

Working During the Pandemic: Headteachers' Experiences in Primary and Junior High Schools in Accra Metropolitan Education Directorate

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Abstract

This study investigated occupational stress levels among headteachers within the Accra Metropolitan Education Directorate (AMED) overseeing Ghana's public primary and junior high schools during the COVID-19 Pandemic. The sample included 79 individuals, with 67 respondents participating in the study. The research employed an explanatory sequential sampling methodology. The study findings indicated that neither gender nor age had a significant effect on occupational stress levels. Interviews with participants highlighted widespread challenges in adhering to safety protocols, such as congregating and improper use of face masks. Recommendations derived from the study include reducing job demands, enhancing management support, and increasing flexibility and control, which are potential strategies to effectively mitigate work-related stress in the future.

Keywords: *Age, basic level, gender, occupational stress, school managers*

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Introduction

Globalisation and technological advancements have significantly boosted economic growth, improved living standards, and ushered in many benefits (Abdel-Hadi, 2012). However, it is crucial to acknowledge that additional factors, such as heightened

competitiveness, increased workloads, challenging working conditions, and elevated job expectations, cannot be underestimated as significant contributors to workplace stress (Prasad & Vaidya, 2020). Occupational stress affects not only employees but also their families and society at large across all nations and professions, and the situation has been exacerbated by the unprecedented challenges brought about by the COVID-19 pandemic (Sayed et al., 2021). Adopting work-from-home (WFH) policies, implemented by numerous organisations, including large corporations, small businesses, microenterprises, and government agencies, has become common in response to the pandemic (Shareena & Shahid, 2020). Before the pandemic, WFH was primarily a premium service large organisations offer, promoting flexibility and discretion. However, it is worth noting that the participants in this current study did not have the opportunity to work from home, even during the pandemic.

The COVID-19 pandemic has disrupted the daily routines of everyone, particularly in the realms of business, education, and the economy, as evidenced by the research conducted by Gautam and Sharma (2020) and Ramarajan and Reid (2013). This disruption has led to demotivation among people, resulting in missed deadlines and heightened levels of distress and anxiety (Sayed et al., 2021). Although some studies have explored the psychological impacts of COVID-19 and lockdown in Ghana, the focus has been mainly on specific caregiver groups, such as healthcare workers (Afulani *et al.*, 2021; Akudjedu *et al.*, 2021; Ofori *et al.*, 2021).

These studies revealed that many healthcare workers were reluctant to seek psychological help, and although they observed depression, anxiety, burnout, and stress, the scale of these issues was relatively small. Only a limited number of investigations (Ehwi & Ehwi, 2022; Owusu-Fordjour *et al.*, 2020) have examined the effects of COVID-19 and lockdown on students and pre-tertiary education headteachers. These studies revealed five significant challenges private basic schools face due to school closures, including disruptions to teaching and learning, difficulties collecting unpaid teaching fees, the inability to meet staff salaries and statutory payments, underutilisation of existing assets, and the costs incurred in storing unused stock. Public schools also faced disruptions to teaching and learning.

Overcrowding in schools can significantly affect the occupational stress levels of headteachers, as it often results in an increased workload due to managing larger student populations (Osai *et al.* (2021); Waweru & Ndambuki, 2012). Resource constraints, discipline, behaviour management challenges, an amplified administrative burden, potential declines in teacher and staff morale, and the pressure to meet parental and community expectations exacerbate this heightened workload (Jones *et al.*, 2020). These stressors can adversely affect headteachers' well-being, impacting their mental

and physical health and ability to provide effective leadership within overcrowded school environments (Brown & Anderson, 2018).

Occupational stress is a change in one's physical or emotional state due to a perceived threat or difficulty at work (Colligan *et al.*, 2006). The most stressful occupations require individuals to make critical decisions under significant mental pressure (Ravalier, 2021). Working at the basic school level is inherently stressful due to long working hours, substantial workloads, challenging students, and conflicting demands. Workers in basic education, particularly headteachers, are especially vulnerable to high- stress levels, which can manifest in various ways, such as increased errors in paperwork, higher medical expenses, tardiness, decreased productivity, and increased sick leave (Nnuro, 2012). Despite the detrimental effects of occupational stress on health and job satisfaction, the Ghana Education Service has yet to take concrete actions to address these stress-related issues that undermine productivity. Pre-tertiary education headteachers play a crucial role in the overall development of students, teachers, and School Management Committees (SMCs) within educational institutions. Headteachers occupy a pivotal role in school management, significantly influencing relationships with teachers, students, and administrative staff. As such, their well-being is essential for the effective functioning of the educational system. This study investigates the occupational stress experienced by headteachers in the Accra Metropolitan Education Directorate (AMED), with a particular focus on densely populated areas, during the COVID-19 pandemic.

The literature on occupational stress among educational leaders, particularly headteachers in basic-level schools, has garnered significant attention recently (Jones *et al.*, 2020). Studies have underscored the myriad of stressors headteachers face, including increased workloads, resource constraints, disciplinary challenges, administrative burdens, and pressure to meet various stakeholder expectations (Brown & Anderson, 2018). While existing research provides valuable insights into the sources and impacts of occupational stress in educational leadership roles, there still needs to be a notable gap in the literature regarding the specific experiences of headteachers in densely populated urban areas during the COVID-19 pandemic.

Prior studies have focused on the broader aspects of occupational stress in educational settings, often overlooking the unique challenges encountered by headteachers operating within densely populated urban environments, such as those in the Accra Metropolitan Education Directorate (AMED) (Osai *et al.*, 2021). These settings present distinctive stressors, including overcrowded classrooms, limited resources, heightened community expectations, and infrastructure constraints, which may exacerbate the demanding nature of the headteacher role. Furthermore, while some research has explored the psychological impacts of the COVID-19 pandemic on various educational

stakeholders, such as students and healthcare workers, there is a dearth of literature examining the experiences of headteachers in navigating the unprecedented challenges brought by COVID-19 in densely populated urban areas. Consequently, there is a pressing need for empirical research on the occupational stressors headteachers face in such situations to better understand their unique circumstances and inform targeted interventions and support mechanisms (Ehwi & Ehwi, 2022).

Purpose of the Study

This study aimed to explore the levels of occupational stress experienced by primary and junior high school headteachers within the Accra Metropolitan Education Directorate during the COVID-19 Pandemic Era. The specific objectives are as follows:

- i. What work-related stress do basic school headteachers experience?
- ii. What are the gender differences in occupational stress among basic-level headteachers in the Accra Metropolitan Education Directorate?
- iii. What are the differences in age on occupational stress among basic-level headteachers in the Accra Metropolitan Education Directorate?
- iv. What other experiences did basic school headteachers have about occupational stress during COVID-19?

Literature Review

Theoretical framework

The interactional and transactional theories of occupational stress provide essential light on the interactions between people and their workplaces and the elements that lead to stress. According to Lazarus and Folkman (1984), the interactional theory highlights how subjectively people evaluate stressors. Stress originates from external factors and people's interpretations and perceptions of them. For example, a headteacher with a high workload that interferes with personal or professional goals may find it stressful (Lazarus & Folkman, 1984). According to this idea, emotional and physiological reactions are determined by how stresses are perceived rather than by the stressors themselves. On the other hand, according to the transactional theory, stress is the outcome of continuous interactions between people and their surroundings (Lazarus & Folkman, 1984). Dynamic interactions, in which people constantly assess and adjust to external pressures, give rise to stress. As per Lazarus and Folkman (1984), a headteacher could reevaluate their capacity to oversee administrative duties, student requirements, and staff expectations and modify their coping mechanisms.

Both transactional and interactional stress theories underscore the subjective nature of stress and its dynamic interplay with environmental factors. While the former emphasizes the individual's continuous appraisal of environmental demands, the latter focuses on personal interpretation of stressors. Together, these theories provide a comprehensive framework for understanding occupational stress. Applied to the context of elementary school headteachers during the COVID-19 pandemic, these perspectives illuminate the emergence of stressors such as school closures and the implementation of new regulations. The resultant increased workload and responsibilities significantly contributed to headteachers' occupational stress.

Both ideas help research occupational stress among urban head teachers during the epidemic. The interactional theory highlights the subjective evaluation of stresses, such as increased workloads and COVID-19 protocols (Lazarus & Folkman, 1984). The way headteachers view these stresses has a significant impact on how they react to stress. According to Lazarus and Folkman (1984), the transactional theory emphasises the dynamic interactions between headteachers and their surroundings. These interactions involve ongoing assessment and adaptation of coping strategies. For instance, in the face of pandemic uncertainty, head teachers may modify their approaches to handle staff morale and distant learning.

Occupational stress experienced by headteachers

Individuals experience stress at varying levels due to how headteachers interpret stress sources (Sagara, 2012; Commey-Mintah et al., 2023). They admit that stress affects their performance, the success of their schools, and the teaching personnel's efficacy. The primary sources of stress are dealing with stakeholders and administrative duties. Headteachers in primary schools are stressed and must focus intently to finish tasks on time (Mushoriwa & Dlamini, 2015). This focus becomes vital for reducing work-related stress since it helps save and recover resources (also called work recovery) (Johnson & Smith, 2020; Park & Haun, 2016). Employers are responsible for ensuring workers' well-being and promoting their independence, particularly considering the increasingly hazy borders between work and personal life (Wendsche & Lohmann, 2017; Allen et al., 2014). Unexpected expectations that are out of sync with people's abilities or beliefs frequently lead to stress, and feeling like one has no control or support also worsens stress (Bhui et al., 2016). Insufficient assistance, fragmented job duties, long working hours, and a lack of support from local authorities were among the stressors that a study on headteachers in Wales revealed, along with growing workloads and limited financial resources (Scott et al., 2021; Elomaa et al., 2021; Oplatka, 2017). Headteachers also frequently battle with hefty workloads and little time for teaching activities (Ruiz & Hernández-Amorós, 2020).

Gender differences in occupational stress among headteachers

In Greece, Galanakis and Alamani (2020) conducted a study to investigate the impact of gender on occupational stress. They found that gender does not affect the stress level experienced at work. However, Cocchiara (2017) discovered that women confront more severe barriers in work environments due to increased role conflicts and fewer prospects for promotion. Remarkably, 32% of women believe there are few chances for career progression, and their managers do not value their work. According to research by Suleman et al. (2018), there is no appreciable variation in the stress levels of male and female secondary school principals. Stressors include job overload, role conflicts, difficult circumstances, political pressures, disengagement, and the debt experienced by people of both genders. However, due to differences in gender and kind of school, Graves et al. (2021) found that female headteachers experience higher stress levels than their male counterparts.

There are also notable age disparities in headteachers' occupational stress levels. Compared to managers aged 36–45 and 46–55, Hsu (2018) found that managers aged 25–35 experienced higher levels of occupational stress. The study found a negative relationship between age and stress at work, indicating that people's perception of stress declines as they age. Roman et al. (2019) corroborated this, discovering that older employees had lower burnout symptoms and professional stress levels than younger employees. However, George et al. (2021) found no appreciable variations in workplace stress levels between younger employees (those 40 years of age and under) and older employees (those 41 years of age and above). These results imply that age-related differences in workplace stress are erratic and contingent upon variables like job duties, the work environment, and personal stress perceptions.

Methodology

The study utilised a mixed methods design, specifically an explanatory sequential design (Creswell, 2018), as the primary approach for data collection. This approach was chosen based on the recognition that while quantitative data and outcomes offer a fundamental overview of the research problem, incorporating qualitative data is necessary to elucidate further, expand upon, or enhance the overall understanding. In this research, we employed a quantitative cross-sectional descriptive approach within the explanatory sequential design to assess the day-to-day activities of pre-tertiary school principals within the Accra Metropolitan Education Directorate. Subsequently, a qualitative approach, specifically interviews, was conducted to identify additional sources of occupational stress experienced by these school principals.

The study encompassed all pre-tertiary school principals within the Accra Metropolitan Education Directorate in the Greater Accra region of Ghana as the target group. However, the accessible population used for the study consisted of basic school principals within the Accra Metropolitan Education Directorate. The high student population and the potential impact on adherence to COVID-19 protocols influenced the choice of a location with clustered schools for the study. Clusters of schools bring higher population density and increased traffic, making it challenging to enforce social distancing and control movement in and out of premises. Shared facilities among neighbouring schools can also spread the virus without strict hygiene practices.

The heightened community transmission rates prevalent in densely populated areas exacerbated the risk of COVID-19 infection among students, staff, and their families. Managing schools within such environments necessitated intricate coordination among various stakeholders, thereby complicating the implementation and enforcement of pandemic protocols. To determine the appropriate sample size, the Krejcie and Morgan (1970) table was consulted. Given a target population of 79 headteachers from basic schools within the Accra Metropolitan Education Directorate, a sample size of 66 participants was deemed necessary. Ultimately, data were collected from 67 headteachers (17 male, 50 female), surpassing the minimum sample size requirement as outlined by Krejcie and Morgan.

The combination of purposive and convenient sampling with the explanatory sequential approach formed a robust sampling strategy deemed appropriate for the study. Purposive sampling allowed us to deliberately select participants who possessed specific characteristics or experiences relevant to the research objectives (cf. Pesambili, 2020; Pesambili, 2021; Pesambili & Mkumbo, 2024). In this case, purposive sampling enabled the selection of headteachers from basic schools under the Accra Metropolitan Education Directorate, ensuring representation of the target population. Convenient sampling, on the other hand, offered practicality and ease of access to participants, which was particularly useful when resources and time constraints were factors. By employing convenient sampling, we efficiently gathered data from available participants within the chosen location, which in this study was the clustered area with a high student population. Combining these sampling methods with the explanatory sequential approach enhanced the study's validity and comprehensiveness. The initial quantitative phase, supported by convenient sampling, provided a broad understanding of the research topic by efficiently capturing data from a larger sample size. Subsequently, the qualitative phase, utilising purposive sampling, facilitated a deeper exploration of the quantitative findings. Participants were selected

from each of the eight sub-metros in the AMED, chosen for their ability to provide rich insights pertinent to the research questions.

Data collection occurred between March 2021 and September 2021, involving visits to the headteachers of identified basic schools within the Accra Metropolitan Education Directorate. The researchers visited the schools, making 21 visits for quantitative data collection and eight for qualitative data collection. The study adhered to ethical standards, with approval from the University of Education, Winneba Research Ethics Committee (ECH 055/20-21). Participants provided informed consent, with the study emphasising the voluntary nature of participation and the right to withdraw at any point. The study employed a demographic questionnaire and the Occupational Stress Inventory-Revised (OSI-R) instrument by Osipow (1998) to assess occupational stress. The questionnaire had two sections: the first collected personal information (age, gender, education level, marital status, religious denomination, work experience), and the second, the Occupational Roles Questionnaire (ORQ), as part of the OSI-R, to measure job stress levels. The questionnaire demonstrated a high level of internal consistency with a reliability coefficient of 0.80. Data analysis involved computing total scale scores for the OSI-R instrument to facilitate analysis. We used frequency and percentage to examine personal information and background data. We employed mean and standard deviation for research question 1, while we used an independent samples t-test to investigate potential gender differences in work stress (research question 2). We used the Analysis of Variance (ANOVA) for research question 3, which examined age differences. For research question 4, we applied thematic analysis to provide a comprehensive response.

Results and Discussion

The following section provides a concise overview of the data collected and the statistical tests applied in this research. We presented the sample's demographic characteristics and then explained the research questions and the data analysis techniques employed to address them.

Demographics of respondents

We characterised the sample using background information provided within the questionnaire, which organised demographic details in a structured sequence. Table 1 summarises the outcomes related to several demographic variables. The participants' ages ranged from 31 to 60 years, with an average age of 48. Regarding gender, most respondents were female (74.7%), while the male participants constituted 17 (25.4%) of the sample. Further exploration revealed that a significant proportion of female headteachers were married to high-ranking government officials, employed within

within ministries in Central Accra or related to such individuals.

Table 1

Biographic Data of Participants

SN	Variable		Number	Percentage
1	Age of headteachers	31-35	6	9.0
		41-45	15	22.4
		46-50	21	31.3
		51-55	17	25.4
		56-60	8	11.9
2	Gender of headteachers	Male	17	25.4
		Female	50	74.6
3	Number of years of being headteacher	less than 5	49	61.2
		6 to 10	19	28.4
		11 to 15	6	9.0
		31 to 35	1	1.5
4	Level of Headship	Primary	17	25.4
		Junior High School	16	23.9
		Primary and Junior High School	34	50.7

Most headteachers (31.3%) fall within the age group of 46 to 50. Out of the 67 respondents, 90% are over 40. The breakdown in Table 1 reveals that 25.4% of the participants were male, while the majority, constituting 74.6% of the respondents, were female headteachers. Table 1 also indicates that a substantial portion of headteachers (61.2%) have less than five (5) years of experience as heads of basic schools. Additionally, 28.4%, 9.0%, and 1.5% of respondents reported having 6 to 10, 11 to 15, and 31 to 35 years of headship experience, respectively. About half (50.7%) of the headteachers manage primary and junior high schools. On the other

hand, 25.4% and 23.9% of the respondents serve as heads of only primary and junior high schools, respectively. The scale employed to assess occupational stress among basic school headteachers during the COVID-19 pandemic consisted of 17 questions organised into five subscales. These questions were rated using a Likert scale, with responses ranging from “strongly disagree,” “disagree,” “uncertain,” “agree,” to “strongly agree,” corresponding to values of 1, 2, 3, 4, and 5, respectively. The presentation of results aligns with research questions outlined in the introduction. Four research questions were analysed, and the outcomes are detailed below.

Work-related stress experienced by basic-level headteachers

The findings, as outlined in Table 2, offer insights into the levels of occupational stress experienced by male and female headteachers. Additionally, Table 2 provides an overview of the disparities in work-related stress between female and male headteachers. These results illustrate notable distinctions between male and female headteachers regarding specific stressors. We observed significant differences when they were not provided clear directives or adequate resources for their new responsibilities ($p=.030$). Furthermore, we noted differentiation in cases where they needed more clarity about their higher authorities and colleagues' expectations regarding work and behaviour ($p=.004$).

Table 2 also sheds light on the various subscales of the Occupational Role Questionnaire (ORQ) that contribute to the occupational stress experienced by headteachers in schools. For instance, the headteachers reported feeling overburdened with work, with a mean score of 3.88 and a standard deviation of 0.95. This finding suggests that they experience stress due to role overload in their positions as school headteachers. This situation implies that the COVID-19 pandemic heightened their workload as school leaders, increasing stress. Additionally, the level of responsibility they had to shoulder (subscale denoted as [R]) also emerged as a significant source of stress. For instance, they expressed feeling overburdened with work, as evidenced by a mean score of 3.88 and a standard deviation of 0.95. This result suggests they encounter stress due to an overload of responsibilities as headteachers of their schools. This situation implies that the COVID-19 pandemic escalated their workloads as school leaders, leading to increased stress. Moreover, the extent of responsibility ([R]) shouldered by the headteachers emerged as a notable source of stress for them.

Table 2*The Extent of Occupational Stress Experienced by Male and Female Headteachers*

SN	Statements	Statements	Mean (Standard deviation)			Sig.
			Overall	Male	Female	
1	Role Overload	I have a huge amount of work to do	3.88(.95)	4.00(.87)	3.84(.98)	.551
2	Role Overload	I have few staff and resources despite the heavy workload.	3.31(1.14)	3.35(1.17)	3.30(1.15)	.871
3	Role Overload	Due to a heavy workload, I must do my assignments quickly.	2.84(1.16)	2.71(1.26)	2.88(1.14)	.598
4	Role Overload	My superiors do not value my position or effort as much as they should.	2.57(1.13)	2.71(1.36)	2.52(1.05)	.562
5	Role Overload	I must complete tasks that others should complete.	2.91(1.20)	3.00(1.32)	2.88(1.17)	.725
6	Role Overload	I cannot finish my task since I am overworked and short on time.	2.73(1.21)	2.94(1.48)	2.66(1.11)	.413
7	Role Ambiguity	My job and its effects are unclear to me.	2.69(1.16)	2.24(.90)	2.84(1.20)	.062
8	Role Ambiguity	My work-objectives and roles are well-defined and well-planned.	3.55(1.11)	3.65(1.06)	3.52(1.13)	.685
9	Role Ambiguity	My jurisdiction and authority could be more consistent and predictable, making it challenging to fulfil my duties.	2.45(1.09)	2.06(1.09)	2.58(1.07)	.089
10	Role Ambiguity	What kind of work and behaviour my superiors and coworkers anticipate from me needs to be clarified.	2.54(1.06)	1.88(.99)	2.76(1.00)	.004*
11	Role Boundary	I get contradicting instructions from my Officers.	2.78(1.18)	2.65(1.27)	2.82(1.16)	.605

12	Role Boundary	Authorities do not meddle with my authority or ways of operation.	3.16(1.18)	2.76(1.20)	3.30(1.15)	.105
13	Role Boundary	We must have explicit instructions or more resources for their extra obligations.	2.79(1.24)	2.24(1.15)	2.98(1.22)	.030*
14	Role Boundary	Workers embrace official guidelines and employment practices.	3.61(1.03)	3.76(1.03)	3.56(1.03)	.483
15	Role Boundary	It takes time to change dealing processes and rules suddenly.	3.66(1.05)	3.41(1.33)	3.74(.94)	.270
16	Responsibility	I manage several employees' performance and efficacy.	3.43(1.14)	3.53(1.28)	3.40(1.10)	.690
17	Responsibility	Several of my employees' future is in my hands.	3.54(1.13)	3.65(1.12)	3.50(1.14)	.647
18	Responsibility	I am primarily responsible for this institution's growth and success.	3.85(1.20)	3.94(1.39)	3.82(1.14)	.721
19	Physical Environment	I work under nervous conditions.	2.66(1.12)	2.82(1.19)	2.60(1.11)	.482
20	Physical Environment	My working environment is poor (e.g., noise, lighting, temperature, ventilation)	3.01(1.40)	2.71(1.49)	3.12(1.37)	.295
21	Physical Environment	Some of my assignments are quite risky and complicated.	2.82(1.04)	3.12(1.11)	2.72(1.01)	.177
22	Physical Environment	My occupation has frequently made my life much more difficult.	2.54(1.06)	2.47(1.00)	2.56(1.09)	.767

Significant at $p < .05$

As presented in Table 2, the headteachers indicated that they bear primary responsibility for the success and wellbeing of their organisation (mean=3.85, standard deviation=1.20), as well as the future of many employees (mean=3.54, standard deviation=1.13) within the school. These significant responsibilities imposed upon them seem overwhelming, resulting in their experience of stress.

These findings are consistent with previous research. Elomaa et al. (2021) identified key stressors among surveyed workers, including work intensity, long working hours, increased workload, conflicting interests, role conflicts, and staff management. They further noted that for heads of basic schools, the sudden introduction of new work processes and policies to replace existing ones is particularly challenging (mean=3.66, standard deviation=1.31). Despite these challenges, all headteachers agreed on the necessity of official instructions and formal work processes for all employees (mean=3.61, standard deviation=1.03) and regarded their work-role objectives as well-defined and well-planned (mean=3.55, standard deviation=1.11).

The results presented in Table 2 provide evidence of a significant distinction between male (mean=1.88, standard deviation=0.99) and female (mean=2.76, standard deviation=1.00) headteachers in terms of their uncertainty regarding the type of work and behaviour expected by their superiors and coworkers ($p=.004$). Specifically, female headteachers experience greater uncertainty than their male counterparts. Additionally, female headteachers (mean=2.98, standard deviation=1.22) reported similar dissatisfaction with the lack of clear guidelines and adequate resources for the additional responsibilities assigned to them ($p=.030$) compared to male headteachers (mean=2.24, standard deviation=1.15). These findings are consistent with current literature. For instance, Elomaa et al. (2021) observed that significant responsibilities and insufficient time for learning and instruction adversely impacted headteachers (Oplatka, 2017). Moreover, existing literature identifies job intensity, extended working hours, work overload, lack of support from local authorities, and inadequate resources as major stressors for employees (Ruiz & Hernández-Amorós, 2020; Wang, 2020), which aligns with the results of this study. Mushoriwa et al. (2015) also found that the gender and age of a headteacher did not significantly influence overall occupational stress, corroborating the findings of the current study.

Gender differences in occupational stress among basic-level headteachers

An independent-sample t-test, as detailed in Table 3, was carried out to examine potential differences in work-related stress between the male and female headteachers who participated in the survey. The results in Table 3 indicate that male headteachers (mean = 65.59, standard deviation = 12.86) exhibited slightly lower levels of occupational stress than female headteachers (mean = 67.90, standard deviation = 9.40). However, it is noteworthy that this observed difference was not statistically significant (mean difference = -2.31, 95% confidence interval [-8.12, 3.50], $t(65) = -0.795$, $p = .430$). Consequently, there were no discernible variations in the levels of occupational stress between the male and female headteachers who were part of the survey. This finding aligns with the outcomes of a study by Galanakis and Alamani (2020), which indicated that workplace stress remains unaffected by gender.

Conversely, a study by Phillips et al. (2007) uncovered that female headteachers reported experiencing more stress than their male counterparts.

Table 3

Gender Differences in Occupational Stress among Headteachers

	Gender	N	M	SD	df	t	p
Occupational stress	Male	17	65.59	12.86	65	-.795	.430
	Female	50	67.90	9.40			

Significant at p<.05

Additionally, Cocchiara (2017) suggested that while men are not impervious to work-related pressures, women are more likely to be constrained in organisational settings characterised by escalating role conflicts and limited opportunities for advancement.

Differences in age on occupational stress among basic-level headteachers

We conducted a one-way analysis of variance (ANOVA) to address research question three, which explores the influence of age on occupational stress among basic school-level headteachers in the Accra Metropolitan Directorate of Education. The results from Table 4 show that headteachers aged between 46 and 50 (with a sample size of 21, mean=68.81, standard deviation=11.42) experienced higher levels of occupational stress. In contrast, headteachers aged 56 to 60 (with a sample size of 8, mean=63.88, standard deviation=3.91) reported the lowest stress levels. This finding suggests that headteachers approaching 50 may be more susceptible to occupational stressors. Conversely, the results indicate that headteachers older and closer to retirement may not be as susceptible to occupational stressors. This finding aligns with the results of similar studies in the literature. For instance, a study by Hsu (2018) discovered higher stress levels among managers in the younger age brackets (25-35 years) compared to those in the middle and older brackets, with lower occupational stress levels.

Table 4

Mean Ratings of Age Differences on Occupational Stress

Age	N	M	SD	Minimum	Maximum
31-35	6	65.33	8.38	50.00	73.00
41-45	15	66.53	13.22	39.00	83.00
46-50	21	68.81	11.42	40.00	92.00
51-55	17	68.47	9.13	53.00	84.00
56-60	8	63.88	3.91	58.00	69.00

We did not identify any outliers as determined by the boxplot; the data exhibited a normal distribution for each group, as confirmed by the Shapiro-Wilk test ($p > .05$). Additionally, Levene's test for homogeneity of variances ($p = .120$) indicated consistent variances across groups.

Table 5 classifies the surveyed headteachers into five age groups: 31-35 ($n = 6$), 41-45 ($n = 15$), 46-50 ($n = 21$), 51-55 ($n = 17$), and 56-60 ($n = 8$). The occupational stress scores among headteachers increased across age groups, with mean scores as follows: 56-60 ($M = 63.9, SD = 3.9$), 31-35 ($M = 65.3, SD = 8.4$), 41-45 ($M = 66.5, SD = 13.2$), 51-55 ($M = 68.5, SD = 9.1$), and 46-50 ($M = 68.8, SD = 11.4$). Table 5 further details the data to evaluate differences in occupational stress among the various age groups of headteachers.

Table 5

One-way ANOVA on Occupational Stress by Age

	Age	<i>N</i>	<i>M</i>	<i>SD</i>	<i>df</i>	<i>F</i>	<i>p</i>
Occupational stress	31-35	6	65.33	8.38	4	.446	.775
	41-45	15	66.53	13.22			
	46-50	21	68.81	11.42			
	51-55	17	68.47	9.13			
	56-60	8	63.88	3.91			

Significant at $p < .05$

The findings presented in Table 5 indicate that age is not a significant predictor of occupational stress among headteachers in this study. This finding diverges from Nnuro's (2012) research, which reported elevated stress levels among younger managers. Conversely, the current study's results align with Mushoriwa et al.'s (2015) findings that neither gender nor age significantly impacts occupational stress among headteachers. While the average age of participants in this study is 48, a closer examination of the data reveals an unexpected pattern. Individuals aged 31-35 and 56-60 reported lower stress levels compared to those in other age groups. However, this finding warrants further investigation to explore potential underlying factors contributing to these variations as the sample size within these age categories may be insufficient to draw definitive conclusions.

The Ghana Education Service (GES) was established in 1974 under the aegis of NRCDC 247 and subsequently modified by NRCDC 252, 357, and SMCD 63. As an integral component of Ghana's public service, the GES is responsible for overseeing pre-tertiary education nationwide. In collaboration with regional, metropolitan, municipal, and district education offices, the GES ensures effective school management and

supervision in the country. School heads, as outlined by Atta, Agyenim-Boateng, and Baafi-Frimpong (as cited in Esia-Donkoh, 2014; Ojo and Olaniyan, 2008), are entrusted with a broad range of responsibilities. These encompass curriculum implementation, personnel management, student welfare, school-community relations, financial management, and overall school improvement.

It is worth noting that the Accra Metropolitan Education Directorate (AMED) is situated within the densely populated and traffic-congested Accra Metropolitan Assembly, which encompasses eight circuits spread across three sub-metros: Ashiedu Keteke, Ablekuma South, and Okaikoi South. Within Ashiedu Keteke are three circuits: Ga Mashie, Ussher, and Ayalolo. The Ablekuma South sub-metro comprises Korle Gonno, Ojoo, and Mamprobi circuits, while Okaikoi South consists solely of the Kaneshie and Bubiashie circuits. A high density of schools and congestion characterises this area.

Headteachers' additional experiences with occupational stress during COVID-19

For the qualitative section, one headteacher was selected from each of the eight circuits to explore the factors influencing their occupational stress and other aspects of their duties during the pandemic. Beyond experiencing occupational stress, the headteachers' perspectives in the interviews were largely consistent, reflecting similar work experiences across their schools during the COVID-19 era. We asked the selected headteachers to recount their experiences with the students during the pandemic. Here are some examples of the headteachers' comments.

Headteacher 1 expresses, "The students we work with and protect are very daring. Most of them bring nose masks to school and comport themselves until the first break when they can go on break. This first break is the time that their adrenalin goes up. After taking their food, some learners forget their nose masks or even throw them away. Some go to the extent of exchanging their nose masks with other colleagues. During these happenings, their occupational stress level increases as they do not know what to expect at the end of the day".

Headteacher 2 remarks, "They realised it was tough for most learners to adhere to the protocols. The thought of the learners catching the virus was very daunting for them. Anytime they leave home, their blood pressure shoots up because of the worry they carry to school".

Headteacher 3 notes, "Children, as they may be, will always play together. When it happens like this, most learners forget about the pandemic.

However, because of the prevalence, they keep thinking and praying for their teachers and students now and then to ensure that they do not catch the virus”.

Headteacher 4 observes, “Most students share their food as they used to do before the pandemic. They show no fear about the devastating effect of the virus. Some even do not believe that the virus exists”.

Headteacher 5 observes, “Surprisingly, some students want to experience the sickness by hook or crook. They always go against the protocol or do the opposite things to enhance their chances of contracting the virus. Such situations put so much pressure on them, which is disturbing”.

Headteachers' qualitative accounts reveal substantial challenges in enforcing COVID-19 protocols within classrooms in Ghana. Student non-adherence to preventive measures, such as mask-wearing and social distancing, significantly increased the risk of virus transmission (Maison, 2021). This, coupled with students' indifference or outright defiance, has placed immense psychological strain on headteachers (Agyapong, 2022). The constant pressure to monitor student behaviour and ensure compliance while navigating conflicting public health messages has exacerbated feelings of stress and anxiety among school leaders. Furthermore, the emotional toll on both students and staff has been considerable. These findings emphasize the complex interplay between individual behaviours, public health messaging, and school-level interventions in mitigating the impact of the pandemic. To effectively address these challenges, schools require comprehensive support, including improved communication strategies, mental health resources, and potentially more stringent enforcement mechanisms. The experiences of headteachers underscore the urgent need for systemic changes to safeguard the well-being of the school community (Son, 2020; Sayed et al., 2021).

Conclusion

This research delved into the occupational stress encountered by headteachers within the Accra Metropolitan Education Directorate throughout the COVID-19 pandemic. The study successfully fulfilled its objectives, addressing the various research questions. The findings shed light on headteachers' challenges, including excessive workloads and the sudden introduction of new operational procedures. Despite these challenges, the headteachers acknowledged the significance of official directives and clearly defined work-role objectives. Notably, the study revealed distinctions in how male and female headteachers were treated in terms of receiving guidelines and resources for their newly assigned responsibilities. Head-

teachers also reported ambiguity concerning role expectations from superiors and colleagues, suggesting a potential source of occupational stress. While male headteachers indicated lower levels of occupational stress compared to female counterparts, this difference was not statistically significant. Additionally, a trend emerged where middle-aged headteachers (45-50 years) experienced higher stress levels than their older colleagues (56-60 years). However, upon further analysis, neither gender nor age emerged as a significant predictor of occupational stress among headteachers. Notably, student behaviour, particularly non-adherence to safety protocols and engagement in risky behaviours, was identified as a key factor contributing to elevated stress levels during the pandemic.

Limitations and Recommendations for the Future

The Accra Metropolitan Education Directorate's headteachers responded to this survey. As a result, the survey's findings might not reflect how other district heads feel about occupational stress. Because of this limitation, the study's findings may not apply to all headteachers in Ghana due to the study's focus on a specific group. Similarly, the study would be prone to representativity and selection bias as it used purposive sampling (Frankfort-Nachmias et al., 2015). However, there was no selection bias because no respondents were known to the researcher. Based on the research outcome, we made the following recommendations: To enhance the well-being and effectiveness of headteachers during challenging times, educational authorities and institutions should provide comprehensive support. This enhancement includes offering additional resources, training, and guidance to address work overload and introducing new processes.

To promote fairness and equality, it is essential to ensure all headteachers, regardless of gender, receive equitable support and resources. Clear communication of expectations from superiors and colleagues can reduce ambiguity and stress, warranting the establishment of regular communication channels. Tailored support and interventions, such as stress management workshops, should be extended to middle-aged headteachers (45-50) who reported higher stress levels compared to the people (56-60). Additionally, implementing and enforcing safety measures among students can create a conducive learning environment and alleviate headteachers' stress. Prioritising the long-term well-being of headteachers through regular assessments of stress levels, workload, and mental health is crucial. Lastly, continued research can offer deeper insights and potential solutions to enhance headteachers' overall work experience and stress management.

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