STRESS LEVELS, IMPACT AND COPING STRATEGIES ADOPTED BY AGRICULTURAL SCIENCE TEACHERS IN SECONDARY SCHOOLS IN A SOUTH EASTERN NIGERIAN CITY

BY

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ABSTRACT

Stress happens to everyone and can affect daily activities if not well managed. The study sought to ascertain the stress levels, impact and coping strategies adopted by agricultural science teachers in secondary schools in a South Eastern Nigerian city. Three research questions guided the study while three hypotheses were formulated and tested at 0.05 level of significance. The study adopted a descriptive survey research design and was carried out in Awka which is a city in South Eastern Nigeria. The population of the study was 402 agricultural science teachers in secondary schools in the study area. There was no sampling since the population was manageable. Two instruments were utilized for data collection which were an adapted 10-item version of Cohen's Perceived Stress Scale (PSS) and Stress Impact and Coping Strategies Questionnaire (SICSQ). The two instruments were validated by five experts; all from the Department of Agricultural Education, University of Nigeria, Nsukka. Cronbach Alpha was used to test the reliability of the two instruments which yielded a reliability coefficient of 0.83 and 0.81 for PSS and SICSQ respectively. Four hundred and two copies of the two instruments were administered by the researcher with the help of six research assistants. Out of the 402 copies of questionnaire distributed, there was an 82% retrieval rate. Mean, standard deviation t-test was used to analyze data. Findings of the study revealed that; agricultural science teachers were highly stressed, there were nine impacts of stress on agricultural science teachers and they adopted nine coping strategies to mitigate the influence of stress. The findings further revealed that gender plays no significant role on stress levels while experience and age plays a significant role on impacts and coping strategies adopted by agricultural science teachers. The study recommended among others that; Schools administration should ensure factors that can contribute to high stress among agricultural science teachers such as late payment of salaries are eradicated to enable these teachers perform at their optimal abilities; and State Governments should organize conferences for teachers on the negative impacts of stress on their health and life in general so that they make conscious efforts to avoid activities that could trigger stress

Keywords: *Stress, Stressors, Coping Strategies, Agricultural Science Teachers*

INTRODUCTION

Stress occurs within a workplace when employees feel under pressure if the demands of their jobs are greater than they can comfortably manage. Stress occurs when an individual is confronted by a situation that they perceive as overwhelming and cannot cope up with (Bataineh, 2013). According to Isher, Sudhakar, Dwivedi, Kumar and Sharma (2018), stress is a psychological and physical state that results when the resources of the individual are not

sufficient to cope with the demands and pressures of the situation. Stress could happen in an organization when there are bad management practices, lack of support between employer and employee, changes in management and lack of focus on job content and demands ((Bolarinwa, Ayinde & Adeogun, 2016). The author further posited that although factors such as heavy workload, job insecurity, the threat of job loss or redundancy and conflict with other workers or superiors could lead to stress, the main cause of stress is how an individual responds to the aforementioned factors. However, these factors that could trigger stress in human beings are referred to as stressors.

Stressors refer to activities or factors that could trigger stress. According to Goff (2011), stressors are events or conditions in one's surroundings that cause stress as well as events that evoke emotional or mental strain. In the opinion of Fortner (2002) as cited in Nandamuri and Che (2011), a stressor is any physical activity, psychological or environmental events or conditions that initiate the stress response. Stressors can be classified into four namely: environmental stressors, social stressors, physiological stressors and thoughts (Davis, Eshelman, & McKay, 2008).

Environmental stressors occur when the environment bombards someone with intense and competing demands to adjust. Examples of environmental stressors include weather, noise, crowded places, pollution, traffic, unsafe and substandard housing and crime. Social stressors can be experienced through the demands of different social roles people occupy, such as parent, spouse, caregiver, and employee. Some examples of social stressors include deadlines, financial problems, job interviews, presentations, disagreements, demands for your time and attention, loss of a loved one, divorce, and co-parenting. Physiological situations and circumstances affecting a person's body can be experienced as physiological stressors. Examples of physiological stressors include rapid growth of adolescence, menopause, illness, aging, giving birth, accidents, lack of exercise, poor nutrition, and sleep disturbances. The fourth is thoughts, for instance, the brain interprets and perceives situations as stressful, difficult, painful, or unpleasant. These stressors lead to three major types of stress; acute stress, episodic acute stress and chronic stress (American Psychological Association, 2008).

Acute stress is short term and the most common type of stress often caused by negative thoughts about situations that have recently occurred or upcoming situations or demands in the near future. For instance, an individual may have acute stress because of an upcoming work deadline. Episodic acute stress occurs when people have frequent triggers of acute stress. An individual who frequently suffers acute stress often lives a life of chaos and crisis. According to Shawna (2018), there are two types of personality that presents itself in episodic acute stress and these are "Type A personality" and the "Worriers". Type A personality have an excessive competitive drive, aggressiveness, impatience, abrupt, and a sense of time urgency, presents as reactive with hostility and almost always a deep-seated insecurity about performance. The Worrier presents with almost incessant negative thoughts causing episodic acute stress on physical and mental health. Worriers project probable disaster and negatively forecast catastrophe in almost every situation. Chronic stress is the most harmful type of stress and it can significantly and often cause irreversibly damage to one's physical and mental health if left untreated. For example, long term poverty, repeated abuse in any form, unemployment, dysfunctional family, poor work environment, substance abuse, or an unhappy marriage can cause significant chronic stress. These stress experiences can lead to consequences such as individual feels hopeless, depression and does not see an escape from the cause of stress and gives up on seeking solutions (Shawna, 2018). The various types of stress lead to varying levels of stress among workers including agricultural science teachers in secondary schools.

Agricultural science teachers are individuals who inculcate knowledge, skills and attitudes about agriculture to learners (Nwakile, Onogu, Okon, Odoh & Ogbonna, 2020). At the secondary school level, the skill aspect of agriculture is given considerable attention. The objectives of agricultural science at the secondary school level includes; to stimulate and sustain student interest in agriculture; to enable students acquire basic knowledge and practical skills in agriculture; to enable students integrate knowledge with skills in agriculture; to prepare students for further studies in agriculture and to prepare as well as expose students to occupations and opportunities in field of agriculture (Osinem, 2008). The author further posited that in order to achieve these objectives, the curriculum content at this level consists of six units namely; basic concepts, crop production, animal production, agricultural ecology/systems, agricultural engineering and agricultural extension/economics. A series of activities suggested in the curriculum is designed to ensure the development of psychomotor skills in agriculture by the students. In attaining the laudable objectives of agricultural science at the secondary school level, agricultural science teachers in Awka undertake activities which might be perceived as stressful.

Awka is a major city as well as the capital of Anambra State which is located in South Eastern Nigeria. Many agricultural science teachers in the area teach numerous classes, take students to the farm for practical, come in

contact with potentially harmful chemicals, mark numerous scripts, invigilate examinations and occasionally serve as labour officers in boarding schools. These activities coupled with external stressors such as low remuneration for teachers, insecurity in the area, delay of salaries, numerous bills to pay, as well as loss of loved ones could lead to stress among agricultural science teachers. When teachers are stressed, it might be difficult for them to help agricultural science students achieve the benefits of the programme (Nwakile et al, 2020). Furthermore, these stressors may lead to negative consequences which could be psychological such as depression, irritability, burnout; physical such as headaches, heart palpitations, hyperventilation; and behavioural such as absenteeism, turnover, violence (Bolarinwa & Ayinde, 2016). Hence, avoiding or reducing the negative impacts of stress among agricultural science teachers in the workplace will lead to greater job satisfaction and possibly increase the productivity of the agricultural science teachers. Due to stress, many teachers in the area adopt various coping strategies to manage stress.

Coping refers to the ability to assess the stressful situation with the goal of adaptation to the change so as to regain balance and develop the power and ability to meet new challenges (Smeltzer & Brenda, 2010). Coping involves the strategies one uses to reduce the negative consequences of stress. Coping involves appraising the stressful situation so as to adapt to the change needed to regain balance and develop ability to meet new challenges (Smeltzer, et al, 2010). The stress level experienced by teachers can be altered by the coping strategies they choose to employ (Ajibade, Olabisi, Fabiyi, Ajao & Ayeni, 2016). According to MacArthur (2014), coping strategies can be subdivided into active and avoidant coping strategies. Active coping strategies are responses of an individual which could be behavioral or psychological aimed at changing the nature of the stressor itself or how one thinks about it while avoidant coping strategies prevent people from directly addressing stressful events which could lead them to activities such as alcohol use. In line with this, Ajibade et al (2016); Samson-Akpan; John, Edet and Ella (2017) found that utilizing active coping strategies are better in managing stress instead of avoidant coping strategies which appears to postpone the issue to a future date in exchange for momentary happiness. According to Khater, Akhu-Zaheya and Shaban (2014), effective coping strategies help teachers to perform markedly better in regards to their studies as well as relieving students' stress and improving mental health. However, Bolarinwa et al, 2016 posited that many employees use avoidant strategies such as alcohol use instead of active coping strategies but no previous study has ascertained this among agricultural science teachers in Awka, South East Nigeria.

Previously, many studies that have tried to ascertain impact of stress focused on individuals in the medical or nursing field (Abdulghani, Alkanhal, Mahmoud, Ponnamperum & Alfaris, 2011; Abasimi, Atindanbila, Mahamah, & Gai, 2015; Abiola, Lawal, & Habib, 2015; Oku, Oku, Owoaje., 2015; Monjok, 2015). The few that focused on agricultural related fields such as Bolarinwa and Ayinde (2016); Onu et al. (2019) focused on stress among extension agents and agricultural education lecturers respectively. Although Nwakile et al (2020) focused on impact of stress on agricultural science teachers in North Central Nigeria; it didn't ascertain the coping strategies adopted as was carried out in North Central Nigeria. Furthermore, there is no known study to the knowledge of the Researcher focused on stress levels, impact and coping strategies adopted by agricultural science teachers in secondary schools in a South Eastern Nigerian city. Hence, it is this gap in literature that the present study sought to fill.

THEORETICAL UNDERPINNING

The study was hinged on the Person-Environment fit theory postulated by French and Caplan in 1972. The theory states that the degree to which individuals fit their environment is related to the degree to which they are stressed. That is, physical, mental, and/or emotional stress occurs when a person does not fit their environment. The theory is proposed as an approach for understanding the process of adjustment between individuals and their work environment. The theory adds that stress and strain result from the interaction of an individual with his or her physical or social environment. The interaction between an individual and his or her environment determines whether or not a situation is stressful for that person. When demands of a job or course exceed a person's ability to meet those demands, the fit between an individual and their environment is incompatible; leading to a condition of stress. The theory has implications for the current study. The stress experienced by agricultural science teachers could be because many of them do not fit perfectly to their environments. As postulated in the theory, although stress can be measured from the objective environment which indicates physical and social situations as they exist, a better measure is the subjective environment which refers to the situations and events as perceived by the person. In relation to this study, stress measure is based on the perception of the individuals because experiences that are objectively not stressful could be stressful to the teachers. Hence, creating a better fit between the environment

(school) and the person (agricultural science teachers) through coping strategies could lead to better management of stress among the agricultural science teachers.

PURPOSE OF THE STUDY

The general purpose of the study was to ascertain the stress levels, impact and coping strategies adopted by agricultural science teachers in secondary schools in a South Eastern Nigerian city. Specifically, the study seeks to ascertain the stress levels among agricultural science teachers, the impact of stress on agricultural science teachers and the coping strategies adopted by agricultural science teachers in managing stress in secondary schools in Awka, South East Nigeria.

HYPOTHESES

The following hypotheses would be tested at 0.05 level of significance.

Ho 1: There is no significant difference between the mean responses of male and female agricultural science teachers on the level of stress experienced by agricultural science teachers in secondary schools in Awka

Ho 2: There is no significant difference between the mean responses of experienced (> 5 years of experience) and inexperienced (≤ 5 years of experience) agricultural science teachers on the impact of stress on agricultural science teachers in secondary schools in Awka

Ho 3: There is no significant difference between the mean responses of old (> 40 years of age) and young (≤ 40 years of age) agricultural science teachers on the coping strategies adopted by agricultural science teachers in managing stress in secondary schools in Awka.

METHODODOLOGY

The study adopted a descriptive survey research design and was carried out in Awka which is a city in South Eastern Nigeria. The population of the study was 402 agricultural science teachers in secondary schools in the study area. There was no sampling since the population was manageable. Two instruments were utilized for data collection. The first was the adapted 10-item version of Cohen's Perceived Stress Scale (PSS) which was used to measure stress levels of agricultural science teachers. The adapted PSS had response options of Never (N), Almost Never (AN), Sometimes (S), Fairly Often (FO) and Very Often (VO) The second instrument was a structured questionnaire titled; Stress Impact and Coping Strategies Questionnaire (SICSQ) containing two clusters (I and II). Cluster I sought information on the impact of stress among agricultural science teachers while Cluster II sought information on coping strategies adopted by agricultural science teachers in managing stress. The questionnaire had response options of Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD). Additionally, details of the subjects' demographic and socio -economic characteristics were ascertained through questions about age, experience and gender.

The two instruments were validated by five experts; all from the Department of Agricultural Education, University of Nigeria, Nsukka. The Cronbach Alpha was used to test the reliability of the two instruments which yielded a reliability coefficient of 0.83 and 0.81 for PSS and SICSQ respectively. Four hundred and two copies of the two instruments were administered by the researcher with the help of six research assistants. Out of the 402 copies of questionnaire distributed, there was an 82% retrieval rate which equated to 330 retrieved copies. Descriptive statistics (mean and standard deviation) as well as analytic statistics using t-test was used to test the hypotheses.

During the analysis, PSS scores were obtained by firstly assigning values to the items on the scale thus; Never (N) = 1, Almost Never (AN) = 2, Sometimes (S) = 3, Fairly Often (FO) = 4 and Very Often (VO) = 5. The SICSQ was scored on the basis of Strongly Agree (SA) - 4, Agree (A) - 3, Disagree (D) - 2 and Strongly Disagree (SD) - 1. Decision was reached on PSS using mean cut off point of 3.0. If the cumulative mean was 3.0 or above, then agricultural science teachers were highly stressed on the average but if the cumulative mean were less than 3.0 then it means that agricultural science teachers were lowly stressed on the average. For the SICSQ, items that had mean values of 2.50 or above were interpreted as agree while items with mean less than 2.50 were interpreted as disagree. The null hypothesis was accepted if probability value was equal or greater than 0.05 or otherwise rejected.

RESULTS

Research Question 1: What is the stress level of agricultural science teachers in secondary schools in Awka?

Ho 1: There is no significant difference between the mean responses of male and female agricultural science teachers on the level of stress experienced by agricultural science teachers in secondary schools in Awka

Table 1: Stress Level of Agricultural Science Teachers in Secondary Schools

Stress Levels	Mean	SD	Remarks
Cohen's PSS	3.41	0.78	Highly Stressed

N = 330

Table 2: T-test of the Mean Responses of Male and Female Agricultural Science Teachers on Stress Levels

Stress Levels	$\overline{X}_1$	SD_1	$\overline{X}_2$	SD_2	Sig	Decision
Items 1 – 10	3.6	0.70	3.4	0.86	0.78	NS

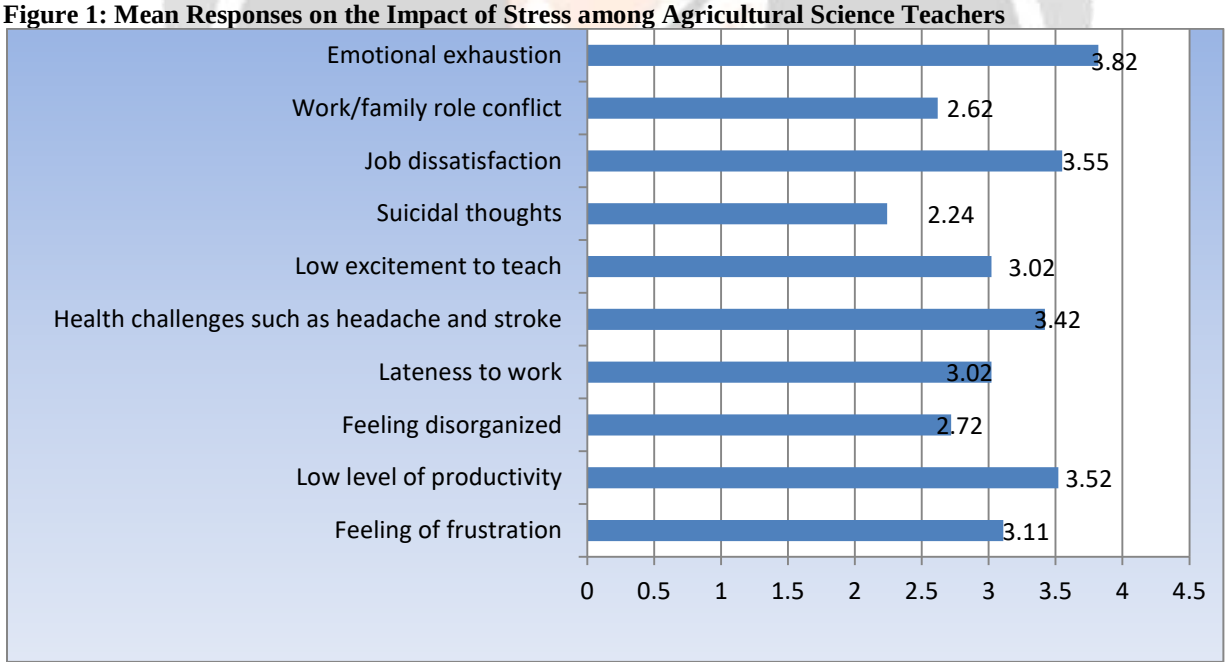
Key; N = 330 (192 Males & 138 Females); $\overline{X}_1$ = mean of males, $\overline{X}_2$ = Mean of females, $\mathbf{SD_1}$ = standard Deviation of males, $\mathbf{SD_2}$ = standard deviation of females, **S** = Significant, **NS**= Not significant. See Adapted PSS in Appendix A

Findings from Table 1 revealed that agricultural science teachers in secondary schools were highly stressed because they had a mean response of 3.41 which was above the cutoff point of 3.00. The standard deviation was 0.78 which was less than 1.96 indicating that the respondents were close to each other and the mean in their responses. Data from Table 2 revealed that the significant value (0.78) was greater than 0.05. Hence, the null hypothesis was accepted and therefore not significant.

Research Question 2: What are the impacts of stress on agricultural science teachers in secondary schools in Awka?

Ho 2: There is no significant difference between the mean responses of experienced (> 5 years of experience) and inexperienced (≤ 5 years of experience) agricultural science teachers on the impact of stress on agricultural science teachers in secondary schools in Awka

Figure 1: Mean Responses on the Impact of Stress among Agricultural Science Teachers



N = 330

Table 3: T-test of the Mean Responses of Experienced and Inexperienced Agricultural Science Teachers on Impact of Stress

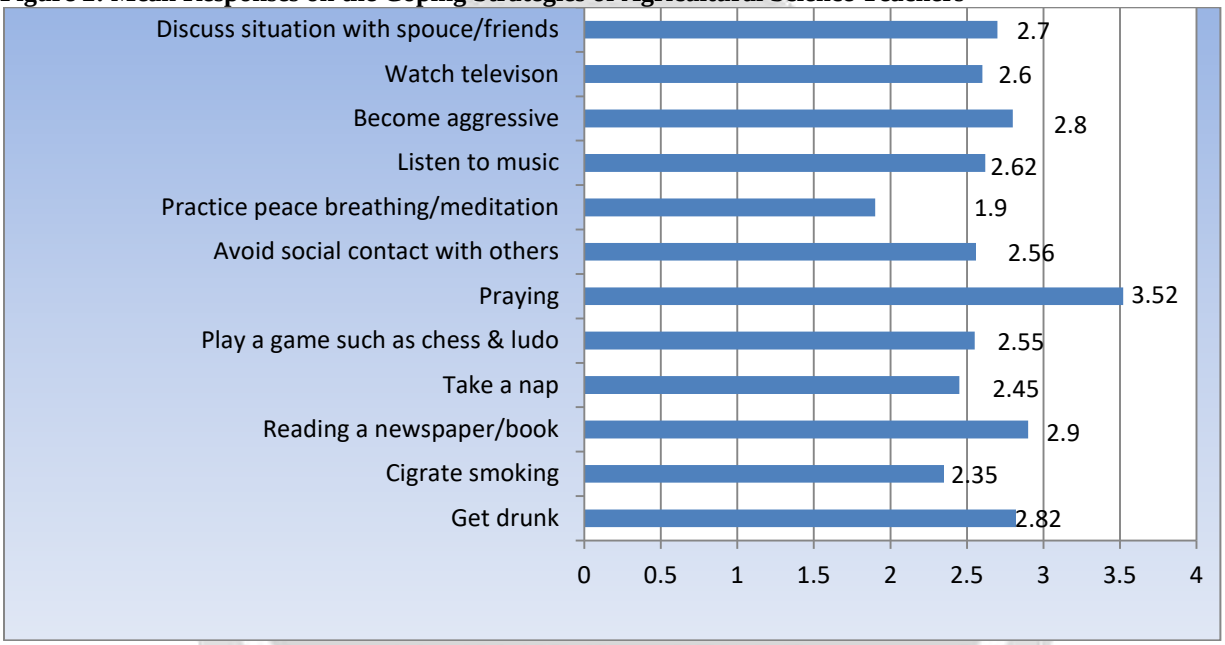
Stress Levels	$\overline{X}_1$	SD_1	$\overline{X}_2$	SD_2	Sig	Decision
Items 1 – 10	2.71	0.94	3.52	0.78	0.02	S

Key; N = 330 (228 Experienced Teachers & 102 Inexperienced Teachers); $\overline{X}_1$ = mean of experienced teachers, $\overline{X}_2$ = Mean of inexperienced teachers, SD_1 = standard Deviation of experienced teachers, $\mathbf{SD_2}$ = standard deviation of experienced teachers, **S** = Significant, **NS =** Not significant.

Data in Figure 1 revealed that the 9 out of the 10 items had mean values ranged from 2.62 – 3.82. The values were above 2.50 indicating that the items were the impacts of stress on agricultural science teachers. However, one item with mean value of 2.24 indicated that the item was not an impact of stress among agricultural science teachers. Data from Table 3 revealed that the significant value (0.02) was less than 0.05. Hence, the null hypothesis was rejected and therefore significant.

Research Question 3: What are the coping strategies adopted by agricultural science teachers in managing stress in secondary schools in Awka?
Ho 3: There is no significant difference between the mean responses of old (> 40 years of age) and young (≤ 40 years of age) agricultural science teachers on the coping strategies adopted by agricultural science teachers in managing stress in secondary schools in Awka.

Figure 2: Mean Responses on the Coping Strategies of Agricultural Science Teachers



N = 330

Table 4: T-test of the Mean Responses of Old and Young Agricultural Science Teachers on Coping Strategies

Stress Levels	$\overline{X}_1$	SD $_1$	$\overline{X}_2$	SD $_2$	Sig	Decision
Items 1 – 12	2.27	0..71	2.98	0.73	0.04	S

Key; N = 330 (198 Old Teachers & 132 Young Teachers); $\overline{X}_1$ = mean of old teachers, $\overline{X}_2$ = Mean of young teachers, SD_1 = standard deviation of old teachers, SD_2 = standard deviation of young teachers, S = Significant, NS= Not significant.

Data in Figure 2 revealed that the 9 out of the 12 items had mean values ranged from 2.56 – 3.52. The values were above 2.50 indicating that the items were the coping strategies adopted by agricultural science teachers. However, the three remaining items were ranged 1.90 – 2.45 which indicated that the items were not coping strategies for managing stress adopted by agricultural science teachers. Data from Table 4 revealed that the significant value (0.04) was less than 0.05. Hence, the null hypothesis was rejected and therefore not significant.

DISCUSSION OF FINDINGS

Findings on stress level of agricultural science teachers in secondary schools in Awka revealed that agricultural science teachers were highly stressed. This could be because they engage themselves in strenuous activities such as agricultural practical, teaching numerous classes, setting examinations and marking numerous scripts. This is in line

with Nwakile et al (2020) who found that agricultural science teachers are very often stressed due to factors such as late payment of salaries, taking students to the farm for practical and serving roles such as labour officers. The findings are also in cognizance with Chenevey and Ewing (2008) who found out that there is high level of stress experienced by agricultural science teachers which is evidenced in high level of teacher burnout. Furthermore, the findings on the tested hypothesis of no significant difference on the level of stress revealed that the hypothesis was accepted meaning that gender doesn't play any significant role in the level of stress experienced by agricultural science teachers. This agrees with Onu et al (2019) who found out that gender doesn't play any role in the level of stress experienced by agricultural teachers. The findings however disagrees with Nwakile et al (2020) who found that gender plays a role in the stress levels of teachers and that female agricultural science teachers experience higher level of stress compared to their male counterparts. The difference in findings between the two studies could be attributed to the different areas of the study

The findings of the study on the impacts of stress on agricultural science teachers in secondary schools in Awka revealed that the impacts of stress on agricultural science teachers include; emotional exhaustion, work family conflict, job dissatisfaction, low excitement to teach, health challenges such as headache and stroke, lateness to work, feeling disorganized, low level of productivity and feeling of frustration. The findings are in line with Okwaraji & Aguwa (2015) who found out that stress leads to psychological distress and job dissatisfaction among agricultural science teachers. The findings are also in cognizance with that of Smith and Smalley (2018) who found out that stress leads to burnout and job dissatisfaction among agricultural science teachers. The findings are also supported by Onu et al (2019) who found that stress could lead to health challenges such as stroke. The findings on no significant difference between the mean responses of experienced and inexperienced agricultural science teachers on the impact of stress on agricultural science teachers revealed that the hypothesis was rejected and that there was significant difference between the mean responses of experienced and inexperienced agricultural science teachers on the impact of stress on agricultural science teachers in secondary schools in Awka. The difference in opinions could because the experienced teachers have gotten used to stressful activities and learnt to manage it better compared to their younger counterparts

The findings on the coping strategies adopted by agricultural science teachers in managing stress in secondary schools in Awka revealed that they utilized the following strategies; Discussion of situations with spouse/friends, watch television, become aggressive, listen to music, avoid social contact with others, praying, play a game such as chess and ludo, reading a newspaper/book and getting drunk. The findings are in line with Bolarinwa Ayinde and Adeogun (2016) who found out that many employees use maladaptive measures like getting drunk to relieve stress while they reject effective measures such as peace breathing/meditation. The findings on the tested hypothesis of no significant difference between the mean responses of old and young agricultural science teachers on the coping strategies adopted by agricultural science teachers in managing stress in secondary schools in Awka revealed that it was rejected. Hence, age plays a role in the coping strategies adopted by agricultural science teachers in the area. The difference in opinions could be because the older teachers have gotten used to stressful activities and learnt to cope with it better than their younger counterparts who tend to lean towards maladaptive measures like alcohol intake and being aggressive when stressed.

CONCLUSION

Stress is a part of everyday life and most people experience it at one point or the other in their lives. In line with this, the study revealed that there wass high level of stress among agricultural science teachers and gender plays no role in the level of stressed experienced by the teachers. The high level of stress has led to negative consequences such as emotional exhaustion, work family conflict, job dissatisfaction, low excitement to teach, health challenges such as headache and stroke and lateness to work, among others and impact of stress on agricultural science teachers is dependent on their level of experience. As a result of these negative consequences of stress, agricultural science teachers in secondary schools adopt measures to cope with stress. The coping strategies adopted by agricultural science teachers in the area are sometimes healthy such as playing a game such as chess and ludo as well as reading a newspaper/book while others such as getting drunk are unhealthy although the strategies adopted were dependent on the ages of the agricultural science teachers. To ensure that stress is effectively managed among agricultural science teachers so as to reduce its negative consequences, some recommendations would be made.

RECOMMENDATIONS

1. Schools administration should ensure factors that can contribute to high stress among agricultural science teachers such as late payment of salaries are eradicated to enable these teachers perform at their optimal abilities.
2. State Governments should organize conferences for teachers on the negative impacts of stress on their health and life in general so that they make conscious efforts to avoid activities that could trigger stress
3. Agricultural Science teachers should avail themselves to therapy sessions in which they will be taught how to use effective stress control measures such as meditation as against the maladaptive measures such as being drunk that some use

CONFLICT OF INTERST

The authors have declared no conflict of interest whatsoever.

APPENDIX A

ADAPTED COHEN PERCEIVD STRESS SCALE (PSS)

S/N	ITEMS	N	AN	S	FO	VO
1	In the last month, how often have you been upset because of something that happened unexpectedly?					
2	In the last month, how often have you felt that you were unable to control the important things in your life?					
3	In the last month, how often have you felt nervous and "stressed"?					
4	In the last month, how often have you felt unconfident about your ability to handle your personal problems?					
5	In the last month, how often have you felt that things were not going your way?					
6	In the last month, how often have you found that you could not cope with all the things that you had to do?					
7	In the last month, how often have you felt not been able to control irritations in your life?					
8	In the last month, how often have you felt that you were not on top of things?					
9	In the last month, how often have you been angered because of things that were outside of your control?					
10	In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?					

Key: N = Never, AN = Almost Never, S = Sometimes, FO = Fairly Often, VO = Very Often
Source: Cohen, Mermelstein, Kamarck and Hoberman (1983).

Note: The scale is the same with the original apart from items 4, 5, 7, & 8 which were changed to negative items as against being positive in the original scale

REFERENCES

Abasimi, E., Atindanbila, S., Mahamah, M. M., & Gai, X (2015). The experience of stress among nursing students in nursing colleges in Tamale, Ghana. *International Journal of Psychology and Behavioural Sciences, 5*(2), 89-97. DOI: 10.9790/1959-0603086170.

Abdulghani, H,M., Alkanhal, A. A., Mahmoud, E. S., Ponnamperum, G. G., & Alfaris, E. A. (2011). Stress and its effects on medical students: A cross sectional study at a college of medicine in Saudi Arabia. *Journal of Health Population Nutrition, 29* (5), 516 – 522. DOI: 10.3329/jhpn.vn29i5.8906

Abiola, T., Lawal, I., & Habib, Z. G. (2015). Psychological distress due to academic stress among clinical students in a Nigerian tertiary institution: Comparison between medical and physiotherapy students. *Nigerian Journal of Basic and Clinical Sciences, 12(*2), 81 – 85. DOI: 10.4103/0331-8540.169298

Ajibade, B. L., Olabisi O. O., Fabiyi, B., Ajao, O. O. & Ayeni, A. R. (2016). Stress, types of stressors and coping strategies amongst selected nursing schools students in South-West, Nigeria. *European Journal of Biology and Medical Science Research, 4* (3), 1-15. Https://www.eajournals.org/journals/european-journal-of-biology-and-medical-science-research-ejbmsr/vol-4-issue-3-july-2016/stress-types-stressors-coping-strategies-amongst-selected-nursings-school-students-south-west-nigeria/

American Psychological Association (2008). *Stress in America*. Retrieved from http://apahelpcenter.mediariim.com/file.php/174/stress.

Bataineh, M. Z. (2013). Academic stress among undergraduate students: The case of Education Faculty at King Saud University. *International Interdisciplinary Journal of Education, 2*(1), 82 – 88. https://www.researchgate.net/publication/235863354

Bolarinwa K. K., Ayinde A.F.O. & Adeogun S.O. (2016). Stress coping strategies among agricultural extension agents in Oyo State, Nigeria. *Journal of Agricultural Extension, 20*(1), 163 – 172. Http://dx.doi.org/10.4314/jae.v20i1.14

Chenevey, J. L., & Ewing, J. C. (2008). Teacher burnout and job satisfaction among agricultural education teachers. *Journal of Agricultural Education, 49*(3), 12 – 22. DOI: 10.5032/jae.2008.03012.

Cohen, S., Mermelstein, R., Kamarck, T. & Hoberman, H. (1983). A global measure of perceived stress. *Journal of health and social behavior, 24*, 385-396.

Davis, M., Eshelman, E.R., & McKay, M. (2008). *The relaxation and stress reduction workbook*. Oakland, CA: New Harbinger Publications, Inc

Goff, A. M. (2011). Stressors, academic performance, and learned resourcefulness in baccalaureate nursing students. *International Journal of Nursing Education, 8(*1), 22- 28.

Isher, A.K., Sudhakar, J.K., Dwivedi, S., Kumar, R. & Sharma, S. (2018). Sources and effects of stress among agricultural university students. *Agro Economist - An International Journal 5*(1), 43-46. DOI: 10.30954/2394-8159.01.2018.

Khater, W.A Akhu-Zaheya, L. M & Shaban,. I. A. (2014) Sources of stress and coping behaviors in clinical practice among baccalaureate nursing students. *International Journal of Humanities and Social Science, 4*(6), 194 – 202. Https://www.researchgate.net/publication/285406471.

MacArthur, K, (2014) *Coping strategies*. Retrieved from http;//www.macses.ucsf.edu on May 27, 2020

Nandamuri, P. P. & Che, G. (2011). Sources of academic stress: A study on management of students. *Journal of Management and Sciences, 1*, 31 – 42.

Nwakile, T. C., Onogu, B., Okon, U. E., Odoh, P. N. & Ogbonna, E. K. (2020). Impact of stress on agricultural science teachers in secondary schools in a North Central Nigerian Community. *International Journal of Advance Research and Innovative Ideas in Education,* 6(4), 840 – 849.

Okwaraji F. E & Aguwa, E. N. (2015). Burnout, psychological distress and job satisfaction among secondary school teachers in Enugu, South East Nigeria. *Journal of Psychiatry, 18*(1), 14 – 66. http://dx.doi.org/10.4172/Psychiatry.1000198

Osinem E.C (2008). *Managing agricultural education and training. Resources, principles and methods*. Belony Int'l Publishers

Samson-Akpan, P. E., John, M. E., Edet, O. B., & Uka , V. K. (2016). Undergraduate nursing students‟ experiences with stress in Nigeria. *International Nursing Research Conference, 6-8 April*, 2016. University Edinburgh, Scotland

Shawna, F. (2018). *Three types of stress and health hazards*. Retrieved from https://spaciousthерapy.com

Smeltzer, S. C. O. & Brenda, G. B. (2010). *Brunner and Suddarth's textbook of medical surgical nursing*. Philadelphia; Wolterns Kluwer – Lippincotte.

Smith, A. R. & Smalley, S. (2018). Job Stress, burnout, and professional development needs of mid-career agricultural education teachers. *Journal of Agricultural Education, 59*(2), 305-320 https://doi.org/10.5032/jae.2018.02305