

Stress among Female Primary School Teachers in Kodie and Buohu Circuits of Afigya Kwabre District in Ghana

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ABSTRACT

Background: This study aimed to assess the level of stress experienced by female teachers in the Buohu and Kodie circuits of the Afigya Kwabre district in Ghana, identify the sources and symptoms of stress, and examine the stress coping strategies employed by these teachers.

Materials and methods: The research approach was a quantitative descriptive survey, and a sample size of 86 female teachers was used. A questionnaire survey was conducted to collect data from the female school teachers who had given their acceptance to participate in the study. The face-to-face interaction was solely for the purpose of delivering and collecting the questionnaire and not for interviews or obtaining qualitative data. Data were presented as mean values and analysis was conducted using Statistical Package for the Social Sciences (SPSS), using independent sample *t*-tests. All procedures were approved by the Institutional Review Board of the University of [edited out for blind review].

Results: The results showed that 60.8% of respondents experienced moderate levels of stress and the top stressors were inadequate teaching and learning materials (TLMs), pupil misbehavior, workload, and lack of recognition. The most prominent symptoms of stress among female teachers were depression, restlessness, weakness, short-term tiredness, and sleeplessness. The study also found that social support is essential in reducing stress levels among these teachers.

Conclusion: The study highlights the need to address the sources of stress among female teachers in Ghana and the importance of social support as a coping mechanism. Overall, this study provides valuable insights into stress management strategies that can be employed to support the well-being of female primary school teachers in Ghana.

Keywords: Coping strategies, Female teachers, Manifestation, Primary school, Stress, Symptoms.

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INTRODUCTION

Stress is a widely studied and complex concept with various definitions, causes, symptoms, and effects that depend on the field and context in which it is viewed. It is defined as a biological response to adverse external factors,¹ while² others see it as an individual's adaptive response to excessive psychological or physical demands. Stress can result from endogenous, exogenous, or a combination of internal and external factors. However, stress is subjective, and how individuals interpret and respond to stressors varies, making it a challenging phenomenon to study. Stress has negative impacts on an individual's physiological, psychological, and behavioral health, and if left unaddressed, it can lead to further trauma.

Stress has been associated with reduced motivation, decreased work performance, and negative effects on work productivity. The nature of the loss can impact an individual's perception and manifestation of stress, which can lead to symptoms such as avoidance, intrusion, and hyperarousal in cases of posttraumatic stress. Hans Selye introduced stress to the field of life sciences in 1936, and it is derived from the Latin word "stringere," which refers to experiences of physical hardship, starvation, torture, and pain. Stress is generally considered a negative experience, but some individuals may view it as a positive challenge.

Women in Ghana play a crucial role in the country's social and economic development, with a majority of 51.3% of the population being women according to the 2010 census.³ The contemporary Ghanaian woman balances multiple roles, including homemaker, wife, mother, and career-oriented individuals, including management positions in various economic sectors such as medicine, industry, and mining. Women also engage in

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self-employment and economic ventures to supplement the family income.⁴ However, the conflicts of balancing work and family responsibilities, which are deeply rooted in Ghanaian culture, result in additional stress for women and can have a negative impact on their health and overall quality of life.⁴⁻⁶

There are three main perspectives on understanding stress in teaching. The first perspective compares the pressure placed on educators in educational institutions to Hooke's law of electricity, which suggests that excessive stress can result in physical or psychological harm.⁷ The second perspective looks at how teachers

respond to these demands, with stress defined as an uncomfortable emotional condition.⁸ The third perspective focuses on the demands and responses of educators and the coping strategies they use to manage their challenges.⁹ Recent surveys suggest that 20–40% of teachers experience significant stress while working in schools, and many leave the profession due to the difficulties they face.¹⁰

MATERIALS AND METHODS

Study Design and Sample Selection

The research approach was a quantitative research and descriptive survey as the research design. The population consisted of a total of 110 female teachers in the Buohu and Kodie circuits of the Afigya Kwabre district in Ghana. A sample size of 86 was used for this study. This figure was arrived at by the formula used by¹¹ in determining sample size.

$$\text{The formula is size} = \frac{X^2 NP (1-P)}{d^2 (N-1) + X^2 P(1-P)}$$

The probability sampling technique using a simple random technique was employed to select the samples. The study was conducted from October 2018 to July 2019.

Instrumentation

A Likert scale was used to measure the female teacher's opinions regarding the causes, effects, and coping strategies of stress among female teachers in primary schools. A Likert scale ranging from 1 to 3 was utilized, where a rating of 1 indicated no stress, 2 denoted mild stress, and 3 represented severe stress.

Validity and Reliability

To ensure face validity, the opinions of their supervisor and colleagues were sought, and their suggestions were incorporated. A reliability analysis was conducted, with a result of 0.748, which meets the α value of 0.7 or above required for accurate group inferences.¹² A demonstration of validity is sufficient to establish reliability.¹³

Demographic Characteristics

Location, age of the respondent, marital status, number of dependents, academic qualification, and years of experience were noted.

Inclusion Criteria

- The teacher should have a minimum diploma certificate in teaching.
- The teacher should be an employee of the government of Ghana.
- The teacher should teach pupils from classes 1–6.
- The teacher should be willing to participate in the study and should have signed the consent form.

Exclusion Criteria

- Teachers who are nongovernment employees and part-time teachers were not part.
- Teachers with teachers' certificate "A" were not part of the study.

Parameters Studied

The parameters studied were the level of stress experienced by the respondents, sources of stress identified from the respondents' answers, symptoms of stress reported by the participants, and stress coping strategies used by the female teachers.

Statistical Analysis

In terms of hypothesis testing, the responses were processed using Statistical Package for the Social Sciences (SPSS), with cross-tabulation used for demographic data analysis. The mean test was used to determine mean values for stress causes and coping strategies, while an independent sample *t*-test was conducted to test for a significant difference in coping strategies between the female teachers in the two circuits. Descriptive statistics were used to understand the manifestations of stress and analysis of variance was employed to test for a significant difference in stress levels experienced by female teachers based on the number of years they have served as teachers. In our study, a decision rule was utilized to quantify stress by determining the significance of participants' responses. Mean values of 2 or greater were considered significant for the causes of stress, symptoms of stress, and stress coping strategies data. This decision rule allowed us to identify and emphasize responses indicating higher levels of stress among the participants. By focusing on these salient factors, as perceived by the participants themselves, we gained insights into the key contributors to teacher stress. Although specific scales were not employed, the decision rule provided a systematic framework for interpreting and analyzing the data. It facilitated the identification of patterns and trends in participants' responses, enabling us to draw meaningful conclusions regarding the significance of different stress-related factors.

DISCUSSION OF RESULTS

Demographic Characteristics

All the participants who responded were female, aged at least 21 years old and included both married and unmarried women. Their academic qualifications varied, ranging from diploma holders to those with a master's degree. While some of the respondents had <5 years of teaching experience, a significant number had been teaching for over 16 years. This is indicated in Table 1. Respondents with postgraduate qualifications constituted only 5.4% of the respondents, while those with degrees made up 56.8% of the sample. Teachers with over 16 years of service made up only 9.7% of the sample.

Decision Rule

In our study, the quantification of stress was achieved using a decision rule. Specifically, we applied a decision rule to determine the significance of the responses provided by the participants. Mean values of 2 or greater were considered to be significant for the causes of stress, symptoms of stress, and stress coping strategies data.

By using this decision rule, we aimed to identify and highlight the responses that indicated a higher level of stress among the participants. This approach allowed us to focus on the most salient factors contributing to teacher stress as perceived by the participants themselves.

While we did not employ specific scales in quantifying stress, our decision rule provided a systematic framework to interpret and analyze the data. It facilitated the identification of patterns and trends in the participants' responses, enabling us to draw meaningful conclusions regarding the significance of different stress-related factors. The utilization of a decision rule in this manner is not a novel approach, as demonstrated by¹⁴ in their study titled "Perceptions of Determinants of Job Selection in the Hospitality and Tourism

Stress among Female Primary School Teachers

Table 1: Demographic characteristics of female teachers from Buohu to Kodie circuits of the Afigya Kwabre district in Ghana

Variable	Rank			
	Superintendent N (%)	Senior superintendent N (%)	Principal superintendent N (%)	Total N (%)
Circuit				
Buohu	3 (4.1)	11 (14.9)	24 (32.4)	38 (51.4)
Kodie	2 (2.7)	15 (20.2)	19 (25.7)	36 (48.6)
Total	5 (6.8)	26 (35.1)	43 (58.1)	74 (100.0)
Age				
21–25	4 (5.4)	4 (5.4)	3 (4.1)	11 (14.9)
26–30	0 (0.0)	11 (14.9)	18 (24.3)	29 (39.2)
31–35	1 (1.4)	5 (6.8)	8 (10.8)	14 (18.9)
36–40	0 (0.0)	4 (5.4)	9 (12.2)	13 (17.6)
41+	0 (0.0)	2 (2.7)	5 (6.8)	7 (9.5)
Total	5 (6.8)	26 (35.1)	43 (58.1)	74 (100.0)
Marital status				
Single	2 (2.7)	11 (14.9)	4 (5.4)	17 (23.0)
Married	3 (4.1)	15 (20.3)	39 (52.7)	57 (77.0)
Total	5 (6.8)	26 (35.1)	43 (58.1)	74 (100.0)
Dependents				
0	3 (4.1)	11 (14.9)	3 (4.1)	17 (23)
1–3	1 (1.4)	12 (16.2)	32 (43.2)	45 (60.8)
4+	1 (1.4)	3 (4.1)	8 (10.8)	12 (16.2)
Total	5 (6.8)	26 (35.1)	43 (58.1)	74 (100.0)
Academic qualification				
Diploma	5 (6.8)	22 (29.7)	1 (1.4)	28 (37.8)
Degree	0 (0.0)	3 (4.1)	39 (52.7)	42 (56.8)
Postgraduate	0 (0.0)	1 (1.4)	3 (4.1)	4 (5.4)
Total	5 (6.8)	26 (35.1)	43 (58.1)	74 (100.0)
Experience				
<5	4 (5.4)	10 (13.5)	6 (8.1)	20 (27.0)
5–10	1 (1.4)	12 (16.2)	24 (32.4)	37 (50.0)
11–15	0 (0.0)	2 (2.7)	8 (10.8)	10 (13.5)
16+	0 (0.0)	2 (2.7)	5 (6.8)	7 (9.5)
Total	5 (6.8)	26 (35.1)	43 (58.1)	74 (100.0)

Industry—the case of Korean university students.” Again¹⁵ also justifies the use of this decision rule by saying “an important advantage of this approach is the possibility of handling inconsistencies in the preferential information, resulting from hesitations of the decision maker.” The proposed methodology is based on the elementary, natural, and rational principle of dominance.

Level of Stress

The level of stress experienced by the teachers was found to be moderate, with 60.8% of the 45 respondents reporting moderate levels of stress and 9.5% experiencing high levels of stress, as indicated in Table 2. According to Table 2, it can be inferred that 60.8% of the respondents experienced moderate stress, while 29.7% did not experience any stress, and 9.5% experienced high levels of stress. This information is based on the responses of 45, 22, and 7 participants, respectively.

Causes of Stress

The causes of stress were also analyzed, with Table 3 presenting the overall causes based on respondents’ responses. From Table 3, it can be observed that the female primary school teachers report

Table 2: Level of stress among female teachers from Buohu to Kodie circuits of the Afigya Kwabre district in Ghana

Items	Frequency	Percentages
Not stressful	22	29.7
Moderately stressful	45	60.8
Highly stressful	7	9.5
Total	74	100.0

stress caused by inadequate teaching and learning materials (TLMs), with a mean value of 2.45, as well as pupil misbehavior with a mean value of 2.49. Workload is also a significant source of stress with a mean value of 2.41, which is higher than the theoretical mean of 2.0. Lack of recognition for teachers’ work causes stress for 89.2% of respondents. The working conditions in the school are also a source of stress with a mean value of 2.25.

Stress Symptoms

To understand how stress manifests among female teachers, the symptoms were grouped into three categories, namely

Table 3: Causes of Stress as responded by the female teachers from Buohu to Kodie circuits of the Afigya Kwabre district in Ghana

Variable	Mean values	Not stressful	Moderately stressful	Highly stressful
Promotion prospects	1.31	57 (77.0)	11 (14.9)	6 (8.1)
Teaching and learning materials	2.44	2 (2.7)	37 (50.0)	35 (47.3)
Lack support	2.04	16 (21.6)	38 (51.4)	19 (25.7)
Unconducive school environs	2.17	15 (20.3)	31 (41.9)	28 (37.8)
Learners' commitment	2.20	16 (21.6)	27 (36.5)	31 (41.9)
Pupils behavior	2.48	8 (10.8)	22 (29.7)	44 (59.5)
Student's threat	1.31	56 (75.7)	13 (17.6)	5 (6.8)
Work of low value	2.02	14 (18.9)	44 (59.5)	16 (21.6)
Lack upgrading opportunities	1.71	37 (50.0)	21 (28.4)	16 (21.6)
Inadequate salary	2.36	11 (14.9)	25 (33.8)	38 (51.4)
Job insecurity	1.24	62 (83.8)	6 (8.1)	6 (8.1)
working conditions	2.25	14 (18.9)	27 (36.5)	33 (44.6)
High expectation	1.90	20 (27.0)	41 (55.4)	13 (17.6)
Little recognition	2.41	8 (10.8)	27 (36.5)	39 (52.7)
Workload	2.40	7 (9.5)	30 (40.5)	37 (50.0)
Work pressure	2.25	9 (12.2)	37 (50.0)	28 (37.8)
No relaxation	2.35	8 (10.8)	31 (41.9)	34 (45.9)
Class size	2.21	15 (20.3)	28 (37.8)	31 (41.9)
Communication	1.28	56 (75.7)	15 (20.3)	3 (4.1)
Trusted staff	1.33	52 (70.3)	19 (25.7)	3 (4.1)
Colleagues respect	1.22	60 (81.1)	11 (14.9)	3 (4.1)
professional disregard	1.64	29 (39.2)	42 (56.8)	3 (4.1)
Students' respect	1.20	61 (82.4)	11 (14.9)	2 (2.7)
Time off duty	1.56	35 (47.3)	36 (48.6)	3 (4.1)
Role conflict	2.00	10 (13.5)	54 (73.0)	10 (13.5)
Domestic problem	1.87	16 (21.6)	51 (68.9)	7 (9.5)
Satisfied role	1.13	64 (86.5)	8 (10.8)	1 (1.4)
Exhaustive role	1.90	21 (28.4)	39 (52.7)	14 (18.9)
Satisfied life	1.51	40 (54.1)	30 (40.5)	4 (5.4)

Figures in parenthesis are percentages

psychological, behavioral, and physiological. Table 4 provides a clear representation of the different stress categories and the common symptoms experienced by the respondents.

Coping Strategies Adopted

The coping strategies adopted by the teachers were analyzed and the various strategies they employed to manage their stressful situations were reported. Table 5 displays the different coping strategies utilized by the respondents to manage their stress when they encounter it. The survey of female teachers in the Buohu and Kodie circuits in Ghana revealed that social support is essential in reducing stress levels. The teachers found support from their family, friends, and loved ones helpful in managing challenging times. In addition to social support, female teachers in the two circuits used physical activities and self-care practices such as exercise and taking sick leave to manage stress levels.

Hypothesis Testing

Social support is one of the effective coping strategies as evident from Table 6. The results of Table 7 indicate that there is no significant difference in the use of crying as a coping strategy between the two circuits, with a t -value of 1.20 and a p -value of 0.12 ($p \geq 0.05$). Table 8 reveals that there was no significant difference in

the use of drugs as a coping strategy for both circuits studied, with a result of $t(0.85) = 0.20, p \geq 0.05$. Table 9 indicates that the use of relaxation as a coping strategy did not significantly differ between the two circuits studied, with a t -value of 1.61 and p -value of 0.06 ($p \geq 0.05$). The authors suggest that practicing relaxation techniques such as deep breathing exercises can help neutralize problematic emotions as a stress management strategy. They cited¹⁶ to explain deep relaxation as a state of low physiological arousal that can be achieved through systematic relaxation procedures.

DISCUSSION

From the results, it was evidential that the female teachers experienced moderate levels of stress in the job they do as teachers. The moderate level of stress experienced by 60.8% of female teachers in the present study could have several implications. Firstly, it may affect their well-being and job satisfaction, leading to a decrease in their motivation and productivity. This, in turn, could have negative consequences on the quality of education provided to students. Secondly, if the stressors identified in the study are not addressed, it may lead to burnout, high turnover rates, and a shortage of teachers in the education system.¹⁷ Similar studies have also found that female teachers experience moderate

Table 4: Mean values of stress symptoms shown by female teachers in Bouhu and Kodie circuits show when stressed

Categories	Manifestation	Mean
Psychological	Teachers feel frustrated	1.75
	Teachers become very anxious	1.79
	The feeling of depression sets in	2.03
	They get angry easily	1.97
	They feel sleepy	2.00
	They become dejected	1.86
	They feel like withdrawing from the teaching profession	2.10
Behavioral	They become impatient	2.01
	They become restless	2.14
	They resort to the intake of alcohol	1.90
	Teachers easily become aggressive	1.94
	They are often seen resting	2.24
Physiological	Often seeking help	1.97
	They become weak easily	2.22
	They get tired shortly	2.32
	They experience body pains	2.36
	They experience sexual difficulties	2.17
	They lose their appetite	2.13
	They find it difficult to sleep	2.45
	They have problems with their breathing	2.33

Table 5: Coping management strategies used by female teachers in Bouhu and Kodie circuits

Strategies	Mean
I resort to social support to cope with my stress	2.14
I resort to prayer to overcome my stress	1.93
I tackle issues one after the other	1.86
I resort to another alternative to solve my problems	1.87
I ask for professional advice	1.89
I take advice from my spouse	1.90
I direct my emotions towards others	2.27
I occupy myself with other activities	2.29
I sometimes resort to crying	2.55
I keep my feelings to myself	2.35
I resort to using drugs	3.10
I do physical exercise	2.08
I ask for sick leave	2.60
I relax any time am stress	2.20
I consume alcohol to keep me off the situation	3.13

levels of stress. For example, a study conducted in Nigeria¹⁸ found that female teachers experienced moderate levels of stress due to factors such as workload, inadequate resources, and low salaries. Another study conducted in Egypt¹⁹ found that female teachers experienced moderate levels of stress due to factors such as heavy workload, lack of support, and low salaries.

The effect of moderate levels of stress on female teachers can vary. Some teachers may be able to cope with the stress and continue to provide quality education, while others may experience negative consequences such as decreased job satisfaction, burnout, and mental health issues. It is, therefore, essential to address the

Table 6: Independent *t*-test of circuits on the use of social support

Circuit	N	Mean	Standard deviation	t	Degree of freedom	p-value
Bouho	38	2.37	1.15	1.67	72	0.05
Kodie	36	1.92	1.18			

Table 7: Independent *t*-test of circuits on the use of crying as a coping strategy

Circuit	N	Mean	Standard deviation	t	Degree of freedom	p-value
Bouho	38	2.74	1.08	1.20	72	0.12
Kodie	36	2.38	1.23			

Table 8: Independent *t*-test of circuits on the use of drugs as a coping strategy

Circuit value	N	Mean	Standard deviation	t	Degree of freedom	p-value
Bouho	38	3.21	1.10	0.85	72	0.20
Kodie	36	3.00	1.10			

Table 9: Independent *t*-test of teachers' responses on the use of relaxation as a coping strategy

Circuit	N	Mean	Standard deviation	t	Degree of freedom	p-value
Bouho	38	2.02	0.97	1.61	72	0.06
Kodie	36	2.40	0.96			

stressors identified in the study to promote the well-being and job satisfaction of female teachers, and ultimately, improve the quality of education provided to students.

Since the findings of the study suggest that female teachers in the Afigya Kwabre district experience moderate levels of stress due to their job and domestic responsibilities, we recommend that the government should implement stress reduction programs and reforms for female teachers, such as counselling programs for pupils, providing TLMs, and reducing class sizes. The study emphasizes the need to address stress among female teachers to improve their well-being and performance.

Our study demonstrates that school climate is a major source of stress for female primary school teachers, with a mean value of 2.32. This finding is supported by previous research conducted.^{20,21} This highlights the need for policymakers to address the issue of school climate as a stressor for teachers, as it can affect their health and well-being, as well as their students' learning outcomes. Creating a positive and supportive school culture that promotes teacher well-being and provides opportunities for professional development and growth can help mitigate the negative impact of school climate on teachers.

The study also found that inadequate TLMs, pupil misbehavior, workload, lack of recognition, and poor working conditions were significant stressors experienced by female primary school teachers. These stressors can have a detrimental impact on teachers' mental and physical well-being, which can ultimately affect their ability to provide quality education to their students.²²

Pupil misbehavior can be a significant source of stress for teachers, with disruptive behavior, and lack of motivation being

among the most commonly reported issues.²² The authors note that this can lead to feelings of frustration, anxiety and helplessness, and ultimately affecting the teacher's well-being and job satisfaction.

Workload is another major stressor experienced by female primary school teachers. High workload can be a significant source of stress for teachers, with excessive lesson planning, grading, and administrative tasks being among the most commonly reported factors.²² The authors found that this can lead to feelings of exhaustion, burnout, and job dissatisfaction, which can ultimately affect the teacher's ability to effectively teach students. Additionally, a high workload can result in increased absenteeism and turnover rates among teachers, further contributing to the negative effects on the education system.

Poor working conditions can also contribute significantly to stress among female primary school teachers. "teachers' job demands, such as high workload and poor physical working conditions, have been identified as significant sources of work-related stress."²³ These factors can also negatively impact the teacher's physical health, as exposure to poor indoor air quality, high noise levels, and inadequate lighting can lead to health problems such as headaches, respiratory issues, and eye strain.

Therefore, pupil misbehavior, high workload, and poor working conditions are significant stressors experienced by female primary school teachers. These stressors can have a detrimental impact on teachers' mental and physical well-being, leading to reduced job satisfaction, increased turnover rates and lower quality teaching, and learning outcomes. It is important for educational policymakers and institutions to address these stressors by providing adequate resources, effective discipline policies, and improving working conditions in schools. This can help to reduce teacher stress and burnout, and ultimately improve the quality of education provided to students.

Again, our study conducted on teachers in two circuits revealed that the majority of teachers showed signs of psychological stress, particularly depression which had a mean value of 2.02. Depression is a state of low mood and aversion to activity that can affect a person's thoughts, behavior, feelings, and well-being. Stress is the most common underlying condition leading to depression and anxiety and there is a need for early intervention, prevention, recognition, and treatment of stress.²⁴ National Mental Health Association found that one in eight women will develop depression at some point in their lifetime and women are twice as likely as men to suffer from depression.²⁵

The teachers showed other symptoms of stress including frustration, dejection, sleepiness, restlessness, and a desire to abandon their job as teachers. Restlessness is a common symptom of anxiety and is caused by the feeling of being unable to sit still or the feeling that something is wrong. Taking alcohol to suppress stress and showing aggressive behavior were also indicated. Physiological symptoms of stress such as general body pains, headaches, chest pains, back pains, and joint pains were reported by the teachers. The study supports the findings that it is more than possible that people seek solace in alcohol and drugs as a result of stress.²⁶

The findings of the study in the two circuits also highlight the alarming levels of psychological stress experienced by female primary school teachers. The high prevalence of depression, frustration, dejection, sleepiness, restlessness, and desire to abandon teaching all indicate the adverse effects of stress on teachers' mental and physical well-being. The use of alcohol to suppress stress and the display of aggressive behavior are also

concerning symptoms of stress. These findings reinforce the need for educational policymakers and institutions to address the issue of stress among teachers and provide the necessary support and resources to help them manage stress effectively. By doing so, teachers can maintain their well-being and provide quality education to their students.

Our study provides details of the various coping strategies that the female teachers used anytime they were experiencing stress. It is obvious from their responses that social support is one of their effective strategies. This outcome highlights the need to belong to a supportive community. This sense of belonging to a supportive community was critical in maintaining a positive outlook and resilience. Research supports the proposition of highlighting the significance of social support in reducing job stress,²⁷ and other studies indicate that women tend to seek social support more frequently than men in managing stress.²⁸

Physical exercise was also another revealing coping strategy as can be seen from our study. Exercise was seen as a way to improve overall quality of life and life expectancy, with moderate exercise can reduce the harmful effects of chronic stress.²⁹ encouraged a combination of healthy habits, exercise, and relaxation as a means of maintaining physical and mental well-being.³⁰ However, the limited time available for female teachers raises questions about when and how long they can exercise. Additionally, taking sick leave was also a coping strategy, but it led to missing instructional hours and potentially resulted in additional stress from taking on extra responsibilities. The results also showed that some female teachers resorted to alcohol and drug use as a coping mechanism, which is generally considered taboo in Ghana. Research supports the relationship between alcohol consumption, stress levels, lack of social support, and avoidance coping,^{31,32} while theories link acute and chronic stress with the motivation to abuse addictive substances.^{33,34}

Our study also shows that there is a significant difference in the use of social support as a coping strategy between the two circuits, Buohu and Kodie. The *p*-value ($p < 0.05$) indicates that social support is a significant coping strategy used by one of the circuits more than the other. This aligns with previous research which highlights the role of social support in reducing job stress.²⁷ Female teachers in these circuits often rely on emotional and practical support from friends, family, and loved ones to cope with stress. Given the large number of female teachers in these circuits, it may be important to raise awareness and provide training on the importance and various forms of social support.

Crying can be an effective way of coping with stress for some people as it allows them to release their emotions. Crying is a sign of deeply ingrained stress that occurs when earlier stages of stress (faces one and two) are not properly addressed.³⁵ The findings of this study suggest that female teachers in both circuits may resort to drug use as a coping strategy. This is a concerning finding as drug use can have negative consequences on the health and well-being of individuals, as well as their job performance and ability to effectively support the learning and development of their students. The use of drugs as a coping strategy may be indicative of a larger problem of occupational stress among teachers, which has been shown to be a significant issue in the field of education.³⁶ It is important for schools and educational institutions to provide support and resources to help teachers manage their stress and cope with the demands of their jobs in healthier ways.

Interestingly, the study did not find a significant difference in the use of drugs as a coping strategy between female teachers in

the two circuits studied. This suggests that the prevalence of drug use as a coping strategy may be similar in both rural and urban areas. This finding is in contrast to previous research that has shown that the prevalence of stress and burnout may be higher in urban areas due to the increased demands and pressures of working in these environments.³⁷ It is possible that other factors, such as access to resources and support, may play a larger role in determining the coping strategies used by female teachers in these two circuits.

Further research is needed to explore the factors that contribute to drug use as a coping strategy among teachers and to identify effective interventions to promote healthier coping strategies and support the well-being of teachers in the workplace. Firstly, further studies could examine the effectiveness of stress reduction programs and reforms, such as counseling programs for pupils and reducing class sizes, in reducing stress among female primary school teachers. Secondly, studies could investigate the relationship between stress and teacher retention rates, as well as the impact of stress on the quality of education provided to students. This would help to determine the long-term consequences of stress on the education system and highlight the need for effective stress management strategies. Thirdly, studies could explore the role of school administrators in mitigating stress among female primary school teachers. This could include examining the leadership styles and practices of school administrators and their impact on teacher stress and well-being. Lastly, studies could investigate the unique stressors and coping mechanisms of female primary school teachers in different regions and cultures. This would help to identify the specific stressors that are most prevalent in different contexts and provide insights into culturally appropriate stress management strategies.

The limitations of this study have been noted by prominent researchers in the field of teacher stress.^{38–41} These limitations primarily center around the use of one-time, self-report questionnaires, and can be summarized into three key concerns. Firstly, the use of one-shot questionnaires assumes that stress is a relatively stable or fixed state, neglecting its dynamic, and fluid nature. This limitation suggests that capturing stress levels with a single snapshot may not fully capture the complexity of the phenomenon. Secondly, relying on retrospective reporting in one-time surveys fails to account for the time lag between stressful events and participants' responses. This retrospective approach introduces the potential for recall bias and may impact the accuracy and reliability of the collected data. Thirdly, the questionnaire-based methodology often gathers fragmented information about stress without a comprehensive theoretical framework. Instead of incorporating coherent conceptualizations, these surveys frequently present arbitrary lists of stressors and coping mechanisms, limiting the development of a nuanced understanding of teacher stress.

Recommendation for Future Research

Comparison of stress levels between genders—this study focused solely on female teachers, but it would be valuable to compare stress levels, and coping strategies between male and female teachers to determine if there are gender differences.

Investigation of the effectiveness of different coping strategies—the study identified social support, exercise, and taking sick leave as effective coping strategies for the female teachers, but it also found that some resorted to alcohol and drug use. Future research could investigate the effectiveness of different coping strategies in reducing stress levels and promoting well-being among teachers.

Investigation of the underlying causes of stress—while the study identified inadequate TLMs, pupil misbehavior, workload, and lack of recognition as the main stressors, it would be valuable to conduct further research to determine the underlying causes of these stressors and potential solutions to address them.

CONCLUSION

The subject of teacher stress is a complex and multifaceted area of research that warrants careful consideration. While this study utilized one-time, self-report questionnaires, it is essential to acknowledge the limitations highlighted by prominent researchers in the field. These limitations include the presumption of stress as a stable state, the reliance on retrospective reporting, and the lack of a comprehensive theoretical framework.

Despite these limitations, this study contributes to the existing body of knowledge on teacher stress. It sheds light on the experiences of teachers and provides insights into potential stressors and coping mechanisms. However, it is crucial to exercise caution when interpreting the findings and to recognize that a more holistic understanding of teacher stress requires alternative methodologies and a deeper exploration of the underlying dynamics.

Ultimately, the insights gained from studying teacher stress can inform the development of effective interventions and support systems. By addressing the challenges faced by teachers and promoting their well-being, educational institutions can create a conducive environment that nurtures both the personal and professional growth of educators.

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