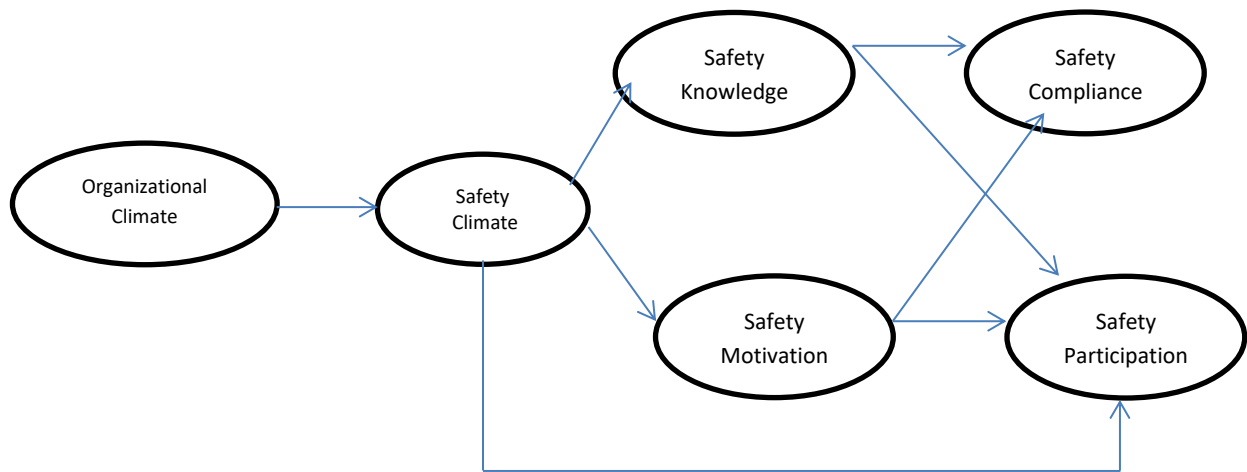

Figure 1: Safety Behaviour Model
Source: Ansori *et. al*, 2021

Conversely, work climate is influenced by the subjectivity of workers, colleagues, and employers. Therefore, the researchers proposed that safety climate may directly influence safety behaviour in SMEs as shown in figure 2, which is in tandem with previous studies. The model was also adjusted based on the consideration that the cordial relationship between workers, and their employers leads to a lack of social difference in SMEs (Marlow and Patton, 2002).

The integration of person and situation-related factors in SMEs needs to be carried out due to their unique characteristics. Mihail (2004) stated that the safety climate of SMEs is relatively informal and personal. Subsequently, it is difficult to objectively implement safety measures, given the excessive flexibility of work rules. Furthermore, the commitment of SMEs management is generally based on the personality, beliefs, or values of owners-managers in order to ensure that most decisions regarding effective working conditions are their responsibility (Croucher *et. al*, 2013). Therefore, the proposed model aims to examine the direct impact of safety climates on compliance and performance.

Theoretical Framework

The theoretical framework for this study is based on Herzberg's Two-Factor Theory of Motivation, propounded by Frederick Herzberg, Bernard Mausner, and Barbara Bloch

Snyderman in 1959. The theory distinguishes between motivators (intrinsic factors such as achievement, recognition, and personal growth) that lead to job satisfaction, and hygiene factors (extrinsic factors such as company policies, supervision, working conditions, and safety) that, if inadequate, cause job dissatisfaction. The theory posits that improving hygiene factors may reduce dissatisfaction but does not necessarily enhance satisfaction or performance unless motivators are also present. Applied to this study, safety climate aligns with Herzberg's hygiene factors, as a safe and supportive work environment reduces graduate employees' dissatisfaction, while motivation corresponds with the motivators that drive enhanced job performance. In the context of SMEs in Plateau State, Nigeria, a conducive safety climate coupled with well-structured motivational strategies can jointly enhance graduate performance, as employees are more likely to remain productive, engaged, and committed when both sets of factors are adequately addressed.

Methodology

The study adopted a correlational research design to examine the influence of safety climate and motivation in enhancing graduate performance in Small and Medium Enterprises (SMEs) in Plateau State, Nigeria. The target population comprised all graduate employees working within registered SMEs across the three senatorial zones of Plateau State. A sample of 342 graduate employees was selected from 40 SMEs using the Taro Yamane sampling technique to ensure representation and feasibility. Data were gathered through a structured 5-point Likert scale questionnaire with response options: Strongly Agree (SA), Agree (A), Undecided (UN), Disagree (D), and Strongly Disagree (SD). The instrument was validated by experts in industrial psychology and human resource management to ensure content accuracy and relevance. Its reliability was established through a pilot test involving 30 respondents, yielding a Cronbach's alpha coefficient of 0.88, indicating high internal consistency. Data were analyzed using mean score and the Pearson's correlation coefficient was used to determine the strength and direction of the relationship between safety climate, motivation, and graduate performance.

Results and Discussion

Data Analysis and Interpretation

Research Question 1: What is the extent of a positive safety climate in SMEs in Plateau State?

Table 1: The extent of a positive safety climate in SMEs in Plateau State

S/N	Items	SA	A	UN	D	SD	Total	Mean ($\bar{a}$)
1	Employees attend safety briefings regularly.	102	140	46	36	18	342	**3.80**
2	Supervisors ensure compliance with safety protocols.	80	130	50	50	32	342	**3.51**
3	Management conducts regular inspections and follow-ups.	75	125	70	40	32	342	**3.50**
4	Safety equipment is readily available and functional.	88	140	60	36	18	342	**3.71**
5	Employees are involved in safety-related decision-making.	70	110	90	40	32	342	**3.43**

The findings reveal a moderately high level of safety climate in SMEs across Plateau State. The highest-rated item (Mean = 3.80) indicates that employees regularly attend safety briefings, showing a strong organizational commitment to safety training. Functional safety equipment (Mean = 3.71) and compliance enforcement (Mean = 3.51) further reflect a proactive safety environment. However, employee involvement in decision-making about safety scored the lowest (Mean = 3.43), suggesting a top-down approach to safety management. Overall, SMEs seem to be maintaining reasonable safety standards, though more participatory safety culture could enhance outcomes.

Research Question 2: What are the common motivational practices experienced by graduates in SMEs in Plateau State?

Table 2: the common motivational practices experienced by graduates in SMEs in Plateau State

S/N	Items	SA	A	UN	D	SD	Total	Mean (ā)
6	Graduates are given performance-based incentives.	104	120	40	50	28	342	**3.65**
7	Graduates feel overwhelmed due to high workload expectations.	176	100	34	20	12	342	**4.19**
8	Graduates are required to attend external workshops/trainings frequently.	140	110	40	34	18	342	**3.94**
9	Graduates are assigned late tasks or responsibilities beyond working hours.	124	130	40	32	16	342	**3.92**
10	Graduates are expected to work during weekends/holidays.	110	140	50	24	18	342	**3.88**

The data indicates that while some motivational strategies (e.g., performance incentives) exist in SMEs (Mean = 3.65), many graduates experience stress-inducing work demands. The highest mean score (4.19) reflects a perceived excessive workload, implying that motivation might come at a cost to work-life balance. Frequent workshops (3.94), late tasks (3.92), and weekend work (3.88) point to a high-pressure work environment. Although these practices can enhance skill acquisition and productivity, they may negatively affect performance due to burnout or stress, suggesting a need for more balanced motivational strategies.

Research Question 3: What is the relationship between safety climate, motivation, and graduate performance in SMEs in Plateau State?

Table 3: The relationship between safety climate, motivation, and graduate performance in SMEs in Plateau State

S/N	Items	SA	A	UN	D	SD	Total	Mean (ā)
11	Safety policies are linked to improved job performance.	140	120	30	30	22	342	**3.95**
12	Pressure from management affects employee motivation negatively.	92	140	50	40	20	342	**3.71**
13	High motivational pressure leads to burnout and reduced efficiency.	158	120	30	20	14	342	**4.13**
14	There is a direct relationship between safety climate and motivation.	124	130	50	26	12	342	**3.96**
15	Employees believe high motivation improves overall performance.	140	100	50	30	22	342	**3.89**

These results show that both safety climate and motivation significantly affect graduate performance in SMEs. A high mean score (4.13) suggests that excessive motivational pressure can diminish efficiency, hinting at counterproductive stress levels. Nonetheless, respondents believe safety policies and motivation do positively influence performance (Means = 3.95 and 3.89). Importantly, the relationship between safety climate and motivation (Mean = 3.96) indicates that a safe work environment may enhance or support motivational efforts, leading to improved outcomes when balanced correctly.

Testing of Hypothesis
H$_0$: There is no significant relationship between safety climate, motivation, and graduate performance in SMEs in Plateau State.
Table 4: Relationship between safety climate, motivation, and graduate performance in SMEs in Plateau State

Variables	N	r	p-value	Decision
Safety Climate, Motivation & Performance	342	0.67	0.000	Reject H$_0$

With a Pearson correlation coefficient of r = 0.67 and a p-value of 0.000, the hypothesis is rejected, confirming a significant positive relationship among safety climate, motivation, and graduate performance in SMEs. This implies that enhancing safety standards and adopting motivating practices are both crucial to improving performance outcomes for graduates in Plateau State.

Results and Discussion

The findings from the first research question indicate a generally moderately high level of parental involvement in primary education across Plateau State. With most parents attending PTA meetings, supervising homework, and providing learning materials, the data shows that many are engaged in supporting their children's education, though less so in school decision-making processes. This is consistent with the findings of Epstein (2001), who argued that parental involvement is multifaceted and often strongest in the areas of home-based academic support and school visitation, while parents tend to be less engaged in formal school governance and policymaking.

Regarding the second research question, the study revealed that over-schooling is prevalent among primary school pupils, manifesting in extended academic activities beyond

regular school hours, including late-night assignments, extra lessons, and weekend tutorials. The highest mean was recorded for the item concerning the lack of rest due to academic workload. These results align with Okpala and Ellis (2005), who found that excessive academic engagements outside regular hours are becoming normalized in some Nigerian schools, often leading to student fatigue and burnout, especially in urban and semi-urban educational contexts.

The third research question addressed the relationship between parental involvement and over-schooling, and the data suggest that increased parental engagement—driven by high academic expectations—correlates with higher incidences of academic overloading. Specifically, parents' ambitions and belief in over-schooling as a path to success contribute to excessive academic scheduling. This agrees with the findings of Kim and Schneider (2005), who reported that in contexts where educational competition is high, parental involvement often leads to intensified academic pressures on children, sometimes undermining the intended supportive role of such involvement.

The hypothesis testing confirmed a significant positive correlation ($r = 0.67$, $p < 0.05$) between parental involvement and over-schooling practices. This indicates that while parental support is crucial for academic success, it may also contribute to practices that lead to student stress and burnout. This result mirrors the work of Pomerantz, Moorman, and Litwack (2007), who emphasized the "double-edged nature" of parental involvement: while it enhances performance, it can inadvertently increase stress and reduce students' motivation if not appropriately moderated. Thus, educational stakeholders must balance involvement with awareness of children's developmental and emotional needs.

Conclusion

The study reveals a moderately positive safety climate in SMEs in Plateau State, characterized by regular safety briefings, available safety equipment, and supervisor enforcement of safety protocols. However, limited employee involvement in safety decisions indicates a hierarchical approach to safety management. On the other hand, motivational practices in these SMEs appear to be demanding, with graduates facing excessive workloads and high-pressure conditions, which, while intended to motivate, may risk burnout. Crucially, the study finds a significant positive relationship between safety climate, motivation, and graduate performance, suggesting that a well-balanced safety and motivational strategy can substantially enhance

employee productivity. The rejection of the null hypothesis confirms the importance of integrating both safety and motivational factors to optimize graduate outcomes in SMEs.

Recommendations

In line with the findings, the following are recommended:

1. SMEs should enhance employee participation in safety-related decision-making to foster ownership and improve the effectiveness of safety practices, thereby strengthening the overall safety climate.

2. While maintaining productivity incentives, SMEs should address excessive workload and reduce pressure by establishing clear work-hour boundaries and offering support systems to prevent burnout.

3. Management should develop holistic policies that interlink safety measures and motivational practices, ensuring that workplace conditions support both physical well-being and psychological motivation for improved graduate performance.

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