

Prevalence, Socio-demographic Factors and Psychosocial Work Hazards of Primary School Teachers: A School-based Cross-sectional Study

Chinedu Ifedi Okeke¹, Moses Onyemaechi Ede^{*)1}, Aprezo Pardodi Maba²

¹University of the Free State, South Africa, ²Institut Agama Islam Ma'arif NU (IAIMNU) Metro Lampung, Indonesia

^{*)}Corresponding author, ✉e-mail: edeh.mo@ufs.ac.za

Abstract

This study investigated the prevalence, socio-demographic factors, and psychosocial work hazards of primary school teachers. This is a cross-sectional study that recruited 254 primary school teachers. The responses from the participants were collected using Copenhagen psychosocial questionnaire and teachers' socio-demographic questionnaire. Bar chart, mean, standard deviation, and bivariate analysis were used to analyze the data collected. The result showed a high level of work-related psychosocial hazard among primary school teachers. The results showed that teachers' age has a positive relationship with psychosocial work hazards. Also, the result showed that working status and years of experience have a significant relationship with psychosocial work hazards. Therefore, occupational health experts should consistently conduct psychosocial risks assessments on the teachers.

Keywords: Socio-demographic factors, Psychosocial work hazards, Primary school teachers

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Introduction

The school setting is a place where teaching and learning take place. In schools, teachers are employed to deliver the business of the school. Under the auspices of the teachers, students are expected to have changed in behaviors. In course of delivering their services to the satisfaction of the students and wellbeing of the institution, they face some unhealthy situation that is possibly hazardous to the psychological and social wellbeing of the teachers and organization. In the context of this study, the hazardous situations that are both psychological and social in nature are conceptualized as psychosocial hazards.

Psychosocial hazards could be described as those conditions in a particular setting that inflict emotional, social, physical, and economic harm on individuals therein (Okefor & Alamina, 2018). Therefore, it is a psychosocial work hazard when it is associated with work. In as much as the hazardous conditions arise due to workplace factors, it occupational or workplace hazards (Cashman, 2010). The hazards in workplaces are those that factors like workloads, work-imbalance, relationship matters, stress, bullying, and violence (Cashman, 2010). Psychosocial work-related hazards could easily manifest as work

stress. Work stress could be seen as a key identifier or indicator of psychosocial work hazards, most prevalent in the workplace (Nkporbu et al., 2016).

Several psychological and social harms have been associated with psychosocial work hazards health (Nilvarangkul et al., 2006). A report indicated that it has huge harm on the mental and physiological health of employees (Organización Mundial de la Salud & Organización Internacional del Trabajo, 2022). These have increased low productivity, a high rate of absenteeism, and sickness (László et al., 2010; Rydstedt et al., 2006). The consistent harmful effects on employees' mental health and occupational health have been confirmed by past studies (László et al., 2010; Rydstedt et al., 2006). Evidence from empirical literature showed that barely 80% of the global workforce working in developing countries experience risky and hazardous working conditions (Nkporbu et al., 2016). It was shown that a higher percentage of teachers reported a high level of stress as a result of hazardous experiences in their workplace in Nigeria (Nwimo & Onwunaka, 2015). Another Nigerian evidence showed there is a higher number of teachers that are experiencing workplace hazards (Uro et al., 2021).

Certain reasons lead to psychosocial work hazards and a few among them include changes in the workforce, job content, workload, workplace, relationships in the work (Ortega et al., 2009). Consequently, some primary school teachers have deliberately ignored to perform the key duties designated to them. What they are currently doing is abstaining from their jobs, late coming, laxity, and arrogance (Arop et al., 2018).

Worker characteristics have been noted as possible factors that influence organizational wellbeing. Considering the age range of employees in contemporary organizations, people aged 40-50 years greatly occupy the nub of the workforce (Ghaddar et al., 2011). The age of a worker could contribute to the ability and job performance of the individual. Ageing could be linked to ill-health and increased absenteeism among employees and could also bring about an increase in low productivity (Ghaddar et al., 2011; Van Den Berg et al., 2009).

Another worker characteristic is the years of experience which could as well be associated with workplace hazards. The psychological experiences about organizational content, workloads, and role distributions could expose workers to psychosocial risks in the workplace. Given the far-reaching setback it could cause in many organizations, few studies conducted on how years of experiences correlate with psychosocial work-related hazards are limited. In view of the above worries, this study investigated the prevalence of psychosocial work hazards and the relationship between the sociodemographic factors and psychosocial work hazards of primary school teachers in Enugu State Nigeria.

Methods

This is a cross-sectional study that recruited 254 primary school teachers. Before the recruitment exercise, the University of Nigeria through her Research and Ethics of Faculty of Education had approved the study. The participants' oral consent was also ascertained. Thereafter, the researchers informed them about the goal of the study and assured them there were no psychological and physical harms and risks associated with the study. Two weeks later, all the primary schools were visited by the research team including the research assistants. As the administration of the data commenced in each school, all the teachers were invited by the headteacher in the school auditorium and the researchers and the assistants distributed to those that responded to the invitation. The instructions that guided the questionnaire were read and interpreted in the presence of the teachers. They were given an hour to complete the questionnaire. Each pack of the questionnaire contained a pencil and a pen. At the hall, they were well seated. A response rate of 100% was achieved after the administration exercise.

During the data collection, a Copenhagen Psychosocial Questionnaire (COPSOQ) created by Kristensen et al. (2003) was employed. COPSOQ was created to measure the degree of psychological and social-related indicators that are making demands and controlling individuals. It has 30 items on psychosocial factors (e.g. stress, individual health/well-being), personality factors (e.g. coping style, etc.), cognitive demands (e.g. demands to hide emotions, quantitative demands; sensorial demands, etc.). the COPSOQ has 7-response options for the participants to select from and it ranges from "to a very large extent" to "to a very small extent") or frequency (from "always" to "never/hardly ever"). The COPSOQ

has been confirmed to be reliable (0.81 α .) (Kristensen & Vilhelm, 2003). Ghaddar et al. (2011) also confirmed the internal consistency of the COPSOQ. In this study, the reliability of COPSOQ was established using Nigerian teacher populations.

Teachers' Sociodemographic Information Inventory (SII) is a checklist that ascertained the sociodemographic data of the participants. This was constructed by the researchers of the present study. The sociodemographic components cover the scope of participants' personal data the present study was limited to age, year of experience, and working status.

The data collected using COPSOQ were subjected to statistical data analysis using SPSS software. The psychosocial work-related hazards scores were compared according to the years of experience, age, and working status of the participants using bar chart, mean and standard deviation. The correlation between years of experience, age, and working status with psychosocial work-related hazards scores (continuous outcome variable) was explored using bivariate analysis.

Results and Discussion

Results

Figure 1 (1) illustrates that of all the teachers, primary school teachers within the age range of 26 to 35 and 36 to 54 years of experience psychosocial work-related hazards more compared to others, (2) illustrates teachers with 10 to 20 years of experience psychosocial work-related hazards compared to others, and (3) illustrates that teachers at middle cadre experience psychosocial work-related hazards more compared to others.

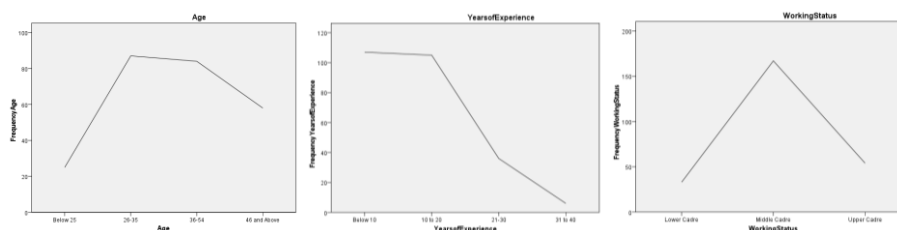


Figure 1. Demographical information of participants

Table 1. Descriptive analysis of teachers' age, years of experience, and working status

Variables	Mean±SD
<i>Age</i>	
Below 10	104.25±33.60
10 to 20	113.43±35.62
21-30	105.10±27.67
31 to 40	108.59±15.55
<i>Years of Experience</i>	
Below 25	73.49±26.01
26-35	109.65±33.06
36-54	113.42±32.34
46 and above	113.83±30.49
<i>Working Status</i>	
Lower Cadre	108.74±31.72
Middle Cadre	107.52±36.95
Upper Cadre	110.34±21.95

Table 1 shows the descriptive presentation of teachers' age, years of experience, and working status. The results show that the mean work-related psychosocial hazard score for teachers aged below 10 (104.25±33.60), within the age range 10 to 20 (113.43±35.62), the age range of 21 to 30 (105.10±27.67), and the age range of 31 to 40 (108.59±15.55). The result shows a high level of work-related psychosocial hazard among primary school teachers irrespective of age.

The results show that the mean work-related psychosocial hazard score for teachers that had working years of experience below 25 (73.49 ± 26.01), within the range 26 to 35 (109.65 ± 33.06), the range of 36 to 54 (113.42 ± 32.34), and the range of 46 and above (113.83 ± 30.49). The result shows a high level of work-related psychosocial hazard among primary school teachers across years of experience except those that had working years of experience that is below 25 years.

The results show the mean work-related psychosocial hazard score for teachers according to working status. The mean score of teachers at lower cadre (108.74 ± 31.72), middle cadre (107.52 ± 36.95), and upper cadre (110.34 ± 21.95) showed there is a high level of work-related psychosocial hazard among primary school teachers across their working status.

Table 2. variables inter-correlation

Variables	1	2	3	4
1 Age	1	.296**	.542**	.246**
2 WS		1	.436**	.020
3 YE			1	.048
4 PW				1

** . Correlation is significant at the 0.01 level (2-tailed).

Note: Age = teachers' age, WS = working status, YE = years of experience, PW = psychosocial work hazards

Table 2 shows the relationship between teachers' age, working status, years of experience, and psychosocial work hazards. The results show that teachers' age has a positive relationship with psychosocial work hazards, $r = .246^{**}$, $p < .001$. Also, the result shows that working status and years of experience have a significant relationship with psychosocial work hazards, $r = .020$, $p > .757$; $r = .048$, $p > .446$.

Discussion

The result showed a high level of work-related psychosocial hazard among primary school teachers. The results showed that teachers' age has a positive relationship with psychosocial work hazards. Also, the result showed that working status and years of experience have a significant relationship with psychosocial work hazards. As in the present findings, Kennedy (2018) demonstrated that there is a highest prevalent rate of workplace hazards, and it mostly occurs among individuals aged 26-45 years. Such age range is taken to be the most active workforce in the work environment as they perform over 70% of work roles and contents (Spreitzer, 2008). The current study supports Sackett et al. (2006) that found workers demographic factors such as age, highest educational degree obtained, occupational area, number of years of education, current job tenure (years), and career tenure (years). significantly predicted occupational health.

On the part of years of working experience, our study supports previous evidence that employment experience is closely related to psychosocial work-related hazards (Van Den Berg et al., 2009). These similar results could be due to hazardous exposure experienced in the psychosocial work environment. Besides, the Nigerian work environment seems to escalate the situation as workers have been hospitalized for one or two sicknesses. Due to exposure to hazardous psychosocial working environments, workers become victims of huge psychological and social problems such as burnout (Misiak et al., 2020) leading to work-life imbalance. Equally, Ghaddar et al. (2011) reported that age and work experience were related to work-related psychosocial stress. Reiterating how psychosocial risks associated with the working environment could cause ill-health to staff, scholars posited that experiences of work-related stress-inducing psychosocial hazards have catapulted the higher spread of chronic diseases in the workplace (Lovelock, 2019). This has consistently threatened the physical health and mental health of some primary school teachers in developing countries such as Nigeria.

Given that working experiences, status, years of service could lead to workplace-induced psychosocial risks or hazards as found in the current study, some practice implications could be attributed to that. This result, therefore, charged professionals in occupational health to demonstrate how teachers or other employees could cope with occupational-related stress. As noted in past literature that exposure to

job risks causes mental illnesses such as anxiety, emotional distress, and depressive symptoms (Cox et al., 2000). Therefore, precautions should be taken to reduce the growing cases of mental illnesses in the working environment.

Since the working environment may be prone to psychosocial hazards, school leaders should ensure that work roles and contents distributions are done equitably. This is to avoid a higher percentage of workloads resting on few workers. Once this is done it will reduce the work-related psychosocial risk that leads to the psychological experiences of mental health inequalities (LaMontagne et al., 2008). Those that have been exposed to work-related psychosocial hazards should be helped by occupational health therapists. This emphasized that the mental and psychological problems accrued from the workplace could be psychologically managed (Lovelock, 2019).

One of the limitations of this study is the fact only four socio-demographic factors were investigated, meanwhile there are other potential socio-demographic factors such as location, gender, etc. Another limitation is the population of this study. Using teachers only could hinder the generalizability of the present finding to larger populations of educators.

Conclusion

This study concluded that teachers' age has a positive relationship with psychosocial work hazards. Also, the result shows that working status and years of experience have a significant relationship with psychosocial work hazards. Therefore, occupational health experts should consistently conduct psychosocial risks assessments on the teachers. Any school that does not have such experts, the government should deploy them for those schools.

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References

- Arop, F. O., Owan, V. J., & Ekpan, M. A. (2018). School hazards management and teachers' job effectiveness in secondary schools in Ikom Local Government Area, Cross River State, Nigeria. *International Journal of Education and Evaluation*, 4(9), 38–49. <https://doi.org/10.5281/zenodo.4320554>
- Cashman, C. (2010). European Agency for Safety and Health at Work: <http://europe.osha.eu.int/>. In *Occupational Medicine* (Vol. 60, Issue 2, pp. 157–158). <https://doi.org/10.1093/occmed/kqp172>
- Cox, T., Griffiths, A., & Rial-Gonzalez, E. (2000). Work-related stress. In S. Leka & J. Houdmont (Eds.), *Occupational Health Psychology* (pp. 31–56). Wiley-Blackwell.
- Ghaddar, A., Ronda, E., & Nolasco, A. (2011). Work ability, psychosocial hazards and work experience in prison environments. *Occupational Medicine*, 61(7), 503–508. <https://doi.org/10.1093/occmed/kqr124>
- Kristensen, T. S., & Vilhelm, B. (2003). Copenhagen psychosocial questionnaire (COPSOQ). *Mental Health*, 5(5).
- LaMontagne, A. D., Keegel, T., Vallance, D., Ostry, A., & Wolfe, R. (2008). Job strain - Attributable depression in a sample of working Australians: Assessing the contribution to health inequalities. *BMC Public Health*, 8, 181. <https://doi.org/10.1186/1471-2458-8-181>
- László, K. D., Ahnve, S., Hallqvist, J., Ahlbom, A., & Janszky, I. (2010). Job strain predicts recurrent events after a first acute myocardial infarction: The Stockholm Heart Epidemiology Program. *Journal of Internal Medicine*, 267(6), 599–611. <https://doi.org/10.1111/j.1365-2796.2009.02196.x>
- Lovelock, K. (2019). *Psychosocial hazards in work environments and effective approaches for managing them* (Issue April, p. 76). <https://worksafe.govt.nz/data-and-research/research/psychosocial-hazards-in-work>

- environments-and-effective-approaches-for-managing-them/
- Misiak, B., Sierzantowicz, R., Krajewska-Kułak, E., Lewko, K., Chilińska, J., & Lewko, J. (2020). Psychosocial work-related hazards and their relationship to the quality of life of nurses—a cross-sectional study. *International Journal of Environmental Research and Public Health*, *17*(3). <https://doi.org/10.3390/ijerph17030755>
- NA, K. (2018). Assessment of Psychosocial Hazards among Workers at the University of Port Harcourt. *Clinical Depression*, *04*(03). <https://doi.org/10.4172/2572-0791.1000135>
- Nilvarangkul, K., Wongprom, J., Tumngong, C., Supornpun, A., Surit, P., & Srithongchai, N. (2006). Strengthening the self-care of women working in the informal sector: Local fabric weaving in Khon Kaen, Thailand (phase I). *Industrial Health*, *44*(1), 101–107. <https://doi.org/10.2486/indhealth.44.101>
- Nkporbu, A. K., Asuquo, E. O., & Douglas, K. E. (2016). Assessment of Risk Factors for Psychosocial Hazards among Workers in a Tertiary Institution in Nigeria: The Need for a Safer Work Environment. *OALib*, *03*(10), 1–16. <https://doi.org/10.4236/oalib.1103104>
- Nwimo, I. O., & Onwunaka, C. (2015). Stress among Secondary School Teachers in Ebonyi State, Nigeria: Suggested Interventions in the Worksite Milieu. *Journal of Education and Practice*, *6*(26), 93–100. <http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ1077456&site=ehost-live&authtype=ip,uid>
- Okefor, C. U., & Alamina, F. E. (2018). a Qualitative Study on Psychosocial Hazards Among Health Care Workers in a Tertiary Health Facility in South-South Nigeria. *Annals of Ibadan Postgraduate Medicine*, *16*(1), 23–29. <http://www.ncbi.nlm.nih.gov/pubmed/30254555> <http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=PMC6143885>
- Organización Mundial de la Salud, & Organización Internacional del Trabajo. (2022). Mental health at work: Policy brief. *Occupational Health*, *57*(11), 16. <file:///C:/Users/javie/Downloads/9789240057944-eng.pdf>
- Ortega, A., Høgh, A., Pejtersen, J. H., & Olsen, O. (2009). Prevalence of workplace bullying and risk groups: A representative population study. *International Archives of Occupational and Environmental Health*, *82*(3), 417–426. <https://doi.org/10.1007/s00420-008-0339-8>
- Rydstedt, L., Ferrie, J., & Head, J. (2006). Is there support for curvilinear relationships between psychosocial work characteristics and mental well-being? Cross-sectional and long-term data from the Whitehall II study. *Work and Stress*, *20*(1), 6–20. <https://doi.org/10.1080/02678370600668119>
- Sackett, P. R., Berry, C. M., Wiemann, S. A., & Laczó, R. M. (2006). Citizenship and counterproductive behavior: Clarifying relations between the two domains. *Human Performance*, *19*(4), 441–464. https://doi.org/10.1207/s15327043hup1904_7
- Spreitzer, G. (2008). Taking stock: A review of more than twenty years of research on empowerment at work. *The SAGE Handbook of Organizational Behavior: Volume I - Micro Approaches*, 54–72. <https://doi.org/10.4135/9781849200448.n4>
- Uro, E., S.B, A., & Elenwo, E. I. (2021). Hazard perception by teachers of public secondary schools in Rivers state, Nigeria. *International Journal of Scientific Research and Innovative Technology*, *8*(3), 1–15.
- Van Den Berg, T. I. J., Elders, L. A. M., & Burdorf, A. (2009). The effects of work-related and individual factors on work ability: A systematic review. *Promotion of Work Ability Towards Productive Aging - Selected Papers of the 3rd International Symposium on Work Ability*, *66*, 15–18. <https://doi.org/10.1201/9780203882511-7>