



ENUGU STATE UNIVERSITY OF SCIENCE AND TECHNOLOGY UNDERGRADUATES' PERCEPTION OF STRESS AND STRESS MANAGEMENT

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Abstract

This was a survey study aimed at ascertaining the Enugu State University of Science and Technology Undergraduates' Perception of Stress and Stress Management. Specifically, four specific objectives with four corresponding research questions and hypotheses were formulated to guide the study. The area of the study was Enugu State while the population for the study was 7,820 students. Survey research design was used. Multi-stage sampling procedure was used to draw 504 respondents from the population. Questionnaire was the only instrument used for data collection and was developed by the researcher. The instrument was validated by three experts. The reliability of the instrument was established using Cronbach Alpha to ascertain the internal consistency of the instrument which yielded a coefficient index of .86. Four research questions were answered using mean scores and standard deviation while four null hypotheses were tested using t-test at 0.05 level of significance. The findings revealed that the perception of Enugu State University of Science and Technology towards stress was positive. Four null hypothesis were not rejected as there was no significance difference between male and female undergraduate students on their perception towards stress, sources, consequences and its management. Findings also revealed that stress makes students lack concentration in the class, lose interest in school programme, cause sickness and depression. In addition, the students were ready to adjust any coping strategies available in order to make good academic records. Based on the findings a number of recommendations were made aimed at improving the stress coping strategies among the undergraduates. These included that educational psychologist and counsellors should introduce more appropriate coping strategies to the undergraduates.

Introduction

Undergraduate education is the post-secondary education previous to the postgraduate education. It includes all the academic programmes up to the level of a bachelor's degree. An undergraduate student is a student who is studying for first degree. There are levels of undergraduate study which may be first-year, second-year and third-year study, among others. Stress is a pressure resulting from problems of life.

Nigerian undergraduates undergo a lot of stress during the process of acquiring university education. Uncertainties over this issue have led to media discussion, seminar workshops and publications in books and journals concerning perception of stress among undergraduates. Stress constitutes unusual student behaviours and performance that are of concern to families, teachers, the government and society at large (Ezeilo, 2000).



Okeke (2001) described stress as conditions which place individuals under pressure. Griffiths (2008) stated that stress is any stimulant that interferes with the biological as well as the psychological balance of an organism. According to Griffiths, one's behaviour depends on how the person responds to both the environmental and internal stress that impact on such person. Individuals encounter a considerable degree of stress in their daily lives and a person is capable of tolerating only certain degree and when he is exposed to more than he can cope with, he then experiences physical as well as emotional stress. Green (2008) used the term stress to describe the environmental events that are thought to affect persons adversely. Hobfoll (2006), Lazarus and Folkman (2004) also noted that people experience stress when they perceive that the demand of the situation exceeds their personal resources. In the context of this study, stress is viewed by the researcher as emotional instability of an individual.

There are different types of stress, according to Baum, Davison and Singer (2001) chronic emotional stress could lead to illness such as ulcer, asthma, cancer, hypertension and heart diseases. It can also impair the immune system and plays a role in more than half of all medical problems one encounters. Ndubuisi (2008) pointed out that severe stress may result in changes that impair the body's ability to fight infections and that tense emotions like anger or fear which may disrupt performance and problem solving ability. Ugwuadi (2002) opined that chronic severe stress may hasten the aging process. According to him, each severely stressful experience seems to leave some scars on the individual inflicting wear and tear on the system even after resting, following the stress.

Horgan and Horgan (2002) contend that eustress is a beneficial aspect of stress. It is desirable stress that is used to maintain life. Eustress prepares the mind and body for optimum functioning, for example when a student studies very hard for examination for fear of failure. Okafor and Okafor (2008) emphasized that distress is stress that has a harmful effect. Distress is experiencing too many stressors over a short time or many stressors over a long time exceeding a person's ability to cope effectively and remains in control.

Stress affects all categories of people; students, workers and apprentices. Nigerian undergraduates undergo stress as they pass through the universities. Some factors that pose some threat to them include financial constraints of both the relations and students, over population of the students in the campus and hostel, inadequate educational facilities like poor lecture rooms, laboratories and libraries. Academic pressure such as anxiety about failing examination and too many academic loads are contributory factors that cause stress among undergraduates (Hob, 2006). This calls for the need for stress management.

According to Wikipedia (2015), stress management refers to the techniques and psychotherapies aimed at controlling a person's levels of stress, especially chronic



stress, usually for the purpose of improving everyday functioning. Stress produces numerous physical and mental symptoms which vary according to each individual's situational factors. These can include physical health decline as well as depression. The essence of stress management is to provide keys to a happy and successful life in modern society. Although life provides numerous demands that can prove difficult to handle, stress management provides a number of ways to manage stress and maintain overall well-being. Therefore, it is important for students both male and female to know the consequences of stress in order to devise a means of managing stress.

This is because, gender has a role to play in the way individual manages stress. As noted in Wikipedia (2010) gender is the physical and behavioural difference that distinguishes individual organisms according to their functions in the reproductive process. Wikipedia (2015) supported this view that gender is the range of characteristics pertaining to, and differentiating between, masculinity and femininity. Therefore, these characteristics may include biological sex (i.e. the state of being male or female), sex-based social structures which include gender roles and other social roles, or gender identity. Since gender is an innate characteristics which an individual exhibits and which distinguishes individual role in the society, it may follow that the attitude of males and females toward the way and manner they manage stress may be different.

Statement of the Problem

In a developed countries, students are provided with adequate infrastructures that create conducive atmosphere for learning. Their system is so organized that both their infrastructure and human resource are just enough to accommodate the number of admitted students. In developing countries such as Nigeria, the rate of students' intake is so overwhelming to the point that the condition of learning is in a sorry state. This is why the process of preparing for, anticipating and getting admission into tertiary institution can trigger stress to an individual due to the inhumane condition of dilapidated infrastructure and incoherent academic activities occasioned by trade disputes. Nigerian universities do not provide adequate environment necessary for learning and these and many other circumstances appear to contribute to lack of concentration, anger, hostility and in extreme cases psychosis. The question is, what are the undergraduates of Enugu state university of science and technology's perception of stress, its sources, and the consequences associated with it? What are their perceptions towards stress and stress management?

Purpose of the Study

The purpose of this study was to investigate the perception of Enugu State University of Science and Technology undergraduate towards stress and stress management. Specifically, the study aimed to determine;

1. the perception of Enugu State University of Science and Technology undergraduates towards the concept of stress,



2. the perception of Enugu State University of Science and Technology undergraduate towards sources of stress; and
3. the perception of Enugu State University of Science and Technology undergraduates towards the consequences of stress.
4. the perception of Enugu State University of Science and Technology undergraduate towards stress management;

Significance of the Study

The findings from this study will be of immense benefits to undergraduates of Enugu State University of Science and Technology, university authority, parents, government, and future researchers.

The undergraduates will benefit from the findings of this work as it will enable them understand the concept of stress; identify stressors and its implication to their academic endowment. It will provide an insight into the sources of stress, effects of stress, health related problem associated with stress, and the consequences of stress as well as know how to positively cope and manage stress in such a way that the undergraduates of health and physical education will study under relative stress free environment thereby upgrading their performance both in sports and academics.

This study will be of great benefits to the parents as it will enable them to be aware of their roles in helping the undergraduates to achieve desired academic objectives by studying in a relatively stress free environment.

It will also be of immense benefits to the government as it will enable them to know the needs and interest of undergraduates and how to meet up with them for overall attainment of educational goal which will inevitably promote the health of the university undergraduates and that of the general public.

The result of this study is also expected to be of importance to federal ministry of education and federal ministry of health which are responsible for formation of health and educational policies respectively: Data generated will equally add to the body of knowledge in the area of educational research which is hoped to be of use to future researchers.

Scope of the Study

The study concentrated on the perception of Enugu State University of Science and Technology undergraduates towards stress and stress management. This study took into consideration the link between gender and the students; perception towards stress and stress management.

Research Questions

The following research questions guided the study.

- What is the perception of Enugu State University of Science and Technology



towards the concept of stress?

- What is the perception of Enugu State University of Science and Technology undergraduates towards the sources of stress?
- What is the perception of Enugu State University of Science and Technology undergraduates towards the consequences of stress?
- What is the perception of Enugu State University of Science and Technology undergraduates towards stress management?

Hypotheses

The following hypotheses were formulated to guide the study and was tested at 0.05 level of significance.

- H₀₁: There is no statistical significance difference between the mean response scores of male and female undergraduate on their perception of the concept of stress.
- H₀₂: There is no statistically no significant difference between the mean response scores of male and female undergraduates on their perception of the sources of stress.
- H₀₃: There is no statistically significant difference between the mean response scores of male and female undergraduates on their perception of consequences of stress
- H₀₄: There is no statistically significant difference between the mean response scores of male and female undergraduates on their perception towards stress management.

Review of related literature

The literatures related to this study were reviewed under the following sub headings:

A: Conceptual Framework

- Concept of Stress
- Sources of Stress
- Consequence of Stress
- Stress Management
- Gender
- Perception

B: Theoretical Framework

The General Adaptation Theory

C: Empirical studies

D: Summary of Reviewed Literature

Conceptual Framework

Concepts of Stress 12

Gallo and Mathew (2013) define stress as a feeling of strain and pressure. They explained that small amounts of stress may be desired, beneficial, and even healthy. Positive stress helps to improve athletic performance. It also plays a factor in motivation, adaptation, and reaction to the environment. Excessive amounts of stress,



however, may lead to bodily harm. Stress can increase the risk of strokes, heart attacks, ulcers, and mental illnesses such as depression. Stress can be external and related to the environment, but may also be created by internal perceptions that cause an individual to experience anxiety or other negative emotions surrounding a situation, such as pressure, discomfort, etc., which they then deem stressful. Humans experience stress, or perceive things as threatening, when they do not believe that their resources for coping with the obstacles (stimuli, people, situations, etc.) are enough for what the circumstances demand. When human think the demands being placed on them exceed the ability to cope then stress is perceived.

Stress as a scientific concept is too well known yet little understood (Broome, 2009). Broome (2009) explained that stress is an everyday occurrence. According to Bloome (2009), every human organism is exposed to stress in every moment of life and his response to stress often determines the quality of his life and health. The Oxford Advance Learners Dictionary (2008) defined stress as pressure, tension or worry resulting from problems of life. Mann (2008) thought of stress in terms of multiplicity of changes that take place in the body as a result of stress agent (stressors). These stressors have always been threats to the body's homeostasis. Mann noted that the stressors cause disruption of homeostasis and when the disruption is so serious that the body is not capable of regaining homeostasis by itself, danger or disease occurs and medical therapy as well as psychotherapy may be necessary to correct it. Stress is the non-specific response of the body to any demand made upon it. This definition emphasizes the non specificity of responses or reactions made by the body to the stressor no matter their source or nature. Esset, (2008) referred to stress as stimuli or pressure from within and not to the response. He used the term stress almost invariably to refer to situational, environmental or psychological factors or stimuli, which elicit emotional or visceral response or appear to be related to the onset of medical illness in which psychosomatic factors apparently are involved.

Melgosa (2001) defined stress to simply mean being subjected to external forces or pressures and can be either positive or negative depending upon the effect of the external force. Melgosa added that a certain amount of stress is necessary in order to accomplish goals or projects. This stress serves as a stimulus to help reach an adequate level of accomplishment and success. However, if this level of stress is greater than an individuals are able to support, the individual become stressed, the output decreases and the situation if not altered can become explosive.

Stress has been used not only to refer to extreme environmental or psychological condition but also as a substitute for behaviours which otherwise might have been called anxiety, conflict, emotional distress, age-threat, frustration, threat to security, tension, (Nweze, 2005). Philip (2009) suggested that psychological stress should be viewed in broader terms as encompassing the whole range of interdependent factors including not only stimulus and response but also the Intervening psychological and experimental factors, which ultimately determine stimulus response relationship.



Davies (2008) pointed out that emotional stress process is determined by three basic forces: pressure, conflict and frustration. According to Davis, pressure comes with the environmental demands, especially with regards to the urgency of time required to respond to the demands. Conflict arises because of competing alternatives, which requires making the right choice and decision. Then frustration is imposed because of inability to meet the objectives or achieve the goals. Under a stressful situation, a discrepancy arises between the demand being made and our subjective assessment of our capability meets the demands or the challenges of the demand. It is this discrepancy that triggers off the stressful feelings.

Joe (2007) describes stress as the environmental events that are thought to affect people adversely. According to Joe, it is a popular term used by nearly everybody but whose definition and concept people do not readily agree on. Philip (2009) defined stress as a state that occurs when an organism is faced with a threatening situation that is difficult to cope with. It is a burden or load under which a person survives or cracks.

Okoli (2001) explained stress as a silent killer. He describes it as any stimulus that interferes with the biological as well as the psychological balance of an organism. According to Okoli, behaviour is said to depend on how persons responds to both the environment and internal stress that impinge on such persons, He further said that every individual encounters a considerable degree of stress either by changing something about environment or changing something about a person. Okoli revealed that the capacity with which anyone can adjust to accommodate a prevailing stressful situation was therefore limited by the opportunities one had to change one's external environment or adjust to it according to ones physical and emotional make up. Stress in this study is pressure resulting from problems of life.

Sources of Stress among Undergraduates

Williamson (2001) argues that, stress affects people in both body and mind. When an individual is under a large amount of stress, the individual can become tired, sick, and unable to concentrate or think clearly. The person may even suffer mental breakdowns. There are different sources of stress which may include survival stress, internal stress, environmental stress, fatigue and work.

Survival Stress is a common response to danger in all people and animals. This is when someone is afraid that someone or something may physically hurt the person, the body naturally responds with a burst of energy so that the person will be better able to survive the dangerous situation by fighting or escaping it all together by flight.

Internal Stress is when a person is worrying about things that the person can do nothing about or worrying for no reason at all. This is internal stress and it is one of the most important kinds of stress to understand and manage. Internal stress is when people make themselves stressed. This often happens when someone worry about



things someone cannot control or put themselves in situations they know will cause them stress. Some people become addicted to the kind of hurried, tense, lifestyle that results from being under stress. They even look for stressful situations and feel stress about things that are not stressful.

Environmental Stress is a response to things around that cause stress, such as noise, crowding, and pressure from work or family.

Fatigue and Overwork build up over a long time and can take a hard toll on someone's body. It can be caused by working too much or too hard at workplace, school, or home. It can also be caused by not knowing how to manage time well or how to take time out for rest and relaxation. This can be one of the hardest kinds of stress to avoid because many people feel this is out of their control.

A tremendous stretch of stress emanates from one's environment (Adinma, 2009). According to Adinma (2009), most of the environmental stress are imposed upon individual directly by other individuals or indirectly by the Social system. Adinma further explained that when a person's opportunity to satisfy what the person considers to be basic psychological needs is interfered by the society a considerable environmental stress is generated. Hubert (2004) explained that work environment may be a source of stress. Hubert worried that apart from providing financial income, work can generate a considerable amount of stress on the physical and mental health. Hubert further observed that work overload contributed to the geneses of stress to individuals. Hubert (2004), explained that qualitative overload means that the work is too difficult and the job exceeds the technical and intellectual competence of the individual. Therefore, job may involve continuous concentration, high-level decision making and dealing with sophisticated information and the individual may lack the ability to cope with it.

Sorensen and Luckman (2009) listed the following as sources of stress among undergraduates: attacks by bacteria, viruses or parasites, trauma (injury, bumps, assaults, electric shock), inadequate food, disruption of social and family living, conflicting social and cultural expectations, basic needs (e.g. sexual desires) that must be denied because of social pressure, change in the internal physiology (e.g. puberty, menstruation, pregnancy, and menopause), battle condition (war), geographic relocation (change of residence, travel), hard competitive sports and imagined threats of injury.

In addition to the above listed stressors, undergraduates like ESUT students also pass through some stressful events during their course of studies. These stressful events often times are experiences from day one of their university lives. Ezike (2003) reported that stress among undergraduate may be associated with specific factors of the student's status. For example, if the student enters the university without adequate qualification the student has just laid a solid foundation for the experience



of stress as an undergraduate. Also, students from problematic homes have a lot of stress.

Nwafor (2003) noted that students perceived sources of stress to include: poor family upbringing, lack of facilities, bad company, and poverty. According to Nwafor (2003), most of these responses point to extra-personal factors which include factors in the physical and social environment that frustrate the student and adding that severe stress in the Nigerian undergraduates seems to be the rule rather than exception. Like any other person, the student is subjected to changes of life and changes are always stressful. Beside the stress involved in the process of preparing for, anticipating and getting admission in the tertiary institution is better experienced than imagined.

Okeke, (2001) noted that each student comes from a home; a family from which the student may be physically but not psychologically separated. The atmosphere in that home may be tensed or relaxed. Parents may be separated or divorced, if they are living under the same roof they might be constantly quarrelling, fighting or not talking to one another. This makes the young student unhappy, anxious, and insecure and sees life in negative and unpleasant ways. When the student brings this experience to the university, his stress level becomes high and he experiences the symptoms of stress.

Academic pressure which include anxiety about failing in examination, experiencing academic difficulty, wanting to change university or course of study, fear of academic probation, too heavy academic load, fear of embarrassing parents and friends in case of failing in examination constitute great deal of stress to Nigerian undergraduates (Ezeilo, 2005). Noting the rising incidence of emotional stress among Nigerian undergraduates, Ezuna (2002) attributed the causes to academic pressure emanating from extreme value placed on education by present day Nigerian Youths and the government. Unavailability of textbooks or journals in the libraries with endless assignments, term papers, seminars and projects given to students are frustrating. Students will now forfeit their lectures and leisure, spend more money and time in search of materials for assignment, which eventually may not be found. This is extremely demoralizing and stressful to undergraduates (Melgosa, 2001).

As observed by Ezeilo (2005), overcrowding is another source of stress because university management at times does not consider the available educational facilities like lecture rooms, reading rooms, laboratories before admitting students thereby admitting students more than the university can manage, this leads to increase in population on undergraduates in various institutions with its attendant problem. In view of this, Udoka (2003) and Ezike (2003) reported that, increased population of students leads to overcrowding as well as inadequate facilities. Overcrowding, according to them, leads to inadequate hostel accommodation for students, diverse behaviours of roommates also constitute a major source of stress to undergraduates (Ezeilo, 2000). Ezeilo (2000) stated that one common problem students have is how



to get on with roommates. She maintained that any student who learns to get on well with his or her roommates is likely to succeed in getting on well with his or her life partner. According to Ezeilo, behaviour of roommates can be irritating or even provoking. Some put on loud sound system when the other wants to read or sleep. Untidy roommates may most of the time mess up the room which one of the roommates labours to keep clean. These are stressful to the students. Also with overcrowding, Ezeilo (2000) maintained that the lecturers will be overstressed and will not meet up with their academic obligations to the students. This stressful condition can lead to ill health of lecturers and subsequent absenteeism from school or exit of esteemed lecturers. This is frustrating to the students because they will not receive the supposed lectures and eventually pass out as half-baked graduates to meet a society that demands a lot from them.

Many universities do not have adequate toilet facilities for their students. So Students that want to ease themselves will either rush back home (if possible) to do so thereby forfeiting their lectures or may decide to mess up the school environment. This is an act of indiscipline as reported by Ezeilo (2000) and should not be found among students. Nwoye (2002) noted that in Nigeria, students who live in their academic institutions are subjected to stress producing forces like academic pressure, financial constraints, incessant strikes, menace of secret cult, unavailability of textbooks and journals in the libraries, population explosion of students' hall of residence, inadequate toilet facilities, malnutrition and insufficient library/reading rooms. These are some of the sources of stress among undergraduates, and all these sources may also be sources as stress for undergraduate, hence these sources were considered in this study.

Consequences of Stress on Undergraduates

Stress in undergraduates is viewed as the subjective experience of the student which affects his or her psychological or physiological condition such that the student is forced to deviate from normal functioning. (Ezeilo, 2005). Nwoye (2002) highlighted that deviant behaviour put up by students to cope with stress has placed the society in a chaotic shape. Lives and properties are no longer safe because of the activities of armed robbers and cult members, high incidence of rape and sexual immorality have led to increase in sexually transmitted diseases one of which is AIDS. Some students pass their courses through examination malpractices and eventually graduate without being able to defend their certificates. This has led to decreased production in industries and institutions/establishments and decreased economic development.

Prolonged and uncontrolled stress is known to lead to the activation of body systems, elevation of blood pressure, over secretion of body fluid that lead to their eventual depletion under continued stress (Harvey, 2001). The consequence leads to degenerative disease condition, chronic hypertension, heart diseases, stroke, liver and kidney failure and sudden death in both young and old. The depletion of the immune system may render the individual highly susceptible to attacks of simple



illness. Hubert added that in severe cases there is the development of thyroid malfunction, which can lead to disease conditions such as rheumatoid arthritis.

Stress contributes to heart diseases in many ways (Cohen, 2001) According to Cohen (2001), during the period of stress one's blood pressure rises and pulse increases placing and adding burden to the heart. He further added that stress induces changes in the blood chemistry such as elevate cholesterol levels, promoting arteriosclerosis and finally the coronary arteries that supply blood to the heart muscle constrict thereby reducing the amount of oxygen available to the heart muscle.

Excessive stress reduces the effectiveness of immune mechanism and thereby increasing one's risk of getting infectious disease (Nwogu, 2001). He noted that dentists for instance have long recognized that gum infections are associated with highly stressful period of ones life. In line with this, Nwosu. (2001), proved that oral and genital herpes attacks tend to develop during period of high stress. Also, Hubert (2006) observed that stress help to cause cancer because it depresses the immune response; it does this through the action of adrenal cortex hormones.

Okafor and Okafor (2008) revealed that factors such as viruses, chemicals and radiations are suspected as causing cancer or the rapid growth of abnormal cells. They also added that it is believed that cancerous cells growth occur in all of us but since our immunological system destroys these cells before they can multiply, most of us do not develop cancers, likewise they further noted that lowering of one's immune defense by stress may allow such cancerous cell to multiply.

Stress has the effect of increasing sugar level in the blood (Edlin & Golanty, 2002). According to them because the body is preparing to respond in some physical manner "fight or flight when stressed, the sugar is designed to provide energy for either of these two reactions They further noted that chronically high level of blood sugar brought about by chronic stress will diminish the ability of the pancreas to develop adequate insulin needed to metabolise the sugar. This results in a permanent insulin deficiency and this is diabetes mellitus.

The actual cause of ulcer is not known but factors such as hereditary, diet and stress are undoubtedly important in the development of peptic ulcer (Hubert, 2006). According to him, peptic ulcers are often found in people who suffer anger, hate, guilt, frustration and hostility Nwoye (2002) observed that men have a high incidence of peptic ulcer but recently women have begun to catch up. Arthritis is inflammation of the Synovial membrane of the joint o he body. The etiology is poorly understood most investigators believe that it is an autoimmune degenerating chronic disease (Cannon, 1992). Although there is controversy over whether there is a distinct rheumatoid arthritis personality, it is believed that stress is a factor in the unset of the disease, (Morse and furst 1998). They further stressed that the rheumatoid arthritis is becoming a women's disease pointing out that out of five rheumatoid sufferers four



are women. Most stress related accidents are those involving automobile caused by people being emotionally aroused. These consequences of stress were covered in this study.

Stress Management and Stress Management Technique

Stress is generally described as the response of the body to any demand made upon it by both external and internal stimulus called stressors. It is such a pervasive phenomenon that it manifests at work, home, school and at play. In most cases, stress procedures poses adverse effects on the person or individuals and their performance. As an emotional experience, stress may bring about feeling like anger, anxiety, depression, fear, grief, guilt, loneliness or same, which may have both psychological and physiological consequences. In view of the predominantly detrimental effects of stress, there is the need to take decisive and positive measure to curtail stress.

Evan (2001) stressed that time management as a stress coping strategy helps the individuals take stock of the work load, identify the priority and as such become better placed to cope with the multiplicity of pressure and demands on his time and resources. Ezeilo, (2005) revealed that severe stress and its adverse consequences could be coped with by undergraduates at three levels namely personal, institutional and societal. According to Ezeilo, at the personal level, the student needs to be aware that when their performance in academics and other tasks begin to decline or he develops any symptoms of stress, it is a signal for him to consider more adaptive coping mechanism. The relaxation techniques and assertive training help the students feel better and relate better with fellow students in interpersonal situations. The sleep induction technique helps the student to deal with sleepiness. The focus is on solving the problem that the student is facing. In deciding to join any group, the student should be guided by the demand of his academic programme. The friends any student keeps should be those that help the student achieve the goals of succeeding in obtaining the degree or diploma certificate through honest acquisition of knowledge.

Nwankwo (2001) stated that some higher institutions in Nigeria provide facilities for helping the students solve their personal problems. Such facilities include medical centres, psychology clinics, and counseling units for Students, Student Affair Department and spiritual leaders on campus to help students in distress. She added that each student is usually assigned to an Academic Adviser who helps the student with academic problems.

Nwankwo (2001) recommended 10 formulae against stress as follows: smile always no matter the situation. Keep a smiling face and a smiling heart, the world is a mirror, if you smile to it, it smiles back at you and vice versa. Sweat it out, work it out but do not over work. Do not overdo anything; Just do your honest best.



Nwankwo added that it is good to do one sports or the other. Exercise is good to reduce stress, it keeps you fit and eliminates stress from your body and reduces your weight, he added. According to him, sleep helps to reduce stress. He advised that one should sleep well at night for at least eight hours daily in order not to cheat nature and if one does not sleep well he will have stress.

Listening to music according to Nwankwo (2001), helps to reduce stress. He advised that listening to good music is helpful. When one's mood is down he/she should listen to music and keep himself happy. He further advised that listening to regular sermons from religious leaders in churches will help you to be closer to your God and improve your spiritual life. You can reduce stress if you have faith in God. Being satisfied with one's position in life has a lot to do with one's happiness. He concluded by adding that one should do his best and with a satisfied and sincere mind you will be elevated crying is a very natural form of relief. All these practices of stress coping mechanism were focused on in this study. This is because student undergoes this techniques.

Gender and Stress

Wikipedia (2015) defined gender as the socially determined differences between women and men, such as roles, attitudes, behaviour and values. Gender roles are learned and vary across cultures and over time; they are thus amendable to change. Gender equality focuses on changes for both men and women. It is a view through which to assess other social organizing principles with influence on the status of men and women. Wikipedia further explained that gender roles are sets of societal norms dictating what types of behaviours are generally considered acceptable, appropriate or desirable for a person based on their actual or perceived sex. Wallen, (2009) explained that gender refers to the socially constructed roles, behaviours, activities, and attributes that a given society considers appropriate for men and women. Gender relations are the ways in which a culture or society defines rights, responsibilities, and the identities of men and women in relation to one another (Bravo-Baumann, 2000).

Concept of Perception

According to Wikipedia (2014), perception is the organization, identification, and interpretation of sensory information in order to represent and understand the environment. All perception involves signals in the nervous system, which in turn result from physical or chemical stimulation of the sense organs. For example, vision involves light striking the retina of the eye, smell is mediated by odour molecules, and hearing involves pressure waves. Perception is not the passive receipt of these signals, but is shaped by learning, memory, expectation and attention.

Perception can be split into two processes. Firstly, processing sensory input, which transforms these low-level information to higher-level information (e.g. extracts shapes for object recognition). Secondly, processing which is connected with a



person's concepts and expectations (knowledge) and selective mechanisms (attention) that influence perception.

Theoretical Framework

This section reviewed theories relevant to this study, they are general adaptation theory.

General adaptation theory by Selye, (1956) argues that stress and the stress phenomenon floats aimlessly like loose logs on the sea. It periodically rises and falls in waves of popularity and disgrace. General Adaptation theory consists of three stages, (the alarm, resistance and exhaustion) which explain the body's response to stress.

The Alarm Stage is the stage I. In the first stage an alarm reaction resembles the fight or flight response, it signifies the presence of threat. Physiological arousal is increased and the organism mobilizes the necessary resources for fight or flight as described by Selye. The initial shock stage can last from a few moments to as long as 24hrs depending on the intensity of the stressor and the vulnerability of the individual. Symptomatically, the individual may complain of chest pain, palpitation, headache, joint pain. If survival of the organism is possible, a stage of resistance follows alarm reaction.

Resistance Stage is the stage II. This occurs if stress continues. Physiological arousal stabilizes as the organism gets accustomed to the threat. If the threat persists over time, the organism enters the third phase, the stage of exhaustion.

The Stage of Exhaustion is stage III: At this stage the body's resources get overwhelmed due to inherent limitations. Physiological arousal decrease and eventually the individual may collapse from exhaustion. The state of reduced resistance leads to what Selye's theory exposes the relationship that exists between stress and physical illness. He showed how prolonged exposure to stress can lead to disease.

In his studies, Selye (1956) noticed that the body has been adapting to external stressors in terms of a biological pattern that is actually predictable, so that the internal balance, would be restored and maintained. In its attempt to retain the balance, the body makes use of its hormonal system, also known as the fight or flight response. With this response, the person would notice how the body wants things to be resolved fast and easy, that is why it already resorts to releasing hormones that would enable the person to combat stress in the most immediate way possible. This struggle of the body against stress is the main theme of the General Adaptation Syndrome. Another observation by Selye (1956) was that even if the body wants to control or reduce the stress, it still has its limits. The limited supply of body energy to adapt to the stressful environment is even more compromised when the body is exposed to the stressor continuously.



In everyday situations like at the office, or school many people automatically respond to stress with this flight or fight reaction. However, because they cannot run away and brawling is prohibited, it becomes more of a “rough or stuff” reaction. They feel rough and act irritated or they “stuff” their emotions, repressing them to come out later in other ways. This theory is useful for students so that they will understand the stages of stress and device a strategy to manage stress when it occurs. However, whether stage I, II or III, the most important thing is for the stressor (student) to actually understand the situation and device a means of managing the stress.

Empirical Studies

Marwan (2013) conducted a survey to ascertain stress level and coping strategies among undergraduates in the Department of Physical Education and Engineering in Pedagogy, in India. A sample of 60 subjects was randomly sampled from the Physical Education and Engineering Institute, India. The instrument used was questionnaire. Data was analysed using (ANOVA). Two way analysis of variance. Findings revealed that stress due to all the stimuli was significantly higher among girls in comparison to boys of their profession. Findings also showed that coping strategy was higher in boys than girls of their respective profession but physical education girls had higher coping strategy than boys and girls of Engineering. Recommendations were made for the students to participate regularly in aerobic exercise as it was shown to decrease overall level of tension, elevate and stabilize mood, improve sleep and improve self esteem.

This study is in relation with the present study because both discussed stress among undergraduate students. Meanwhile the present study is different because it looked at attitude of undergraduate students towards stress and stress management.

Sanjeev Kumar (2013) conducted a survey on Academic stress among undergraduates: The case of Education Faculty at Kingsaud University Saudi Arabia (KSU). The study investigated the academic stressors experienced by the students at University. A total sample of 232 subject's participated in this study were obtained from Faculty of Education at KSU. Data were collected through self-administered questionnaire which was randomly distributed to the students during lecture time. Data obtained were analysed using descriptive statistics, correlation, and Analysis of Variance (ANOVA). The result showed that academic overload, course awkward, inadequate time to study, work load every semester, exams awkward, low motivation and high family expectations were sources of stress among students. It was also found that fear of failure is the major source of stress among undergraduate students. A large majority of students perceive stress as mental tension, external pressure affecting work, psychological burden, helplessness, inability to cope, increased workload and high expectations. For some, it is a break in the normal routine, lack of concentration, helplessness, reaction to unpleasant environment, loss of interest, inferiority complex, depression. Few express it as an excess of functional of one's physical mental or spiritual being leading to parhal or complete exhaustion of that



individual. More than 90% of the students maintained that they have had episodes of stress while in college at one time or more. This includes 94.1% males and 91.1% females. Among the day scholars, 93.2% feel stressed while 91.1% of the hostilities are stressed in a way. Those on financial assistance 90.7% have felt stressed as compared to 93.8% of students who are not on financial assistance. Females felt more fatigue headaches and short-temper than males. Day scholars are more fatigued (60%) than hostilities (40%). It was interesting to note that day scholars appear more stressed than the hostilities. A feeling of inadequacy in fulfilling family commitments can also be attributed to the higher stress levels in day scholars. Another factor could be lack of control over management of their own expenses. Findings also showed that stress expose students to some consequences which includes low moods, inability to concentrate, short temper, changed sleep patterns and loneliness were frequently cited. Fatigue, headache and stomach ache also included. Findings also revealed coping mechanisms adopted by the students which includes, spending time with friends, sleep, music, sports and isolation. It was observed that females preferred to stand and sleep while their male counterparts were inclined to hang out with their friends, play sports or isolate themselves. Both day scholars and hostilities preferred spending time with friends and playing sports. A striking difference was seen in smoking being used as a coping mechanism in hostilities, double the frequency of day scholars. The development of such an unhealthy habit was attributed to the peer pressure and being away from the families. As for recommendations, majority ask for more encouraging, interactive and friendly relationship between faculty and students. The need for more effective student advisors was clearly heightened, more entertainment activities such as movie shows, reading clubs, dramatics and debates, musical and cultural events, sports, free internet facilities and more college sponsored excursion tours.

Hence, this study is related to the present study because it focused on academic stress among undergraduate students while the present study is different in the sense that the present study deal with attitude of undergraduate students towards stress and stress management.

Jayakumar (2014) conducted a survey on Stress management. The purpose of the study is to carry out an empirical study on stress management for higher secondary students in Salem District-Tamil Nadu. The study was a descriptive survey. The result shows that the student community in higher secondary schools follows some unhealthy ways to cope with stress by selecting negative strategies to avoid failure, aiming too low, over scheduling daily life etc., The findings also shows that in other to evaluate the stress among higher secondary students and effective management of stress in Salem District will be a society oriented project keeping in mind the needs of the students in backward area. It was recommended that the examination of stress within the student community is real cause for worry and the issue of stress among students has to be addressed immediately. It was also recommended that family support is helpful for students faced with stress, no matter how they are adaptable to



the stress. While school students should take advantage of family support, their family members should try to understand their interests, specialties, and abilities so as to avoid having too high expectations of them and causing them additional stress. Therefore, this study is related to the present study because it focused on stress management for higher secondary students while the present study is different in the sense that the present study deal with attitude of undergraduate students towards stress and stress management.

Quick, (2004) conducted a study on perceived stress among medical undergraduates, Department of Physiology College of Medicine University of Dammam, Saudi Arabia. The study of medicine is extensive, time consuming and highly stressful especially during practical study period. The art of the study is to access clinical study period.

Aim: To access perceived stress in medical students studying in a medical college in Saudi Arabian Eastern Province and observe any gender-related variations in stress.

Study and design: Cross-sectional comparative study. **Materials and methods:** The present study was carried out in College of Medicine, University of Dammam using Arabia version of perceived stress scale – 10 questionnaire. Eighty students (40 males and 40 females) study in 2nd year were included in the study.

Statistical Analysis: Data were analysed by using Microsoft Excel and SPSS version 19. Descriptive analysis were conducted to determine the frequency distributions of the study variables. Independent sample test was used to compare stress scores among males and female students. Stress level was analysed by quartiles of perceived stress.

Results: The overall prevalence of stress found in the study was 71.7%. Mean perceived stress scores of all the students was 17.31 ± 5.31 . There was no significant difference in the mean stress scores of males and females students. The percentage of students with no, mild, moderate and severe stress was found to be 28.3%, 21.7%, 31.7%, and 18.30%, respectively. **Conclusion:** The present study indicates of high prevalence of stress in these medical students in the preclinical years. Hence, there is a need to take measures by the authorities to reduce stress among students.

Warrach, Ahmed, Nawaz and Khoso (2014) conducted a survey on impact of stress on job performance. The purpose of the study was to carry out an empirical study on empirical study of the Employees of Private Sector Universities of Karachi, Pakistan. The study was a descriptive survey. The result obtained from the data revealed that workload and role conflict, and inadequate monetary reward are the prime reasons of causing stress in employees, and this stress reduces their efficiency. Thus, it was recommended that employer should minimize stress by lowering the work load, abate the role conflict, pay adequate salary and provide training and counseling to employees in order to improve their job performance and job satisfaction.



This study is related to the present study because both focused on stress. However, the present study is different because the present study deals with attitude of undergraduate students towards stress and stress management.

Murphy (2006) study stress management in work settings: a critical review of the health effects. Murphy defined stress-management interventions as techniques that are designed to help employees modify their appraisal of stressful situations or deal more effectively with the symptoms of stress. He found out that a variety of stress-management techniques was used in worksite studies, including muscle relaxation, meditation, biofeedback, cognitive-behavioural skills, and combinations of these techniques. The most common techniques used were muscle relaxation, cognitive-behavioural skills, and combinations of two or more techniques. He recommended that to produce changes on these types of measures, stress interventions will need to alter or modify the sources of stress in the work environment. It can be said that stress management in work settings can be effective in enhancing worker physical and psychological health, but the choice of which stress-management technique to use should be based on the specific health outcomes that are targeted for change. This study is related with the present study because both study is talking about stress management. The present study is difference because it deals with students in higher institutions.

Cheng (2013) carried out a study on stress sources among college students in Taiwan. A questionnaire survey was conducted to collect research data. A total of 230 questionnaires were distributed, and 201 valid responses were obtained. Research findings suggested that male students felt stronger stress from family factor than female ones; students in higher grades felt more stress from physical/mental, school, and emotional factors; students who took a student loan also felt more stress from physical/mental, school, and emotional factors than those who did not. Cheng recommended that Schools should provide more support and care to help students cope with various stressors and identify students having stress reactions as soon as possible. Also, general curriculum on stress and stress-coping strategies should be designed. Both studies are related because they all talks about stress but the present study is looking and stress and stress management among students in higher institutions

Juvilyn and Marita (2014) carried out a study on sources of stress among college students in Malaysia. The focus of this study was on the pressures affecting the college student in dealing with family, friends and significant persons. The major concept of stress and stressors in the college environment and which of the sources of stress caused him to be more prone most. A questionnaire on Student-Life Stress Inventory was adopted to gather the needed data among 150 college students. Frequency count, per cent, rank, mean and Pearson-r correlation were used. Results show that the interpersonal stressors of students ranked the highest while the environmental stressors the lowest. Specific results under the interpersonal stressors include



working to people they do not know, trouble with parents, and relationship with opposite sex. It was recommended that school management should support the idea of creating a stress management program for higher education institution. The present study has a relationship with this one because both are talking about stress among students but the present study deals with how to manage stress.

Denise (2011) carried out a study on academic and environmental stress among undergraduate and graduate college students: a literature review. This study is a critical analysis of stress among undergraduate and graduate college students. The two populations that were investigated were undergraduate and graduate students. This review of literature examined various academic, interpersonal, and environmental stressors. This study determined the major sources of stress for undergraduate and graduate students. Some of the areas that were investigated were the stressors that students are encountering; how they handle various stressors, and ways students manage stressors. This area of study is important because both populations are undergoing multiple life changes. This life change can add a strenuous amount of stress on a student. Investigating the different areas where stress occurs can help students learn ways to cope with their stress. The result shows that graduate students seem to have more life changes that are occurring while they are in school. It was recommended that stress cannot be prevented, but there seem to be some interventions available that undergraduate and graduate students can acquire to help them relieve some of the stress they may be experiencing. This study is in relation to the present study because both are talking about stress among students but the present study focused mainly on undergraduates' students. Denise Pfeiffer (2011) Academic and environmental stress among undergraduate and graduate college students: a literature review Unpublished Research Paper Submitted in Partial Fulfilment of the Requirements for the Master of Science Degree in Guidance and Counseling-Mental Health The Graduate School University of Wisconsin-Stout Menomonie

Summary of Literature Review of Related Literature

The review of literature is summarized as follows: on the conceptual framework. The concept of stress refers to being subjected to external forces or pressures it can be either positive or negative depending upon the effect of the external force. Stress comes in many forms and can be seen as anything that produces the emotional and mental pressure that leads to worry, anxiety, fear, anger, apprehensions, even over-excitements to which our body responds in a quick and inefficient way. Therefore, Stress is a body's method of reacting to a challenge.

Literature reviewed on sources of stress among undergraduate students includes poor family upbringing, lack of facilities, bad company, etc. Related literature reviewed on the attitude revealed that attitude is an individual predisposition or a tendency to respond positively or negatively towards a certain idea, object, person, or situation. Attitude influences an individual's choice of action, and responses to



challenges, incentives, and rewards. This means that attitude decides how to act or behave in a particular situation. Success and failure in schools or in work life depends on the attitude of an individual. It is a usual way of doing things.

Authors whose works are reviewed agreed that students undergo a lot of stress during their undergraduate study. They also agreed that students usually breakdown because of stress they face in the quest of getting academic certificates and should be guided in proper ways of managing stress.

Various authors who studies stress management among undergraduates dwelt on some aspect of the topic. An author studies academic stress among undergraduates. While another author studied stress level and coping strategies among undergraduate students. The various studies did not cover the attitude of students towards stress and stress management among ESUT undergraduates. The above gap is what this study seeks to fill.

Research method

This chapter describes the procedures the researcher adopted in conducting the study. The procedures includes, the research design, area of the study, population for the study, sample and sampling techniques, instrument for data collection, validation of the instrument, reliability of the instrument, method of data collection, and method of data analysis.

Research Design

Descriptive survey research design was used to accomplish the purpose of the study. According to Owie, (2006) a descriptive survey research is one which a group of people or item is studied by collection and analysing data from only a few people or items considered to be the representation of the entire group. Thomas and Nelson (2010) further note that descriptive survey method of research facilitates the description of a situation in its current state and seeks information direct from the respondents.

This design was used because it is fact-finding in nature and focuses on selective dimensions of a phenomenon and measures them in a systematic and precise manner. This design was considered most appropriate because information was gathered from respondents as they existed in their natural setting, no form of manipulation was involved.

Area of the Study

The area of the study was Enugu State University of Science and Technology (ESUT). ESUT has nine (9) faculties; namely:- Faculties of Agriculture, Environmental Science, Education, Social Sciences, Applied Natural Sciences, Law, Engineering, Management Sciences, and College of Medicine. ESUT is geographically located in the Enugu east



senatorial zone of Enugu state. The choice of ESUT is considered most appropriate because ESUT consist of almost all the faculties that are of student's choice.

Population for the Study

The population for this study comprises of all the regular undergraduates of Enugu State University of Science and Technology numbering 17,820 undergraduates comprising 10,257 males and 7,563 females, source (University Planning and Statistics, 2013/2014). Details of the population are presented in Appendix 2.

Sample and Sampling Techniques

The sample for this study consisted of 504 respondents, made up of 204 female and 300 male students drawn from the population. The researcher used multi-stage sampling procedure. In stage one, the faculties that make up the study population were stratified into nine faculties. This is because, each faculty shares a common characteristics. In stage two, proportionate sampling technique was used to sample two (2) departments from each faculty making a total of 18 departments. This is to have equal representation of departments from every faculty. In stage three, simple random sampling technique of balloting without replacement was used to sample 28 students from every sampled department making it a total of 504 students.

Instrument for Data Collection

A structured questionnaire was used to gather data from the respondents. The instrument was developed by the researcher after a thorough review of related literature. The questionnaire consisted of two parts: 1 and 2.

Part 1 dealt with personal data of the respondents while part 2 comprised sections B, C, D,E which dealt with research questions one, two, three and four (See Appendix 1). Questionnaire items 1 to 5 addressed the first research question. Questionnaire items 6 to 10 addressed the second research question. Questionnaire items 11 to 16 addressed the third research question. Questionnaire items 17 to 22 addressed research question four. The instruments are of 4 point scale: Strongly Agree, Agree, Disagree, and Strongly Disagree. These responses were scaled 4, 3, 2, and 1 respectively.

Validation of the instrument

In an attempt to ensure the use of a valid instruments, three copies of the researcher-made questionnaire, purpose of the study, research question, scope of the study, and hypotheses were given to three experts two from health and physical education and one from measurement and evaluation in Enugu state university of science and technology for face validation. The experts were given copies of the questionnaire and requested to critically examine it with a view for determining its comprehensiveness, relevance of content, clarity of statement and appropriateness of the items in addressing the specific purpose of the study. The validators examined the instrument and made some useful suggestions which formed the basis for modifying some of the



items or even rejecting some of them out rightly. See the validates comments on appendix 3.

Reliability of the Instrument

To ensure the internal consistency of the instrument, copies of the questionnaire were administered to a random sample of 20 undergraduates from Ebonyi State University. Ebonyi State University was used because the State was comparable to Enugu in terms of higher education level and they did not form part of the study. Scores generated from the trial testing were used to determine the reliability of the instrument. After collection of their responses, computation of the reliability was done using Crombach Alpha. At the end of the computation, reliability indices of .94 were obtained for Section B, .65 for Section C, .88 for Section D, .97 for Section E. The overall reliability for Section B,C,D,E, was found to be .86 showing that the instrument was reliable. Appendix 4 has details of the reliability computation.

Method of Data Collection

In order to reach the respondents of the university a letter of introduction from the Head, Department of Health and Physical Education, ESUT was attached to the instrument. The researcher employed the services of three research assistants in distribution and collection of the questionnaire in the university. The research assistants were trained by the researcher in a two-day consultative meeting acquitting them with the purpose of the study, nature of the respondents and how to administer and collect the instrument. A brief letter of introduction explaining the purpose of the study was also attached to each copy of the instrument. (See appendix 1&6).

Method of Data Analysis

The raw data were collected, assembled, tallied and converted into mean scores. The research questions were answered using mean scores and standard deviations. Rating of 4, 3, 2, and 1 were assigned respectively to the four point scaling method of Strongly Agree, Agree, Disagree and Strongly Disagree.

Strongly agree - 4 points

Agree - 3 points

Disagree - 2 points

Strongly disagree - 1 point

$$\frac{4+3+2+1}{4} = \frac{10}{4} = 2.50 \text{ (Criterion Mean)}$$

The researcher collapsed both strongly agree and agree to mean “Agreement” while disagree and strongly disagree stood for “Disagreement”. This means that any item with mean score of 2.50 or above were regarded as Positive Perception (PP) while



those less than 2.50 were regarded as Negative Perception (NP). The research hypotheses was tested using t-test at 0.05 level of significance. When the calculated t value was less than t- critical value, null hypotheses were accepted but when the t calculated value was equal to or greater than t critical value, the null hypotheses were rejected.

Data analysis and results

This chapter is concerned with data analysis and presentation of result. The results are presented in tables in line with the research questions and hypotheses that guided the study.

Research Question One

What is the perception of Enugu State University of Science and Technology undergraduates towards stress? Table 1 contains the data that provided answer to the above research question.

Table 1: Enugu State University of Science and Technology undergraduates perception of stress
n = 504

S N I	t e m s	SA 4	A 3	D 2	SD 1	N	Mean	S D	Decision
1	Students feel anxious and tensed under pressure	2 6 2	1 1 5	9 7	3 0	5 0 4	3.25	0.74	P P
2	Stress makes students lack concentration in class	2 8 0	1 4 0	3 6	4 8	5 0 4	3.26	0.62	P P
3	Stress makes students lose interest in school program of activities	2 6 9	1 3 0	4 8	5 7	5 0 4	3.20	0.89	P P
4	Stress induces sickness like headache	2 7 9	1 5 8	4 7	2 0	5 0 4	3.35	0.72	P P
5	It leads to depression	2 7 8	1 6 9	5 2	5	5 0 4	3.45	0.65	P P
	G r a n d m e a n						3.30	0.72	

*PP = Positive Perception

Data report in table 1 showed a grand mean response of 3.30 and standard deviation of 0.72 respectively. This means that the perception of Enugu State University of Science and Technology undergraduate towards stress was positive since the grand mean was above the criterion mean of 2.50. However, students felt anxious and tensed under pressure with mean and standard deviation of 3.25 and 0.74. The table showed that stress made students lack concentration in class (mean = 3.26). It also showed that stress made students lose interest in school program of activities (mean = 3.20). The table further showed that stress induced sickness like headache (mean = 3.35). The table also showed that stress led to depression (mean = 3.45).

Hypothesis One

There is no significant difference between the mean response of male and female undergraduates on their perception of the concept of stress. Table 2 contains data testing this hypothesis.

Table 2: **t-test analysis of difference between the mean response of male and female undergraduates on their perception of the concept of stress**

Students gender	N	X	S D	D f	t-cal	t-crit	P	Decision
M a l e	230	3.92	0.19	502	-6.06	1 . 9 6	. 0 5	Do not Reject
F e m a l e	274	2.78	0.56					

Results in table 2 show that there was no significant difference that exist between male and female undergraduates regarding their perception of the concept of stress. The result shows that the calculated t-value is less than the t-critical table values (t-cal = -6.06 < 1.96) at .05 level of significance. Therefore, the null hypotheses was accepted as stated. Based on the above, undergraduates' perception of the concept of stress was not dependent on gender.

Research Question Two

What is the perception of Enugu State University of Science and Technology undergraduates towards the sources of stress? Table35 contained the data that provided answer to the above research question.

Table 3: **Enugu State University of Science and Technology undergraduates' perception of sources of stress.**

n=504											
S N I	t e m s	SA 4	A 3	D 2	SD 1	N	Mean	S	D	Decision	
1 1	E x a m i n a t i o n	430	7 0	4 0	5 0	4	3.81	0.39	P	P	
1 2	pressure from lectures	330	110	5 5	1 0	504	3.58	0.57	P	P	
1 3	discomfort from environment	260	100	9 8	4 6	504	3.16	0.80	P	P	
1 4	financial problems	330	9 8	4 0	3 6	504	3.46	0.67	P	P	
1 5	fear of unknown	3 1	1 1	9 6	3 5	0 504	1.42	0.60	N	P	
1 6	overload of courses	273	120	5 6	5 5	504	3.22	0.79	P	P	
	G r a n d m e a n						3.10	0.64	P	P	

4. PP = Positive Perception

5. NP = Negative Perception

In table 3, the data showed the grand mean of 3.10 and standard deviation of 0.64. This means that there were several perceived sources of stress on Enugu State University of Science and Technology undergraduates since the grand mean was above 2.50. Therefore, students agreed that stress comes from examinations (mean = 3.81). The table showed that stress comes from pressure from lectures (mean = 3.58). The table also showed discomfort from environment causes stress (mean = 3.16). The table further showed that financial problems leads to stress (mean = 3.46). The table also showed that students disagrees that fear of unknown do not leads to stress



(mean = 1.42). The table also showed that overload of courses leads to stress (mean = 3.22).

Hypothesis Two

There is no significant difference between the mean responses of male and female undergraduate students on their perception of the sources of stress on Enugu state university of science and technology undergraduates. Table 4 contains data testing this hypothesis.

Table 4: t-test analysis of difference between the mean response of male and female undergraduates on their perceived sources of stress.

Students gender	N	X	S D	D f	t-cal	t-crit	P	Decision
Male	230	3.60	0.34					
				502	-11.02	1.96	.05	Do not Reject
Female	274	2.70	0.50					

Results in table 4 show that no significant differences existed between male and female undergraduates regarding the causes of stress on students. The result shows that the calculated t-value was less than the t-critical table values ($t\text{-cal} = -11.02 < 1.96$) at .05 level of significance. Therefore, the null hypothesis was upheld. Based on the above, undergraduates' perception of the sources of stress was not dependent on gender.

Research Question Three

What is the perception of Enugu state University of Science and Technology undergraduates towards the consequences of stress? Table 5 contained the data that provided answer to the above research question.

Table 5: Perceived consequences of stress on Enugu State University of Science and Technology undergraduates.

n=504											
S N I	t e m s	SA 4	A 3	D 2	SD 1	N	Mean	S D	Decision		
17	S i c k n e s s	369	125	5	5	504	3.71	0.47	P	P	
18	failure in exam	280	132	48	44	504	3.22	0.89	P	P	
19	D e p r e s s i o n	160	145	130	69	504	2.73	1.07	P	P	
20	F a t i g u e	300	150	40	14	504	3.47	0.76	P	P	
21	emotional trauma	170	200	100	34	504	3.09	0.87	P	P	
22	lack of concentration	220	190	89	5	504	3.23	0.89	P	P	
	G r a n d m e a n						3.24	0.82	P	P	

- PP = Positive Perception



In table 5, the data showed the grand mean of 3.24 and standard deviation of 0.82. This means that there were several perceived consequences of stress on Enugu State University of Science and Technology undergraduates since the grand mean was above 2.50. Therefore, students agreed that sickness was a consequence from stress (mean = 3.71). The table showed that failure in exam was perceived to be due to stress (mean = 3.22). The table also showed that depression was perceived to be due to stress (mean = 2.73). The table further showed that fatigue was perceived as a problem from stress (mean = 3.47). The table also showed that emotional trauma was perceived as the consequence of stress (mean = 3.09). The table also showed that lack of concentration was perceived to be a result of stress (mean = 3.23).

Hypothesis Three

There is no significant difference between the mean responses of male and female undergraduates on their perception of the consequences of stress on Enugu state university of science and technology undergraduates. Table 6 contains data testing this hypothesis.

Table 6: t-test analysis of difference between the mean response of male and female undergraduates on their perceived consequences of stress

n=504

Students gender	N	X	S D	D f	t-cal	t-crit	P	Decision
M a l e	230	3.91	0.15					
				502	-1.47	1.96	.05	Do not Reject
F e m a l e	274	2.68	0.72					

Results in table 6 show that there were no significant differences existing between male and female undergraduate regarding their perceived consequences of stress on undergraduate students. The result shows that the calculated t-value was less than the t-critical table values ($t\text{-cal} = -1.47 < 1.96$) at .05 level of significance. Therefore, the null hypothesis was upheld. Based on the above, students' perception of the consequences of stress was not dependent on gender.

**Research Question Four**

What is the perception of Enugu state University of Science and Technology Undergraduates towards stress management? Table 7 contains the data that provided answer to the above research question.

Table 7: Enugu State University of Science and Technology Undergraduates' Perception of stress management

n=504

S N	I t e m s	SA 4	A 3	D 2	SD 1	N	Mean	S D	Decision
6	students engage in exercises to ease stress	270	150	34	50	504	3.21	0.81	P P
7	student involve in recreational activities like picnic to ease stress	337	144	20	3	504	3.63	0.50	P P
8	Students they engage in religious activities to manage stress	284	140	46	35	504	3.33	0.84	P P
9	students listen to music to ease stress	320	120	48	16	504	3.44	0.80	P P
10	relaxation helps to ease off stress	350	140	10	4	504	3.63	0.50	P P
	G r a n d m e a n						3.44	0.69	P P

2. PP = Positive Perception

In table 7, the data showed the grand mean of 3.44 and standard deviation of 0.69. This means that the perception of Enugu state university of science and technology undergraduates towards stress management was positive since the grand mean was above the criterion mean of 2.50. However, students engaged in exercises to ease stress (mean = 3.21). The table showed that the student involved themselves in recreational activities like picnic to ease stress (mean = 3.63). The table also showed they also engaged in religious activities to manage stress (mean = 3.33). The table further showed that the students listen to music to ease stress (mean = 3.44). The table also showed that students agreed that relaxation helps to ease off stress (mean = 3.63).

Hypothesis four

There is no significant difference between the mean response of male and female undergraduate students on their perception of stress management. Table 8 contains data testing this hypothesis.

Table 8: t-test analysis of difference between the mean response of male and female undergraduates on their perception towards stress management.

Students gender	N	X	S D	D f	t-cal	t-crit	P	Decision
M a l e	230	3.97	0.07					
				502	-5.62	1.96	.05	Do not Reject
F e m a l e	274	3.00	0.66					

Results in table 8 show that there was no significant differences existed between male and female undergraduates regarding their perception of stress management. The result shows that the calculated t-value was less than the t-critical table values (t-cal



= -5.62 < 1.96) at .05 level of significance. Therefore, the null hypothesis was accepted as stated. Based on the above, students' perception of stress was not dependent on gender.

Summary of Major Findings

The results obtained from data analysis have shown the following:

1. the perception of Enugu state university of science and technology undergraduates towards stress was positive.
2. the undergraduates perceived several sources of stress on Enugu state university of science and technology undergraduates.
3. the undergraduates perceived several consequences of stress on Enugu state university of science and technology undergraduates.
4. the perception of Enugu state university of science and technology undergraduates towards stress management was positive.
5. Gender has no influence on the perception of the undergraduates of Enugu State University of Science and Technology towards stress.
6. Gender has no influence on the perception of the undergraduates of Enugu State University of Science and Technology Undergraduates towards stress management.
7. Gender has no influence on the perception of the source of stress on undergraduates of Enugu State University of Science and Technology.
8. Gender has no influence on the perception of the consequences of stress on undergraduate of Enugu State University of Science and Technology.

Discussion, Conclusions and Recommendations

This chapter presents the discussion of findings, conclusions, educational implications, recommendations, suggestions for further studies and summary of the study.

Discussion of the Findings

The findings of this study are discussed according to the research questions and hypotheses

Research Questions

1. **What is the perception of Enugu State University of Science and Technology undergraduates towards stress?**

The findings of this study reveal that, the perception of Enugu state university of science and technology undergraduates towards stress is adequate. Gender has no influence on the perception of Enugu State University of Science and Technology undergraduate towards the concept of stress (Tables 1 & 2). Thus, students feel anxious and tensed under pressure, stress makes students lack concentration in class, stress makes students lose interest in school program of activities, stress induces sickness like headache and stress leads to depression. This is in line with what Cheng Kai-Wen suggested that general curriculum on stress and stress-coping strategies



should be designed. Jayakumar (2014) noted that the examination of stress within the student community should be looked into and the issue of stress among students has to be addressed immediately.

2. What are the perception of Enugu State University of Science and Technology undergraduates towards the sources of stress management?

In this study, it was revealed that undergraduates believe that there are several sources of stress on Enugu state university of science and technology undergraduates (Tables 4 & 5). Therefore, students agreed that stress comes from examinations, stress comes from pressure from lectures, discomfort from environment causes stress, financial problems leads to stress, students do not believe that fear of unknown can leads to stress, overload of courses leads to stress. This is in line with what Juvilyn and Marita (2014) noted that interpersonal stressors among students include working to people they do not know, trouble with parents, and relationship with opposite sex. Flora (2015) noted that students who don't have healthy sleeping habits or don't get enough sleep at night are more likely to feel stressed than students who get plenty of sleep,

Furthermore, Juvilyn and Marita suggested that school management should support the idea of creating a stress management program for higher education institution.

3. What is the perception of Enugu State University of Science and Technology undergraduates towards the consequences of stress?

The findings of this study reveal that there are several consequences of stress on Enugu state university of science and technology undergraduates. Gender does not have influence on the consequences of stress among undergraduate students (Tables 5 & 6). Therefore, students believes that sickness is as a result of stress, failure in exam is due to stress, depression is due to stress, fatigue is a problem from stress, emotional trauma is the consequence of stress, lack of concentration is because of stress. This is in consonance with what Denise (2011) noted that undergraduate students undergoes multiple life changes. This life change can add a strenuous amount of stress on a student.

In this aspect however, Denise suggested that investigating the different areas where stress occurs can help students learn ways to cope with their stress.

4. What is the perception of Enugu State University of Science and Technology undergraduates towards stress management?

It was noted in this study that the perception of Enugu state university of science and technology undergraduates towards stress management is positive (Tables 7 & 8). Hence, students engage in exercises to ease stress, student involves themselves in recreational activities like picnic to ease stress, they also engage in religious activities to manage stress, students listen to music to ease stress, students believe that relaxation helps to ease off stress. This is in agreement with what Murphy (2006)



submitted that stress-management interventions techniques should be designed to help employees modify their appraisal of stressful situations or deal more effectively with the symptoms of stress.

Murphy recommended that in order to produce changes on the above types of measures, stress interventions will need to alter or modify the sources of stress in the work environment.

- **H01. There is no statistical significance difference between the mean response scores of male and female undergraduate on their perception on the concept of stress.**

The influence of some demographic variables such as gender formed the main focus on the null hypothesis (H01). Regarding the influence of gender, Table 4 contains data testing this variable. Data in the tables showed that Gender has no influence on the attitude of undergraduate of Enugu state university of science and technology undergraduate towards stress. According to the Table, the H01 was not rejected. Therefore, gender exerts no significant influence on the attitude of undergraduate students of Enugu state university of science and technology undergraduate students towards stress (Appendix).

The finding is not in harmony with that of Cheng (2013) who noted a significant difference in gender of students in their attitudes towards stress. Cheng noted that female felt more stress in school than male.

- **H02. There is statistical no significance difference between the mean response scores of male and female undergraduates on their perception towards the sources of stress**

On the other hand, the influence of some variable such as gender was used to form the focus on H03. Regarding the influence of gender, Table 6 contains data testing this variable. Data in the table showed that gender has no influence on the source of stress on undergraduate of Enugu state university of science and technology undergraduate. According to the Table, the H03 was not rejected. Therefore, gender exerts no significant influence on the sources of stress on undergraduate students of Enugu state university of science and technology undergraduate students towards stress (Appendix).

This is in line with what Samira, Alaa, Sajida and Nadia (2015) noted that most of the stressors are from coursework and interpersonal relationships. However, low self-esteem coupled with self-blame and self-criticism is quite common with students.



- **H03. There is no statistical significance difference between the mean response scores of male and female undergraduates on their perception towards the consequences of stress**

On the other hand, the influence of some variable such as gender was used to form the focus on H04. Regarding the influence of gender, Tables 6 contains data testing this variable. Data in the table showed that gender has no influence on the consequences of stress on undergraduate of Enugu state university of science and technology undergraduates. According to the Table, the H04 was not rejected. Therefore, gender exerts no significant influence on the consequences of stress on undergraduate students of Enugu state university of science and technology undergraduate students towards stress (Appendix).

This finding is supported by Denise (2011) who suggested that when a student experiences high levels of stress or chronic stress, regardless of her age or grade, it can interfere with her ability to learn, memorize, and earn good grades, as well as lead to poor physical, emotional and mental health. He also suggested that by learning about common stressors, a parent can help to mitigate negative or chronic stress in a child's life.

The findings of the study are not unexpected to the researcher considering the economic situation of Nigeria as a country and the fact that the leaders of Nigeria as a nation do not take education infrastructure as a priority. Students have adequate attitude towards stress. This is understandable because Ipem and Odeigah (2014) reported that stress level was found to be a great contributor to students' poor academic achievements. Also, Kio, Omeonu and Agbede (2015) asserted the top ten stressors causing moderate to high stress among respondents were academic oriented. However, this is because the major stressor was the fear of graduating.

However, from the findings in the study, there is every need to put proper policies and programmes which will be geared towards enhancing effective stress coping strategies that will especially target the key stressors. The education ministry and the University administration should corroborate and provide adequate curriculum to incorporate public and mental health experts to help student develop personal coping skills and reduce stress on our campuses.

- **H04. There is no statistical significance difference between the mean response scores of male and female undergraduates on their perception towards stress management**

On the other hand, the influence of some variable such as gender is used to form the focus H02. Regarding the influence of gender, Tables 8 contains data testing this variable. Data in the tables showed that Gender has no influence on the attitude of undergraduate of Enugu state university of science and technology undergraduate towards stress management. According to the Table, the H02 was not rejected. Therefore, gender exerts no significant influence on the attitude of undergraduate



students of Enugu state university of science and technology undergraduate students towards stress management (Appendix).

This is in agreement with what American Psychology Association (2010) reported that both men and women tend to choose sedentary activities like reading, listening to music and watching television to manage their stress over healthier behaviours like seeing a mental health professional or exercising.

Conclusions

Based on the findings of the study, the following conclusions were made:

- Undergraduates of Enugu State University of Science and Technology showed positive perception towards the concept of stress.
- Enugu State University of Science and Technology undergraduates showed positive perception towards stress management.
- undergraduates believe that there are several sources of stress on Enugu state university of science and technology undergraduates.
- There are adequate consequences of stress on undergraduates of Enugu state university of science and Technology.
- Perception of Enugu state university of science and Technology undergraduates towards stress is not dependent on gender.
- Perception of Enugu state university of science and Technology undergraduates towards stress management is not dependent on gender.
- Sources of stress on Enugu state university of science and Technology undergraduates' is not dependent on gender.
- Consequences of stress on Enugu state university of science and Technology undergraduates is not dependent on gender.

Educational Implications

The findings of this study have the following educational implications

1. The findings on Perception of Enugu State University of Science and Technology undergraduates' towards stress showed that students are knowledgeable and are ready to imbibe any coping strategies available in order to maintain good academic records.
2. In practice, there is no policy in place to take care of this need for students to actually manage and cope with stress in Nigerian campuses.
3. However, the stress will keep deteriorating the qualities of the graduates we produce in Nigerian higher institutions. Thereby having negative effect on the quality of education and graduate of Nigerian higher institutions.

Recommendations

The following recommendations were made, based on the findings of the study and conclusions drawn.

1. The ministry of education is encouraged to provide Corroborative intervention education and administer it to University students by public and mental health



experts in order to help student develop personal coping skills and reduce stress on our campuses.

2. University authorities should provide recreational facilities for the students who should introduce more appropriate coping strategies which will help students to overcome their stressors
3. Students should make extra effort to manage themselves when they are stressed up in order to avoid poor academic performances.
4. Parents should try and provide adequate financial need of their children to avoid financial stress.

Suggestions for Further Research

The researcher suggested thus:

- Similar study should be carried out in other higher institutions of the country.
- A study on the stress level and academic performance of Nigerian students should be carried out.

Summary of the Study

This was a survey study aimed at ascertaining the Enugu State University of Science and Technology Undergraduates' Perception of Stress and Stress Management. Specifically, four specific objectives with four corresponding research questions and hypotheses were formulated to guide the study. The area of the study was Enugu State while the population for the study was 7,820 students. Survey research design was used. Multi-stage sampling procedure was used to draw 504 respondents from the population. Questionnaire was the only instrument used for data collection and was developed by the researcher. The instrument was validated by three experts. The reliability of the instrument was established using Cronbach Alpha to ascertain the internal consistency of the instrument which yielded a coefficient index of .86. Four research questions were answered using mean scores and standard deviation while four null hypotheses were tested using t-test at 0.05 level of significance. The findings revealed that the attitude of Enugu State University of Science and Technology towards stress was adequate. Four null hypothesis were not rejected as there was no significance difference between male and female undergraduate students on their attitude towards stress, sources, consequences and its management. Findings also revealed that stress makes students lack concentration in the class, lose interest in school programme, cause sickness and depression. In addition, the students were ready to adjust any coping strategies available in order to make good academic records. Based on the findings a number of recommendations were made aimed at improving the stress coping strategies among the undergraduates. These included that educational psychologist and counsellors should introduce more appropriate coping strategies to the undergraduates. There should be friendly relationship between the faculty and students.



References

- Adinma, C. (2009) Socializing concern for others in the home. *Developmental Psychology*, 27, 338-342.
- Albert M. Monika F. (2001). Associations among the big five, emotional responses and coping with acute stress. *Personality and individual differences* 2002 ;32:1215-1228.
- Baum, A. Davison. L and singer, B. (2001) stress and you. *Cognitive Therapy And Emotional Disorder*. New York: McGraw-Hill Book.
- Bravo-Baumann, H. 2000. The interactional context of problem, emotion and association focused coping: the role of the big five personality factors. *Journals of personality* 2006:64:775-813.
- Broom, K. (2009) *Health Psychology Process and Application*. London: Chapman and hill.
- Bruce A. (2006). *Effect of family visits on the blood pressure and heart rate of patients in CCU Heart & Lung*, 5, 291-296.
- Byer, O. C. and Sheinberg, W. L (2001). Living Well, Health in Your Hands. In Okafor J O. & Okafor R.V. (1998) *Emotional and Mental health*. Nsukka: Raije Publisher.
- Cannon, VV.B. (2002) *Bodily changes in Paan Hunger; Fear And Rage*. New Yo1c: St. Martin's Press.
- Caplin, A.B. (2009). *Social Behaviour of the Youths*. Chicago: University press.
- Caruthers, U. (2004) *Healthy People in Healthy Communities*. London: Chalto and Windus.
- Cheng Kai-Wen (2013). A study of stress sources among college students in Taiwan. *Journal of Academic and Business Ethics* vol 12(2) pp 23-29
- Chukwu, B. I. (2001) Responsiveness of the Administrators of School of Nursing to Administrative Challenges in Enugu State. *Unpublished Ph.D Thesis*. Enugu State University of Science and Technology.
- Cohen, B. I. (2001). Health Care Coping And the Counsellor. *Personal and Guidance Journal*, 2 (1) 52-54.
- Coleman, J.C. (2005). Life Stress Arid Maladaptive Behaviour. *American Journal of Occupational therapy*.



- Davis, P. (2008). Stress and Its Management. *Quality Magazine* 3 (1) 7.
- Davidson, T. and Neale, A. (2006). *Alcohol and Stress* Management, London: Allen and Unwin.
- Edlin, G. and Golanty E. (2002). Health And Wellness In Okafor J.O. and Okafor, R V (1998) *Emotional And Mental Health*. Nsukka: Ralja Publisher.
- Esset, M. (2008). *Stress and Nigerian Youths* *Quality Magazine* 16 (2) 14-15.
- Evans, .F. J. (2001) The Placebo Response in Pain Reduction. *Journal of Tropical Medicine* 60-140.
- Ezeilo, B.N. (2000) *Psychology and Health in Africa* *Journal of Social Sciences and Medicine* 31 (6) 705-710.
- Ezeilo, B.N. (2005). Good Study habit. *Paper Presented at the Freshman orientation program University of Nigeria. Enugu Campus.*
- Ezike, H.O. (2003). Root Causes And Remedies of Indiscipline in Nigerian Universities *Paper Presented at the Freshman Orientation Programme University of Nigeria, Nsukka.*
- Ezuma, V. (2002). *Aspect of Stress Management*. Ibadan: Board Publications Ltd.
- Glass, P. (2007) *Selected issues*. New York: McGraw Hill.
- Green, C.J. (2008) *stress behavioural pattern and coronary disease* London: oxford university press.
- Griffiths, D. (2008). *Stress psychology and medicine*. London George Allen.
- Harvey, P. (2001). Stress and Health. *Health psychology journal* Chapman and hall 2 (14) 24-33.
- Healy, D (2003). *Anxiety and depression* London Chapman and Hall.
- Hob fool, S.E. (2006). Coping and adaption to stress. *Journal on behavioural medicine*. 2 (6) 20-23.
- Horgan, W.K. & Horgan, S.A. (2004). *Life time physical and wellness*. London: Englewood, Morton publishers.
- Hubert, T.B. (2006). Stress and immune system. *Newswatch*. 5 (4) 12-15.



- Ipem C. and Odeigah L. (2015) Gender variation, stress level and academic achievement of students in Nigerian University *Journal of world educators Vol 1(2)* pp2-15.
- Jayakumar (2014) An Empirical Study on Stress Management for Higher Secondary Students in Salem District-Tamil Nadu *International Journal of Recent Advances in Organizational Behaviour and Decision Sciences (IJRAOB)* Vol,1(1) 270 – 278
- Jacobson, P. (2005). *The University and Youths*. San Francisco: Jossey-bass.
- Jeo, A.I. (2007). *Stress among a group of undergraduates*. Enugu: great Paulson press Ltd.
- Juvilyn G and Marita G (2014) Sources of stress among college students *CVCITC Research Journal* Vol. 1(1) pp 120-128.
- Keith, A.K. (2007). *Emotion and bodily changes*. (4th Ed) New York: Columbia university Press.
- Lawson, H.E. (2004). *Organizational stress and individual strain*. London: Mosby Company.
- Lawson, H.E. Bloomes, K. and Kendall, A. (2004) stress, anxiety, Depression and physical illness in college students. *Journal of genetic Psychology*. 155 (3), 321-330.
- Lazarus, B.F. and Forkman, A. (2004). *Science and human behaviour*. New York: Macmillan
- Mann, R. (2008). *Stress and coping in nursing* London: Chapman and Hall.
- Marwan, Z. B. (2013) Academic Stress among undergraduates students, The case of Education Faculty at King Saud University India. *International Interdisciplinary Journal of Education* Vol. 2, pp. 1.
- McEwen, B. S. (2000). *Allostasis and allostatic load: Implications for neuropsychopharmacology*. *Neuropsychopharmacology*, 22(2), 108—124.
- Melgosa, D. (2001) *Stressful life Events: Nature and Effects*. New York: John Wiley.
- Morgans C.T (2001) Mental and Social Health *American journal of Medicine*, 35 (2). 95-97.



- Morse, S.K. and Furst, P. (2008). *Stress in Women*. New York: McGraw Hill.
- Murphy L.R (2006). *Stress management in work settings: a critical review of the health effects*. National Institute for Occupational Safety and Health (NIOSH), Cincinnati, Ohio USA.
- Ndubuisi, P. (2008) Youths and Stress *vanguard Newspaper*.
- Nwana, O.C. (1981) *introduction to educational research*. Ibadan Wisdom Publishers.
- Nwafor, U (2003). Stress and Human Health. *Health care magazine*.
- Nwamkpa, K. (2001). What You Should Know about Stress. *Family Health Magazine*. 2 (1) 15.
- Nwankwo, V. (2001). 10 Formulae Against Stress. *Health Care Magazine* 3 (1).10-13.
- Nweze, A. (2005) Current Development in Stress And illness. *Nigeria Journal of Clinical psychology* 3 (122) 1-9).
- Nworgu, B. G. (2001) *Educational Research; Basic issues and Methodology*. Ibadan: Wisdom.
- Nwosu, J., (2001). Anxiety and Depression. *Quality magazine*. 10. (3) 16-18.
- Nwoye. R.I. (2002 September 12). What everybody should know about Stress. *Family Health Magazine* 3 (4) 17-18.
- Okafor, J.O. and Okafor. R.U. (2008). *Emotional and Mental Health*. Nsukka: Raija Publishers.
- Okeke, J.O. (2001) Stress and Implication. *The Guardian Newspaper*, 16.
- Okoli N. (2001). Coping with Stress. *Health Care Magazine* (19) 2426:
- Oxford Advanced Learner Dictionary (2013) London. *British National corpus*.
- Parker, EL (2000) Life Events and Subsequent Illness. *American Journal of Epidemiology* 104 (2), 146-158.
- Philips, K (2009). *The Psychology of Health*. London: Routledge Publishers.
- Porth, W. (2006) *Principles In Behaviour Modification*. New York: 1014 Rinehart and Winston.



- Priest, M. (2008). *Anxiety and Depression*. London: Chapman and Hall.
- Prince, H. (2009). *The practice of behaviour therapy*. New York: Academic Press.
- Quick, J.C (2004.). *Organizational stress, and preventive management* New York: McGraw Hill
- Roy C, (2006). *The Roy Adaptation Model: The definitive statement*. Norwalk, CT: Appleton & Lange.
- Ryan, M. (2007) Loneliness, social support, and depression interactive variables with cognitive status: Testing Roy's model. *Nursing Science Quarterly*, 9, 107—114.
- Rimm, D.C and Masters, J.C. (2009). *Behaviour Therapy: Techniques and Empirical finding* (2nd Ed). New York: Academic Press.
- Robertson, A (2002) *Social support and drinking among young women*. New York: William Collins publisher
- Samira S., Alaa A, Sajida A. and Nadia O. (2015) Sources of Stress and Coping Strategies among Undergraduate Medical Students Enrolled in a Problem-Based Learning Curriculum. *Journal of biomedical education* vol 1(4) pp8-14
- Sanjeev, K. J. (2013) Stress level and coping strategies of University students Saudi Arabia, *Journal of Physical Education and Sports Management*, Vol. 4(1): pp5 - 11.
- Schacht B. and Morrissey J. (1979) *Helping Distressed women*. New York: Columbia university press.
- Shader, R.I, (2004) *Stress Responses Manual of psychiatric Therapy* (2nd Ed) Boston: Little Bron and company
- Selye, H. (1956). *The Stress of life*. New York McGraw Hill.
- Sorensen, A. and Lurickman, (2009). *Psychology of nursing care* London: Oxford University Press.
- Tanner B.S (2006). *The effect and control of Stress in Undergraduates*. New York: Lippuicott.
- Udoka, M (2003). *Principles and Techniques of Behaviour Modification*. Owerri: International University press.



- Ugwu, B. (2007 May 24). Controlling Stress and Tension. *The Punch*. 12.13.
- Ugwuadi, S. (2002 Aug. 18) Stress in Nigeria *This Day* 21
- Uzoagulu, A. E. (2008). *Practical guide to writing research project Report* in tertiary institution Enugu; John Jacob classic.
- Wallen, K. (2009). The Organizational Hypothesis: Reflections on the 50th Anniversary of the Publication of Phoenix, Goy, Gerall, and Young (1959). *Hormones and Behavior*, 55 (5), 561–565
- Warrach, Ahmed, Nowaz and Khoso (2014) Impact of stress on job performance: An Empirical study of the Employees of Private Sector Universities of Karachi, Pakistan *Research Journal of Management Sciences*, 3(7) 14-17
- Warbuton, H (2000). *Stress wise: A Practical Guide for dealing with stress* New York: McGraw Hill.
- Wheatley D. (2000). *Speaking your mind A. Guide to Christian Assertiveness*. London: S.P. publications Inc.
- Webopedia (2015) Gender. Retrieved July 24 2013 from <http://www.webopodia.com>
- Webster (2015) Definition of Attitude. Retrieved January 12 2014 from <http://www.merriam-webster.com/dictionary/attitude>
- Wikipedia (2014) Stress management. Retrieved December 6 2013 from <http://www.wikipedia.org/wiki>
- Williamson, H. (2001). *Stress and the American Youths*. New York: Ballantin Books.
- Yeah C. H. (2003). *Psychological distress: Testing hypotheses based on Roy's Adaptation Model*. *Nursing Science Quarterly*, 16(3), 255—263.
- Zhan, L. (2000). *Cognitive adaptation and self consistency in hearing-impaired older persons: Testing Roy's Adaptation Model*. *Nursing Science Quarterly*, 13(2), 158—165.