

# IMPACT OF PRIMARY SCHOOL TEACHERS' DEMOGRAPHICS ON THEIR PSYCHOSOCIAL WORK HAZARDS: A CROSS-SECTIONAL SURVEY OF NIGERIAN TEACHERS

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## Abstract

The majority of workers, particularly teachers, encounter one type of psychosocial work hazard or another. Thus, psychosocial work hazards are prevalent in the Nigerian school environment. However, no research has been done to determine the impact of teachers' demographics on their psychosocial work hazards. Therefore, this study was required to investigate, using a cross-sectional survey design, the impact of primary school teachers' demographics (age, teaching experience and location) on their psychosocial work hazards. This research was anchored on the tenets of the Job-Demand-Control-Support theory. This theory assumes that job characteristics affect employees' mental health. The theory illustrates how workplace demands, including a heavy workload, job insecurity, and pressure from the job, can result in psychosocial work hazards for employees. The idea is that people may deal with these challenges by employing their job abilities, which provide them autonomy and control over their work. The strategy functions by showing how stressed out people become when they are under a lot of strain at work. On the other hand, employees can lessen stress or any other psychological work hazards by having greater working autonomy and developing close bonds with their supervisor and coworkers. A sample of 254 primary school teachers drawn from different primary schools located in Southeast Nigerian states (Enugu, Imo and Anambra States) comprised the research participants. This sample was drawn using a multistage sampling procedure. In the first stage, three states (Enugu, Imo and Anambra States) were sampled from the five southeast states using a simple random sampling technique. In the second stage, a stratified random sampling technique was used to sample 86 primary schools from the sampled states. The stratification was based on the states. Finally, a simple random sampling technique was used to sample 254 primary school teachers from the sampled schools. Data were collected using a 28-item questionnaire on psychosocial work hazards. The questionnaire's items had an internal consistency reliability index of 0.74. Data collected were analysed using analysis of variance (ANOVA) to test the hypotheses at 5% probability levels. The findings of the research revealed that age and location of teachers had significant impacts ( $p > .05$ ) on their psychosocial work hazards. It was also found that teaching experience had no significant impact on teachers' psychosocial work hazards ( $p > .05$ ). These findings imply that the age and location of primary school teachers are major determinants of their psychosocial work hazards. Therefore, it was recommended that the demographics of teachers be taken into account as significant criteria during the recruitment of teachers.

Keywords: Demographics, Primary school teachers, Psychosocial Work Hazards.

## 1 INTRODUCTION

In addition to the physical characteristics of the job, psychosocial dangers also pertain to its psychological and social components. As a result of their jobs, workers are probably exposed to several psychological risks and hazards. Burnout, bullying, aggression, antagonism, and stress are just a few of the problems that can harm employees' health and wellbeing. Other risk factors increase the possibility of suffering health problems as a result of exposure to a job hazard, such as the abuse of alcohol or other drugs or poor change management. Rising psychosocial work hazards include long working hours, heavy workloads, irregular work shifts, workplace bullying and violence, precarious employment, and financial uncertainty [1]. Workplace conditions are acknowledged as a substantial source of psychosocial stress, and their effects on workers' health have been amply documented in recent decades [2]. Due to exposure to adverse psychosocial work conditions and the resulting work-related stress, burnout is becoming more common among employees [3].

Even while teachers are known to have several health and safety issues, little study has specifically addressed these problems [4]. The teaching profession is one of the occupations that suffer from psychosocial work risks. Workers' physical and mental health, as well as their quality of life and their ability to perform, are all adversely affected by psychosocial risks at work [5]. Concern over educators'

exposure to psychosocial occupational hazards appears to exist in Malaysia [6]. The bulk of the risk factors was similar to those discovered in past studies, but several, such as school characteristics (school level, government or private school, and location [rural/urban]), had not been studied [6]. 72.9 percent of the instructors in Putrajaya acknowledged having psychological workplace hazards [7]. Psychosocial job hazards are prevalent (24,8 %) among professors in Malaysia [8].

Job overload was the most prevalent psychosocial work hazard component, occurring at 67.72 percent, followed by poor communication and staff attitude at 50.37 percent and a lack of resources and equipment at 50.37 percent among Nigerian workers [9]. At the University of Port Harcourt in Nigeria, it was discovered that 62.2% of employees were exposed to psychosocial hazards, with verbal abuse at work being the most prevalent (43.9%) [10]. The majority of psychological work dangers, particularly those related to employment expectations, control, roles, and relationships, have grown over time, raising alarm [11]. This study aimed to experimentally establish the impact of teachers' demographics on their psychological job hazards based on the aforementioned. The Job-Demand-Control-Support model by Karasek and Theorell served as the foundation for this investigation (1990)

A well-known theory/model that explains how job characteristics affect employees' mental health is the job-demand-control-support model. The model illustrates how workplace demands, including a heavy workload, job insecurity, and pressure from the job, can result in psychosocial work hazards for employees. The idea is that people may deal with these challenges by employing their job abilities, which provide them autonomy and control over their work. The strategy functions by showing how stressed out people become when they are under a lot of strain at work. On the other hand, employees can lessen stress or any other psychological work hazards by having greater working autonomy and developing close bonds with their supervisor and coworkers. Recent research has shown that the psychosocial workplace risks faced by employees are correlated with their demographic traits.

The majority of studies revealed that factors such as gender, level of education, salary, job title, and length of service all had a substantial impact on psychosocial work hazards [8]. Age, gender, high job demand, and insufficient job control all had a substantial impact on psychosocial work hazards [5]. The psychosocial risks kindergarten teachers confront at work are significantly influenced by their age and training [12]. Gender was found to be significantly associated with psychosocial work hazards among teachers in Putrajaya after other factors like age, marital status, and other employment activities were taken into account [7]. A higher risk of psychological job risks was associated with increasing age, male gender, father's unemployment, low school ranking, not living with both biological parents, perceived family discord, low self-esteem, and depression [13]. In a separate study, it was discovered that women were more likely to experience psychosocial job hazards and that authoritarian and laissez-faire leadership styles were positively associated with these hazards [14]. Teachers' sadness and anxiety were partially impacted by job stressors thanks to job control and social support [15]. Although school level was not associated with reports of psychosocial work disorder, female principals reported more symptoms of suspected psychosocial work disorder than male principals [16].

Male principals' term of employment was related to fatigue symptoms of psychosocial work disorder [16]. Workers' ages and the characteristics of workplace psychosocial factors were shown to be significantly correlated [17]. Italian workers' age, education level, and gender all play a part in work-related psychological risks [18]. The workplace and a worker's marital status can affect their level of work-related stress [19]. According to [20], there were strong relationships between the psychological job hazards and the age and gender of primary school teachers in Malaysia. While low levels of work-family conflict and supervisor support reduced psychosocial job hazards in women, they increased them in men when high physical demands were combined with relatively high work-family conflict [21]. However, the relationships between exposure to psychosocial work risk factors and the frequency of work-related illnesses were similar for both formal and informal teachers [22]. Gender and exposure to psychosocial aspects at work and in job-related health were not significantly correlated, according to numerous work organization models [23].

The aforementioned research demonstrates that there have been sufficient studies conducted on the factors influencing workers' psychological workplace dangers all over the world, yet their conclusions sometimes don't seem to coincide. The majority of investigations, it was discovered, were conducted outside of Africa, necessitating the need for this study to fill in the gaps left by those earlier studies. In order to give empirical information on the nature and scope of the links between the demographic features of primary school teachers and their psychosocial work hazards in the Nigerian environment, the researchers based their research on this background. Therefore, the researchers made the following hypothesis: the psychosocial job hazards of primary school teachers will significantly ( $p < .05$ ) be related to their demographic features.

## 2 METHODOLOGY

This study adhered to the paradigm of scientific research because the inferences were drawn based on the outcomes of the hypothesis testing. In line with this scientific study paradigm, a quantitative research strategy was employed to direct the investigation. The study's objective was to ascertain the kind and degree of correlations between the demographic characteristics of primary school teachers and their psychosocial workplace hazards, and it did so by employing a correlational survey research design. In related studies, recent scholars [24, [25] have adopted this paradigm, method, and research design. Enugu State in Nigeria was the site of this study. The states of Ebonyi, Kogi, Anambra, and Abia border the southeast-facing Enugu state. With a land area of 7,161 km<sup>2</sup>, Enugu State is home to 722,664 people. The target population for this study consisted of all primary school teachers in Enugu State, Nigeria, who worked in the study area's public primary schools. 254 elementary school teachers were selected at random from the population using the convenience sampling method. A convenience sample is one drawn from a group of people who are easy to reach or contact as part of a non-probability sampling process. The covid-19 pandemic made it impossible for the researchers to reach the entire target population for the study, so they used this technique. The following criteria were used to choose the study subjects: He or she must meet the following requirements: i) be a certified teacher; (ii) work in an elementary or primary school; (iii) possess a certificate in education; and (v) be actively involved in the practice of teaching. Teachers who failed to meet these criteria were excluded from the research.

To learn more about the demographic characteristics of the primary school teachers who took part in the study, the researchers created a demographic profile questionnaire. The demographic details of the individuals taken into account in this study include age, gender, employment status, education level, marital status, number of years of teaching experience, and location. For the study, the researchers used the Copenhagen Psychosocial Questionnaire (COPSOQ), which was created by Kristensen et al. (2005). A 30-item self-report questionnaire called the COPSOQ measures psychosocial factors like stress, one's health and well-being, and personality features (coping style, sense of coherence, etc.). The COPSOQ was organized based on frequency and response categories (from "to a great extent" to "to a great extent") (ranging from "always" to "never"). Dutch, Chinese, Danish, English, Flemish, German, Croatian, Malaysian, Norwegian, Persian, Portuguese, Spanish, and Swedish are just a few of the languages in which the COPSOQ is available. Validity and reliability of the scale ranged between 0.61 to 0.81. Professionals in educational psychology, measurement, and evaluation from the researchers' universities' colleges of education constructively examined the measures to determine their face validity. The items of the measures were given to the experts to evaluate critically in terms of their suitability in light of the study's goals. They were invited to make recommendations that could help the researchers accomplish their objectives. The draft instrument was modified as a result of the expert advice, leading to the creation of the final version of the instruments. After then, 20 primary school instructors in Ebonyi State were subjected to the COPSOQ in order to test its validity. The Cronbach alpha method was used to examine the data for the Nigerian sample, and the results showed that the instrument has a high level of reliability with an overall reliability index of 0.74.

The researchers asked the University of Nigeria's Faculty of Education for ethical approval and permission to conduct the study in primary schools in accordance with the academic community's ethical norms. The American Psychological Association's standards for conducting human-related research are adhered to in this. Informed permission forms were also provided to the participants to complete and sign before the actual data collection. The researchers obtained letters from the gatekeepers of the several elementary schools used in the study, as well as ethical approval for the research before they started collecting data. Four weeks were needed to finish the data gathering. 20 minutes were allowed for each participant to finish the tasks that had been assigned to them. The participants answered the questionnaires offline after being given the tests by the researchers in their separate classes. The researchers were able to immediately take possession of the completed copies after they had finished filling them out. The data were analyzed using a statistical technique of frequency and percentage, mean and analysis of variance. The analysis was conducted using SPSS version 26.

### 3 RESULTS

Table 1: Mean analysis of the psychosocial work hazards of primary school teachers of different age ranges

Age range	N	Mean	Std. Deviation	95% Confidence Interval for Mean	
				Lower Bound	Upper Bound
Below 25	24	69.41	28.35	57.44	81.39
26-35	88	112.87	35.58	105.33	120.41
36-54	84	116.61	33.38	109.37	123.86
46 and Above	58	116.96	31.28	108.73	125.19
Total	254	110.94	35.75	106.52	115.35

Table 1 showed that primary school teachers below 25 years of age had mean psychosocial work hazards of ( $M = 69.41$ ,  $SD = 28.36$ ), those within the age range of 26-35 years had mean psychosocial work hazards of ( $M = 112.87$ ,  $SD = 35.58$ ), those within the age range of 36-54 years had mean psychosocial work hazards of ( $M = 116.61$ ,  $SD = 33.38$ ), while those within the age range of 46 years and above had mean psychosocial work hazards of ( $M = 116.96$ ,  $SD = 31.28$ ). This means that the teachers within the age range of 46 years and above had higher mean psychosocial work hazards than others.

Table 2: Analysis of variance of the impact of age on psychosocial work hazards of primary school teachers

	Sum of Squares	df	Mean Square	F	Sig.
<b>Between Groups</b>	46524.915	3	15508.305	13.997	.000
<b>Within Groups</b>	276989.199	250	1107.957		
<b>Total</b>	323514.114	253			

Table 2 revealed that age of teachers had a significant impact on the psychosocial work hazards of primary school teachers,  $F(3, 250) = 13.997$ ,  $p = .000$ . Thus, the null hypothesis was rejected. This implies that age of teachers is a significant determinant of their psychosocial work hazards. The pairwise test in Table 3 revealed that the mean difference between the teachers who are within the age of 46 years and above and those below 25 years contributed most to the significant impact of age on their psychosocial work hazards.

Table 3: Pairwise comparison test of the significant impact of age on psychosocial work hazards of teachers

(I) Age	(J) Age	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Below 25	26-35	-43.45833*	7.66520	.000	-63.7867	-23.1299
	36-54	-47.20238*	7.70421	.000	-67.6342	-26.7705
	46 and Above	-47.54885*	8.07883	.000	-68.9742	-26.1235
26-35	Below 25	43.45833*	7.66520	.000	23.1299	63.7867
	36-54	-3.74405	5.07744	.976	-17.2096	9.7215
	46 and Above	-4.09052	5.62966	.977	-19.0206	10.8396
36-54	Below 25	47.20238*	7.70421	.000	26.7705	67.6342
	26-35	3.74405	5.07744	.976	-9.7215	17.2096
	46 and Above	-.34647	5.68266	1.000	-15.4171	14.7242
46 and Above	Below 25	47.54885*	8.07883	.000	26.1235	68.9742
	26-35	4.09052	5.62966	.977	-10.8396	19.0206
	36-54	.34647	5.68266	1.000	-14.7242	15.4171

\*. The mean difference is significant at the 0.05 level.

Table 4: Mean and t-test analysis of the psychosocial work hazards of primary school teachers of different school locations

Location	N	Mean	Std. Deviation	95% Confidence Interval for Mean		df	t	p
				Lower Bound	Upper Bound			
Urban	121	100.45	36.48	93.88	107.02	252	-4.635	.000
Rural	133	120.48	32.37	114.92	126.03			
Total	254	110.94	35.75	106.52	115.35			

Table 4 showed that teachers in urban schools had mean psychosocial work hazards of ( $M = 100.45$ ,  $SD = 36.48$ ) while those in the rural schools had mean psychosocial work hazards of ( $M = 120.48$ ,  $SD = 32.37$ ). This indicates that the rural school teachers had higher mean psychosocial work hazards than the urban school teachers. Thus, further analysis revealed that location had a significant impact on the psychosocial work hazards,  $t(252) = -4.635$ ,  $p = .000$ . Thus, location is a significant determinant of teachers' psychosocial work hazards.

Table 5: Mean analysis of the psychosocial work hazards of primary school teachers of different years of teaching experience

Years of experience	N	Mean	Std. Deviation	95% Confidence Interval for Mean	
				Lower Bound	Upper Bound
Below 10 Years	106	107.15	35.99	100.21	114.08
10 to 20 Years	106	115.74	37.66	108.49	122.99
21-30 Years	36	107.94	30.69	97.55	118.33
31 to 40 Years	6	111.00	15.54	94.68	127.33
Total	254	110.94	35.75	106.52	115.35

Table 5 showed that primary school teachers who had teaching experience below 10 years had mean psychosocial work hazards of ( $M = 107.15$ ,  $SD = 35.99$ ), those who had teaching experience within 10 to 20 years had mean psychosocial work hazards of ( $M = 115.74$ ,  $SD = 37.66$ ), those who had teaching experience within 21-30 years had mean psychosocial work hazards of ( $M = 107.94$ ,  $SD = 30.69$ ), while those who had teaching experience within 31 to 40 years had mean psychosocial work hazards of ( $M = 111.00$ ,  $SD = 15.54$ ). This means that the teachers who had teaching experience within 10 to 20 years had higher mean psychosocial work hazards than others.

Table 6: Analysis of variance of the impact of teaching experience on psychosocial work hazards of primary school teachers

	Sum of Squares	df	Mean Square	F	Sig.
<b>Between Groups</b>	4292.518	3	1430.839	1.121	.341
<b>Within Groups</b>	319221.596	250	1276.886		
<b>Total</b>	323514.114	253			

Table 6 revealed that teaching experience had no significant impact on the psychosocial work hazards of primary school teachers,  $F(3, 250) = 1.121$ ,  $p = .341$ . Thus, the null hypothesis was not rejected. This means that the psychosocial work hazards of primary school teachers are not dependent on their years of teaching experience.

## 4 DISCUSSION

This study aimed to investigate the associations between psychosocial job hazards and the demographic traits of primary school teachers. It was discovered that the instructors' age and location significantly affected the psychological job hazards they faced. These results show that elementary school teachers will be more exposed to psychosocial workplace dangers the older they are. These

results are in line with the researchers' experiences as university teachers. It is usual in the university system to see older, highly qualified instructors working overtime and taking on other academic obligations that pose a greater risk to their psychological health than do the younger lecturers.

The characteristics of workplace psychosocial elements were found to have a substantial association with workers' ages, which supports these findings [17]. The psychosocial risks kindergarten teachers confront at work were significantly influenced by their age [12]. Italian workers' ages significantly influence the psychological risks associated with their jobs [18]. [20] found a substantial link between Malaysian primary school teachers' ages and psychological job hazards. Age, strong demand for the job and poor job control on the part of the workers all had a substantial impact on psychosocial work dangers [5]. The risk of psychosocial job risks was found to be significantly correlated with worker age [13].

However, we also discovered that there was no correlation between psychosocial job hazards and gender, marital status, years of teaching experience, or employment status. An investigation that demonstrated that gender was not substantially correlated with exposure to psychosocial workplace components [23] was used to support this conclusion. Contrarily, several recent research refute the idea that there is no connection between psychosocial job hazards and factors including gender, marital status, number of years of teaching experience, and employment position. For instance, it was discovered that women had lower psychosocial job hazards than males did when the work-family conflict was low [21]. Although school level was not associated with reports of psychosocial work disorder, female principals reported more symptoms of suspected psychosocial work disorder than male principals [16]. Male principals' term of employment was related to fatigue symptoms of psychosocial work disorder [16]. The workplace and a worker's marital status can affect their level of work-related stress [19]. Teachers' educational attainment was found to be significantly correlated with psychosocial workplace risks [8]. Italian workers' educational attainment significantly influences the psychological risks associated with their jobs [18].

According to the aforementioned data, there are many discrepancies in the nature of the correlations between the demographic traits of teachers and their psychosocial work hazards. More empirical research on the topic is necessary in light of this circumstance. In order to compare the results of such research with the current findings, the researchers advise that future researchers reproduce this study in the same or different circumstances. This will make it easier to comprehend the nature of the connections between the psychosocial job hazards faced by teachers and their demographic characteristics.

## 5 CONCLUSION AND RECOMMENDATIONS

According to the literature, teachers' demographic characteristics have an impact on workplace psychosocial hazards. Based on the results of this study, the researchers concluded that the location and age of primary school teachers are significant determinants of their psychological job hazards. In other words, a teacher's location and age affect how they handle psychosocial risks at work. The researchers advised the Local Government Education Authority staff to consider the demographics of candidates when hiring primary school teachers in order to avoid selecting candidates who are more vulnerable to psychosocial workplace hazards.

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