

**IMPACT OF MULTIPLE STRESS MANAGEMENT INTERVENTION ON  
MOTIVATION AND ACADEMIC PERFORMANCE OF AUTOMOBILE  
TECHNOLOGY EDUCATION STUDENTS IN UNIVERSITIES IN SOUTH-SOUTH,  
NIGERIA**

Dr. Jacob Poripo

Department of Technical Education (Metalwork/Automobile Technology), School of  
Vocational and Technical Education, Isaac Jasper Boro College of Education,  
Sagbama, Bayelsa State, Nigeria.

**Email:** jackporipo1@gmail.com, jackporipo2@gmail.com

**ABSTRACT**

The study sort to determine the impact of multiple stress management intervention on motivation and academic performance of Automobile Technology Education students in Universities in South-South, Nigeria. 2 purposes with corresponding research questions were generated, answered respectively. The study employed quasi-experimental design. The population for the study was 97 first year Automobile students. The structured questionnaire and automobile technology performance test instruments were used for data collection. The instruments used for data collection were validated by 3 experts and has overall reliability coefficients of 0.78. Data analysis was carried out using mean and standard deviation. MANCOVA was used to test the hypothesis. The findings revealed significant effect of the intervention on student's health status and improved academic performance. It was therefore recommended among others that multiple stress management intervention should be integrated in Automobile technology education and other engineering/technology based programmes to foster effective stress management practices among students. Also, there is the need for stress management training for all levels of Automobile students with involvement of capability within the university.

**Keywords:** Automobile Technology Education, Academic Performance, motivation and Multiple Stress Management Intervention.

**INTRODUCTION**

Automobile Technology is one of the trades offered as an option in technical education in the tertiary institutions in Nigeria. The programme of Automobile Technology in tertiary institutions including universities in South-South Nigeria is designed to produce competent graduates-technologists in various Automobile trades despite the stressful nature of the university education (Poripo, Ede, Nwaodo & Youdiowei, 2020). Automobile is a self-propelled vehicle that is used for the transportation of goods and passengers on the ground. However, Automobile Technology Education involves the application of scientific knowledge in the design, selection of materials, construction, operation, maintenance and pedagogical skills acquisition of automobiles (Poripo, Ede, Nwaodo & Youdiowei, 2020; Poripo & Youdiowei, 2014).

Automobile Technology Education is one of the professional course areas in the university. The course, in addition to the usual daily classroom lessons requires student's participation in the compulsory and highly technical workshop practice with varying automobile related practical sessions apart from higher academic requirements, greater time pressure, financial demands and lesser time for recreational activities in the university environment (Lee, Ahmed, Pathirana & Papier, 2016). University students including those studying Automobile need to adapt to various psychosocial changes besides motivation and coping with the academic and social demands in preparing for their professional careers (Poripo, Ede, Nwaodo & Youdiowei, 2020; Uehara, Takeuchi, Kubota, Oshima, Ishikawa, 2010). Literature however, revealed that students with

high stress level face various negative consequences of stress including sleeping problems (Akerstedt, 2006), burnout (Maslach & Leiter, 1997), increased risk of anxiety and depression among students (Melchior, Caspi, Milne, Danese, Poulton & Moffitt, 2007), suicide thoughts and anger (Elgard & Arlett, 2002; Al-Qaisy, 2011), risky health behaviours and poor dietary patterns (Lee, et al., 2016). This is an indication that stress would most likely have negative consequences among Automobile university students especially health challenges and poor academic performance (Poripo, Ede, Nwaodo & Youdiowei, 2020).

However, Automobile Technology Education students are not exempted from the stressful nature of life, especially those in the first year of their academic programme in the South-South Nigeria universities. The period of transition from secondary school to higher institution is a remarkable stage of human development (Poripo, Ede, Nwaodo & Youdiowei, 2020; Boujut, Bruchon, Schweitzer, & Rasclé, 2004). During this stage, university students are considered to be in the last period of transition before adult life (Towbes & Cohen, 1996). Their psychological and physical discomfort due to stress can manifest in various ways, including mood, sleep, fear, depression and eating disorders (Boujut, Bruchon-Schweitzer & Dombrowski, 2012). In essence, this group of individuals is vulnerable to stressful events which affects their mental health, academic performance and can be detrimental to their progress (Grebott & Barumandzadeh, 2005; Stanley & Manthorpe, 2001). Thus, students at this level require expert's assistance to cope with and handle their stressful experiences (Boujut, Koleck, Bruchon-Schweitzer, & Bourgeois, 2009). Compass, Connor-Smith, Saltzman, Thomsen and Wadsworth (2001) asserted that several psychological interventions for the treatment and prevention of detrimental outcomes of stress should be designed to enhance the mental health status and academic performance of Automobile students. It implies that stressful experience among first year students is imminent which include those studying Automobile Technology Education in university. This is also because of their age and transition from secondary education to higher education (Poripo, Ede, Nwaodo & Youdiowei, 2020).

Academic performance in the University is no doubt the measure of students' success. Academic performance points to the extent to which Automobile students have gained from a particular curriculum, subject or task based on relatively standardized experiences, such as a class test (Akinade, 2001). Effective learning and sound academic performance are said to constitute an integral part of the goal of schooling for students optimal performance (Hassan 2006). Student's academic performance however, have high tendency to be drastically affected or influenced by academic stressors manifestation which include lack of concentration in the classroom, absence from lectures, examination tension, fear of failure and academic grading system, inability to complete multiple assignments among others (Awino & Agolla, 2008; Bataineh, 2013). According to Nkem (2015), vocational and technical subjects including Automobile Technology Education students face the following, course stress, class work overload, shortage of course reference materials, unsatisfying learning experiences and assignment and project deadlines, lack of coverage of course contents before examinations, lockers to keep belongings, delays/transportation to and from the school etc. In this study, academic performance means the total or overall output of individual Automobile Technology Education student after assessment for participating in required academic activities at the end of the session. Automobile students need to be motivated in order to perform well. In this study, stress implies events or psychological difficulties which Automobile Technology Education students encounter during the course of study as a result of combining multiple demands which include academic, personal, social, economic, and workshop practice that poses serious threat and challenge to their mental wellbeing and influence their academic effectiveness in various Automobile courses. In this study, academic performance means the total or overall output of individual Automobile Technology Education student after assessment for participating in required academic activities at the end of the stress management intervention and be motivated.

Motivation is a fundamental recipe for academic success. It involves internal and external factors that stimulate desire, attention, needs, goals and interests which all focuses on stimulating individual learners and raising their interest and attention towards engaging in an action or behaviour and the accomplishment of such actions or goals. Dornyei (2001) argued that motivation explains why people decide to do something, how hard they are going to pursue it, and how long they are willing to sustain the activity. In order words, motivation is what gets students going, keeps students going, and determines where students are trying to go. Alderman (2004) stated that students who have optimum motivation have an edge and less prone to stress because they have adaptive attitudes and strategies, Furthermore, motivational beliefs are very essential to the academic performance of students because they help to determine the extent to which students will consider, value, put in effort, and show interest in the task.

Motivation plays a significant role in student's academic life and their performance. Motivation reflects in learners choices of academic tasks, the time and effort they allocate to each task, their perseverance in academic tasks. In order for stress levels to be controlled and maintained, Automobile Technology Education students should create expectations and goals for themselves that are realistic and achievable. After accomplishing these set goals, the goals can be raised pushing the students further, making them more challenging until these goals are reached. Goals should be set to be realistic in order for progress to be noticeable increasing students motivation and stress management.

However, most Automobile students in Southern Nigeria lack stress management strategies with reason to the common experience of negative stress outcomes which indicate trial and error strategies because of lack of educative management intervention for handling stressful and related challenges. The requisite skill in stress management at present may be very low among Automobile students which may have resulted into bad reactions to most of the stressors in university. According to Grant, Compas, Thurm, McMahan & Ey, (2000), the ways in which university students (Automobile students) cope with stress are potentially important mediators of the impact of stress on current and future mental health status as well as overall academic performance. This implies that Automobile Technology Education students could acquire stress management skills through appropriate stress training intervention such as multiple stress management intervention.

However, multiple stress management intervention is a structured, psycho-educational and intervention therapy in form of a training programme offers to students. This approach is a face-to-face training which, according to Heber, Lehr, Ebert, Berking, Cuijpers and Riper (2016), is the most effective method of stress management therapy. It involves didactic teaching components as well as learning exercises with basic objective of ensuring that Automobile students develop the capacity to effectively execute coping strategies and academic performance. Boujut, Bruchon-Schweitzer and Reasle, (2004) confirmed that "despite reports of many symptoms including somatic (tiredness, headaches, backaches), psychological (e.g. depression, suicidal tendencies), and behavioural disorders (e.g. eating habits, addictive behaviours) among first year students, very few studies have focused on student's motivation, mental health and academic performance. Previous Studies however reported that higher institution students perceive academic life as stressful, demanding report experience of emotional and cognitive reactions to stress, especially due to external pressures and self-imposed expectations (Hicks & Miller, 2006; Veaser & Blakemore, 2006).

Thus, Automobile students with provision of an educative assistance such as stress and health management models stress management would most likely use appropriate mechanism to prevent the gross negative consequences of stress (Bataineh, 2013; Stevenson & Harper, 2006; Chang, 2007). Therefore, carrying out this intervention study could be a life time opportunity for students who participate in overcoming the defects of stress in their entire life.

### Statement of the Problem

The goal of Automobile Technology Education in Nigerian universities is to produce Automobile graduates or technologists with sound theoretical and practical knowledge who can test, diagnose, service and repair faults relating to Automobiles. The Automobile graduates have the prospect of either being employed or becoming self-employed. Achievement of this aim and objective requires adequate provision of learning facilities, stress free or less stress and always in a right state of mind to be able to cope with the demands of the courses. However, Automobile Technology Education students in Southern Nigeria Universities are exposed to a large number of academic stressors with continued stressful experiences. As a result of these stressors, student cognitive effectiveness is affected with various negative behavioural display and reduced academic competencies and performance. For instance, there are frequent reports of high level of stress experience with symptoms and manifestations including signs of depression, feeling overwhelmed, sad, hopeless, behavioural disorder, relational conflicts, anger, incessant sickness, mental declination, poor academic performance and suicide thought among students in Universities in South-South, Nigeria which often leads to their inability to achieve academic aims and goals. However, a major concern is the inability of students most especially Automobile Technology Education students in first year to manage these multiple academic demands, expectations and unavoidable stressors within university education which causes stressful experiences with detrimental effect ranging from lack of motivation, mental health failure and poor academic performance. This problem, if not addressed would continue to lead to graduation of half-baked, unskilled and irrelevant Automobile Technology Education graduates from Universities in South-South, Nigeria.

Moreso, to prevent or avoid severe psychological effects and its implications among the Automobile Technology Education students, effective stress management intervention is needed which could help or assist students in handling stressful university events appropriately, thereby avoiding its harmful effects which could affect or jeopardize student's academic performance and future working ambitions. This stress management intervention should help Automobile students with a better perception of the university environment and identify appropriate ways which will help to reduce the severe negative effect of stress among students. Therefore, the problem of this study is how to reduce stress and the negative manifestations that are noticeable among Automobile Technology Education students in their study habit and other school activities in order to improve their academic performance.

However, if Automobile students are not exposed to stress management treatments especially at this early stage of their university life before adult life, stress may jeopardize their academic ambition, force them to adopt maladaptive behaviours, frustrate their mental health stability and make them one of the potential future frustrated Automobile employees. Thus, it becomes urgent to find out the effect of multiple stress management intervention on mental status and academic performance of first year Automobile students in Universities in Southern Nigeria.

### Purpose of the Study

The general purpose of this study is to determine the mental health status and academic performance of automobile technology education students in universities in southern Nigeria. Specifically, the study determines:

1. The effect of multiple stress management intervention on motivation among Automobile Technology Education students.
2. The effect of multiple stress management intervention on Academic performance of Automobile Technology Education students.

### Research Questions

The following research questions were answered in the study:

1. What is the effect of multiple stress management intervention on motivation among Automobile Technology Education students?

2. What is the effect of multiple stress management intervention on academic performance of Automobile Technology Education students?

### Methodology

A quasi-experimental design was adopted for this study. The study was conducted in Universities offering Automobile Technology Education in South-South zone of Nigeria. The population for this study consists of 97 first year students of Automobile Technology Education in four universities offering the course as an option in the Technical Education Programme in South-South zone of Nigeria. The first year Automobile Technology Education students was used for this study because they are the most vulnerable to stress in the Universities. The entire population of the subject was used for the study because of the relative small size which is manageable and accessible by the researcher, hence there was no sample. The instruments used for data collection in this study include; a questionnaire titled “Questionnaire on Automobile Technology Students’ Stress experience, Motivation and Mental Health Concern (QATSSEMMHC)” and an Automobile Technology Achievement Test (ATAT). The instruments used for collection of data in this study were validated by three experts from the University of Nigeria, Nsukka. Statistical Package for Social Sciences (SPSS) version 20.0 was used to analyzed the data collected from the respondents. Cronbach alpha reliability coefficient index was used to determine the internal consistency of the instruments. The overall reliability index for the instruments was 0.77. The data collected from the administration of both pre-test and post-test, were analyzed and interpreted using mean (X) and standard deviation (SD). The multivariate analysis of covariance (MANCOVA) was used to test the hypotheses at 0.05 level of significant.

## RESULT

### Research Question 1

What is the effect of multiple stress management intervention on motivation among automobile technology education students?

**Table 1:** Pretest/Posttest Mean scores of Students on the effect of multiple stress management intervention on motivation among automobile technology education students

Groups	N	Pretest		Posttest		Mean Gain/Loss	Remarks
		??	SD	??	SD		
Experimental	51	50.38	4.56	58.75	3.19	8.37	Increases
Control	46	56.14	3.38	53.86	3.84	-2.28	Decrease

The results presented in Table 1 shows the mean difference between the pretest and posttest responses of students in the experimental and control groups on motivation responses of Automobile Technology Education students in Universities in South-South Nigeria. The Table shows that the pretest mean score (M=50.38) and standard deviation (SD=4.56) of the responses of Automobile students in the experimental group on motivation responses is less than their posttest mean score (M=58.75) with a mean gain of 8.37 which is an indication of improved motivation response among Automobile Technology Education students in Universities in South-South Nigeria. In the same vein, the Table 2 also, shows that the pretest mean score (M=56.14) of responses of Automobile Technology Education students in Universities in South-South Nigeria in the control group is greater than their posttest mean responses (M=53.86) with a mean loss of -2.28 which shows decrease in their motivation responses among Automobile Technology Education students in Universities in South-South Nigeria. Therefore, the mean increase of 8.37 among the students in the experimental group is an indication that the multiple stress management intervention seems to positively influenced the improvement in students motivation responses during stressful experiences. Moreso, the control group with mean

decrease of -2.28 implies a decrease in students motivation responses among Automobile Technology Education students in Universities in South-South Nigeria during stressful experiences in the absence of multiple stress management intervention therapy. Standard deviation scores of 3.19 for the experimental group and 3.84 for the control group imply that the scores of the experimental group were close to each other than the scores of the control group. Mean gain score of 8.37 and mean loss score of -2.28 for the experimental and control groups respectively imply that multiple stress management intervention strategy had more positive effect on the mean rating score of the experimental group than the control group.

### Research Question 2

What is the effect of multiple stress management intervention on academic performance of automobile technology education students?

**Table 2:** Pretest/Posttest Scores of Students on the effect of multiple stress management intervention on academic performance of automobile technology education students

Groups	N	Pretest		Posttest		Mean gain	Remarks
		??	SD	??	SD		
Experimental	51	53.57	4.39	58.14	4.18	5.54	Increases
Control	46	50.60	3.99	56.14	3.38	4.57	Increases

The results presented in Table 2 shows the mean difference between the pretest and posttest responses of students academic performance in the experimental and control groups among Automobile Technology Education students in Universities in South-South Nigeria. The Table shows that the pretest mean score (M=53.57) and standard deviation (SD=4.39) of Automobile students in the experimental group increase to 58.14 at the posttest with a mean gain of 4.57. On the other hand, the pretest mean score (M=50.60) and standard deviation (SD=3.99) of the control group increases to 56.14 at the posttest with a mean gain of 4.57. However, the experimental group with mean increase of 58.14 has higher increase in their academic performance than the control group with mean increase of 56.14 which implies that the multiple stress management intervention seems to effectively influence the marginal increase in the academic performance of the Automobile Technology Education students in universities in South-South Nigeria in the experimental group compared to those students in the control group with no stress management experience or absence of multiple stress management intervention therapy among Automobile students.

### CONCLUSION

Based on the findings, this study concludes that multiple stress management intervention will be effective in training Automobile students in stress management thereby limiting and reducing the detrimental effects of stress among students most especially those in the first year visa-vi, level of stress, motivation, and their academic performance.

### RECOMMENDATIONS

Based on the findings of this study, the following recommendations were made:

1. Multiple stress management intervention should be integrated in Automobile Technology Education and other engineering/technology based programmes to foster effective stress management practices among students.
2. There should be stress management training for all levels of Automobile Technology Education students with involvement of professional therapists and educational stakeholders to improve students stress management capability within the university education.

3. To promote effective stress management practices among students, general sensitization and specialized training programmes should be organized at least per semester for both students and university staff towards effective stress management practices and application.
4. Stress management centers with required facilities should be made available in the tertiary institutions for helping students who are victims of stressful circumstances.

## REFERENCES

- Adewuya, A., Ola, B., Olutayo, O., Mapayi, B., & Oginni, O. (2006). Depression amongst Nigerian University students: Prevalence and socio-demographic correlates. *Psychiatry Epidemiology*, 41, 674-678.
- Agolla, J. E. (2009). Occupational stress among Police Officers: The case of Botswana police service. *Resources Journal of business Management*, 2 (1), 25-35.
- Aheme, D. (2001). Understanding students stress: A qualitative approach. *Irish Journal of Psychology*, 22, 176-187.
- Akerstedt, T. (2006). Psychosocial stress and impaired sleep. *Scandinavian Journal of Work, Environment & Health*, 32 (6), 493-501.
- Al-Qaisy, L. M. (2011). The relation of depression and anxiety in academic performance among group of university students. *International Journal of Psychology and Counselling*, 3 (5), 96-100.
- Awino, J. O., & Agolla, J. E. (2008). A quest for sustainable quality assurance measurement for universities: case of study of the University of Botswana. *Education Research Revolution*, 3 (6), 213-218.
- Baldwin, D. R., Harris, S. M., & Chambliss, L. N. (1997). Stress and illness in adolescence: Issues of race and gender. *Adolescence*, 32 (128), 839-853.
- 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.
- Boujut, E., Bruchon-Schweitzer, M., & Dombrowski, S. (2012). Coping among students; development and validation of an exploratory measure. *Psychology*, 3 (8), 562-568.
- Boujut, E., Bruchon-Schweitzer, M., & Reasclé, N. (2004). Stress and health in a student population: a transactional model perspective. *Psychology and Health*, 19, 25-26.
- Boujut, E., Koleck, M., Bruchon-Schweitzer, M., & Bourgeois, M. (2009). La santé mentales chez les étudiants: enquête auprès d'une cohorte de 556 étudiants de l'ère année. *Annals Medico-Psy-chologiques*, 167, 668.
- Chan, D. (2008). Emotional intelligence, self-efficacy, and coping among Chinese prospective and in-service teachers in Hongkong. *Educational Psychology*, 28, 397-408.
- Chang K., L. U. (2007). Characteristics of organizational culture, stressors and wellbeing: the case of Taiwanese organizations. *Journal of management psychology*, 22 (6), 549-568.
- Chen, H., Wong, Y., Ran, M., & Gilson, C. (2009). Stress among Shanghai university students: The need for social work support. *Journal of Social Work*, 9 (3), 323-344.
- Chen, H., Wong, Y., Ran, M., & Gilson, C. (2012). Stress among shanghai university students. *Journal of Social Work*, 9 (3), 323-344.
- Chen, k. L. (2009). A Study of stress sources among college students in Taiwan. *Journal of Academic and Business Ethics*, 2 (14), 1-8.
- Cheng, C. S. (1999). *Life stress of and guidance for adolescents*. Taipei: Psychological Publishing Co., Ltd.
- Chinaveh, M. (2013). The effectiveness of multiple stress management intervention on the level of stress, and coping responses among Iranian students. *Procedia Social and Behavioural Sciences*, 84, 593-600.

- Chinaveh, M., Ishak, N. M., & Salleh, A. M. (2010). Improving mental health and academic performance through multiple stress management intervention; Implication for diverse learners. *Procedia Social and Behavioural Sciences*, 7 (C), 311-316.
- Cohen, J. (1984). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ; Lawrence Erlbaum Associates.
- Compass, B. E., Connor-Smith, J. K., Saltzman, H., Thomsen, A. H., & Wadsworth, M. E. (2001). Coping with stress during childhood and adolescence: Problems, progress, and potential in theory and research. *Psychological bulletin*, 127 (1), 87-127.
- Dornyei, Z. (2001). *Motivational strategies in the language classroom*. Cambridge: Cambridge University Press.
- Efuwape, B. M. (2017). Effect of stress management intervention on stress, coping response, mental health and academic performance of university electronic technology education students in south west Nigeria. Ph.D Theses, Department of Industrial Technical Education, University of Nigeria, Nsukka.
- Elgard, J. F., & Arlett, C. (2002). Perceived social inadequacy and depressed mood in adolescents. *Journal of Adolescence*, 25, 301-305.
- Folkman, S. & Lazarus, R. S. (1984). If it changes it must be a process: Study of emotion and coping during three stages of a college examination. *Journal of Personal Social Psychology*, 48 (1), 150-70.
- Folkman, S., Lazarus, R. S., Dunkel-Schetter, C., DeLongis, A., & Gruen, R. J. (1986). Dynamics of a stressful encounter: cognitive appraisal, coping, and encounter outcomes, *Journal of Personal Social Psychology*, 50 (5), 992-1003.
- Gall, M. D., Gall, J. P., & Borg, W. R. (2007). *Education research: An introduction*. New York: person International Inc.
- Garret, J. B. (2001). Gender differences in college related stress. *Undergraduate Journal of Psychology*, 14, 25-34.
- Grant, K. E., Compas, B. E., Thurm, A., McMahon, S. D., & Ey, S. (2000). Stress and developmental psychopathology: Moving from markers to mechanisms of risk (Unpublished manuscript). De Paul University, Chicago.
- Grebot, E., & Barumandzadeh, T. (2005). L'acce' a l'universite: Une situation stressante a l'origine de certaines strategies d'ajustement dysfonctionnelles. (French). *Annales Medico Psychologiques*, 163, 561-567.
- Hage, G. (2000). Response to the reviews. *Oceania*, 70 (3), 276-279.
- Hassan, T. (2006). Educational assessment in Nigeria; a paradox of a victim of its own failure. Retrieved from [www.google.com/on13/04/2007](http://www.google.com/on13/04/2007).
- Heber, E., Lehr, D., Ebert, D. D., Berking, M., Cuijpers, P., & Riper, H. (2016). Internet-and mobile-based stress management for employees with adherence-focused guidance: efficacy and mechanism of change. *Scandinavian Journal of work, Environment and Health*, 42 (5), 382-394.
- Hicks, T., & Miller, E. (2006). College life style, life stressors and health status: differences along gender lines. *Journal of College admission*, 192, 22-29.
- Hiebert, B. (1983). A framework for planning stress control interventions. *Canadian Counsellor*, 17, 51-61.
- Hiebert, B. (1988). Controlling stress: A conceptual update. *Canadian Journal of Counselling*, 22, 226-241.
- Hiebert, B. (2002). Relaxation in the classroom: A win-win life skill. *Guidance & Counselling*, 17 (3), 73-81.
- Lazarus R. S., & Folkman S. (1987). Transactional theory and research on emotions and coping. *European Journal of Personality*. 1, 141-169.
- Lazarus, R. S. & Folkman, S. (1977). Stress-related transactions between person and environment. In L. A. Pervin & M. Lewis (eds.), *Perspectives in Interactional Psychology* (pg. 8-327). New York; Plenum.

- Lazarus, R. S. (1993). Coping theory and research: Past, present, and future. *Psychosomatic Medicine*, 55, 2324-2347.
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York; Springer Publishing Company.
- Lee, P. C., Ahmed, F., Pathirana, T., T., & Papier, K. (2016). Factors associated with stress among first-year undergraduate students attending an Australian university. *Food Nutrition Report*, 1(3). 17-24.
- Mills, R. C. (1995). *Realizing Mental Health: Toward a new Psychology of Resiliency*. Sulzberger & Graham Publishing, Ltd.
- 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. *Open access Macedonian journal of Medical Sciences*, 3 (2), 356-362.
- Ongori, H. (2007). A review of the literature an employee turnover. *African Journal of Business Management*, 19(3), 49-54.
- Ongori, H., Agolla J. E. (2008). Occupational stress in organizations and its effects on organizational performance. *Journal of Management Resources*, 8 (3), 123-135.
- Poripo, J. (2021). *Effect of Multiple Stress Management Intervention on Stress, motivation and Academic Performance of Automobile Technology Education Students in Universities in South-South, Nigeria*. Ph.D Dissertation, UNN.
- Poripo, J., Ede, E. O., Nwaodo, S. I. & Youdiowei, B. T. (2020). *Effect of Multiple Stress Management Intervention on Stress and Academic Performance of Automobile Technology Education Students in Universities in South-South, Nigeria*. *Eng. Applied Sci.*, 15 (9): 2121-2127, 2020.
- Poripo, J., Youdiowei, B. T. & Okardi, B. C. (2016). Development of instrument for assessing students practical skills in fault diagnosis and repairs of motor vehicles in technical colleges, Bayelsa State, Nigeria. *Journal of Issues in Professional Teacher Education*, 11 (2), 130-149.
- Poripo, J. & Youdiowei, B. T. (2014). Assessment of Utilization of Instructional Facilities in the Teaching and learning of Automobile Technology in Tertiary Institutions in South-South Nigeria. *Journal of Vocational Education and Technology*. 11(1&2),77-90.
- Poripo, J. & Youdiowei, B. T. (2015). Technical Skill Improvement Needs of Metalwork Technology Teachers for Entrepreneurship Development in Bayelsa State. *Journal of Vocational Education and Technology*, 12 (1), 8-20.
- Stanley, N., & Manthorpe, J. (2001). Responding to students' mental health needs: Impermeable systems and diverse users. *Journal of Mental Health*, 10, 41-52.
- Stevenson, A., & Harper, S. (2006). Workplace stress and the student learning experience. *Quality assurance Education*, 14(2), 167-178.
- Tosevski, D. L., Milovancevic, M. P., & Gajic, S. D. (2010). Personality and psychopathology of university students. *Current Opinion Psychiatry*, 23 (1), 48-52.
- Towbes, L. C., & Cohen, L. H. (1996). Chronic stress in the lives of college students: scale Development and prospective prediction of distress. *Journal of Youth and Adolescence*, 25, 199-217.
- Uehara, T., Takeuchi, K., Kubota, F., Oshima, K., & Ishikawa, O. (2010). Annual transition of major depressive episode in university students using a structured self-rating questionnaire. *Asia-Pacific Psychiatry*, 2, 99-104.
- Unger, J. B., Li, Y., Johnson, C. A., Gong, J., Chen, X., Li, C. V., Trinidad, D. R., Tran, N. T., & Lo, A. T. (2001). Stressful life events among adolescents in Wuhan, China: Association with smoking, alcohol use and depressive symptoms. *International Journal of Behavioral Medicine*, 8, 1-18.
- Wordsworth, M. E., & Berger, L. (2006). Adolescents coping with poverty-related family stress: prospective predictors of coping and psychological symptoms. *Journal of Youth and Adolescence*, 35, 57-70.