

School Hazards Management and Teachers' Job Effectiveness in Secondary Schools in Ikom Local Government Area, Cross River State, Nigeria.

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Abstract

This study assessed school hazards management and teachers' job effectiveness in secondary schools in Ikom Local Government Area of Cross River State. Four null hypotheses were formulated accordingly to guide the study. The design adopted for the study was ex-post facto research design. Census technique was employed in selecting the entire population of 551 teachers in the area. The instruments used for data collection were "School Hazards Management Questionnaire (SHMQ)" and "Teachers' Job Effectiveness Questionnaire (TJEQ)." Collected data were analysed using descriptive statistics; while the null hypotheses were tested at .05 level of significance using Product Moment Correlation Matrix Analysis. Findings from the study revealed a significant relationship between physical hazard management, psychological management, environmental hazard management, noise hazard management and teachers job effectiveness in terms of punctuality, classroom management, instructional delivery, lesson evaluation, dressing and record keeping respectively. It was generally concluded that, school hazards management has a significant relationship to teachers' job effectiveness in secondary schools. Based on the findings of this study, recommendations were made.

Keywords: School, Hazards, School Hazards, Hazards Management, School Hazards Management, Teachers, Job Effectiveness.

Introduction

In the contemporary society, teachers occupy vital positions of honour and are regarded to be a major determinant of the societal values, Intellectuals and moral development. It is often said that the standard and quality of education of a given nation is dependent and determined by the standard of her teachers; it is on this note therefore that the federal government in 2004 deemed it necessary to review to National Policy on education to include teachers' education (training) Federal Republic of Nigeria (FRN) 2004). This implies teachers at every level of education must strive towards effectiveness since they are the building blocks of any society.

Teacher's job effectiveness refers to the degree of which teachers' carryout their primary duties of teaching as well as their general attitudes towards the teaching profession and their activities (Owan, 2012). For a teacher to be called effective, the teacher must be punctual to school, have good knowledge of his subject matter, good communication skills, good inter-personal relationship with both staffs and students, dresses modestly, must display effective management of time and so on.

After assessing all these qualities, it has been observed that many teachers in most secondary schools in Ikom Local Government Area of Cross River state, do not appear to have met such criteria effectively. Many teachers show unprofessional attitudes to work in the areas of absenteeism, time management, disciplining the students, communication skills. Most of them do not know how to adequately carryout their instructions because of poor knowledge of their subject matter and are also ignorant of the best teaching method to use at that level. They go as far as disobeying the administrators when assigned to perform a duty, poor note writing and many more unethical behaviours. Those poor attitudes of most teachers in the area have contributed to the fall in the standard of education and the poor academic performance of students in both internal and external examinations.

Many teachers have in the past attributed their ineffectiveness to be as a result of the principal and vice principals' strict leadership style, low salary structure, inadequate provision of facilities, poor teaching aids, unconducive environment, poor retraining programme for skill acquisitions and improvement and so on. However, with recent improvement by the government in terms of timely payment of salaries, coupled with other efforts being made in terms of supervision, one expects to see a positive change in the job effectiveness level of teachers. Sadly, the issues persist. It is based on this that the researcher wonders whether school hazard management has any contribution to teachers' job effectiveness.

School hazard management refers to those efforts, strategies and techniques employed within the school system to prevent, reduce, cushion or avoid the dangers of hazards in order to ensure that academic activities follow the planned schedules. There are several types of hazards that can be managed within the school system they include: biological hazard, chemical hazard ergonomic hazard, physical hazard psychological hazard and environmental hazard. But for the purpose of this study, four of those hazards will be looked out they include; physical hazard, psychological hazard environmental hazard and noise hazard.

Physical hazards are those hazards that occur within an environment that can harm the body without necessarily touching it (Mcleod, 2011). They cause pain and injury to individuals within the school system who are victims. Physical hazards can be caused through failure to exercise care, through chemical explosion, poor disposal of waste etc. The physical environment is concerned with ensuring a clean and safe environment exemplified by the presence of water supply, refuse disposal, sewage disposal, quality of school buildings, and absence of harmful objects as well as vectors of disease agents (Cornacchia, Olsen, & Nickerson, 1991).

Psychological hazards are hazards that affect the mental health of a person overwhelming an individual coping mechanism (Ekenodo & Ekechukwu, 2015), highlighted some factors that influence psychological environment in the school such as; interpersonal relationships internal and external pressure and heavy work load.

Environmental hazard can be defined as a state or event which has the potential to threaten the surrounding and natural environment and people within the environment. No matter the occupation one is engaged in, it is a fact that one's health comes first and is more important than any other factor. There are many hazards that might result from the environment if they are not properly managed. Such include falling buildings, dead trees, and students throwing stones, fighting and so on, can pose threat to those in the school.

Noise hazard according to Encyclopaedia Britannica, (2012) noise is any undesired sound that is intrinsically objectionable or one that interferes with other sound that are being

listened to. The school is important for the cognitive, creative, and social development of children. Schools are therefore expected to ensure the best possible conditions for a child's physical and intellectual development, including control of excess environmental noise. The noise in a classroom is made up of external noise which is transmitted through the building envelope, plus internally generated noise, so that children in school may be exposed to noise from a wide variety of sources. External noise is likely to consist of array of environmental noise including noise from transportation sources, industrial noise, plant noise and the noise of people outside the school.

An additional source of noise which is reputed to cause significant disturbance to teaching is the noise of rain falling on light weight school roofs (O'Neil, 2002). Oyedepo (2012), pointed out some sources of noise, which are Electricity generating plants, vehicular traffic noise engine and pressure horns, Construction/industrial noise, Industrial/machinery noise, Noise from worship institutions, household noise. Other sources of noise as pointed out by Abolarin (2012) are Air craft noise, Noise from railroads, Noise from consumer products, Internal Combustion Engines (ICE).

Several studies have been conducted to examine relationship between school hazards and teachers job effectiveness at various locations. For instance, Sekiwu, and Kabanda (2014) in a study on the relationship between collective commitment and management of health and safety in Ugandan secondary schools of Wakiso district. The focus was on head teachers and deputies, teachers, wardens and school nurses. The correlation analysis indicated that there is a significant and positive relationship between collective commitment and managed physical hazard ($r= 0.567$, $p \leq 0.01$). The study concluded that, to avoid physical hazards in the school, all stakeholders must be involved.

The finding of Nkporbu, Asuquo and Douglas (2016) in a study on the possible risk factors for psychosocial hazards among workers at the university of Port Harcourt, revealed that; risk factors for psychosocial hazards included work load with 548 (98.2%), followed by home-work interface with 458 (82.0%), lack of possibilities to advance forward 392 (70.1%), lack of career development 327 (58.7%), work content with 329 (60%) while constant state of alertness (CSA) was the least with 98 (17.6%). It was hence concluded that workers at the University of Port Harcourt experienced or are faced with several risk factors for psychosocial hazards; most of them are organizational and employer's factors. The study recommended that there is a need to institute appropriate measures to address preventable risk factors and improve the work environment thereby increasing workers' effectiveness, productivity and improving their health.

Adigun, Alebiosu and Ajayi-Vincent (2017), investigated the influence of healthful school health environment on academic performance of primary school pupils in southwest Nigeria. The sample of the population was made up of 1006 health education teachers. The result revealed that physical school environment has significant influence in pupils' academic performance. The study recommended that state government, parents, health educators, stakeholders, community, agencies, National and international organisations should join hands to improve the status of physical school environment in southwest Nigeria primary schools to boost academic performance. This finding is related to this study because students' academic performance is an indicator of teachers' job effectiveness.

Ana, Shendell, Brown, and Sridhar (2009), revealed through findings from a study on the assessment of noise and associated health impacts at selected secondary schools in

Ibadan, Nigeria, that; short-term, cross-sectional school-day noise levels ranged 68.3–84.7 dBA. Over 60% of respondents reported that vehicular traffic was major source of noise, and over 70% complained being disturbed by noise. Three schools reported tiredness, and one school lack of concentration, as the most prevalent noise-related health problems. It was concluded that secondary school occupants in Ibadan, Nigeria were potentially affected by exposure to noise from mobile line sources.

From the foregoing, it seems only a handful of studies has been done in Cross River State which examined school hazards management and teachers' job effectiveness. Studies have examined teachers' job effectiveness generally, no study has been identified which examined teachers' effectiveness in terms of punctuality, classroom management, instructional delivery, lesson evaluation, dressing and record keeping. This implies a gap which the present study will fill. It was an attempt to bridge the gaps in the Literature that necessitated the study.

Statement of the problem

Teachers in secondary schools are poised with the responsibility of enhancing teaching and learning. They are supposed to carry out their duties and responsibilities effectively in order to achieve those educationally stated goals. The effectiveness of teachers determines how well the student will perform academically and be productive to his society.

Unfortunately, many teachers fail to carry out their primary responsibilities or duties in the school. Many of them are found displaying unfavourable behaviours such as absenteeism, poor note writing, late coming, and indecent dressing, being reluctant or lazy in carrying out assigned duties. These bad behaviours of teachers have contributed to the poor performance of students in both their internal and external examinations as well as the overall poor quality of students produced by secondary schools who in turn, transit to higher institutions.

In recent times, teachers have attributed their inability to perform effectively as a result of the low salary structure. In order to tackle out some of those problems, the government have set out improvement in the early payment of salaries. Sadly, the issue persists. Due to the outlined problems, one may begin to wonder what really the reason for teachers' ineffectiveness is. Could it be that they are faced or exposed to hazardous substances that could be hindering their good performance? This research therefore is poised to provide answer to the question: how does school hazard management relate to teachers' job effectiveness in terms of punctuality, classroom management, instructional delivery, lesson evaluation, dressing and record keeping in secondary schools in Ikot Ekpene local government area of Cross River State?

Statement of hypothesis

The following hypothesis was formulated to provide focus and directions for the study.

- i. There is no significant relationship between physical hazard management and teachers' job effectiveness in terms of punctuality, classroom management, instructional delivery, lesson evaluation, dressing and record keeping.
- ii. There is no significant relationship between psychological hazard management and teachers' job effectiveness in terms of punctuality, classroom management, instructional delivery, lesson evaluation, dressing and record keeping.

- iii. There is no significant relationship between environmental hazard management and teachers' job effectiveness in terms of punctuality, classroom management, instructional delivery, lesson evaluation, dressing and record keeping.
- iv. There is no significant relationship between noise hazard management and teachers' job effectiveness in terms of punctuality, classroom management, instructional delivery, lesson evaluation, dressing and record keeping.

Methods

The design adopted for the study was the ex-post facto design. The study was carried out in Ikom Local Government Area of Cross River State, Nigeria. The population of this study comprised the entire 551 teachers available in the 19 public secondary schools in Ikom Local Government Area of Cross River State. Census technique was adopted in selecting the entire population of 551 teachers in the area. Census technique is used in cases where the population to be studied is small or manageable such that, all the elements in it could be studied entirely.

The instruments used for data collection were two set of questionnaires designed by the researchers and tagged: "School Hazard Management Questionnaire (SHMQ)", and "Teachers' Job Effectiveness Questionnaire (TJEQ)". These were designed based on the identified sub-variables used for the study. The instrument was organized on a four-point Likert scale of Strongly Agree, Agree, Disagree, and Strongly Agree. Test-retest technique was used in establishing the reliability of the instrument. Reliability estimates of 0.923 and 0.877 were obtained respectively, which indicated that the instrument was internally consistent in measuring what it was purported to measure.

The questionnaire was administered in the entire schools in Ikom Local Government Area on different occasions. The principals of each school were notified before administering the instrument to the respondent. One student was selected to assess a teacher job performance. Thus, a total of 551 students were selected to assess the job effectiveness of their teachers in terms of punctuality, classroom management, instructional delivery, lesson evaluation, dressing and record keeping. The respondents were informed to respond sincerely to the items in the questionnaire, at the end of the exercise, copies of the instruments were retrieved from the respondents for analysis without any loss. Collected data were analysed using descriptive statistics while the null hypotheses were all tested using Pearson Product Moment Correlation Matrix at .05 alpha level with the aid of SPSS version 21

Results and Discussion

Hypothesis one (H_01)

There is no significant relationship between physical hazard management and teachers' job effectiveness in terms of punctuality, classroom management, instructional delivery, lesson evaluation, dressing and record keeping. The result of the analysis is presented in Table 1.

TABLE 1:
Summary of results of the relationship between physical hazard management and teachers' job effectiveness (N =551)

Variables	Physical Hazard Management	Punctuality	Classroom Management	Instructional Delivery	Lesson Evaluation	Dressing	Record Keeping
Physical hazard management	1 551 .434 .000	.434 1 551 .468 .000	.000 551 .524 .000	.551 1 551 .491 .000	.491 1 551 .550 .000	.550 1 551 .533 .000	.533 1 551 .502 .000
Punctuality		551 .468 .000	551 .524 .000	551 1 551	551 .512 .000	551 .550 .000	551 .539 .000
Classroom management			551 .431 .000	551 .559 .000	551 .491 .000	551 1 551	551 .523 .000
Instructional Delivery				551 .489 .000	551 .530 .000	551 .498 .000	551 .533 .000
Lesson evaluation					551 .512 .000	551 .491 .000	551 .539 .000
Dressing						551 .485 .000	551 .502 .000
Record Keeping							551 .524 .000
	551	551	551	551	551	551	551

The results of the analysis presented in Table 1 above revealed that; there is a significant relationship between physical hazards management and punctuality ($r = .434$, $p = .000 < .05$), classroom management ($r = .468$, $p = .000 < .05$), instructional delivery ($r = .431$, $p = .000 < .05$), lesson evaluation ($r = .489$, $p = .000 < .05$), dressing ($r = .485$, $p = .000 < .05$) and record keeping ($r = .502$, $p = .000 < .05$). Since the p-values of various teachers' job effectiveness indices were found to be less than the alpha the null hypothesis was rejected while the alternate hypothesis was upheld. This implies that, there is a significant relationship between physical hazard management and teachers' job effectiveness in terms of punctuality, classroom management, instructional delivery, lesson evaluation, dressing and record keeping.

Hypothesis Two

There is no significant relationship between psychological hazard management and teachers' job effectiveness in terms of punctuality, classroom management, instructional delivery, lesson evaluation, dressing and record keeping. The result of the analysis is presented in Table 2.

TABLE 2:
Summary of results of the relationship between psychological hazard management and teachers' job effectiveness (N =551)

Variables	Psychological Hazard Management	Punctuality	Classroom Management	Instructional Delivery	Lesson Evaluation	Dressing	Record Keeping
Psychological Hazard Management	1						
	551						
Punctuality	.524	1					
	.000						
	551	551					
Classroom management	.477	.524	1				
	.000	.000					
	551	551	551				
Instructional Delivery	.541	.559	.491	1			
	.000	.000	.000				
	551	551	551	551			
Lesson Evaluation	.469	.530	.512	.550	1		
	.000	.000	.000	.000			
	551	551	551	551	551		
Dressing	.518	.523	.524	.498	.533	1	
	.000	.000	.000	.000	.000		
	551	551	551	551	551	551	
Record Keeping	.534	.562	.524	.491	.539	.502	1
	.000	.000	.000	.000	.000	.000	
	551	551	551	551	551	551	551

The results of the analysis presented in Table 2 above, showed that; there is a significant relationship between psychological hazard management and punctuality of teachers ($r = .524$, $p = .000 < .05$), classroom management of teachers ($r = .477$, $p = .000 < .05$), instructional delivery of teachers ($r = .541$, $p = .000 < .05$), lesson evaluation of teachers ($r = .469$, $p = .000 < .05$), dressing of teachers ($r = .518$, $p = .000 < .05$); record keeping attitudes of teachers ($r = .534$, $p = .000 < .05$). With these results, the null hypothesis was rejected because all the p-values were less than .05 alpha level. The conclusion is that there is a significant relationship between psychological hazard management and teachers' job effectiveness in terms of punctuality, classroom management, instructional delivery, lesson evaluation, dressing and record keeping.

Hypothesis three (H₀₃)

There is no significant relationship between environmental hazard management and teachers' job effectiveness in terms of punctuality, classroom management, instructional delivery, lesson evaluation, dressing and record keeping.

The results from the analysis of data disclosed that: there was a positive relationship between environment hazard management with punctuality of teachers ($r = .513$, $p < .05$), classroom management ($r = .497$, $p < .05$), instructional delivery ($r = .494$, $p < .05$), lesson

evaluation ($r = .515$, $p < .05$), dressing of teachers ($r = .522$, $p < .05$), and record keeping of teachers ($r = .556$, $p < .05$). The p-values of all the variables were less than .05 level of significance. Therefore, the null hypothesis was rejected implying that; there is a significant relationship between environmental hazard management and teachers' job effectiveness in terms of punctuality, classroom management, instructional delivery, lesson evaluation, dressing and record keeping. The result of the analysis is presented in Table 3.

TABLE 3:
Summary of results of the relationship between environmental hazard management and teachers' job effectiveness (N =551)

	Environmental Hazard Management	Punctuality	Classroom Management	Instructional Delivery	Lesson Evaluation	Dressing	Record Keeping
Environmental Hazard Management	1						
		551					
Punctuality	.513	1					
		.000					
		551	551				
Classroom Management	.497	.524	1				
		.000	.000				
		551	551	551			
Instructional Delivery	.494	.559	.491	1			
		.000	.000	.000			
		551	551	551	551		
Lesson Evaluation	.515	.530	.512	.550	1		
		.000	.000	.000			
		551	551	551	551	551	
Dressing	.522	.523	.524	.498	.533	1	
		.000	.000	.000	.000		
		551	551	551	551	551	551
Record Keeping	.556	.562	.524	.491	.539	.502	1
		.000	.000	.000	.000	.000	
		551	551	551	551	551	551

Hypothesis four

There is no significant relationship between noise hazard management and teachers' job effectiveness in terms of punctuality, classroom management, instructional delivery, lesson evaluation, dressing and record keeping. The result of the analysis is presented in Table 4 below.

TABLE 4:
Summary of results of the relationship between noise hazard management and teachers' job effectiveness (N =551)

Variables	Noise Hazard Management	Punctuality	Classroom Management	Instructional Delivery	Lesson Evaluation	Dressing	Record Keeping
Noise hazard management	1						
		551					
Punctuality	.478	1					
		.000					
		551	551				
Classroom Management	.512	.524	1				
	.000	.000					
		551	551	551			
Instructional Delivery	.553	.559	.491	1			
	.000	.000	.000				
		551	551	551	551		
Lesson Evaluation	.583	.530	.512	.550	1		
	.000	.000	.000	.000			
		551	551	551	551	551	
Dressing	.508	.523	.524	.498	.533	1	
	.000	.000	.000	.000	.000		
		551	551	551	551	551	551
Record Keeping	.523	.562	.524	.491	.539	.502	1
	.000	.000	.000	.000	.000	.000	
		551	551	551	551	551	551

The results from the analysis of data presented in Table 4 disclosed that: there was a positive relationship between noise hazard management with punctuality of teachers ($r = .478$, $p < .05$), classroom management ($r = .512$, $p < .05$), instructional delivery ($r = .553$, $p < .05$), lesson evaluation ($r = .583$, $p < .05$), dressing of teachers ($r = .508$, $p < .05$), and record keeping of teachers ($r = .523$, $p < .05$). The p-values of all the variables were less than .05 level of significance. Consequently, the null hypothesis was rejected implying that; there is a significant relationship between noise hazard management and teachers' job effectiveness in terms of punctuality, classroom management, instructional delivery, lesson evaluation, dressing and record keeping.

Discussion of Findings

From the first hypothesis, this study discovered that; there is a significant relationship between physical hazard management and teachers' job effectiveness in terms of punctuality, classroom management, instructional delivery, lesson evaluation, dressing and record keeping in Ikom Local Government Area of Cross River State. This finding corroborates the finding of Sekiwu, and Kabanda (2014) in a study on the relationship between collective commitment and management of health and safety in Ugandan secondary schools of Wakiso district. The correlation analysis indicated that there is a significant and positive relationship between collective commitment and managed physical hazard ($r= 0.567$, $p \leq 0.01$).

From the second hypothesis, the finding of this study revealed that; there is a significant relationship between psychological hazard management and teachers' job effectiveness in terms of punctuality, classroom management, instructional delivery, lesson evaluation, dressing and record keeping in secondary schools in Ikom Local Government Area of Cross River State.

The finding of Nkporbu, Asuquo and Douglas (2016), revealed that; risk factors for psychosocial hazards included work load with 548 (98.2%), followed by home-work interface with 458 (82.0%), lack of possibilities to advance forward 392 (70.1%), lack of career development 327 (58.7%), work content with 329 (60%) while constant state of alertness (CSA) was the least with 98 (17.6%). The study recommended that there is a need to institute appropriate measures to address preventable risk factors and improve the work environment thereby increasing workers' effectiveness, productivity and improving their health. The results of finding of Nkporbu, et. al. (2016) implies that, for psychological hazards to be effectively managed, such factors as work load, home-work, lack of possibilities to advance forward, lack of career development, work content and constant state of alertness (CSA) must be given due consideration by all secondary school principals.

This study established through the third hypothesis that; there is a significant relationship between environmental hazard management and teachers' job effectiveness in terms of punctuality, classroom management, instructional delivery, lesson evaluation, dressing and record keeping in Ikom Local Government of Cross River State. This finding agrees with the finding of Adigun, Alebiosu and Ajayi-Vincent (2017) that; physical school environment has significant influence in pupils' academic performance. The study recommended that state government, parents, health educators, stake-holders, community, agencies, National and international organisations should join hands to improve the status of physical school environment in southwest Nigeria primary schools to boost academic performance. This finding is related to this study because students' academic performance is an indicator of teachers' job effectiveness.

The result from the fourth hypothesis of this study a significant relationship between noise hazard management and teachers' job effectiveness in terms of punctuality, classroom management, instructional delivery, lesson evaluation, dressing and record keeping in Ikom Local Government Area of Cross River State. This finding strengthens the finding of Ana, Shendell, Brown, and Sridhar (2009), which revealed that; short-term, cross-sectional school-day noise levels ranged 68.3–84.7 dBA. Over 60% of respondents reported that vehicular traffic was major source of noise, and over 70% complained being disturbed by noise. Three schools reported tiredness, and one school lack of concentration, as the most prevalent noise-related health problems.

Conclusion

Based on the findings of this study, it was generally concluded that, school hazards management has a significant relationship with teachers' job effectiveness in terms of punctuality, classroom management, instructional delivery, lesson evaluation, dressing and record keeping in secondary schools. It was also concluded that; physical hazard management has a significant relationship with teachers' job effectiveness; psychological management significantly relates to teachers' job effectiveness; environmental hazard management is significantly related to teachers' job effectiveness; and noise hazard management relates significantly to teachers' job effectiveness in in terms of punctuality, classroom management, instructional delivery, lesson evaluation, dressing and record keeping in secondary schools.

5.3. Recommendations

Based on the findings of this study, it was recommended that:

- i. Secondary school principals should manage schools against physical hazards by ensuring that all the necessary safety devices are in place. Modern devices like white boards and markers should be provided to all schools as opposed chalkboards and chalk.
- ii. Workplace violence and other conflicts within the school should be discouraged through avoidance or prompt settlement in order to ensure that teachers are put in a good psychological state before discharging their duties.
- iii. The school environment and other plants should be properly arranged or sited in locations that does not give room for regular accidents, or that exposes staff and students to danger and risk.
- iv. Schools should be situated in locations that are not close to noisy areas like markets, churches or mosques, companies, highways, factories and so on. Schools should rather be sited in serene environments to promote effective teaching and learning.

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