MODELLING THE RELATIONSHIPS OF PSYCHOSOCIAL HAZARD AND WORKPLACE SAFETY OUTCOMES AMONG CONSTRUCTION WORKERS IN RIVERS STATE.

ABSTRACT

This research was carried out to investigate therelationship between psychosocial hazards and safety outcomes among workers engaged in a range of industrialconstruction occupations in Rivers State. Questionnaires adapted from various studies and were distributed. Two-hundred and ninty-five (295) respondents had a complete and usable questionnaire. A conceptual model was posited for this study, the model comprises of equipment and environment, work schedule, role organisation, social aspect, organisational culture, and work life balanceas the workplace psychosocial hazards and near miss, accident, absenteeism, and job performance as the safety outcomes on the study. Structural equation modelling was then usedto test the conceptual model and test the hypotheses using SPSS AMOS software. The result from the study shows that all six workplace psychosocial hazards used in the study had direct significant relationship with the accident safety outcome at p-value (< 0.05). The result also shows that environment and equipment, role in the organization, social aspect and work-life balance showed significant relationships with near miss safety outcome at p-value .05. The study also inferred that equipment and environment, work schedule, role organisation, social aspect, and organisational culture are factors in the workplace thatmay be associated with absenteeism. The impact of psychosocial hazards experienced by construction workersis an area of growing research as this study has shown, which is yielding results that suggest overall work safety on theconstruction site should consider psychosocial aspects of work.

Keywords: Modelling, psychosocial hazards, construction.

1. INTRODUCTION

The ‘Workplace’ is one of the social environments that characterise the existence of Man, which apparently provides a plethora of beneficial outcomes to the development of society and individuals [1]. As with other social climes, the workplace uncovers so many psychological experiences which could be beneficial to the wellbeing of workers as a result of its social structure. According toWorld Health Organization[2] the workplace provides a platform for one to acquire a social personality away from one’s circle of relatives; it creates an awareness of time design; enhances our ability to build social relationships, by promoting a sense of collaboration; and helps one to maintain certain level of consistency by being actively engaged. Munir et al. [3]also demonstrated that good organisational and psychological work characteristics shield employees against unnecessary absenteeism and emotional distress.

Psychosocial hazards are hazards with the characteristic potential of inducing psychological or physical harm to an employee due to the organisational and social framework of the workplace [4]. By framework, it means interplay of the arrangement and management of the environmental, cultural, and professional conditions prevalent in the workplace; with such having the prospect of causing negative influence on the health of employees [5].An employee that is exposed to a chemical hazard, for example, may be due to the unpleasant odour experience psychological trauma. Such effect can be aggravated by the worker's concern (perception) that such exposure may be hazardous. So, while physical hazards are predominantly harmful prospects because of 'tangible' hazard sources and processes, psychosocial hazards, on the other hand are more conceptually based. They have to do with the psychological impressions (potentially harmful) elicit in an employee as a result of some peculiar situations within and outside the work environment; however, some of the triggers could still be of the other hazard sources [6]. Psychosocial hazards are a broad concept in the context of occupational health, due to the myriad possible social and professional components of work that might be dangerous to employees' health. Its complexity is amplified by the fact that not all employees have the same perspective on organisational features; since individuals have diverse perspectives of the environment in which they operate [7] & [8].

Psychosocial concerns have lately been identified as substantial developing risks in the workplace [9], [10]. They are occasioned by the risk factors specifically relating to the environmental conditions, job content, organisation of workplace, company's culture, social interaction and support structure within and outside the workspace; and the employee's characteristics in relation to the aforementioned conditions [11].According to Lovelock [8], Way [12] psychosocial hazards such as job-related stress, assault, bullying, and workplace violence are serious occupational health and safety concerns with employee requirements, competencies, attitudes, and experiences as frequent mediators of their distinctive influence on workers' well-being. Marmot & Wilkinson [13] succinctly express that a worker's traits and the characteristics in the work environment are major predictors in the study of psychosocial hazard.

Kennedy [14] notes that with people of various cultures and personal traits frequently working together in a typical Nigerian workplace, ethnic discrimination; bullying and abuse become some of the prevalent social patterns within most work environments. Given that the daily operations of any organisation depend on social relationships, such a situation could be a source of conflict and negative social behaviours.The significance of tackling work environment violence, the unique threats encountered by female workers, those in non-standard aspects of employment (casual and informal work, which is quite popular inside of the construction sector), employees who are susceptible to discrimination, and employees who run the danger of being exploited and trafficked have all been emphasized by the ILO through Pillinger [15]. Women are especially victimized by occupational violence, and they also tend to have poor income, insecure employment, and unstable working circumstances, which exposes them to psychosocial workplace environments that encourage violence.

Nigeria's experience with psychological hazards at work is quite unique as it impacts the two separate strata of the labour population- current and prospective workforce [16]. For instance, despite having strong academic credentials, many Nigerian graduates deal with the harsh realities of few career options and a fiercely competitive labour market, which result in unemployment, under-employment, or redundancy. These graduates, who otherwise will make up the human assets for organisations (in the country), are already mentally stretched as a result of the disputes, pressure, stress, and dissatisfaction that come along with these socio-economic situations [16]. Similarly, workers of establishments in Nigeria are not exempted from the challenges that exist outside the work domain, especially in metropolitan regions where the population is continually growing. Unfortunately, the combination of these pressures (of the workplace and the external environment) stretches the mental health of the country's labour force to varying limits. Pertinently, a good number of the nation's workforce is concentrated in the construction sector due to deficits in the nation's infrastructural developments and the fact that the industry accommodates both skilled and unskilled workers [17].

The construction and fabrication industries are among the high-ranked in terms of exposure of its workers to occupational safety and health risks; with these risks linked to psychosocial hazards [18]. Given that the construction sector is currently acknowledged as a major driver of industrial and economic growth in the majority of developing countries, such as Kenya, Malaysia, and Nigeria, consideration for safety and diligent administration of the human resource aspects are crucial in the workplace, particularly in the case of construction companies [19].However, compared to other sectors, it continues to be one of the riskiest professions, with the greatest incidence of occupational diseases, deaths, and injuries [20]. Construction sites are known for their challenging settings, many resources, intricate tasks, and dangerous working circumstances that put workers' safety and health at risk [21].

2. CONCEPTUAL FRAMEWORK

The conceptual framework of the research as presented in Figure 1 represents the network arrangements of the study variables; their likely interrelationship within the scope of the study predicated on the researcher's empirical findings from the reviewed literatures. Although, there is room for a study's conceptual design to be hypothetically-based, especially for research that seeks to generate or modify a hypothesis. According to Swaen & George [22], it systematically maps out (visually or in writing form) the different core aspects of the study and the presumed or expected connection of these elements and how they are collectively framed in driving a cohesive and better research outcome.

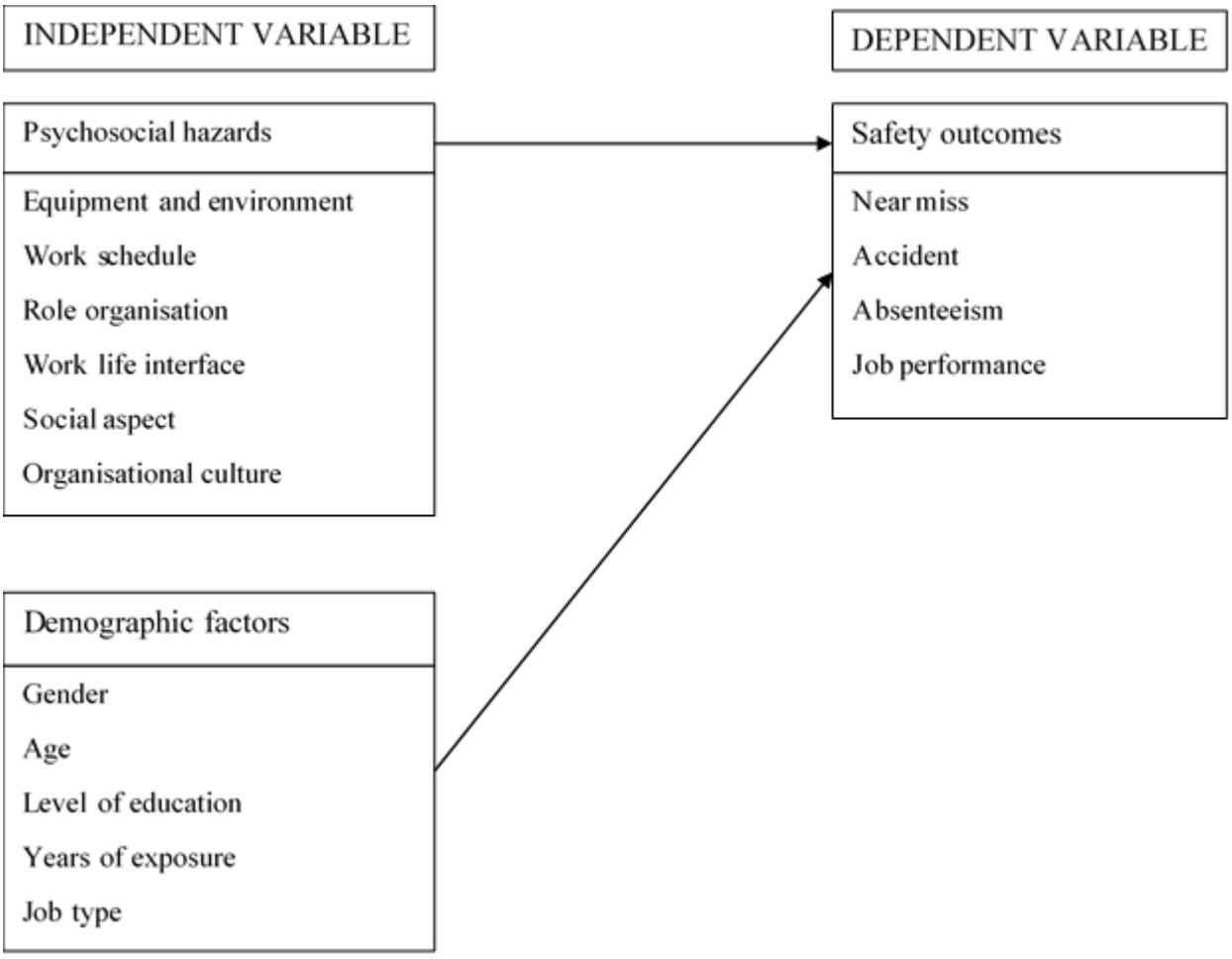

Figure 1: Model of Conceptual Framework

3. METHODOLOGY

This study was carried out on construction workers in Rivers state, Nigeria. For this analysis, a quantitative research approach was adopted, which proceeds by carrying out a survey (questionnaire) designed to determine psychosocial hazards among casual construction workers on construction sites. Purposive sampling techniques was used to determine the Local Government Area(LGA) based on the administrative and operational hub for several multinational, indigenous oil and gas companies, which explains the proliferation of construction and fabrication activities in these areas and 3 companies for the research using some criteria such as economic commonality, spatial conformity and staffing culture.The sample size was 295 respondents which was determined by the population size, and they were administered the questionnaire.

3.1 Research instrument

The aim of the research instrument for this study was to measure the psychosocial hazards and safety outcomes among construction workers. The respondents rated their agreements or disagreements to the questionnaires using the 5-point Likert scale. The data gotten from the questionnaire was coded based on Likert scale ranging from 5 to 1. The Likert codes includes 1 relates to "Never", 2 relates to "Rarely", 3 relates to "Sometimes", 4 relates to "Often" and 5 relates to "Always." The construct used in measuring the psychosocial hazards and the safety outcomes is described in the appendix.

3.2 Data analysis

Statistical package for social sciences (SPSS) version 26 software was used for coding of the Likert scale for each psychosocial hazards and safety outcome construct. Descriptive statistics (mean and standard deviation) were used in evaluating the general respondents' view on the psychological hazard and safety outcomes construct. The reliability of each construct was tested using Cronbach alpha which measures how closely related the set of items are as a group, that is, the internal consistency of the construct. Pearson correlation analysis was used to explore relationships between psychosocial hazards and safety outcomes. Structural equation modelling (SEM) using Analysis of a Moment Structure (AMOS) software was used to perform the structural equation model, create path analysis, confirmatory factor analysis (CFA). The AMOS software helps represent the derived results in visual models.Structural equation modelling multivariate analysis was used to determine the relationship between exogenous (psychosocial factors independent) and endogenous (safety outcomes or dependent) variables.

4. RESULTS & DISCUSSION

4.1 Results

The result from Table 1 shows that majority of the respondents were male. A total of 243 respondents indicated that their gender was male which accounted for 82.4% of the total respondents. A total of 53 respondents indicated that they were females which accounted for 17.6% of the total respondents.

For the Education qualification, the result obtained show that majority of the workers just had secondary school leaving certificate. A total of 180 respondents indicated that they just have secondary school certificate which accounted for 61% of the respondents. Respondent who indicated to have a tertiary degree were 115, which accounted for 39.0% of the total respondents. For work experience most of the respondents had just two to three years' working experience. A total of 137 respondents indicated to just having two to three years of working experience which accounted for 46.4% of the total respondents.

Table 1. Demographic characteristics of all respondents to the questionnaire from the study

Demographic Criteria	**Gender**	**Frequency**	**Percentage (%)**	**Cumulative Percentage (%)**
Gender	Male	243	82.4	82.4
	Female	53	17.6	100
Highest Qualification	Secondary Level	180	61.0	61.0
	Tertiary Level	115	39.0	100
Work Experience	2 to 3 years	137	46.4	46.4
	4 to 5 years	105	35.6	82.0
	5 years above	53	18.0	100.0

Table 2. Reliability of Psychosocial Hazard and Safety outcomes construct

Reliability Statistics

Psychosocial risk hazard and Safety outcomes construct	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items
Environment/Equipment (+)	0.866	0.866
Workload/schedule (-)	0.735	0.739
Role organisation (+)	0.852	0.850
Work-life interface (-)	0.712	0.705
Social aspects (+)	0.688	0.672
Organisational culture (+)	0.719	0.721
Near miss (-)	0.652	0.657
Accident/injuries (-)	0.718	0.722
Absenteeism (-)	0.656	0.657
Job performance (+)	0.754	0.760

Table 3. Mean response by respondents to Psychosocial risk Hazard and Safety outcomes construct

Psychosocial risk hazard and Safety outcomes construct	Mean	St. Dev	Coef. Var	Skewness
Environment/Equipment (+)	3.22	0.75	23.39	0.29

Work load/schedule (-)	3.76	0.43	11.36	-0.66
Role organisation (+)	3.14	0.67	21.35	0.25
Work-life interface (-)	3.84	0.38	9.78	-0.64
Social aspects (+)	2.77	0.43	15.47	0.93
Organisational culture (+)	2.64	0.38	14.45	0.10
Near miss (-)	3.42	0.59	17.12	-0.50
Accident/injuries (-)	3.08	0.62	20.23	-0.09
Absenteeism (-)	2.80	0.63	22.36	-0.14
Job performance (+)	2.00	0.69	34.18	0.62

The mean response for work/schedule was 3.76 which indicates that most of the respondents agreed to the fact that they are often given unfavourable workload/schedule at the workplace. Most of the respondents were of the opinion that they had to work at a high pace throughout the day and they have to strain themselves during work due to time pressure. Most of the respondents were of the opinion that they don't have enough time to complete all their tasks assigned to them in that day. Most respondents agreed that they had to focus on a lot of activities at the same time also agreeing that there is little amount of time allocated for recess in the company's policy.

The mean response for work-life interface was 3.84 which indicates that most of the respondents agreed that more often than not that they do have a balance work life interaction due to the nature of their job. Most respondents highlighted that the conditions surrounding the job is not ideal and it causes conflicts between their personal life and job. Most of the respondent complained that did the demand from their job does not make them have enough time to co-ordinate the affairs of their private life and they also stated that the friends and family complains that they work too much.

The mean response for social aspects was 2.77 which indicate that they rarely feel social support from their colleagues, bosses, and their organisation. Most of the respondents agreed that they feel they are not part of a family or community at work, and they are mostly left out of things they also highlighted that there is little or no good cooperation amongst their colleagues. They also agreed that they cannot relay their views, ideas, feelings to the management and even to their colleagues. Most respondents agreed that there has been some level of bullying, taunting, threats of occupational violence from workers within 24 months period. Also, the mean value shows some level of undesired sexual attention or advancement in the workplace according to most of the respondents.

4.2 Pearson Correlation Coefficient Analysis

Table 4. Pearson Correlation showing the relationship between Psychosocial Hazard and Safety outcomes

Variables	EE	WS	RO	WL	SA	OC	NM	AC	AB	JP
EE	**1.00**									
WS	-0.06	**1.00**								
RO	**0.85**	0.01	**1.00**							
WL	**-0.18**	**0.25**	**-0.17**	**1.00**						
SA	**0.43**	0.10	**0.33**	**-0.13**	**1.00**					
OC	0.06	-0.10	0.04	0.00	**-0.17**	**1.00**				
NM	-0.07	**0.95**	0.01	**0.24**	0.10	-0.10	**1.00**			
AC	-0.11	**0.26**	**-0.12**	0.08	**0.28**	**-0.17**	**0.27**	**1.00**		
AB	0.09	**0.22**	0.08	0.11	**0.30**	-0.09	**0.27**	**0.37**	**1.00**	
JP	**0.56**	**-0.18**	**0.47**	**-0.21**	**0.52**	0.00	**-0.21**	0.11	0.01	**1.00**

Values in bold are different from 0 with a significance level alpha=0.05

Table 4 shows the relationship between psychosocial hazards and safety outcomes using Pearson correlation coefficient. There was a positive relationship between Environment and Equipment (EE) factor with job performance, implying that adequate and conducive working conditions result to better job performance. Therefore, if construction companies improve on their provision of safe work environment and provision of fit for work equipment and tools, the job performance of workers will improve. Workload/schedule (WS) displayed a statistically significant positive correlation of near miss, accident, and absenteeism. This indicates a positive relationship, suggesting that an increased work schedule (WS) is associated with a higher frequency of near misses, accidents, and absenteeism, therefore implying that if construction sites coordinate the workload or high schedules on workers, the frequency of site accidents will be lower. There was a negative relationship between workload/schedule (WS) and job performance (JP). An increase in the workload/schedule (WS) results in a reduction in job performance which implies that if construction companies expect good job performance from their workers, they should reduce workload and allow a bit flexible work schedule. Role organization (RO) exhibited statistically significant negative correlations with accident. A higher level of role organization (RO) was associated with a slightly lower level of accidents and vice versa. This shows that when workers are aware of their roles and can develop their skills, there will be low accident frequency. RO has a significant positive relationship with job performance, indicating that if there is no ambiguity in the job role of the worker then there would be higher job performance. The correlation coefficients for the work-life interface with accident and absenteeism were not statistically significant, indicating an absence of a significant relationship between the work-life interface and the specified safety outcomes. Work life interface (WL) had a positive relationship

with accident and a negative relationship with job performance. Workers that indicated having a poor work-life balance which is the conflict from balancing work and family indicated to have more injuries and lower job performance at their workplace. Therefore, if construction companies in rivers state focuses on improving their work conditions in favour of workers that can help them reduce any conflict between working and living, accident frequency will reduce while job performance will be positive. Social aspect demonstrated a statistically significant positive correlation with job performance (JP). This suggests that when support is received from supervisor and coworker it leads to a better job performance. Organizational culture displayed no statistically significant correlation with near miss (NM), absenteeism (AB), and job performance (JP). This implies that organizational culture does not have a discernible relationship with the specified safety outcomes. Organizational culture (OC) had a significant negative relationship with accidents, which implies that if the company has a positive safety culture and norms where communications are effective, it will result in fewer accidents. The positive correlation between NM and AC was statistically significant, indicating an increase in near misses is associated with an increase in accidents, and vice versa. There was a positive correlation between NM and AB which was statistically significant. The correlation between JP and NM was statistically significant (-0.21), indicating a negative relationship. Higher job performance is associated with a slightly lower level of near misses. The correlation coefficients for Environment/Equipment with near-miss, accidents/injuries, and absenteeism were not statistically significant, implying no discernible relationship between environmental and equipment factors and the specified safety outcomes.

4.3 Structural Equation Modelling

The result of the relationship between the psychosocial hazard factor and safety outcome in Construction Company in Rivers States was evaluated using a two-part model. The first part of the model was the confirmatory factor analysis (measurement model) which evaluated the reliability of the indicator variables used in measuring each construct and the second part model was the structural equation modelling which test the hypothesis of the study.

4.4 Confirmatory Factor Analysis

The result of the confirmatory factor analysis is presented in Tables 5 to 7 and the model diagram is presented in Figure 2. Table 5 shows the result of the chi-square test which is used to evaluate whether the model fits the sample data set. The result from Table 5 showed that the chi-square test was statistically significant ($\chi^2 = 2214.654$, df=694, p-value=0.000), therefore the null hypothesis was rejected. Failure to reject the null hypothesis state that the data contain covariance information that does not speak against the model.The result from the goodness of fit indexes is presented in Table 6

Table 5. Chi-Square Goodness of Fit

Model	NPAR	CMIN	DF	P	CMIN/DF

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	126	2214.654	694	.000	3.191
Saturated model	820	.000	0		
Independence model	40	5263.985	780	.000	6.749

Table 6. Goodness of fit index statistic

Goodness of Fit Statistic	**Value**
CFI	0.932
RMSEA	0.086
SRMSE	0.0896
GFI	0.914
AGFI	0.913

Table 7: Regression weight (Unstandardized)

Paths			Estimate	S.E.	C.R.	P
Nearmiss	<---	Environment_Equipment	-.716	.139	-5.161	***
Accident	<---	Environment_Equipment	-1.737	.280	-6.206	***
Absenteeism	<---	Environment_Equipment	-3.628	.309	-11.754	***
Job_Perfromance	<---	Environment_Equipment	4.361	.187	23.294	***
Nearmiss	<---	Work_Schedule	.000	.053	-.007	.995
Accident	<---	Work_Schedule	.710	.108	6.584	***
Absenteeism	<---	Work_Schedule	1.481	.119	12.454	***
Job_Perfromance	<---	Work_Schedule	-1.799	.072	-24.953	***
Nearmiss	<---	Role_Organization	.679	.106	6.383	***
Accident	<---	Role_Organization	1.104	.215	5.139	***
Absenteeism	<---	Role_Organization	2.781	.237	11.740	***
Job_Perfromance	<---	Role_Organization	-3.209	.144	-22.341	***
Nearmiss	<---	Social_Aspect	.305	.073	4.182	***
Accident	<---	Social_Aspect	1.290	.147	8.762	***

Paths			Estimate	S.E.	C.R.	P
Absenteeism	<---	Social_Aspect	2.259	.162	13.914	***
Job_Perfromance	<---	Social_Aspect	-1.140	.098	-11.576	***
Nearmiss	<---	Organization_Culture	-.190	.185	-1.024	.306
Accident	<---	Organization_Culture	.991	.374	2.650	.008
Absenteeism	<---	Organization_Culture	3.053	.413	7.402	***
Job_Perfromance	<---	Organization_Culture	-2.249	.250	-8.989	***
Nearmiss	<---	Work_Life	.934	.034	27.800	***
Accident	<---	Work_Life	-.323	.068	-4.754	***
Absenteeism	<---	Work_Life	-.084	.075	-1.123	.261
Job_Perfromance	<---	Work_Life	-.532	.045	-11.716	***

The critical ratios and the unstandardized path estimatebetween latent variables are presented in Table 3. Twenty of the twenty-four paths within the model are significant at a 0.001 level; onepath is significant at a 0.008 level, and only three paths (therelationship between near miss and work schedule, nearmiss and organisational culture, and absenteeism and work life) are not significant,although theyshow the signs in the expected direction.The structural model shows environment and equipment, role in the organisation, and social aspects as influencing alloutcome variables through direct orindirect pathways. Specifically, the environment and equipment, role organisation, social aspect and work life balance directly affects or influences nearmiss. Psychosocial hazards which include environment and equipment, work schedule, role organisation, social aspect, work life all directly influences accidents and job performance. All the signs were in agreement with the hypotheses.

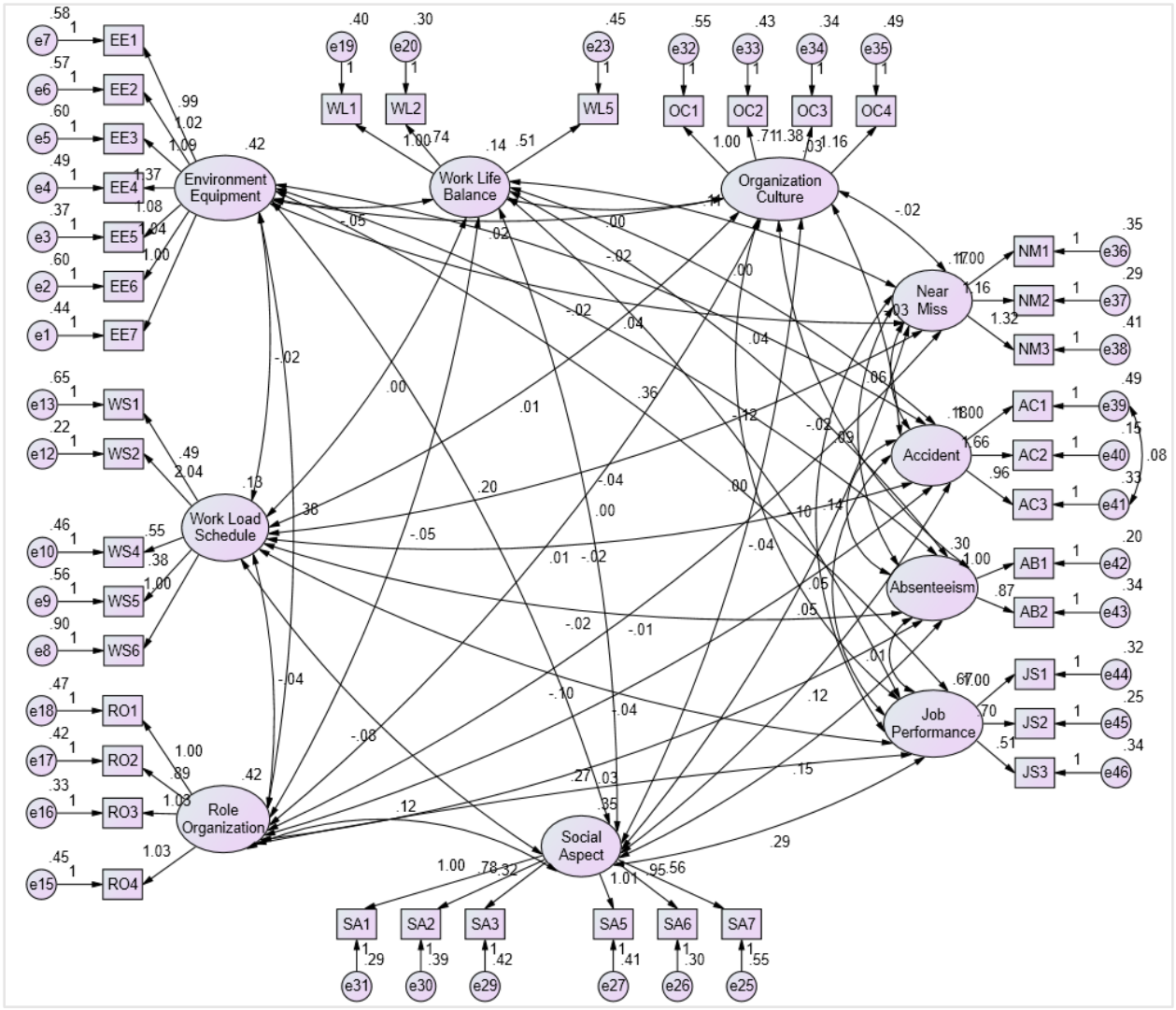

Figure 2. Unstandardized path coefficient for the confirmatory factor analysis

4.5 Discussions

Results from the analysis in table 7 show that the relationship between the culture of the organisation and absenteeism is significant which implies that positive or negative organisational culture significantly affects the level of absenteeism among workers. This was supported by Goetzel et al. [23] where it was highlighted that there are evidence showing organisational culture psychosocial hazards has effects on indices such as absenteeism, sickness absence, productivity.

From the results, it was shown that poor safety culture within the organisation which makes work unfavourable for workers leads to accident in the company. Lamdsbergis [24] supports this claim highlighting those workplaces with poor safety culture and unfavourable psychosocial conditions seem to showhigher accident and injury rate. Therefore, if organisations decide to focus on

improving the general safety culture or improve the perception of workers about the level of safety within the organisation, there will be corresponding reduction of accident cases.

Karasek et al. [25]suggested that high work schedule, high job demands, and low job control(decision latitude) were the key factors that together produced job strain,increasing the risk of physical and mental illness, accident as well as injuries. It was identified from the result in table 4.18 that as high work schedule which are unfavourable to workers within the organisation increases accident increases as well. This shows that Karasek et al. [25] supports the finding that high work schedule leads to increasing accidents, also Ekeke et al. [26] highlighted that most workers tend to take shortcuts while carrying out their task under pressure this increases the chances of accidents.

The home-workinterface(work-life balance) is also an important factor in thegeneral health of individuals considering that, on the one hand, the interaction between work and thefamily can be a source of pressure itself and, on the other, this relationship canbe a source of "spill-over" stress as well. A positive environment where there isrecognition of the need for balance between the demands of work, family andpersonal life is, therefore, essential whereas a negative working environment without the values of balancing working and living will lead to mental illness, physical injuries, near misses and accident [27]. This is in line with one of the findings of this research where it was highlighted that work life psychosocial hazards and accident and or near miss safety outcomes has a significant relationship. It was stated that there is a positive effect in this relationship as it was implied that any increase in poor work life balance among workers leads to accident. This finding corresponds to those of Turner et al. [28] where he highlighted that the higher the work life interface conflicts, the higher the workplace near miss, injuries and accidents are recorded. The conflict within work life interface taxes the mental strength of workers who are doing what they can to protect and function in two most important aspects of life which creates psychological distress in higher levels which in turn causes more workplace near miss and injuries [28].

The result also shows the relationship between social aspects and accidents is significant which implies that various poor behaviour such as discrimination, occupational violence, harassment, bullying can lead to accidents or injury directly or indirectly. According to Van der Klauw [29], he highlighted in his research that in the construction sector, the exposure to occupational violence, high time pressure and exposure harassment in the workplace by colleagues or supervisors were associated with occupational accidents. This research supports the claim where poor behaviours of workers on their fellow workers due to ranks, gender etc can directly or indirectly lead to accidents within various organisations if not controlled.

5. CONCLUSION

This study is an attempt to further an understanding of the relationship workplace psychosocial hazards have with safety outcomes within construction companies, thereby one can know the outcomes of these hazards within their organization. Psychosocial hazards are present in all workplaces and are mostly hidden due to the little information some workers have about them.Some workers may not be able to identify that these hazards are the causes of some accidents, absenteeism, near miss within their organization. Most workers do not know the cause-and-effect relationship of psychosocial hazards and safety outcomes. Findings from the study showed that workload/ schedule factors such as time pressures and high workloads were seen as contributors to near miss, injuries at work. The study highlighted the relationship environment/ equipment have on job performance implying that organisations that provides adequate working conditions enjoy the dividends of good job performance. Findings from the study also shows that if the organization has a good safety culture accident frequency will reduce within the organization. The associations that were identified between psychosocial hazards and workplace safety outcomes, shows the needs for a holistic HSE approach for the wellbeing of construction workers.

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Appendix

DEMOGRAPHIC SECTION

Please tick (√) the appropriate boxes that correspond to the questions below.

1. **Gender:** Male ☐ Female ☐
2. **Age (in years):** specify……
3. **Educational background:** secondary level ☐ tertiary level ☐
4. **Years of Experience**: 2-3 years ☐ 4-5 years ☐ 5 and above ☐
5. **Occupation:** Automobile Operator ☐ Carpenter ☐ Electrician ☐ Mechanic ☐ Pipefitter ☐ Welder ☐ Mason ☐ Iron bender ☐ Others ☐.

QUESTIONNAIRE SECTION

S/N	**QUESTIONS**	ALWAYS	OFTEN	SOMETIMES	RARELY	NEVER
	ENVIRONMENT/EQUIPMENT (EE)					
EE1	My workspace is relatively adequate for my nature of work.					
EE2	My workspace is not exposed to hazardous substance.					
EE3	My work does not exposes me to high levels of sound(noise) from machines.					
EE4	The appropriate equipment/materials for my job are provided.					
EE5	My workspace has a good air quality.					
EE6	My workspace is free of unsafe conditions.					
EE7	My work area lighting is adequate.					

	WORKLOAD/SCHEDULE	ALWAYS	OFTEN	SOMETIMES	RARELY	NEVER
WS1	I have no liberty to decide my workload per day					
WS2	I do not have time to complete all my work tasks.					
WS3	I have to work at a high pace throughout the day.					
WS4	I have to keep my eyes on lots of things while working.					
WS5	I have to strain myself during work due to time pressure.					
WS6	My workplace has no daily recess time policy for all workers.					
	ROLE ORGANISATION	ALWAYS	OFTEN	SOMETIMES	RARELY	NEVER
RO1	I know exactly which areas my job covers.					
RO2	I am required to take the initiative in my work.					
RO3	My work gives me the opportunity to develop my skills.					
RO4	I receive all the information needed in order to do my work well.					
RO5	My skills/expertise are relevant in my line of work.					
RO6	Contradictory demands are not placed on me at work.					
RO7	No worries about new technologies (at work) making me redundant.					
	WORKLIFE INTERFACE	ALWAYS	OFTEN	SOMETIMES	RARELY	NEVER
WL1	In most ways the conditions around my job is not close to my ideal.					
WL2	I feel a conflict between my work and my private life; making me want to be in both places at the same time?					
WL3	I feel that my work requires so much of me that it has a negative effect on my private life.					

WL4	Some friends and family tell me that I work too much.					
WL5	I feel that my private life takes so much of my time that it has a negative effect on my work.					
	SOCIAL ASPECTS	ALWAYS	OFTEN	SOMETIMES	RARELY	NEVER
SA1	I feel part of a community at my place of work.					
SA2	There is a good co-operation between my colleagues at work.					
SA3	I get sufficient levels of social support from colleagues toward problem-solving.					
SA4	I am able to express my views and feelings to colleagues/management.					
SA5	I have not being exposed to taunting (of any form) within the last 24 months.					
SA6	I have not been exposed to threats of violence at a workplace within the last 24 months.					
SA7	I have not been exposed to undesired sexual attention at a workplace within the last 24 months?					
SA8	I have not been exposed to bullying at a workplace within the last 24 months?					
	ORGANISATIONAL CULTURE	ALWAYS	OFTEN	SOMETIMES	RARELY	NEVER
OC1	My organisation has a working Effort-Reward system.					
OC2	My organisation upholds fairness and justice in all of its operational aspects.					
OC3	The work space is open to workers of different race and religion.					
OC4	Effective communication system (at different levels and situations) are implemented in the organisation.					

	NEARMISS			SOMETIMES	RARELY	NEVER
NM1	My work exposes me to near miss occurrences.					
NM2	I have been involved in a near miss situation at workplace.					
NM3	I have witnessed cases of near misses with other employees.					
	ACCIDENT AND INJURY			SOMETIMES	RARELY	NEVER
AC1	My job exposes me to workplace accident/injury occurrence.					
AC2	I have sustained injury due to my work.					
AC3	I have witnessed accident situation with other employees.					
	ABSENTEEISM			SOMETIMES	RARELY	NEVER
AB1	I have been absent from work due to effect (negative) of job-related issue.					
AB2	Other employees have been absent due to effect of work-related issues.					
	JOB PERFORMANCE			SOMETIMES	RARELY	NEVER
JS1	I perform my job optimally regardless of the workplace conditions.					
JS2	I am consistent in my job delivery regardless of my physiological and psychological state.					
JS3	I feel motivated and involved working in my organisation.					