IMPACT OF STRESS ON AGRICULTURAL SCIENCE TEACHERS IN SECONDARY SCHOOLS IN A NORTH CENTRAL NIGERIAN COMMUNITY

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ABSTRACT

The study sought to ascertain impact of stress among agricultural science teachers in secondary schools in a North Central Nigerian Community. Three research questions and one hypothesis guided the study. The study adopted survey research design and was carried out in Okene community of Kogi State, North Central Nigeria. The population of the study was 232 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 namely; the adapted 10-item version of Cohen's Perceived Stress Scale (PSS) and Stress Causes and Consequences Questionnaire (SCCQ). The instruments were validated by five experts who were all lecturers in the Department of Agricultural Education. Cronbach Alpha was used to test the reliability of the two instruments which yielded a reliability coefficient of 0.83 and 0.79 for adapted PSS and SCCQ respectively. Two hundred and thirty two copies of the two instruments were administered by the researcher with the help of three research assistants. Out of the 232 copies of questionnaire distributed, there was an 89% retrieval rate which equated to 207 retrieved copies. Descriptive statistics (percentage, frequencies, mean and standard deviation) as well as analytic statistics using Chi Square for the association between categories were applied and presented with the aid of Tables and graphical representations. The result obtained revealed the following; there were high stress levels among agricultural science teachers as 144 Agricultural science teachers (69.2%) of the total participants reported that they experienced stress fairly often or very often as against only 26 agricultural science teachers (13.3%) who reported to have never experienced stress or almost never experience stress; gender plays a role in level of stress experienced as 78.36% of females fairly often or very often experienced stress as against the 61.83% of males that fairly often or very often experienced stress. It also revealed eight causes as well as eight consequences of stress. Based on the findings, the study recommended among others that; the administrators of secondary schools should organize conferences, seminars and workshops for agricultural science teachers on ways of managing stress so as to reduce the high level of stress among agricultural science teachers; and State and Local Governments should ensure that teachers are well compensated for their jobs and that salaries are paid as at when due to eradicate factors that can cause stress such as low remuneration and delay of salaries

Key: *Stress, Agricultural Science Teachers, North Central Nigeria*

INTRODUCTION

Stress arises when individuals feel under pressure if the demands from their environment are greater than they can comfortably manage. According to Isher, Sudhakar, Dwivedi, Kumar and Sharma (2018), stress refers to a physical or psychological state which results from the inability of an individual to cope with the demands of a particular

situation. Stress occurs when an individual is confronted by a situation that they perceive as overwhelming and cannot cope with (Bataineh, 2013). Furthermore, Khan, Gulzar and Yahya (2013) posited that stress happens to everybody and can take its toll on physical health, mental health and even academic success unless it is managed properly. According to Bolarinwa and Ayinde (2016), some activities in the environment could be difficult but individuals decide how to deal with such activities. Hence, Michie (2002) posits that stress is more likely in some situations than others and in some individuals than others. Generally, Researchers seem to agree that stress is the adverse reaction people have to excessive pressure or other types of demands which could either be physical or mental and is based on individual cognitive appraisal which causes unpleasant emotional distress or even feeling of fear, terror, dread, anxiety, irritation, annoyance, anger, sadness, grief, discomfort and depression (Karabay, Akyuz & Elci, 2016; Hudson, 2016). Stress can be categorized into many types.

Although various authors have classified stress into many types, the American Psychological Association (2008) recognizes three different types of stress and these are; acute stress, episodic acute stress and chronic stress. 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 irreversibly damage 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 does not see an escape from the cause of stress, and gives up on seeking solutions (Shawna, 2018). Hence, it could be why stress as an area of research seems to receive a lot of focus because it cuts across all fields.

Stress has become an important subject among many researchers. Many researchers in the field of Social sciences/education have carried out extensive research on stress and its consequences and concluded that the subject needed more concentrations in the respective fields (Ongori & Agolla, 2008; Agolla, 2009). Stress in academic institutions can have both positive and negative consequences if not well managed (Elfering et al., 2005; Stevenson & Harper, 2006). As a positive effect, stress can help compel individuals to action and can also result in new awareness and an exciting new perspective (Shaikh et al., 2004). On the hand, stress as a negative influence can result in feelings of distrust, rejection, anger, depression which in turn can lead to health problems such as headache, fatigue, stomach upset, insomnia, heart disease and stroke (Stallman, 2008). Stress could be triggered by various factors collectively known 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. According to Bolarinwa and Ayinde (2016), there are four major stressors namely: the environmental stressors, social stressors, physiological stressors and thoughts. The environment can bombard someone with intense and competing demands to adjust. Examples of environmental stressors include weather, noise, crowding, pollution, traffic, unsafe and substandard housing and crime. Social stressors can be experienced through the demands of different social roles people occupy such as being a parent, spouse, caregiver, and employee. Some examples of social stressors include deadlines, financial problems, job interviews, presentations, disagreements, demands for an individual's time and attention, loss of a loved one, divorce, and single parenting. Physiological situations and circumstances affecting the 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 which involve the brain interpreting and perceiving situations as stressful, difficult, painful, or pleasant (Davis, Eshelman, & McKay 2008). Stressors on their own do not cause stress but rather how the individual responds to

stress. It is important that individuals including agricultural science teachers obtain the essential knowledge on stress and events that could trigger it.

Agricultural science teachers are individuals who inculcate knowledge, skills and attitudes about agriculture to learners. 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 of 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 Okene undertake activities which might be perceived as stressful.

Okene is a town in Kogi State which is located in North Central Nigeria. Many agricultural science teachers in the area teach numerous classes within the week, take students to the farm for practical, have contact with chemicals which could be harmful, 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. Furthermore, these stressors may lead to negative psychological (e.g., depression, irritability, burnout), physical (e.g., headaches, heart palpitations, hyperventilation) and behavioural (e.g., absenteeism, turnover, violence) symptoms or 'strains' (Bolarinwa & Ayinde, 2016). Hence, avoiding or reducing the impact 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. Previously, many studies that have tried to ascertain impact of stress focused on individuals in the medical or nursing field (Abasimi, Atindanbila, Mahamah, & Gai, 2015; Abdulghani, Alkanhal, Mahmoud, Ponnamperum & Alfaris, 2011; Abiola, Lawal, & Habib, 2015; Oku, Oku, Owoaje., & 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. Furthermore, there is no known study to the knowledge of the Researcher on stress among agricultural science teachers in the study area. Hence, the paucity of information on impact of stress among agricultural science teachers in secondary schools in Okene is the gap the study sought to fill.

THEORETICAL UNDERPINNING

The study was hinged on the transactional model of stress and coping propounded by Lazarus and Folkman in 1984. The model stated that whether or not stimuli are stressful depends on a person's cognitive appraisal, a process that translates objective events into perceptual experiences. This model states that stress is a two-way process and involves the production of stressors by the environment as well as the response of the individuals subjected to these stressors. When a person appraises an objective event as harmful, he or she may still attempt to cope with it; that is, he or she may make behavioural efforts to reduce and master related internal and/or external demands. A person who fails to cope with harmful stimuli might suffer from mental or physical exhaustion Hence, the level of stress experienced in form of thoughts, feelings, emotions and behaviours as a result of external stressors depends on appraisals of the situation which involves a judgement about whether internal or external demands exceed resources and ability to cope. In relation to the current study, stressors are not the causes of stress among agricultural science teachers but their reaction to stressors is what actually causes stress. If agricultural science teachers are educated about stress and have the resources to cope, they are likely to experience reduced levels of stress

PURPOSE OF THE STUDY

The general purpose of the study was to ascertain the impact of stress on agricultural science teachers in secondary schools in a North Central Nigerian community. Specifically, the study sought to ascertain the level of stress, causes of stress and consequences of stress among agricultural science teachers in the area.

HYPOTHESIS

It is hypothesized that gender plays no role on the level of stress experienced by agricultural science teachers.

METHODS

The study adopted a descriptive survey research design and was carried out in Okene which is a community in North Central Nigeria. The population of the study was 232 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 Causes and Consequences Questionnaire (SCCQ) containing two clusters (I and II). Cluster I sought information on the causes of stress among agricultural science teachers while Cluster II sought information on consequences of stress among agricultural science teachers. 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 and gender.

The two instruments were validated by five experts; two Lecturers from the Department of Agricultural Education, Federal College of Education, Okene and three Lecturers from Department of Agricultural Education, University of Ilorin. The Cronbach Alpha was used to test the reliability of the two instruments which yielded a reliability coefficient of 0.83 and 0.79 for PSS and SCCQ respectively. Two hundred and thirty two copies of the two instruments were administered by the researcher with the help of three research assistants. Out of the 232 copies of questionnaire distributed, there was an 89% retrieval rate which equated to 207 retrieved copies. Descriptive statistics (percentage, frequencies, mean and standard deviation) as well as analytic statistics using Chi Square for the association between categories were applied and presented with the aid of Tables and graphical representations.

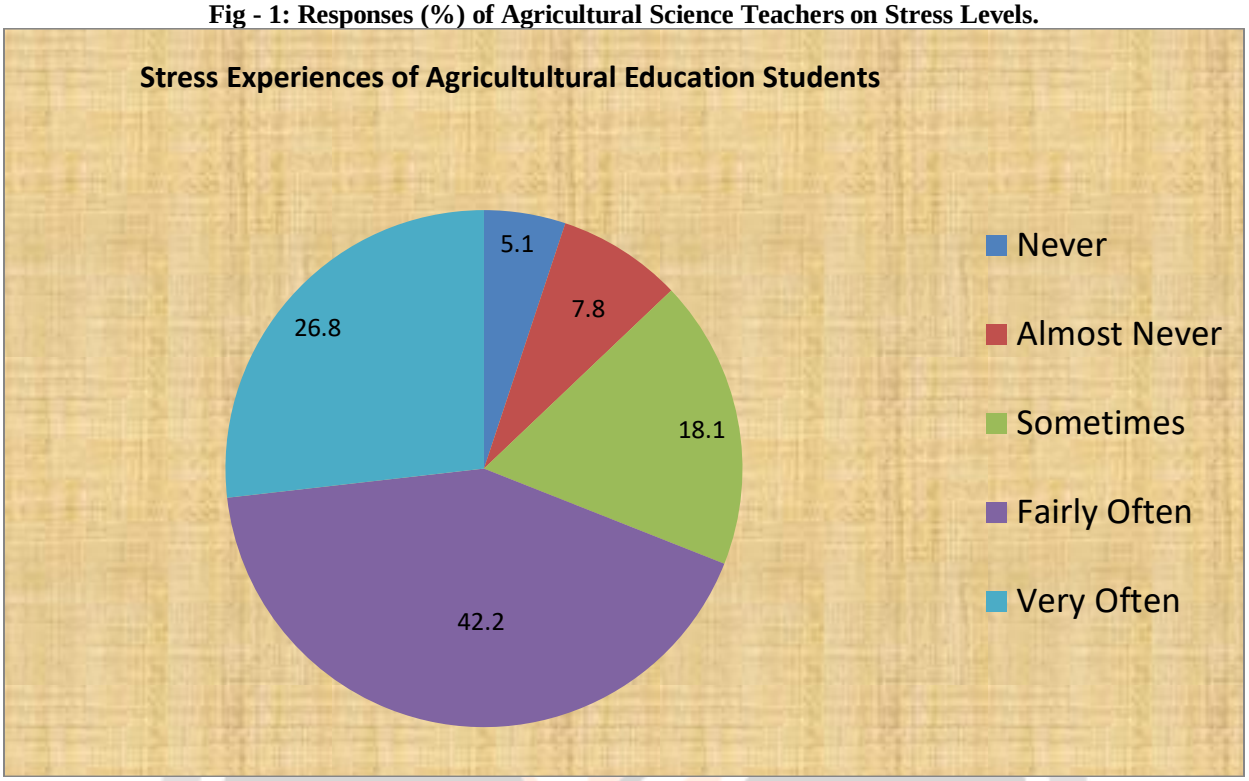
During the analysis, PSS scores were obtained by firstly assigning values to the items on the scale thus; Never (N) = 0, Almost Never (AN) = 1, Sometimes (S) = 2, Fairly Often (FO) = 3 and Very Often (VO) = 4 while reversing the responses for the positively stated items (item 4, 5, 7 & 8) thus; N = 4, AN = 3, S = 2, FO = 1 and VO = 0. Secondly, all the scores of the items were summed to provide the total PSS scores. The minimum score of the PSS was zero and the maximum was 40 with the higher scores indicating higher perceived stress. Percentages were used to classify the respondents based on their stress experience into five classes of those who never experience stress, almost never experience stress, sometimes experience stress, fairly often experience stress and very often experience stress. The SCCQ was scored on the basis of Strongly Agree (SA) - 4, Agree (A) - 3, Disagree (D) - 2 and Strongly Disagree (SD) - 1. Decision was reached for SCCQ using mean cut off point of 2.50. 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 level of stress experience among agricultural science teachers in secondary schools in Okene?

Ho 1: Gender plays no role on the level of stress experienced by agricultural science teachers in secondary schools in Okene?

Fig - 1: Responses (%) of Agricultural Science Teachers on Stress Levels.



N = 207 (100%)

Figure 1 showed that there is high level of stress among agricultural science teachers in the area. Out of the population, 11 Teachers (5.1%) indicated they never experience stress, 15 Teachers (7.8%) indicated they almost never experience stress, 37 Teachers (18.1%) sometimes experience stress, 89 Teachers (42.2%) experience stress while 55 Teachers (26.8%) experience stress very often.

Table 1: Frequency, Percentages and Chi-Square Analysis on the Prevalence of Stress among Male and Female Agricultural Science Teachers

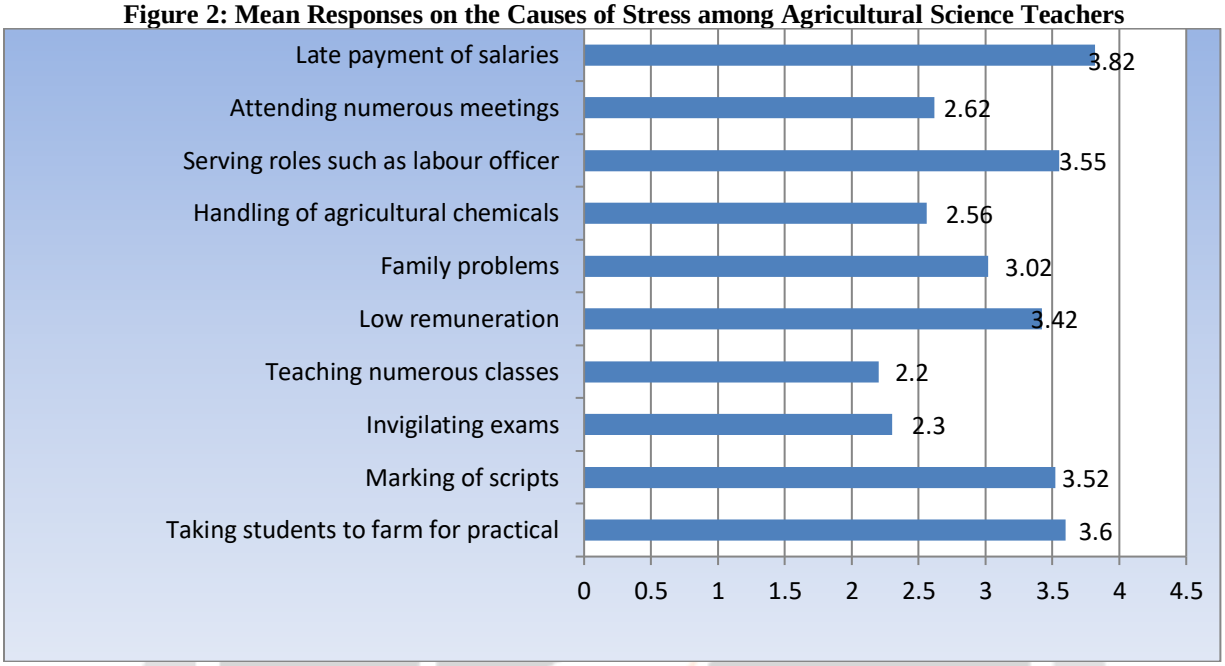
Gender	N	Never	Almost Never	Sometimes	Fairly Often	Very Often	df	Asymptotic Sig (2-sided)	Decision
Male	110	8	11	23	42	26			
%		7.27%	10.0%	20.90%	38.18%	23.65%	4	.025	Reject Ho
Female	97	3	4	14	47	29			
%		3.09%	4.12%	14.43%	48.45%	29.91%			
Total	207	11	15	37	89	55			

Table 1 indicated that stress is prevalent among stress is prevalent among male and female agricultural science teachers. 8 male agricultural science teachers (7.27%) of the male population responded to having never experienced stress, 11 (10.0%) almost never experience stress, 23 (20.09%) sometimes experience stress, 42 (38.18%) fairly often experience stress while 26 (23.65%) very often experience stress. As for the female agricultural science teachers, 3 female agricultural science teachers (3.09%) out of the female population reported to have never experienced stress, 4 female teachers (4.12%) reported to have almost never experienced stress, 14 female teachers (14.43%) sometimes experienced stress, 47 (48.45%) fairly often experienced stress while 29 (29.91%) very often experienced stress. The chi-square test also revealed that the asymptotic significance value of 0.025 was less than

0.05 indicating that the null hypothesis was rejected. Hence, gender plays a role on the level of stress experienced by agricultural science teachers

Research Question 2: What are the causes of stress among agricultural science teachers in secondary schools in Okene?

Figure 2: Mean Responses on the Causes of Stress among Agricultural Science Teachers



N = 207

As shown in Figure 2, out of 10 causes of stress, the predominant causes of stress among agricultural science teachers were late payment of salaries (3.82), taking students to the farm for practical (3.60) and serving roles such as labour officers. These stressors were ranked 1, 2, and 3, respectively by agricultural science teachers. All the items caused stress because they were above the cut off point of 2.50 except teaching numerous classes (2.20) and invigilating exams (2.30). Furthermore, the standard deviation of the ten items ranged from 0. 57 – 1.01 indicating that the respondents were close to each other in their responses.

Research Question 3: What are the consequences of stress among agricultural science teachers in secondary schools in Okene?

Table 1: Mean Ratings and Standard Deviations of Respondents on the Consequences of Stress among Agricultural Science Teachers

S/N	ITEMS	$\overline{X}$	SD	Remarks	Rank
1	Low level of productivity	3.42	0.88	A	5th
2	Feeling disorganized	3.53	0.70	A	2nd
3	Feeling depressed	2.43	0.64	D	9th
4	Health challenges such as headache and stroke	3.48	0.71	A	3rd
5	Difficulty in sleeping	3.45	0.65	A	4th
6	Low motivation to teach	3.15	0.83	A	6th
7	Excitement to teach	1.90	0.98	D	10th
8	Job dissatisfaction	3.72	0.89	A	1st
9	Work/family role conflict	3.04	0.78	A	7th
10	Emotional exhaustion	2.78	0.59	A	8th

N = 207

Data in Table 1 revealed that out of the 10 items, the predominant consequences of stress among agricultural science teachers were job dissatisfaction (3.72), feeling disorganized (3.53) and health challenges such as headache and stroke (3.48). These were ranked 1, 2, and 3, respectively by agricultural science teachers. All the items were consequences of stress because they were above the cut off point of 2.50 except feeling depressed (2.43) and excitement to teach (1.90). Furthermore, the standard deviation of the ten items ranged from 0. 59 – 0.98 indicating that the respondents were close to each other in their responses.

DISCUSSION OF THE FINDINGS

The findings on the level of stress among agricultural science teachers revealed that the stress level was high. This is illustrated by the 144 Agricultural science teachers (69.2%) of the total participants who reported that they experienced stress fairly often (42.4%) or very often (26.8%) as against the 26 agricultural science teachers (13.3%) who reported to have never experienced stress (5.5%) or almost never experience stress (7.8%). The findings also revealed that female agricultural science teachers experienced higher level of stress in comparison to their male counterparts. This is evidenced by the 76 female teachers (78.36%) out of the 97 female agricultural science teachers that fairly often or very often experienced stress as against the 68 male teachers (61.83%) out of the 110 male agricultural science teachers that fairly often or very often experienced stress. This is further buttressed by the rejected hypothesis of no significance that stated that gender plays no role on the level of stress experienced by agricultural science teachers in secondary schools in Okene. Hence, it is inferred that although agricultural science teachers in the area experience high level of stress, the female agricultural science teachers experience higher level of stress compared to their male counterparts. This could be because of the physical nature of the job and males usually adapt better to activities that require physical attributes in comparison to females. The findings are in line 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. The findings however disagree 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 on causes of stress among agricultural science teachers revealed that the main causes of stress among agricultural science teachers are late payment of salaries, taking students to the farm for practical and serving roles such as labour officers. These stressors were ranked 1, 2, and 3, respectively by agricultural science teachers. Other causes of stress among agricultural science teachers include; attending numerous meetings, handling of agricultural chemicals, family problems, low remuneration and marking of scripts. The findings are in line with Onu et al (2019) who found out that handling of chemicals and undertaking practical are major causes of stress among individuals who teach agriculture. The findings are also in line with Okwaraji & Aguwa, 2015) who found out that low remuneration of agricultural science teachers are a major cause of stress among agricultural science teachers.

The findings on the consequences of stress among agricultural science teachers in secondary schools revealed that the major consequences of stress for agricultural science teachers are job dissatisfaction, feeling disorganized and experiencing health challenges such as headaches and stroke. Others include low level of productivity, difficulty in sleeping, low motivation to teach, work/family role conflict and emotional exhaustion. 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 stated that stress could lead to health challenges such as stroke.

CONCLUSION/RECOMMENDATIONS

Stress is an inevitable component of everyday life for most individuals including agricultural science teachers. The findings of the study revealed that agricultural science teachers experience high level of stress but the female agricultural science experience higher level of stress compared to their male counterparts. This is caused by a variety of factors chief among which are; late payment of salaries, taking students to the farm for practical and serving roles such as labour officers. These stressors lead to numerous consequences among which the main ones are job dissatisfaction, feeling disorganized and experiencing health challenges such as headaches and stroke. If these consequences are left unchecked, the aim of agricultural science at the secondary school level might not be achieved

because agricultural science teachers play a primary role in instruction. Hence, to mitigate the causes and consequences of stress among agricultural science teachers in secondary schools in Okene, the following recommendations were made;

1. The administrators of secondary schools should organize conferences, seminars and workshops for agricultural science teachers on ways of managing stress so as to reduce the high level of stress among agricultural science teachers.
2. State and Local Governments should ensure that teachers are well compensated for their jobs and that salaries are paid as at when due to eradicate factors that can cause stress such as low remuneration and delay of salaries
3. Agricultural science teachers should be mandated by school administrators to attend workshops and conferences on stress management to expose them to the negative effects of stress on their physical and mental wellbeing
4. The Government and Non Governmental Organizations (NGOs) should encourage researchers to undertake research on innovative stress management techniques by giving them access to grants.

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

Agolla, J. E. (2009). Occupational stress among police officers: The case of Botswana Police service. *Research Journal of Business Management, 2* (1), 25-35. DOI: 10.3923/rjmb.2009.25.35.

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. (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.

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

Elfering, A., Grebner, S., Semmer, N. K., Kaierfreiburghaus, D., Lauper-Del Ponte, S., & Witschi, I. (2005). Chronic job stressors and job control: Effects on event-related coping success and well-being, *Journal of Occupational Organizational Psychology, 78,* 237-52.

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

Hudson, K. (2016). Coping complexity model: Coping with stressors, coping influencing factors and coping responses. *Psychology, 7*, 300 – 309.

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: 10.30954/2394-8159.01.2018.7

Karabay, M. E., Akyuz, B. & Elci, M. (2016). Effects of family-work conflict, locus of control, self confidence and extraversion personality on employee work stress. *Procedia-Social and Behavioural Sciences, 235*, 269 – 280.

Khan, K. U. D., Gulzar, S. & Yahya, F. (2013). Crucial factors affecting stress: A Study among Undergraduates in Pakistan. *International Journal of Asian Social Science, 3*(2), 428-442. : https://www.researchgate.net/publication/257307378.

Lazarus, R. S. & Folkman, S. (1984). *Stress, appraisal and coping*. New York: Springer Publishing Company.

Michie S. (2002). Causes and management of stress at work. *Occupational and Environmental Medicine, 59*, 67–72.

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

Oku, A., Oku, O., Owoaje, E. & Monjok, E. (2015). An assessment of mental health status of undergraduate medical trainees in the University of Calabar, Nigeria: A Cross Sectional Study. *Macedonian Journal of Medical Sciences, 3*(2), 356-362. http://dx.doi.org/10.3889/oamjms.2015.068

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

Ongori, H & Agolla, J. E. (2008). Occupational Stress in organizations and its effects on Organizational Performance. Journal. Manage. Res. 8(3), 123-135. DOI: 10.5296/jmr.v813.9554.

Onu, F.M., Omeje, B.A., Ugwoke, C. U., Ezebuiro, F. U., Ekenta, L.U., Mgbenka, R.N., Nwankwo, C. U., Onah, F.C., Nwachukwu, C.U., Eze, G.E., Omeje, T.C., Ekwueme, S.U., Odo, E.N., Ogbonna, E.K & Arokwu, F.N. (2019). Occupational stress and burnout prevalence among agricultural education lecturers in Nigerian Universities. *Global Journal of Health Science, 11* (14), 58 – 72. DOI:10.5539/gjhs.v11n14p58

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

Shaikh, M., Kahloon, A., Kazmi, M., Khalid, H., Nawaz, K., Khan, N, & Khan, S. M. (2004). Students, stress and coping strategies: A case of Pakistan medical school. *Education for Health, 17*, 334 – 353.

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

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

Stallman, H. M. (2008). Prevalence of psychological distress in university students – implications for service delivery. *Australian Family Physician, 37*(8), 673 – 677.

Stevenson, A., & Harper, S. (2006). Workplace stress and the student learning experience. *Quality Assurance. Education, 14*(2), 167-178.