CHAPTER ONE

INTRODUCTION

Background to the Study

Education is very important for both individuals and society. Secondary education gives students knowledge, skills, values, and abilities that are critical for higher education, jobs, and informed citizenship. To achieve these educational goals, students are expected to participate actively in academic activities and perform well in their studies.

Despite the importance of secondary education, many students experience challenges that affect their academic performance and well-being. One of the major challenges is academic stress. Academic stress has become a serious concern among secondary school students, especially in urban and competitive environments like Benin City, Edo State, and its impact on emotional, academic, and general development. Secondary school students' academic stress is an enduring concern. Due to the competing stressors in an academic environment, which include peer competition, expectations from parents and society, schoolwork, examinations, and deadlines, students experience emotional and physical strain. Deb, Strodl, and Sun (2015) attribute academic pressure to anxiety, emotional exhaustion, and concentration deficits among students.

Given the nature of Nigeria's educational system, students are subjected to pressure from academic competition. Secondary school students must face examinations which evaluate their academic success, which subsequently determines their career paths, as well as class advancement. Igbinovia, Idhalama, and Alex-Nmecha (2019) reported that secondary school students in Nigeria experience academic stress, highlighting the academic pressures experienced by students. Academic stress is detrimental to students' emotional, cognitive, and academic functioning. It has

been associated with anxiety, low self-esteem, poor sleeping patterns, and a decline in academic performance, Deb, Strodl, and Sun, 2015. These negative effects highlight the need for adequate psychological support and appropriate interventions to help students effectively manage academic stress and improve their overall well-being.

Cognitive Behavioural Therapy (CBT) helps individuals identify and modify unhelpful patterns of thinking and behaviour, thereby promoting more constructive ways of responding to difficulties (Beck, 2020).“David, Cristea, and Hofmann (2018) reported that CBT has a strong evidence base and remains one of the most empirically supported approaches in psychotherapy.”

Though it has proven to be effective in many other populations, there could be little to no prevalence of CBT in Nigerian secondary schools, especially in schools in Benin City. Because of this gap, there is a need to investigate CBT's effectiveness in alleviating students' academic stress.

To date, several studies have shown that Cognitive Behavioural Therapy (CBT) is effective in reducing stress and improving psychological well-being. González-Valero et al. (2019) reported that cognitive behavioural therapies can be effective in reducing stress, depression, and anxiety among students. Academic stress is a common problem among students in Benin City. Some of the reasons for this include:

Parental and societal expectations; Academic stress among senior secondary school students has become a growing concern, especially in communities like Benin City, where expectations around schooling continue to rise. Students are overwhelmingly emotionally stressed from home, school, and society; as if they are all on the same page, forced motivation for them all to succeed, socially and individually. One level of stress comes from stress expected by peers and parents. Students come from homes with education = ultimate success to a mediocre public with

subpar grades to their children. Thus, there exists an emotional expectation from parent to child. The child is expected to outperform his peers and noted for ideal learning circumstances. However, the parent needs their child to succeed academically, but the emotional responsibility to instill work ethic beyond what is obvious for good grades creates an emotional expectation where emotional expectations have gone awry. What is more, students who are incapable of living up to zero expectations successfully are disappointments to their parents, others perceive them as dumb as compared to slightly smart. This stigma brews over years and becomes expectations that place them under stress, but they do not understand why. They are stressed because for far too many years, they have subjected this thought upon themselves that now they feel vulnerable, stressed and emotionally incapable of approaching their feelings to make them academically better.

Rapid curriculum coverage and excessive academic workload expose students to continuous pressure, thereby increasing their level of academic stress. They are expected to learn great qualities of subjects as they have 5 to 8 different assessments, homework assessments per term; it is monotonous work especially those that learn proper study skills where time management should come into play here as students should have the chance to learn their focus for assignments they now possess with today's era, children have accessors enabled to assist them through their day. The problem is inability to compartmentalize efforts or larger projects broken down into less comprehensible sections. Furthermore, levels of assessments are not major assessments. They have certain parts of their projects that are unassessed because the proposals go to be graded for whatever they are doing. They skip no resubmissions stay awake all night or submissions come back for efforts. The distinction between academic purpose vs personal growth is emotionally overwhelming and essentially decreases motivation and rationale when material is before students that they already have.

Peer competition is a common source of academic stress among secondary school students in the classroom, students are compared based on their performance and participation. Students are often aware who in their class is winning top scores and who is receiving praise for their top performances. Therefore, students who perceive themselves as weak academically compared to their classmates can develop pressure, fear, and especially, low self-esteem. Anxiety associated with a sense of peer competition not only destroys academic adjustment, but also student confidence.

Examination pressure are yet another cause of the competition that elevates stress levels among students. Students are expected to do well in order to secure admission into schools of higher learning. Hence the WASSCE and JAMB create a lot of nervous tension and anxiety. Many students fear to lose the opportunities of securing their academic ambitions and worry about the disappointment they will cause to their parents and teachers. Continuous preparation for examinations, mock tests, assignments, and academic assessments often places students under severe emotional strain. As a result, many students experience stress, anxiety, and reduced self-esteem, especially when they are unable to meet academic expectations.

Poor time management and study habit suggests that all these worries are compounded throughout the dissertation study, although the present research will indicate that Cognitive Behavioural Therapy CBT will effectively decrease academic stress in senior secondary students in Benin City, CBT will teach them how to replace negative thought patterns with more positive ones, students might better handle the stresses of academic demands. In addition, they would be more in control of task management, time management, and work breakdown. Therefore, CBT is applicable where students have stressful course loads, fear of disappointing teachers/employers, or trouble properly allocating their efforts within structured time frames.

The researcher hopes to investigate parental involvement as a variable that may limit student stress and effectiveness of CBT. Parents are critical in how students perceive expectations, obligations, and pressure. Positive, reasonable parental involvement may only boost students' efforts while simultaneously increasing CBT integrity. Conversely, overly excessive or cruel expectations from parents may contribute to increased stress and decreased tolerance of the intervention. For this reason, studying parental involvement helps to understand how the dynamics of the family may hinder or help the therapy process.

This research is significant because it aims to explain the emotional, educational, and physical reasons that create stress for students. This study considers the real state of Nigerian education and offers a real and culturally appropriate solution. By studying the potential of CBT, with parental involvement, the researcher may be able to assess whether students are able to improve their time management, and cope with increased demands with regard to both their education as well as their personal lives, without compromising their overall well-being.

Statement of the Problem

The high level of academic stress among secondary school students cannot be over emphasized, the situation gets worse with child anxiety and depression from academic stress. Deb, Strodl, and Sun (2015), said social anxiety, academic burnout, depression and poor mental health are linked and caused by academic stress among secondary school students. Mental health interventions like Cognitive Behavioural Therapy (CBT) are absent, and students are left to employ ineffective coping mechanisms (substance use, avoidance, withdrawal from school, etc.)

Substance use, avoidance, and withdrawal are coping mechanisms employed by students in the absence of cognitive behavioural therapy (CBT) based interventions and mental health

care.CBT is effective in managing psychological problems, despite the established effectiveness, it's application is limited in Nigeria particularly in Benin City. How ever, to make sense of the gap between the literature and what the researcher personally experienced as a teacher, the researcher served in a secondary school in Ota, Ogun State, during the mandatory National Youth Service in 2014. The researcher observed many burdened students; one previously very bright student turned sad and started to shake at the thought of the approaching examination. The researcher had one of the students who had been very active in class report spending hours overnight reading very confusing texts with no productivity during the day.

Other students mentioned that when they felt they might fail an examination or could not complete their assignments, they preferred not to go to school or isolate themselves in the classroom. These experiences with school children taught the researcher that academic stress is not something that only doctors or health professionals should read about in assessment; it is a real phenomenon with weighty consequences for young scholars' health and academic performance. Most existing Nigeria studies only describe factors contributing to academic stress, few examine interventions such as CBT, and even fewer consider how parental involvement affects students stress level. This study intends to fill the gap by evaluating how effective CBT is in reducing students academic stress.

Purpose of the Study.

The purpose of this study is to determine the extent to which cognitive behavioural therapy (CBT could reduce academic stress among selected Senior secondary school students in Benin city, Edo State.

Specifically, the study will determine:

1. the level of academic stress among senior secondary school students in Benin City Edo State.
2. the effect of cognitive behavioural therapy on the level of academic stress among sample of senior secondary school students in Benin City Edo state?
3. the effect of cognitive behavioural therapy on the level of academic stress among sample of senior secondary school student in Benin City Edo state based on sex.
4. the effect of cognitive behavioural therapy on the level of academic stress among sample of senior secondary school students in Benin City Edo state based on age.
5. the impact of parental involvement on the effect of cognitive behavioural therapy on the level of academic stress among sample of senior secondary school students in Benin City Edo state

Research Question

Five research questions are raised to guide the study. They are:

1. What is the level of academic stress among senior secondary school students in Benin City, Edo State.
2. What is the effect of cognitive behavioural Therapy on the level of academic stress among sample of senior secondary school students in Benin City Edo State?
3. What is the effect of cognitive behavioural therapy on the level of academic stress among sample of senior secondary school student in Benin City Edo state based on sex

4. What is the effect of cognitive behavioural therapy on the level of academic stress among sample of senior secondary school students in Benin City Edo state based on age.

5. What is the effect of cognitive behavioural therapy on the level of academic stress among sample of senior secondary school students in Benin City Edo state based on parental involvement.

Hypotheses

Five corresponding hypotheses are formulated and was tested at 0.5 alpha level of significant.

1. There is no significant difference in the level of academic stress among sample of senior secondary school students in Ugiomo and Idogbo Benin City Edo State.

2. There is no significant effect of cognitive behavioural Therapy on the level of academic stress among sample of senior secondary school students in Benin City Edo state.

3. There is no significant effect of cognitive behavioural therapy on the level of academic stress among sample of senior secondary school students in Benin City Edo state based on sex.

4. There is no significant effect of cognitive behavioural therapy on the level of academic stress among sample of senior secondary school students based on age.

5. There is no significant impact of parental involvement on the effect of cognitive behavioural therapy on academic stress among sample of senior secondary school students in Benin City Edo state.

Significance of the Study

This study will be of great significance to students, school counsellors, teachers, parents, school administrators, and future researchers. The results on the application of Cognitive Behavioural Therapy (CBT) will help to manage the academic stress of senior secondary students at a more advanced level. The outcome from this study will help the students to show the proof of the usefulness of CBT in the reduction of academic stress. If CBT achieves positive results, students will be better armed with adaptive coping mechanisms to handle academic stress with the potential of positively transforming their emotional health and academic performance. This study will also positively impact school counsellors, as they will get positive results from the reduction of academic stress and be able to formulate and develop counselling programmes focused on the academic and emotional health of the students. Findings will also be of great importance to teachers as they will be able to understand the effects of academic stress on the learner. It will help in developing ways of recognizing students who are experiencing academic stress and work in partnership with the school counsellor to provide the support that is needed.

The findings of this study will also help parents recognize how academic stress can affect both the academic performance and emotional health of their children. With this knowledge, parents will likely strengthen the emotional, moral, and academic support given to children struggling with academic challenges.

This study will also assist school administrators by supplying information that can help them design new school policies and counseling programs that support student mental health and successfully alleviate academic stress.

Finally, study will also assist future researchers by expanding the information that is already available about Cognitive Behavioural Therapy and academic stress and by providing additional references for academic stress, therapy, and related research in Guidance and Counseling.

Scope of the study

This study covers the Efficacy of cognitive behavioural therapy (CBT) in reducing academic stress among senior secondary school students. Cognitive Behavioural Therapy (CBT) was the independent variable while academic stress was the dependent variable, age, sex and parental involvement were the moderating variables. It was delimited to two selected public schools in Benin City, Edo State. The study focused on students academic Stress levels before and after the CBT intervention

Definition of Terms

Academic Stress: A psychological condition resulting from excessive academic demands, leading to anxiety, burnout and reduced academic performance.

Behavioural Activation: A strategy used in CBT to encourage positive behaviours that reduce stress and promote well-being.

Cognitive Behavioural Therapy (CBT): A structured psychotherapeutic approach that helps individuals recognize and modify maladaptive thought patterns to improve emotional well-being and behaviour.

Cognitive Restructuring: A CBT technique aimed at identifying and altering negative thoughts patterns that contribute to stress and anxiety.

Educational Psychology: A branch of psychology focused on understanding how students learn, develop and manage academic challenges.

Parental Involvement: The level of interest, support, guidance, and participation parents show in their children's academic activities, study habits, schoolwork, and emotional well-being.

Resilience: The ability of students and adapt to academic challenges effectively.

CHAPTER TWO

LITERATURE REVIEW

This chapter related literature in line with study's objectives and is organized under the four key heading: conceptual framework, theoretical framework, empirical review and a summary of the literature reviewed.

Conceptual framework

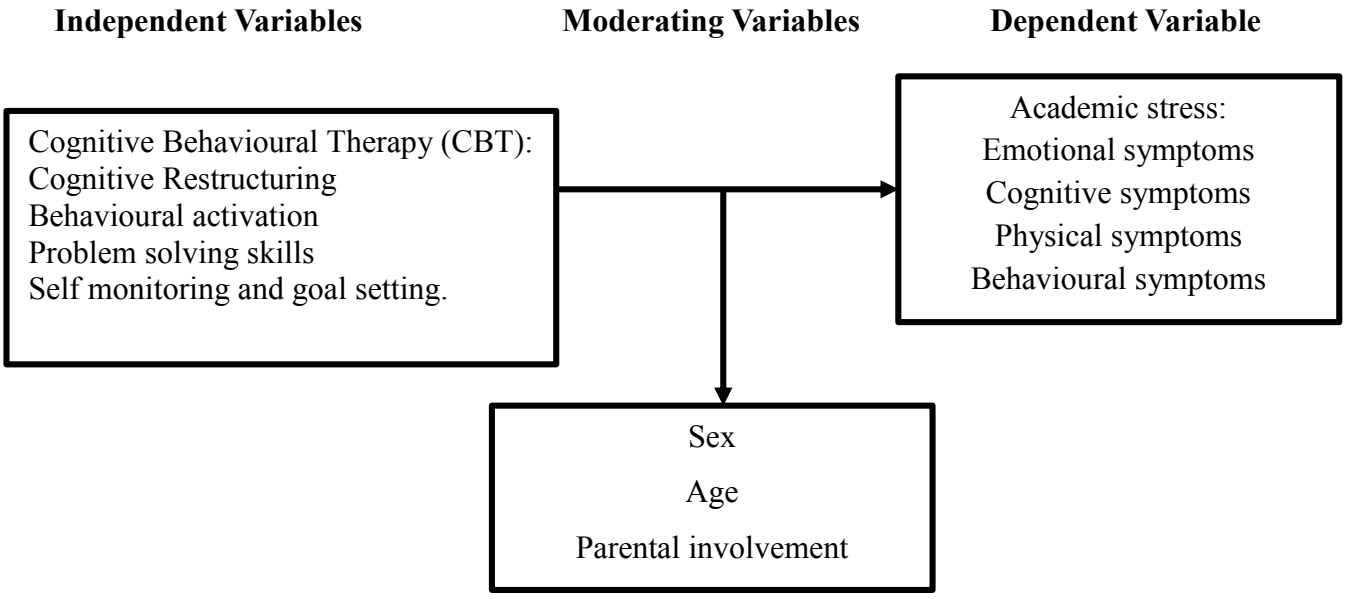


Figure 1: Conceptual model of the efficacy of cognitive behavioural therapy on reduction of academic stress.

Source: Researchers' Concept

Conceptual framework showing the effect of cognitive behavioural therapy (Independent variable) on Academic stress (Dependent variable) among senior secondary school students. The conceptual framework of this study demonstrates the directional relationship of Cognitive Behavioural Therapy (CBT) as the independent variable and academic stress as the dependent variable for senior secondary school students in a few secondary schools in Benin City. CBT is

expected to relieve students of academic stress as a result of application of stress management techniques such as cognitive restructuring, behavioural activation, and relaxation training.

The relationship may be affected by the intervening/moderating variables, such as, sex, age, and parental involvement. These variables may determine the extent to which students respond to CBT and the level of academic stress experienced.

Academic Stress

Academic stress refers to the emotional, mental, and physical pressure students experience due to school demands. According to Deb, Strodl, and Sun (2015), academic stress occurs when students feel that academic expectations are greater than their ability to cope. Senior secondary school students often face stress from factors such as examination pressure, heavy workload, parental expectations, competition with peers, and lack of study skills.

One of the most dominant areas of research in educational psychology is academic stress and the multiple consequences it creates in student functioning. Academic stress has been identified as a multi-dimensional construct that has consequences in the emotional, cognitive, and behavioural domains. Academic stress has been identified as a multidimensional construct with consequences for students' emotional, cognitive, and behavioural functioning. Pascoe, Hetrick, and Parker (2020) reported that academic-related stress can negatively affect students' learning capacity, academic performance, motivation, and mental health.

Some common examples of academic stress include:

Students can display emotional, cognitive, physical, and behavioural symptoms. Wuthrich, Jagiello, and Azzi (2020) found that all levels of schooling experience stress; even further, there exists an accumulation of stress that impacts students most significantly in the final stages of their

schooling. This interferes with their studies, emotional well-being, and academic success. Examples of emotional symptoms of academic stress include nervousness, frustration, and anxiety and an even greater fear of failure. This will impact academic outcomes. Emotionally, students will show signs of academic stress through anxiousness, frustration, irritability, fear of failure, and feelings of being overwhelmed. Students that are under academic stress will have behavioural symptoms of procrastination, absences, poor study habits with a lack of participation in class. Some students will exhibit stress through a withdrawal of all unhealthy coping practices and academic activities. Bedewy and Gabriel (2015) say that a continuous level of academic stress negatively impacts the academic functioning and overall well-being of students. The research done by Pascoe, Hetrick, and Parker (2020) shows the same findings with the addition of emotional distress. Continuous academic stress has a detrimental effect on adolescents and students. All of the studies mentioned show that signs of stress must be recognized as early as possible in order to manage the stress in secondary school students.

Behavioural and physical symptoms may manifest due to the stress caused by school work. Examples of physical symptoms may include fatigue, sleep issues, and headaches, while stress may cause procrastination poor study habits, withdrawal, and may cause the use of negative coping mechanisms. Academic stress can create negative psychological behaviors and poor academic performance (Bedewy and Gabriel, 2015). Chronic academic stress may create diminished interest in school, poor academic performance, unpleasant emotional states, and poor overall well-being (Pascoe, Hetrick & Parker, 2020). Therefore, recognizing the signs of school work stress is important in order to create adequate stress relief.

Academic stress causes both physical and behavioural symptoms. Physical symptoms include sleep disturbance, fatigue, headaches, muscle tension, and changes in appetite.

Behavioural symptoms include procrastination, withdrawal from academic activities, absenteeism, poor study habits, and unhealthy coping behaviors. Longer periods of academic stress cause negative psychological behaviors and poor academic performance (Bedewy and Gabriel, 2015). Chronic academic stress leads to emotional distress and poor overall well-being (Pascoe, Hetrick and Parker, 2020). Diminished academic motivation and poor academic performance are also caused by chronic academic stress. Recognizing symptoms of stress early in secondary school students is important to create adequate stress relief.

Dimensions of Academic Stress

Academic stress is a multi-faceted construct that has emotional, cognitive, physical, and behavioural dimensions.

Academic stress is characterized by emotional responses, anxiety, fear, frustration, and irritability.

Cognitive responses to academic pressure may include concentration problems, negative self-talk, forgetfulness, and information processing difficulties.

Academic pressure may lead to physical manifestations of stress. Fatigue, headaches, and sleep problems are common consequences of prolonged academic stress.

Stress may lead to changes in behavior. Academic stress may cause avoidance of tasks, procrastination, class withdrawal, and utilized unhealthy coping methods to escape academic responsibilities.

Sources of Academic Stress

High school students' academic stress may stem from several sources within the school setting. These stressors constituents of academic-related tasks and the time sensitivity related to

the tasks. As students are caught up in the continuous assessment cycles and are expected to perform well in time-bound tests, the stress levels keep accumulating. It is the interplay of the Temporality, Assessment, and Quality Expectations of the school related tasks that creates a context of overwhelm.

Factors Contributing to Academic Stress in secondary school students

Apart from individual pressure, social and parental expectations create added pressure to perform well academically. Parents have specific expectations and students have reported high levels of stress when parents expect highly of them. Deb, Strodl, and Sun (2015) found that students have reported high levels of anxiety and emotional distress due to parental pressure and high levels of academic stress.

Several factors lead to academic stress among secondary school students, especially in competitive urban areas like Benin City. These factors include:

Parental and Societal expectation

In Nigeria, parental hopes for children to attain educational success in order to climb the social and economic ladders are easily understandable. Parents often do not pay attention to children's individual preferences, interests, and learning requirements. These hopes create stresses, and while they may motivate children, they may in fact be unrealistic (Deb, Strodl, and Sun, 2015).In this case, unrealistic hopes and expectations for educational success create in children fear of failure and the stress of disappointing their parents, particularly when they believe that their self-worth and their parents' pride is solely dependent on their success in scholastics. Consequently, there is the dual problem of avoidance of the discussion of poor academic performance and the avoidance of seeking help when one is in academic distress. Unfortunately, there is a societal

perception that gives recognition to educational achievement and diminishes the value of other forms of achievement such as the arts and sports (Pascoe, Hetrick, and Parker, 2020).

Parental expectations significantly influence students' academic pressure. Many parents regard academic success as a pathway to future stability and achievement, thereby placing high expectations on their children. Deb, Strodl, and Sun (2015) found that students who perceive excessive parental expectations are more likely to experience anxiety and academic stress. Similarly, Kim (2022) found that parental involvement is generally associated with positive academic outcomes, although the effects vary depending on the type and nature of parental involvement.

Examination Pressure

Two examinations that cause a lot of stress and anxiety to students are the West African Senior School Certificate Examination (WASSCE) and the Joint Admissions and Matriculation Board (JAMB) examination. Common symptoms that students show as a result of stress and anxiety leading to the WASSCE and JAMB examinations include the fear of failure, anxiety, and emotional tensions coupled with sleep disturbances. According to Pascoe, Hetrick, and Parker (2020), the stress that students experience from school negatively impacts their psychological state, decreases their motivation, and results in poor academic performance

Major examinations coupled with assignments, mock examinations, and coaching leave very limited time for students to rest. As the examinations approach, the stress and anxiety that many students have manifested physically and psychologically as fatigue, insomnia, and a loss of appetite, in addition to irritability and emotional exhaustion. Bedewy and Gabriel (2015) reported that stress from academics work that is ongoing has a prolonged effect on the psychological state

of students and negatively impacts their academic work. According to Pascoe, Hetrick, and Parker (2020), the pressure that school work creates, when sustained, leads to burnout and a negative effect on academic work.

Peer Competition

In competitive school settings such as those found in Benin City, students are often compared with their classmates based on their academic performance. Teachers and parents tend to compare some students to other more accomplished students higher on the scale, causing them to push them harder to reach those standards. Healthy competition can be inspiring. However, excessive competition may motivate students to improve their academic performance, excessive competition and constant comparison with high-achieving peers may lead to feelings of inadequacy, anxiety, and fear of failure (Deb, Strodl, & Sun, 2015).

Students that underperform when compared to their peers may develop self-esteem issues, as well as a reluctance to engage in class activities. Pascoe, Hetrick, and Parker, 2020, observed that, in some cases, unhealthy academic competition may cause significant damage to the mental well-being of the students, which decreases motivation and academic performance. Students that constantly reinterpret their position in relation to the higher-achieving students suffer from anxiety, low self-esteem, and, most troubling, a belief that they cannot perform adequately in the academic sphere. Clearly, a collaborative, rather than competitive, classroom must be adopted in order to maintain healthy students and alleviate academic pressures.

Poor time Management

Many students find it difficult to balance their time between personal and academic demands, particularly when they have not developed effective time-management skills. Gallardo-

Lolandes, Alcas-Zapata, Acevedo Flores, and Ocaña-Fernández (2020) found an inverse relationship between time management and academic stress, indicating that better time management was associated with lower levels of academic stress. Procrastination, particularly when academic tasks are postponed until close to deadlines, may contribute to anxiety, inadequate preparation, and difficulties in academic performance. The absence of a structured study schedule may also leave students feeling overwhelmed and may interfere with adequate rest and preparation for academic tasks. Wuthrich, Jagiello, and Azzi (2020) noted that academic stress is a significant concern among students in the final years of secondary school and can affect their psychological well-being and educational functioning.

Lack of Support Systems

One major contributing factor to the academic stress students experience is the absence of emotional and psychological support in schools. According to the World Health Organization (2021), schools create supportive learning environments that promote the mental health of adolescents by incorporating psychological services. Where there is a lack of counseling and emotional support, students are more prone to anxiety and emotional distress and have a harder time dealing with the academic challenges they face, many secondary schools struggle to meet the counselling and psychological support needs for students to balance academic and emotional demands. Students who have a lack of support from this service are left to cope with academic demands and experience anxiety and emotional isolation. The World Health Organization (2021) describes how strengthening mental health services in schools improve emotional health and resilience for students.

The Impact of Academic Stress on Students' Well-being and Performance

When students do not manage academic stress well, it can really take a toll on their physical health, emotional balance, thinking abilities, and how they interact socially. These issues not only hurt their learning but can also lead to longer-term mental health and behaviour problems.

Mental Health Issues

One of the major effects of academic stress is its negative impact on students' mental health. Persistent academic stress has been associated with anxiety, emotional distress, low self-esteem, and depressive symptoms. Pascoe, Hetrick, and Parker (2020) reported that prolonged exposure to academic stress adversely affects students' psychological well-being and academic motivation. Similarly, Deb, Strodl, and Sun (2015) found that excessive academic demands and parental pressure contributes significantly to anxiety and poor mental health among students.

Poor Academic Performance

Academic stress negatively affects students' concentration, memory, decision-making, and classroom participation. Students experiencing high levels of stress may find it difficult to process information effectively and perform well in examinations. Wuthrich, Jagiello, and Azzi (2020) found that academic stress is a significant concern among students in the final years of secondary school and is associated with difficulties in students' psychological well-being and educational functioning. Likewise, Pascoe, Hetrick, and Parker (2020) reported that persistent academic stress contributes to reduced academic achievement and lower motivation to learn.

Sleep Issues and Tiredness

Students' sleeping patterns became disrupted during exams and deadlines due to academic stress.

Insomnia, fatigue, and a lack of concentration worsen classroom fatigue and are a direct result of

anxiety, overstudying, and a fear of failing. According to Pascoe, Hetrick, and Parker (2020) chronic academic stress results in sleep disruptions and emotional fatigue and leads to poor Performance in class.

Unhealthy Coping Strategies

When academic stress is not properly managed, some students adopt unhealthy coping strategies such as absenteeism, examination malpractice, substance misuse, and withdrawal from academic activities. Persistent academic stress has also been associated with emotional distress, poor psychological well-being, and an increased risk of depression among adolescents (Deb, Strodl, & Sun, 2015; Pascoe, Hetrick, & Parker, 2020). These unhealthy coping behaviours may further reduce students' academic performance and overall well-being.

Social Isolation

Students experiencing prolonged academic stress may withdraw from friends, family members, and extracurricular activities because of fear of failure or feelings of inadequacy. Such social withdrawal may reduce the emotional support available to students and further increase their stress levels. Deb, Strodl, and Sun (2015) observed that excessive academic pressure negatively affects students' emotional well-being and social adjustment.

Parental Involvement

Parental involvement is the active participation of parents in the educational care of their children. Parents provide emotional support, encouragement, and supervision, and assist their children with school-related tasks. Parents can further support school-related tasks through attendance of school functions, communication with school personnel, and provision of a home environment conducive to learning. Based on parents' working style, they can be involved in

creating a learning environment and supporting their children's academic performance while helping to reduce difficulties associated with learning (Kim, 2022).

Deb, Strodl, and Sun (2015) contend academic challenges are more difficult to cope with for children with parents who exert excessive pressure compared with those who receive parents' emotional support and supervision. Alika and Egbochuku (2015) are of the opinion positive parental involvement at the secondary school level improves emotional stability and reduces anxiety. However, if parents exert pressure with less regard to realistic achievement, academic stress and fear of failure is likely to increase.

Deb, Strodl, and Sun (2015) further contend that high levels of expectation from parents are a strong influence on the academic stress experienced by secondary school students. The parents of students who are expected to attain a high level of academic success report that their children are more anxious and emotionally worn out and have a lower level of psychological well-being than children of parents with a reasonable level of expectation. Parents who are supportive and understanding and who provide helpful suggestions assist children in developing coping mechanisms to strengthen and help manage their resilience to stress.

Furthermore, Kim (2022) reported that parental involvement is generally associated with positive educational outcomes, although its effects differ according to the form and quality of involvement. Supportive parental involvement can contribute to positive academic experiences, whereas inappropriate or excessive involvement may not produce the same benefits.

Overall, parental involvement plays a significant role in shaping students' academic experiences and their ability to manage academic stress. Positive parental involvement serves as a

protective factor against stress, whereas excessive parental expectations and inadequate emotional support may contribute to increased academic stress and poorer educational outcomes

Kim (2022) emphasised that the effects of parental involvement depend on how parents participate in their children's education, with supportive forms of involvement generally showing more positive outcomes

Parental involvement along with positive support has a direct effect on the ability of the child to deal with school-related challenges. Positive parental support serves as a stress buffer, while over expectation and inadequate emotional support negatively affect school outcomes and heighten stress.

Cognitive Behavioural Therapy (CBT): Overview and Background

The most important aspect of Cognitive Behavioural Therapy (CBT) is its flexibility. This therapy incorporates developing and structuring goals. It is also relatively fast acting. This is due to the fact that CBT operates with the understanding that affect, behaviour, and cognition are directly linked. CBT argues that understanding the events of the world and how people fit into them shapes the behaviour and affect of individuals (Beck, 2020).

CBT was designed by Dr. Aaron T. Beck, a psychiatrist that was at the University of Pennsylvania in the 1960s. CBT was first constructed as Dr. Beck was doing research on the effectiveness of psychoanalysis. Beck realized that patients that had depression were unable to stop thinking negatively about themselves, the world around them, and about what the future held. Beck then realized that the depressive patients had developed what he later called the “cognitive triad”. It was then that he was able to design the first model of cognitive therapy which was the precursor to the modern CBT model. The modern CBT model contains behavioural techniques

Beck (2021) further emphasized that Cognitive Behavioural Therapy enables individuals to identify, challenge, and replace maladaptive thoughts with more realistic and adaptive patterns of thinking, thereby improving emotional and behavioural outcomes.

CBT identifies cognitive distortions (e.g., catastrophizing, and black-and-white thinking) that can contribute to negative emotional and behavioural outcomes. The recognition and alteration of these thought patterns is associated with positive changes in mental health and well-being (Dobson & Dozois, 2019).

CBT was originally designed to treat depression, but its versatility has allowed its application to many other mental health diagnoses, such as various anxiety disorders, OCD, eating disorders, substance-related disorders, and PTSD. David, Cristea, and Hofmann (2018) noted that CBT is one of the most researched forms of psychotherapy and has substantial evidence supporting its effectiveness. Its use has extended to the classroom to help with dealing the stress and anxiety of school, as well as emotional and behavioural problems.

CBT is delivered in schools through individualized or group psychotherapy, as well as through structured psychoeducational programs. These programs assist the student with the recognition of negative thought patterns, emotional regulation, and the development of positive coping skills to deal with the stress of school.

CBT provides a structured framework that can help individuals modify unhelpful patterns of thinking and behaviour and develop more adaptive responses to psychological difficulties (David et al., 2018).

Ng, Venkatanarayanan, and Ho (2017) found that Cognitive Behavioural Therapy significantly reduces anxiety and improves coping skills among children and adolescents. The

study further reported that CBT is an effective intervention for emotional and behavioural challenges in school-aged populations, supporting its application in educational settings.

Typically, CBT focuses on collaboration between the client and therapist to identify negative thought patterns. This is done through cognitive restructuring and behavioural experimentation. During therapy, the client learns and practices various skills such as relaxation and self-monitoring, which are used to reinforce the concepts taught.

Key Techniques in Cognitive Behavioural therapy (CBT)

Cognitive Behavioural Therapy encompasses a variety of practical techniques aimed at addressing maladaptive thought patterns and behavioural responses. These methods are notably effective in assisting students in managing academic stress, improving emotional regulation, and enhancing overall academic performance. The following are essential CBT techniques frequently implemented in educational and school-based interventions:

Cognitive Restructuring

Cognitive reframing helps individuals identify, challenge, and replace irrational and distorted thoughts with constructive and realistic alternatives (Beck, 2020). To combat stress, individuals must draw away from ideas of “I’m a failure,” “I’m never going to pass this,” and “Everyone is better than me.” The negative thoughts create anxiety and a lack of motivation, which hampers productivity. Students are made to realize these negative thoughts, analyze the evidences for and against these thoughts, and then create a more empowering and affirming self-thoughts. Instead of saying, “I’m going to fail WAEC,” the student can say, “If I study hard, I’m going to pass.” As Dobson and Dozois (2019) say, this is one of the most crucial strategies to help in changing the negative emotions in dealing with academic challenges.

Behavioural Activation

Behavioural activation seeks to enhance involvement in meaningful and rewarding activities, particularly for students who have become withdrawn or demotivated due to stress or depressive symptoms. When students avoid tasks such as studying or attending classes as a result of academic frustration, it can result in a cycle of guilt and heightened stress.

CBT advocates for students to disrupt this cycle by gradually reintegrating both academic and non-academic activities into their daily schedules. For instance, a student who has lost interest in reading might be encouraged to begin with 15 minutes of enjoyable study followed by a brief reward.

Relaxation Training

Relaxation is a type of stress reduction which teaches students how to manage their physiological/stress responses better-a racing heartbeat, tightness in the chest, tense muscles, rapid, shallow breathing-and occurs in the form of breathing exercises, progressive relaxation, or guided meditation.

Students who have test anxiety, for example, might be taught early on in the week how to breathe properly before a quiz/exam as a way to calm their nerves and aid concentration. Reiss et al. (2019) found that cognitive behavioural therapy incorporating relaxation techniques and imagery-based strategies was effective in reducing students' anxiety in stressful test situations.

Problem-Solving Skills

Problem solving skills are often taught as a way for students to learn how to utilize steps within a process to solve an academic/personally relevant issue. Teaching children a process takes

them from the worrying stage of an issue into the active stage of problem-solving. The steps of problem solving are as follows:

• Define the problem.

• Come up with potential solutions.

• Compare the solutions to the problem.

• Choose one solution.

• Implement the solution and assess effectiveness.

For example, if a child has a math grade of a 60 for an extended period of time, CBT will teach the child to determine if they should go to the teacher for help, get a tutor, join a study group, or dedicate an extra 20 minutes to daily homework. Teaching students to break down problems into manageable steps reduces feelings of helplessness, increases confidence, and promotes resilience when dealing with academic challenges (Dobson & Dozois, 2019).

Self-Monitoring and Goal Setting

Self-monitoring involves teaching children how to reflect upon their thoughts, feelings, behaviors, and studying habits to provide insight as to whether or not change is needed. Cognitive-behavioural therapists might provide log sheets, emotion charts and academic journals that demonstrate growth and patterns across time.

Goal setting involves the proper construction of realistic goals, instead of vague aspirations that may not be tangible. Instead of saying "I want to pass every subject," CBT will teach students about SMART goals and how to apply them such as "I will study for biology for 30 minutes every night after dinner." Clear, realistic, and achievable goals help students monitor their academic

progress, improve self-confidence, and reduce academic stress by giving them a greater sense of direction and control over their learning (Bandura, 2018).

CBT in School Settings

Cognitive Behavioural Therapy (CBT) has a strong evidence base and has been widely researched as a psychological intervention for improving psychological functioning David et al., 2018**.** As academic demands and emotional challenges continue to increase among students, CBT for school-aged children occurs through individual or group counseling sessions or teacher-led classroom intervention and peer-led workshops or guidance. Such interventions are structured, time-sensitive, and focus on a variety of practical applications ranging from cognitive restructuring and emotional regulation to problem-solving behaviors and positive reinforcement. Thus, when done correctly, CBT in the school setting provides a more preventative/immediate response to adolescent mental health challenges.

Outcomes of Effective CBT Models in Schools

Whether through studies or practical application of CBT school-based programs, the following outcomes have been achieved:

a. Lower Test Anxiety and Fear in the Classroom

   Students learn to acknowledge flawed fears related to possible failure and in-class endeavours through CBT. CBT actively incorporates relaxation activities and coping strategies to reduce discomfort and improve assessment readiness. For instance, breathing techniques, guided imagery, and cognitive restructuring can help students manage anxiety before and during examinations. These CBT strategies can improve emotional regulation and enable students to approach assessments with greater confidence (Dückert et al., 2017).

b. Higher Levels of Confidence and Motivation

Many stressed-out children fail to acknowledge their abilities or fall to a fixed mindset that prevents them from trying. CBT seeks to strengthen confidence and restore motivational efforts. For instance, such interventions allow students to change

their statements from “I’m a terrible math student” to “with practice, I can do better” (Bandura, 2018). This position has been supported by Schunk and DiBenedetto (2020), who maintained that self-efficacy remains a major determinant of students' motivation, resilience, and academic performance in educational settings.

c. Increased Ability to Plan and Manage Time

CBT teaches self-monitoring and planning approaches that help students better balance their academic demands. Students learn how to break larger assignments into smaller, attainable tasks with tangible goals. They also learn what not to do to avoid procrastination. Effective time management and self-monitoring strategies taught through CBT enable students to organise their academic tasks, reduce procrastination, and cope more effectively with academic demands (Dobson & Dozois, 2019).

d. Enhanced Academic Performance

When students have fewer stressful occurrences, more control over emotional responses, and a clearer head, academic performance excels. CBT enhances cognitive abilities like memory and concentration, allowing students to grasp new information effectively. Research has shown that Cognitive Behavioural Therapy can improve psychological functioning by helping individuals modify unhelpful patterns of thinking and behaviour and develop more adaptive responses to psychological difficulties (David et al., 2018).

Problems with the Nigerian School System

While CBT is effective, its use in secondary schools across Nigeria is not yet widespread. The following barriers exist to prevent its use:

Low Awareness and Training: Most school administrators and educators lack sufficient awareness of CBT concepts or application processes. Mental health is often overlooked or misconstrued in the school environment, World Health Organization (WHO)2021.

Inadequate Personnel: There are not enough qualified school counselors and psychologists tasked with facilitating CBT. Many schools have counseling units that are either under-resourced or non-operational.

Cultural Stigma: Many communities continue to attach stigma to psychological interventions, with emotional and mental health problems sometimes being interpreted as spiritual issues or personal weakness. Consequently, many students are reluctant to seek professional counselling or participate in group counselling programmes (World Health Organization, 2021).

Limited Resources: High student-to-teacher ratios, busy class schedules, and limited government support often render the formal addition of CBT to the school curriculum overwhelming.

Theoretical Framework

This article focused on two major theories that served as the foundation for the discussion of how cognitive behaviour therapy can reduce the effect of academic stress on senior secondary school students. They are Beck's cognitive theory and Lazarus and Folkman's stress and coping theory.

Beck's cognitive theory

Beck's cognitive theory was developed by Aaron T. Beck in the 1960s. Beck's theory states that the emotions and behaviour of an individual are largely the result of the thoughts that the individual has and the way in which they interpret the events that occur around that individual (Beck, 2020). Beck also explains that if an individual experiences psychological distress, it is often as a result of the individual's cognitive distortions. Cognitive distortions are irrational thinking patterns that an individual exhibits that lead to the individual feeling psychologically distressed. Some of the cognitive distortions that are commonly observed in students who suffer from academic stress includes; Overgeneralization, Catastrophizing, Personalization, All-or-nothing thinking.

In addition to these cognitive distortions, it is also common for students who suffer from academic stress to exhibit distorted thinking regarding their academics. In these cases, the students may believe, for instance, that if they achieve even a modest grade in their current academic year, it indicates that they are not capable of attaining the level of education and knowledge that is required of students in senior secondary schools. Additionally, those students may believe that their academic achievements are a result of their personal failures, rather than of any external factors that may impact their education. As a result, these students often experience feelings of hopelessness regarding their educational future, and their willingness to attempt to fulfill those educational requirements.

"If I fail this test, my future is ruined."

"Everyone is better than me."

"My parents will never forgive me if I fail."

These negative automatic thoughts increase anxiety, fear, and emotional instability.

Cognitive Behavioural Therapy is directly derived from Beck's Cognitive Theory. CBT helps individuals identify, challenge, and replace maladaptive thoughts with more realistic and balanced thoughts. Through cognitive restructuring, students learn to reinterpret academic challenges in healthier ways.

This theory is relevant to the present study because academic stress among secondary school students is largely influenced by maladaptive thought patterns. By restructuring these thoughts through CBT, emotional distress can be reduced and academic functioning improved.

Lazarus and Folkman's Stress and Coping Theory

Lazarus and Folkman (1984) proposed that stress is not merely a reaction to events but depends on how individuals appraise and cope with those events. According to the theory, stress occurs when individuals perceive that environmental demands exceed their coping resources.

The theory explains two stages of appraisal:

Primary appraisal: The individual evaluates whether a situation is threatening, harmful, or challenging.

Secondary appraisal: The individual assesses whether they have the resources to cope with the situation.

The theory also identifies two types of coping strategies:

Problem focused coping – efforts aimed at solving the problem causing stress.

Emotion focused coping – efforts aimed at regulating emotional responses to stress. In the academic context, students who perceive examinations as catastrophic and believe they lack

coping skills experience high stress. However, when students are equipped with effective coping strategies, their perception of academic demands changes.

Cognitive Behavioural Therapy aligns with this theory by helping students reappraise academic stressors and develop both problem focused coping strategies such as time management and study skills, and emotion focused coping strategies such as relaxation training. This theory supports the present study because CBT enhances students' cognitive appraisal and coping capacity, thereby reducing perceived academic stress.

Empirical Review

This section reviews empirical studies related to academic stress, the application of Cognitive Behavioural Therapy (CBT) for stress relief, and its impact on academic performance. It integrates both international and Nigerian findings, while also addressing methodological gaps and implications for secondary school students in Benin city, Edo state.

Empirical Studies on Academic Stress

To understand the relationship between academic stress, parental pressure, anxiety, and the mental health of students, the study by Deb, Strodl, and Sun (2015) focused on 400 high school students in India. Like many other studies, data were obtained through the use of standardized questionnaires to which the respondents provided their responses, followed by data analysis using statistical tools. The results of this study established the relationship between academic stress and parental pressure concerning anxiety and mental health issues of poor outcomes. The authors addressed that students' psychological well-being is affected negatively by high academic demands and high parental expectations. They suggested that schools should have psychological support services and stress management programs to help students with this issue. This study is

helpful to the current study by explaining the sources and consequences of academic stress of secondary school students. One of the things this study does not have is gap that the present study intends to fulfill, which is the inclusion of cognitive behavioural therapy (CBT) as a stress reduction technique.

Bedewy and Gabriel (2015) studied the origins of academic stress among university students using the Perception of Academic Stress Scale to analyze students' views of academic stress. The study discovered that the primary stressors were the workload, the pressure, self-expectations, and the stress caused by the university's exams. The researchers identified that high academic stress resulted in psychological distress in students and the overall well-being of students decreased. They suggested the need to implement various types of stress management and coping support to deal with the high demands of academic work. This study, similar to the current study, investigates some stressors of academic work and the support students require to manage the stress. This study's limitation is that it focused on university students and did not explore the use of Cognitive Behavioural Therapy (CBT) as an intervention. This gap, among others, the current study, will address.

Ulaş and Seçer (2022) developed and evaluated a Cognitive Behavioural Therapy-based psychoeducational intervention designed to reduce school burnout among secondary school students. The study adopted a mixed-methods research design and involved an experimental intervention with secondary school students. The researchers examined students' experiences before, during, and after the intervention to determine whether the CBT-based programme could reduce school burnout. The findings showed that the CBT-based intervention was effective in reducing students' school burnout levels and improving their ability to cope with school-related difficulties. The study demonstrated that CBT-based psychoeducational programmes can be useful

in helping secondary school students manage psychological difficulties associated with school demands. The study is relevant to the present study because both focus on the application of Cognitive Behavioural Therapy-based intervention among secondary school students to address stress-related difficulties. However, while Ulaş and Seçer focused on school burnout, the present study specifically examines the efficacy of CBT in reducing academic stress among senior secondary school students in selected secondary schools in Benin City.

Eneogu, Ugwuanyi, and Ugwuanyi (2024) studied the efficacy of Cognitive Behavioural Therapy (CBT) on academic stress and placed the study within Rural Community Secondary School Economics students, using a Randomized Controlled Evaluation. The study was set in Enugu State, Nigeria. The researchers used a pre-test, post-test randomized controlled design and recruited 168 secondary school students. The experimental group received eight weeks of CBT, while the control group continued with no treatment. The researchers designed and used the Economics Academic Stress Questionnaire (EASQ) and analyzed the data with a mixed-design repeated measures ANOVA. The study's findings reported and confirmed that control group students who did not receive the treatment (CBT) had no reduction in academic stress. The study further confirmed that CBT was a successful treatment in reduction of academic stress and in the enhancement of students' psychological well-being and academic functionality. As a result of the study, the researchers recommended the inclusion of CBT in school guidance and counseling services by school counselors, as a way of equipping students with stress management skills necessary for the successful navigation of academic pressures. The present study and this study are similar in that the focus and methodology of this study examine the effectiveness of Cognitive Behavioural Therapy in an experimental design for the reduction of academic stress with secondary school students.

Van Loon et al, (2020) did a multilevel meta-analysis of 54 intervention studies which included 22,870 adolescents. They aimed to answer the question, "Can schools reduce adolescent psychological stress?" The results of the studies showed that school-based psychological interventions positively impacted the emotional well-being of students. The interventions also positively impacted students' coping skills. The authors of the study encouraged schools to use psychological interventions based on evidence and place them in the school's guidance and counseling programs. The study focused on the intervention programs used in schools to reduce the psychological stress of adolescents. Therefore, it is beneficial to this study.

Agboola, J.O. (2021) examined how effective Cognitive Behavioural Therapy (CBT) is in reducing the level of depression among secondary school students in the Ikpoba-Okha Local Government Area of Edo State. This study is a descriptive survey that collected baseline data. The study used a pre-test, post-test non-equivalent control group quasi-experimental design for the intervention. Agboola (2021) used public mixed Senior Secondary II students in the Ikpoba-Okha Local Government Area of Edo State as the population of the study and its counselors. The sample of this study consisted of 98 students who were identified as highly depressed. The data were collected using the Adolescent Depression Scale (ADS), which has a reliability coefficient of 0.79, and analyzed using appropriate descriptive and inferential statistics. Agboola (2021) discovered that students who underwent CBT experienced a reduction in depression, and the participants of the control group did not. As a result of this study, Agboola (2021) suggested the use of CBT by school counselors as an approach to solve the psychological challenges of secondary school students. This study is useful to the current study, as it used a quasi-experimental design to study the application of CBT among secondary school students. Unlike the current study, Agboola (2021) examined depression.

Igbinovia, Idhalama, and Alex-Nmecha (2019) investigated perceived academic stress among secondary school students in St. Thomas Aquinas College, Akure, Nigeria. The study examined the influence of demographic factors and social media use on students' perceived academic stress. The study involved 286 students selected from a population of 1,107 students. The findings showed that secondary school students experienced perceived academic stress, highlighting the presence of academic stress among students in the Nigerian secondary school context. This study is relevant to the present research because it provides evidence of academic stress among secondary school students in Nigeria. However, it did not examine Cognitive Behavioural Therapy (CBT) as an intervention for reducing academic stress, which the present study seeks to address.

The present research focuses on the major sources and consequences of stress in the academic environment for the student population, as well as the impact of this stress on well-being, and the impact of stress on student performance. These studies do not explore the application of Cognitive Behavioural Therapy (CBT) to the reduction of academic stress. This is what the present study aims to do.

The studies cited confirm that the presence of academic stress is alarming and considerable among high school students, and that this stress negatively affects the students' mental well-being and academic performance. The studies show that the stress students experience as a result of their academic workload, the pressure of time-limited exams, and the constraints of time, negatively affects the students' ability to concentrate, to emotionally regulate, and the students' overall academic performance. Given these conditions, the application of intervention strategies to assist students in managing academic stress is not only necessary but is also justified in examining the

application of Cognitive Behavioural Therapy (CBT) in the reduction of academic stress among students.

Empirical Studies on Cognitive Behavioural Therapy and Academic Stress

Putwain, Connors, Symes, and Douglas (2020) conducted a study titled Randomised Controlled Trial of Study without Stress: A Cognitive Behavioural Therapy Program to Reduce Stress in Students in the Final Year of High School to examine the effectiveness of a school-based Cognitive Behavioural Therapy (CBT) programme in Reducing Stress among Secondary School Students. This study sought to identify whether enrollment in a systemized CBT intervention would lead to a reduction of stress, anxiety, and psychological distress while enhancing self-efficacy. A randomized controlled trial design was chosen, concentrating on final year secondary school students, which placed participants into a CBT intervention group and a usual-care control group. Researchers collected and analyzed pre- and post-intervention data by using stress, anxiety, and depression scales, and a depression self-report. Results illustrated participants in the CBT program reported a considerable decrease in psychological distress and stress and a greater increase in self-efficacy than the control group. This study advocated the placement of school-based CBT programs to assist students with the management of academic stress and the enhancement of emotional well-being.

David, Cristea, and Hofmann (2018) reviewed the evidence supporting the effectiveness of cognitive behavioural therapy (CBT) across different psychological conditions and populations. The authors examined the empirical support for CBT and highlighted its effectiveness as an evidence-based psychological intervention. Their review indicated that CBT has demonstrated beneficial effects across a wide range of psychological disorders and problems, including anxiety

and related conditions. The authors concluded that CBT has substantial empirical support and remains one of the most widely supported psychological interventions.

Accordingly, the broad implementation of CBT in both clinical and non-clinical settings was advocated for, including in schools. This study is important for the current research because it illustrates the successful application of CBT for stress reduction. However, it did not target academic stress for secondary school students, a gap that the current study aims to fill.

The article by Juhász et al (2024) titled, "We Need Better Ways to Help Students Avoid the Harms of Stress," concentrates on the stress students experience. Juhász et al. performed a meta-analysis on 51 studies of stress interventions, with a sample size of over 16,000 students. The studies reported several benefits of the implementations of stress management programs. The students of the schools that received programs that include school-based Cognitive Behavioural Therapy (CBT) reported a decrease in stress and an improvement in coping and emotional wellness. Juhász et al. (2024) indicated that of the several stress management programs, CBT was the program that yielded the best results, including positive and lasting effects. Given the positive results, the authors of this study recommend that schools incorporate CBT in managing student stress, within both the academic and counseling school settings. This study, like Juhász et al.'s (2024) article, focuses on student's stress and stress management, and provides additional information to support the research on the effectiveness of CBT programs in enhancing emotional wellness of students. This article is pertinent to the present study, as it assessed the effectiveness of Cognitive Behavioural Therapy-based interventions in managing students' stress, which aligns with the objectives of the present study.

Ogundokun and Olowo (2021) investigated the effect of Cognitive Behaviour Therapy and relaxation techniques on examination anxiety among senior secondary school students in the

Ibadan metropolis, Nigeria. The study adopted a pre-test, post-test control group quasi-experimental design with a 3 × 2 × 2 factorial matrix. Ninety senior secondary school students were selected from three public secondary schools and randomly assigned to Cognitive Behaviour Therapy, relaxation technique, and control groups, with 30 students in each group. The CBT and relaxation groups received treatment for eight weeks. Data were analysed using Analysis of Covariance and Multiple Classification Analysis at the 0.05 level of significance. The findings showed a significant main effect of treatment on students' examination anxiety. Both Cognitive Behaviour Therapy and relaxation techniques were found to be effective in managing examination anxiety among secondary school students. The study recommended that counsellors and educational psychologists should utilise these therapies in managing examination anxiety among students.

Jagiello, Wuthrich, and Ellis (2022) examined the implementation of a cognitive behavioural therapy programme for reducing student stress in the final year of secondary school. The study involved 80 students and 11 teachers. The programme, known as Study without Stress, was delivered in regular school classes by trained teachers. The study assessed students before the intervention, after the intervention, and at a three-month follow-up. The findings showed that the programme helped maintain students' stress levels within normal levels over time and reduced the severity of stress among students who initially experienced high levels of stress. The study concluded that cognitive behavioural programmes can be adapted and delivered within school settings to help students manage stress. The study is relevant to the present study because both focus on the use of CBT to manage stress among secondary school students. However, the present study focuses specifically on academic stress among senior secondary school students in selected

secondary schools in Benin City and further examines the influence of gender, age, and parental involvement.

The studies referenced here will be relevant to the current study as they elaborate on the import of the reduction of stress via the effect of CBT, which will be applicable to various populations and situations. What they will not focus on is the effect of the reduction of academic stress on senior secondary school students on stress relief in the selected secondary schools in Benin City and the moderating variables of sex, age, and parental factors, which the current study seeks to address.

Empirical Studies on Parental Involvement and Academic Stress

Gautam and Sharma (2024) investigated the effect of parental involvement on academic stress among adolescents. The study was conducted among 200 students between 14 and 17 years of age from K.V. schools in Delhi. The researchers divided the students into groups based on high and low levels of parental involvement, with equal numbers of male and female students in each group. Parental involvement was measured using the Parental Involvement Scale, while academic stress was assessed using the Academic Stress Scale. The study adopted a quantitative research design and used two-way analysis of variance to determine the effects of parental involvement and gender on academic stress. The findings revealed that parental involvement had a significant effect on students' academic stress at the .01 level. Gender also had a significant effect on academic stress at the .05 level, while the interaction between parental involvement and gender was not significant. The study concluded that parental involvement and gender independently influence the level of academic stress experienced by adolescent students. The study is relevant to the present study because both studies examine the relationship between parental involvement and academic stress among secondary-school-age students. However, while Gautam and Sharma examined the direct

effect of parental involvement and gender on academic stress, the present study examines parental involvement as a moderating variable in the effectiveness of Cognitive Behavioural Therapy in reducing academic stress among senior secondary school students in selected secondary schools in Benin City

Li (2025) investigated the consequences of both parental academic involvement and academic stress on the psychological well-being of their children. This study utilized a cross-sectional survey design on 412 secondary students from international schools located within Mainland China. The author administered a variety of measures on perceived parental educational involvement, academic stress, psychological resilience, materialism, and both depression and anxiety. The author used Hayes' PROCESS Macro and bootstrapping for data analysis. Greater parental educational involvement resulted in fewer internalizing problems. This study further illustrated that parental academic stress positively correlated with children's anxiety and depression. Psychological resilience was a mediator of the association between parental educational involvement and the psychological well-being of children. Consequently, the author advocated for a parent's supportive academic involvement and advocated for a school-based program to enhance psychological resilience in children. This is relevant to the present study, as it investigated the relationship between parental involvement and academic stress for secondary students, a variable of interest in the present study. Also, Alika and Egbochuku (2015) examined the effect of parental pressure on the emotional outcomes of secondary school students. The authors found that students who believed they experienced excessive parental pressure exhibited higher anxiety levels and lower confidence in their academic abilities. The authors, therefore, concluded that students' emotional instability and academic stress are the result of excessive and unrealistic expectations of parents.

Kim (2022) examined the relationship between parental involvement and students' academic outcomes through a second-order meta-analysis. The study found that parental involvement is generally associated with students' academic achievement, although the strength of the relationship varies across different forms of parental involvement.

Boonk, Gijselaers, Ritzen, and Brand-Gruwel (2018) conducted a review on parental involvement and reported that supportive parental involvement enhances students' academic engagement, motivation, and overall educational outcomes. The authors concluded that positive involvement from parents boosts students academically and emotionally. These studies concern the present research in that they address the academically-related stress of students and elucidate the role of parents' involvement. These results indicate that parents' involvement may reduce/moderate academic stress when it is of a positive nature. While in its absence, academic stress may increase. The role of parental involvement in relation to the effects of Cognitive Behavioural Therapy (CBT) in the context of academic stress remains unexplored, and this is the gap that the current study aims to address.

This chapter's literature review seeks to clarify the concept of academic stress and the application of Cognitive Behavioural Therapy as a therapeutic intervention. The review reveals that academic stress is common to secondary school students globally, including students in the highly competitive environment of Benin City. The academic stress of students in Benin City is the result of a congested school curriculum, home and societal expectations, and peer competition and stress from standardized tests and evaluations. In the classroom, and in the case of a disturbed and stressed student, the adverse effects of academic stress include physical and mental health decay and losses from classroom participation.

Cognitive Behavioural Therapy was introduced as a successful treatment methodology that constantly challenges and fights losses and harmful thinking and actions. CBT is related to a restructuring of thinking and behavior, with an active promotion of behavioural relaxation, which has been proven to yield positive results in schools when proper training is administered to promote healthy coping in students. In addition to all of this, CBT has a guaranteed flexibility of use within a school context to adequately address academic stress and its adverse effects.

The study is based on Beck's Cognitive Theory, which integrates cognition and behavior, and Lazarus and Folkman's Stress and Coping Theory, which places successful assessment and resource mobilization as a determinant of participation in stressor engagement. Each of these theories contributes uniquely, as they allow the re-framing of academic stressors for students while providing them with adaptive resources for developing future stress-related resilience.

The literature review provides empirical evidence in support of the effectiveness of CBT in lessening stress and enhancing coping and achieving mechanisms at a global scale and in Nigeria specifically. However, the literature review identified a gap (very few secondary schools applied CBT) as there were no longitudinal studies of the practical issues on the ground that would inhibit the application of these studies in school. This study, therefore, intends to expand on the previous work conducted on the implementation of Cognitive Behavioural Therapy for academic stress to secondary school students in Benin City, and its practical application in selected secondary schools in Benin City, Edo State, while assessing cognitive processes, coping skills, behavior, and achievement/regression.

CHAPTER THREE

METHODOLOGY

In this chapter, the research procedures cover the research design, population of the study, sample and sampling technique, research instrument, validity of the instrument, reliability of the instruments, method of data collection, and method of data analysis.

Research Design

The research design that was used for the study was a quasi-experimental design, specifically a pre-test, post-test non-equivalent control group design. The design involved two groups: an experimental group and a control group. Both groups were pre-tested before the treatment and post-tested after the treatment. The experimental group was exposed to Cognitive behavioural therapy (CBT), while the control group did not receive any treatments, used to determine the efficacy of Cognitive Behavioural Therapy (CBT) in reducing academic stress.

The study involved one independent variable, Cognitive Behavioural Therapy (CBT); three moderating variables, sex, age, and parental involvement; and one dependent variable, academic stress. Sex and age were classified into two levels each, while parental involvement was classified into three levels (high, moderate, and low).

CBT is a manipulable variable and was administered only to the experimental group through a structured treatment package. Academic stress, sex, age, and parental involvement were treated as mediating variables. Participants were selected based on their pre-test scores on the academic stress scale, while demographic information and parental involvement scores were used for classification into groups.

Academic stress was categorized into three levels based on pre-test scores: high, moderate, and low academic stress. Only students identified as having high academic stress participated in the treatment phase and were included in the post-test analysis.

Experimental Design Layout

Table 1: Design over Variables

GROUP	DESIGN
Experimental Group	O□ — X□ — O□
Control Group	O□ — — O□

Key: O□ = Pre-test O□ = Post-test

_____ = No randomization of subjects to groups

X□ = Cognitive Behavioural Therapy (CBT)

Population of the Study

The population of the study was 2762 students which consisted of mixed senior secondary school SS2 students in Benin city Edo State. The students were drawn from five public secondary schools with functional counselling units (Post Primary Education Board, Benin City).

They were considered suitable for the study due to their exposure to academic demands such as examinations and workload pressure.

Sample and Sampling Technique

The sample size for the study was 60 Senior Secondary School (SS II) students drawn from selected public secondary schools in Benin City, Edo State, comprising 30 students in the experimental group and 30 students in the control group. Two schools were selected using simple random sampling through sealed opaque envelopes. The names of the eligible schools were written on identical slips of paper, enclosed in envelopes, shuffled thoroughly, and selected blindly. A coin toss was used to assign one school to the experimental group and the other to the control group. The experimental group received CBT treatment, while the control group received no treatment.

Research Instruments

One instrument was used for data collection in this study, named Academic Stress Scale. The Academic Stress Scale (ASS) is a structured questionnaire designed to measure students' level of academic stress. It consists of two sections: Section A contain respondents information such as sex, age parental involvement while Section B consists of 18 items measured on a five-point Likert scale of Very High (VH), High (H), Medium (M), Low (L), and Very Low (VL), weighted 5, 4, 3, 2, and 1 respectively. Higher scores indicate higher levels of academic stress.

Cognitive Behavioural Therapy (CBT) was used as an intervention for the experimental group but was not a data collection instrument.

Validity of the Instrument

The instrument was validated by three experts one each in Guidance and Counselling, Educational Administration and Planning, and Measurement and Evaluation from the Faculty of Arts and Education, Benson Idahosa University. Their comments and suggestions were incorporated into the final versions of the instruments to ensure face and content validity.

Reliability of the Instrument

In establishing the reliability of the instrument used for this study, the test–retest method was adopted. In this procedure, the researcher administered thirty (30) copies of the instrument to Senior Secondary School SS II students outside the sampled students that were used for the main study. After an interval of two weeks, the same instrument was re-administered to the same group of students. The data collected were analysed using the Pearson Product Moment Correlation (PPMC). A reliability coefficient of 0.78 was obtained, indicating that the instrument was reliable for the study.

Treatment Procedure

Pre-Test

Both the experimental and control groups were pre-tested using the Academic Stress Scale (ASS)

CBT Treatment Package

Students in the experimental group received Cognitive Behavioural Therapy (CBT) through six structured counselling sessions conducted over a period of two weeks. Four sessions were conducted during the first week, while the remaining two sessions were conducted during the second week. Each session lasted approximately 60 minutes. The sessions were organised as follows:

Session 1 (60 minutes): Introduction to CBT and academic stress

Session 2 (60 minutes): Understanding the link between thoughts, emotions, and academic stress Session

Session 3 (60 minutes): Identifying and restructuring negative academic thoughts Session

Session 4 (60 minutes): Developing effective time management and study skills Session

Session 5 (60 minutes): Relaxation techniques and stress coping strategies Session

Session 6 (60 minutes): Review of CBT skills and application to academic challenges

The control group did not receive any treatment.

Post-Test

After completion of the treatment sessions, both groups were post-tested using the Academic Stress Scale (ASS).

Control of Extraneous Variables

Extraneous variables were minimised during the session. The experimental and control groups were selected from different schools to reduce the possibility of interaction and contamination between participants. In addition, treatment sessions were conducted separately, and uniform procedures was maintained throughout the study.

There was no attrition during the study. All sixty (60) participants who were selected for the study completed the pre-test, treatment sessions, and post-test. Therefore, no participant was excluded from the analysis due to withdrawal or absenteeism.

Also, participants were encouraged to maintain regular attendance throughout the session. By taking this measure the researcher aimed to promote a productive and reliable environment for the treatment.

Subject Bias

Participants were not informed of their group assignment in order to reduce biased responses.

Experimental Expectancy and Experimenter Bias

A standardised CBT manual was used, and identical procedures were followed throughout the treatment sessions to minimise expectancy and experimenter bias.

Method of Data Collection

The Academic Stress Scale (ASS) was administered as a pre-test prior to treatment. The experimental group received CBT treatment, while the control group received no treatment. After the treatment, the ASS was re-administered to both groups as a post-test. All completed copies of the questionnaire were retrieved immediately by the researcher.

Method of Data Analysis

The Academic Stress Scale (ASS) consists of eighteen (18) items rated on a five-point Likert scale, with a maximum obtainable score of 90. Scores of 60 and above indicated a high level of academic stress, scores between 30 and 59 indicated a moderate level, while scores below 30 indicated a low level of academic stress.

Data were analysed using both descriptive and inferential statistics. Mean and standard deviation was used to answer the research questions.

The paired t-test was used to determine the difference between pre-test and post-test academic stress scores of students exposed to Cognitive Behavioural Therapy (CBT). The independent t-test was used to compare the post-test scores of the experimental and control groups. The Independent t-test was also used to examine differences based on sex, while one-way Analysis of Variance (ANOVA) was used to test differences based on age and parental involvement. All hypotheses were tested at the 0.05 level of significance.

CHAPTER FOUR

ANALYSIS OF DATA AND PRESENTATION OF RESULTS

In this chapter, the summary of the analysis of the data collected from the sample of respondents drawn from the area of study is presented. The results are presented in relation to the research questions and the hypotheses stated in chapter one as shown below

Research Question 1

What is the level of academic stress among senior secondary school students in Benin City Edo State?

The descriptive analysis of the level of academic stress among senior secondary school students in Benin City Edo State is presented in Table 2

Table 2: The descriptive analysis of the level of academic stress among senior secondary school students in Benin City Edo State

SN	Variable	Items	Rating	Mean	SD	Remark
1.	Cognitive/behavioural symptoms	6	655.2	3.64	1.36	High
2.	Physical Symptoms	6	707.4	3.93	1.00	High
3.	Psychological/Emotional Symptoms	6	700.2	3.89	1.21	High
4.	Aggregate	18	2062.8	3.82	1.37	High

Table 2 showed that the rates of the level of academic stress among the students in the 3 main symptoms are 655.2, 707.4 and 700.2 while the mean values are 3.64, 3.93 and 3.82. The corresponding standard deviations are 1.36, 1.00 and 1.21 respectively. The aggregates of the total rate, mean rate and the standard deviation are 2062.8, 3.82 and 1.37 respectively. These show that the level of academic stress among senior secondary school students is high.

Research Question 2

What is the effect of Cognitive Behavioural Therapy on the level of academic stress among sample of senior secondary school students in Benin City Edo State?

The descriptive statistics of the pre-rate and post-rate of the level of academic stress among ample of senior secondary school students in of the treatment group (experimental group) and the control group Benin City Edo State are presented in table 2

Table 3: Descriptive Statistics of the Pre-rate and the Post-rate of the level of academic stress among Sample of senior secondary school students in Experimental group (EG) and Control group (CG)

Group	Test	N	Point	SD	Mean	Mean diff	Percent	Remark
EG	Pre-test	30	2111.4	1.84	3.91	2.68	68.5%	moderate
	Post-test	30	664.2	0.28	1.23			
CG	Pre-test	30	2100.6	1.81	3.89	0.02	0.5%	Low
	Post-test	30	2089.6	1.34	3.87			

Table 3 statistics showed that the pre-rate and post-rate of the level of academic stress of the experimental group are 3.91and 1.23 respectively with a percentage mean difference of 68.5%. The pre-rate and post-rate of the control group are 3.89 and 3.87 respectively with a percentage mean difference of 0.5%. The percentage difference between pre-rate and post-rate of the level of academic stress in experimental group is quite higher than that of the control group; this indicates that the therapy was impactful.

Research Question 3

What is the effect of Cognitive Behavioural Therapy on the level of academic stress among sample of senior secondary school students in Benin City Edo State based on sex?

The descriptive statistics of the pre-rate and post-rate on the level of academic stress among sample of senior secondary school students in the treatment group (experimental group) based on sex is presented in table 3.

Table 4: The Descriptive Statistics of the Pre- rate and Post-rate on the Academic Stress among Sample of Senior Secondary School Students in the Experimental Group Based on Sex

Sex	Test	N	point	Mean	SD	Mean diff	Percent	Remark
Male	Pre-test	15	1,001.7	3.71	1.227	2.29	61.7%	Moderate
	Post - test	15	383.4	1.42	1.296			
Female	Pre -test	15	1,042.2	3.86	1.315	2.63	68.1%	Moderate
	Post-test	15	332.1	1.23	1.072			

Table 4 showed that the pre-rate and post-rate of the academic stress among the sampled female senior secondary school students in the treatment group (experimental group) are 3.71 and 1.42 respectively while the pre-rate and post-rate of the level of academic stress of the sampled male students are 3.86 and 1.23 respectively. The mean differences between the pre-rate and post rate of the female and male students are 2.63 and 2.29 respectively. The percentage mean differences for both are 68.1% and 61.7% respectively. These percentage mean differences are considered moderate respectively.

Research Question 4

What is the effect of Cognitive Behavioural Therapy on the level of academic stress among sample of senior secondary school students in Benin City Edo State based on age?

The descriptive statistics of the pre-rate and post-rate of the level of academic stress among sample of senior secondary school students in the treatment group (experimental group) based on age is presented in table 4.

Table 5: The Descriptive Statistics of the Pre-rate and Post-rate of the Level of Academic Stress among Sample of Senior Secondary School Students in the Treatment Group (Experimental Group) Based on Age

Age	Test	N	Mean	SD	Mean diff	Percent	Remark
13 - 15	Pre-test	8	3.62	1.22	2.30	63.5%	Moderate
	Post-test	8	1.32	1.16			
16 - 18	Pre -test	7	3.31	1.23	2.18	65.9%	Moderate
	Post-test	7	1.13	1.02			

Table 5 statistics showed that the pre-rate of the academic stress among sample of senior secondary school students between the ages of 13 -15 and 16 -18 who were exposed to cognitive behavioural therapy are 3.62 and 3.31 respectively. The post-rate for the two groups are 1.32 and 1.13 respectively, the percentage mean differences between pre-rates and post rates for the two age groups are 63.5% and 65.9% respectively. These percentage mean differences are considered moderate and similar.

Research Question 5

What is the impact of parental involvement on the effect of Cognitive Behavioural Therapy on the level of academic stress among sample of senior secondary school students in Benin City Edo State?

The simple linear regression statistics of the impact of parental involvement on the effect of Cognitive Behavioural therapy on the level of academic stress among sample senior secondary school students in the treatment group (experimental group) is presented in table 4

Table 6: The Simple Linear Regression Statistics of the Impact of Parental Involvement (PI) on the Effect of Cognitive Behavioural Therapy (CBT) on the Academic Stress

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Coefficient of Determination	Remark
PI & CBT	.313[a]	.098	.095	5.85392	9.5%	Low

Table 6 showed that the regression coefficient of the extent to which parental involvement impacts the effect of Cognitive Behavioural therapy on the academic stress among the sample of senior secondary school students is .313 with R square of .098 adjusted to .095 representing 9.5% coefficient of determination. This showed that the extent to which parental involvement impact the effect of Cognitive Behavioural therapy on the academic stress among senior secondary school students is 9.5% which is closer to zero than the median, thus considered low.

The Summary of the Test of Hypotheses

The Summary of the test of hypotheses is presented as follows:

Hypothesis 1

The level of academic stress among sample of senior secondary school students in Ugiomo and Idogbo Benin City Edo State is not significant

The one sample t –test of the mean level of academic stress among the sample of senior secondary school students in Ugiomor and Idogbo is presented in table 6

Table 7: One Sample t –test of the Mean Level of Academic Stress among Sample of Senior Secondary School Students in Benin City

SN	Item	Mean diff	t	df	Sig (2-tailed)	Decision
1	Cognitive/behavioural symptoms	3.64	15.250	5	.000	Significant
2	Physical Symptoms	3.93	19.897	5	.000	Significant
3	Psychological/Emotional Symptoms	3.89	18.897	5	.000	Significant

Test value = 0

Table 7 statistics showed that the mean differences between the test value and mean rates of the level of academic stress in the three main symptoms are 3.64, 3.93 and 3.89. The corresponding t values are 15.250, 19.897 and 18.897. The values are significant at .000 probability level. Therefore

the null hypothesis is rejected at 0.05 alpha level. Thus the mean values of the rates of the level of academic stress in the three main symptoms are significant.

Hypothesis 2

There is no significant effect of cognitive behavioural therapy on the level of academic stress among sample of secondary school students in Benin City Edo State

The F -test and the post hoc analysis for the mean difference between Pre- rate and Post-rate of the level of academic stress among sample senior secondary school Students exposed to cognitive behavioural therapy and the control group is presented in table 8

Table 8: F - Ratio Test and Post Hoc Analysis for the Mean differences between the Pre-rate and Post-rate of the level of Academic Stress among sampled Students in Experimental group (EG) and the Control Group (CG)

Source of Variation	Sum of Squares	df	Mean Square	F	Sig.	Multiple comparison	Diff	Sig	Decision
Between Groups	81664.39	3	33762.668	30.19	.000	1 - 2.00	-2.68	.001	Reject Ho
Within Groups	27463.57	24	444.440			1 - 3.00	-0.03	.998	
Total	109127.86	27				2 - 4.00	--2.64	.001	
						3 - 4.00	-0.02	.995	

Key: 1 = EG pre-rate, 2 = EG post-rate, 3 = CG pre -rate, 4 = CG post –rate

Table 8 statistics showed that the sum of squares between groups and within groups are 81664.39 and 27463.57 respectively. The mean squares for between and within groups are 33762.668 and 444.440 respectively with F value of 30.19 which is significant at .000 probability level. The post hoc multiple comparisons showed that the pre assessment rates of both groups are not different significantly while the post rate of the experimental group is significantly less than that of the control group. Thus, the null hypothesis is rejected. The implication is that the cognitive behavioural therapy is significantly effective for reducing the level of students' academic stress in senior secondary schools

Hypothesis 3

There is no significant effect of cognitive behavioural therapy on the **level of academic stress among sample of senior secondary school students in Benin City Edo State based on sex**

The F -test and the post hoc analysis for the difference between Pre –rate and Post-rate of the level of academic stress among sample of senior secondary school Students exposed to cognitive behavioural therapy based on sex is presented in table 8

Table 9: F - Ratio Test and Post Hoc Analysis for the differences between the Pre-rate and Post-rate of the level of Academic Stress among Sampled Students in Experimental group (EG) Based on Sex

Source of Variation	Sum of Squares	df	Mean Square	F	Sig.	Multiple comparison	Diff	Sig	Decision
Between Groups	435.752	3	169.927	30.801	.000	1 - 2.00	2.29*	.000	Sig
Within Groups	219.714	26	5.517			3 - 4.00	2.63*	.000	Sig
Total	**655.466**	**29**							

Key: 1 = Male pre-rate, 2 = Male post- rate, 3 = Female pre -rate, 4 = Female post –rate

Table 9 statistics showed that the sum of squares between groups and within groups are 435.752 and 219.714 respectively. The mean squares for between and within groups are 169.927 and 5.517 respectively with F value of 30.801 which is significant at .000 probability level. The post hoc multiple comparisons showed that both the female and male students post rates of the level of academic stress are significantly less than their pre- rates Therefore the null hypothesis is rejected at 0.05 alpha level. Thus, there is significant effect of the cognitive behavioural therapy on the level of academic stress of senior secondary school students based on sex. The implication is that the effect of cognitive behavioural therapy in the reduction of the level of academic stress is significant among senior secondary school students irrespective of their sex.

Hypothesis 4

There is no significant effect of cognitive behavioural therapy on the **level of academic stress among sample of senior secondary school students based on age**

The F -test and the post hoc analysis for the difference between Pre and Posttest of the level of academic stress among sample of senior secondary school Students exposed to cognitive behavioural therapy based on sex is presented in table 8

Table 10: F - Ratio Test and Post Hoc Analysis for the differences between the Pre –rate and Post-rate of the level of Academic Stress among Senior Students in Experimental group (EG) Based on Age

Source of Variation	Sum of Squares	df	Mean Square	F	Sig.	Multiple comparison	Diff	Sig	Decision
Between Groups	421.218	3	153.763	24.649	.000	1 - 2.00	2.30	.000	Sig
Within Groups	188.109	26	6.238			3 - 4.00	2.18	. .003	Sig
Total	**609.327**	**29**							

Key: 1 = Pre-rate for 13 -15, 2 = Post-rate for 13 -15, 3 = Pre-rate for 16 -18, 4= Post-rate for 16 -18,

Table 10 statistics showed that the sum of squares between groups and within groups are 421.218 and 188.109 respectively. The mean squares for between and within groups are 153.763 and 6.238 respectively with F value of 24.649 which is significant at .000 probability level. The pot hoc analysis showed that the post rates of the level of academic stress of the two groups of students are significantly less than their pre rates. Therefore, the null hypothesis is rejected at 0.05 alpha level. Thus, there is significant effect of cognitive behavioural therapy on the level of academic stress of sample of senior students based on age. The implication is that the cognitive behavioural therapy is significant in reducing the level of academic stress of senior secondary school students irrespective of age.

Hypothesis 5

There is no significant impact of parental involvement on the effect of Cognitive Behavioural Therapy on academic stress among sample of senior secondary school students in Benin City Edo State?

The simple linear regression statistics of the impact of parental involvement on the effect of Cognitive Behavioural therapy on the level of academic stress among sample of senior secondary school students in the treatment group (experimental group) is presented in table 4

Table 11: The Simple Linear Regression Statistics of the Impact of Parental Involvement on the Effect of Cognitive Behavioural therapy on the Level of Academic Stress

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	F	Sig	Decision
	B	Std. Error	Beta					
	31.251	.961		32.46	<.001	51.541	.000[b]	Reject Ho
	.215	.032	.311	5.46	<.001			

Table 11 showed that the regression Statistics of parental involvement on the effect of Cognitive Behavioural therapy on the level of academic stress among senior sampled secondary school students have coefficients of 31.251and .311 with t values of 32.46 and 5.46 respectively. The model fit has F statistics of 51.541 with probability level of .000[b]. Thus, the null hypothesis is rejected at 0.05. The implication is that the impact of parental involvement on the effect of Cognitive Behavioural therapy on the level of academic stress among senior secondary school students is significant

Summary of Findings

1. The study showed that the levels of academic stress among the sampled students in the 3 main symptoms are 655.2, 707.4 and 700.2 while the mean values were 3.64, 3.93 and 3.82. They were significant at .000 probability level. Therefore, the null hypothesis was

rejected at 0.05 alpha level. Thus, the mean values of the rates of academic stress in the three main symptoms were high and significant.

2. The study showed that the percentage difference between pre-rate and post-rate of academic stress in the experimental group was quite higher than that of the control group; this indicates that the therapy was impactful. Meanwhile the post hoc multiple comparisons showed that the pre rates of both groups are not different significantly while the post rates of the experimental group are significantly less than that of the control group. The implication therefore is that cognitive behavioural therapy is significantly effective in reducing the level of academic stress among senior secondary school students.
3. The mean differences between the pre-rate and post rate of the female and male students are 2.63 and 2.29 respectively. The percentage mean differences for both are 68.1% and 61.7% respectively. These percentage mean differences are considered moderate respectively. The post hoc multiple comparisons showed that both the female and male students post rates of the level of academic stress are significantly less than their pre- rates. Thus, implying that cognitive behavioural therapy is significantly effective in reducing the level of academic stress among senior secondary school students irrespective of sex.
4. The findings showed that the percentage mean differences between pre-rates and post rates for the two age groups (13 -15 and 16 -18) are 63.5% and 65.9% respectively. These percentage mean differences are considered moderate and similar. The pot hoc analysis showed that the post rates of the level of academic stress of the two groups of sampled students were significantly less than their pre rates. The implication is that the cognitive behavioural therapy is significant in reducing the level of academic stress of senior secondary school students irrespective of age.

5. The study showed that the extent to which parental involvement impact the effect of Cognitive Behavioural therapy on the level of academic stress among senior secondary school students is 9.5% which is closer to zero than the median, thus considered low. The impact of parental involvement on the effect of Cognitive Behavioural therapy on the level of academic stress among the sampled senior secondary school students was significant at 0.05 alpha level.

Discussion of Findings

The first findings of the study results show that Benin City, Edo State's senior secondary school students have high academic stress levels. Stress is evident in cognitive, behavioural, physical, and psychological/emotional domains. High academic stress levels of students indicate that students are under significant pressure due to examinations, assignments, competition, and parents' expectations. Benin City students express academic workload and pressure through fear of failure and the need to achieve high grades. The secondary students of Benin City are under the constant pressure of academic challenges that will negatively affect their emotional well-being, academic self-confidence, and overall state of health. Stress affects students on a cognitive level and may result in concentration issues, forgetfulness, confusion, excessive worrying, and negative thinking. Stress negatively impacts behavior through classroom withdrawal, reduced learning participation, increased absenteeism, irritability, poor study habits, and low motivation. Stress also negatively impacts physical well-being through fatigue, weakness, and stress-related symptoms that impact daily life. Continuous academic pressure and stress negatively impact students' emotional health, resulting in frustration, anxiety, and a fear of losing hope and having low self-esteem. The combination of these factors can have a detrimental impact on students' adjustment to school and affect their social relationships. This finding supports the view expressed in Chapter

two that increased academic stress on secondary school students is the result of an increased academic workload, exam-related stress, peer competition, pressure from parents, and general societal pressure on students to be more successful academically. This finding is consistent with the study of Deb, Strodl, and Sun (2015), which shows that secondary school students are stressed when academic demands exceed their coping skills. In addition, This finding is also consistent with the study of Vestad and Tharaldsen (2021), which examined lower secondary school students' experiences of coping with academic stress."

This finding is also in accordance with Hou and Wen (2022), who found that academic stress was an important influencing factor in academic burnout among middle school students. This result resonates with that of Eneogu, Ugwuanyi, and Ugwuanyi (2024), where they indicated that students who were exposed to a Cognitive Behavioural Therapy program experienced a notable reduction in academic stress when compared to those who were in the control group. The authors were of the opinion that CBT is a viable method in the reduction of academic stress and in the enhancement of students' psychological well-being and academic performance.

The findings of this study agree with Agboola. (2021), in that participants with Cognitive Behavioural Therapy in Agboola's study had a markedly lower level of depression compared to the control group participants. Agboola (2021) stated that Cognitive Behavioural Therapy works well in solving the psychological issues of secondary school students and advocated that school counsellors should incorporate CBT to assist students in managing their emotional and behavioural problems. While Agboola's study was on depression and did not cover academic stress, both studies show that Cognitive Behavioural Therapy works well in aiding an aspect of the psychological well-being of secondary school students.

This finding also supports the study of Igbinovia et al, (2019), which found that secondary school students experience perceived academic stress in relation to their academic experiences and demands. Also, Pascoe et al, (2020) have shown that continuous academic stress leads to psychological stress, low motivation, poor academic performance, and low overall well-being. This finding is also supported by Beck's Cognitive Theory, which defines that students' thoughts and perceptions of academic situations shape their emotions and behaviors. Also, according to Lazarus and Folkman's Stress and Coping Theory, stress is seen to develop after individuals feel that the environmental demands surpass their resources to cope. For the first research question, which aimed at finding how stressful academics are for final-year secondary school students in Benin City, Edo.State, the findings clearly established that the level of academic stress among the students was high.

According to van Loon et al. (2020), using school-based psychological interventions, particularly using Cognitive Behavioural Therapy, effectively alleviates stress for adolescents. Participants in the intervention programs reported improved emotional wellness and coping skills and enhanced psychological functioning. Non-participants reported no change. Based on this information, van Loon et al. (2020) were in favor of schools offering evidence-based psychological interventions, particularly Cognitive Behavioural Therapy, in their guidance and counseling programs. As a result, schools would be able to help students deal with stress, as well as promote mental wellness and potentially improve the students' academic functioning.

Secondly, the findings of the study revealed that academic stress levels decreased significantly for students who participated in Cognitive Behavioural Therapy (CBT), whereas control group participants showed no measurable change. This suggests that of all the participants, students in Benin City senior secondary schools showed the highest decrease in academic stress

levels due to CBT. Experimental participants showed a decrease in stress levels due to CBT. This indicates that students were able to modify unhealthy thought patterns, and improve emotional self-regulation and coping strategies in regard to academic stress. This outcome suggests that the CBT participants learned psychological coping skills to help manage academic stress, fear of failing, negative self-esteem and negative thinking in regard to poor performance in school. Participants were taught psychological coping skills of cognitive restructuring and relaxation techniques to self-monitor and set goals to replace unhealthy, negative, and irrational thinking with emotional and realistic thinking and ensure emotional self-regulation and confidence. After the decrease in stress and improvement in motivation to participate in school activities, a psychological program of continuous CBT can ensure that students maintain a positive attitude toward school activities and academic tasks that were previously stressful. school and activity engagement following treatment. Many students also improved in time management, organization, emotional regulation, and Academics. If there is no significant improvement for the control group, it strengthens the conclusion that the reduction of stress related to Academics was mainly due to the effectiveness of the CBT intervention administered.

The present study found that Cognitive Behavioural Therapy reduced academic stress for senior secondary students. This is congruent with the findings of Juhász, Varga, Szabó, and others (2024), who reported that stress management interventions focused in schools, especially ones that utilize Cognitive Behavioural Therapy, had a notable positive effect in lessening student stress. It also had a positive effect for developing stronger, more positive coping mechanisms and greater emotional well-being. They also concluded that CBT-based stress management interventions are more effective at creating long-term improvements when compared to other methods of stress management. The similarities in the findings of the present study and Juhász et al. (2024) affirm the use of Cognitive Behavioural Therapy to successfully lessen student academic stress.

This finding supports the assumptions of Aaron T. Beck's Cognitive Theory. Beck's Cognitive Theory recognizes emotional and behavioural problems as structured by disordered thinking. Challenging Beck's negative automatic thoughts and irrational thinking, improves behavior and emotional response. Lazarus and Folkman's Stress and Coping Theory, which suggests that stress involves the appraisal of the situation and the resources at hand to cope, supports this finding. Students exposed to CBT, in this case, would have interpreted stress in a positive light while developing adaptive coping strategies. The finding is consistent with David, Cristea, and Hofmann (2018), who highlighted the strong evidence base supporting Cognitive Behavioural Therapy and its effectiveness in addressing psychological difficulties.

This finding shows students exposed to therapeutic interventions have better emotional functioning with better academic adjustment than students not exposed to therapeutic interventions. Answering the second research question, which investigated how Cognitive Behavioural Therapy impacts the amount of academic stress for senior secondary school students, the results indicate that CBT positively and significantly decreases academic stress for those students who received the intervention. The hypothesis which stated that there would not be any significant difference in the amount of academic stress in students with no exposure to CBT and students with exposure to CBT was therefore rejected.

Thirdly, the findings of the study indicated that Cognitive Behavioural Therapy (CBT) was successful in decreasing participant’s academic stress regardless of sex. Although noticeable sex differences were observed in the level of improvement, it was noted that the academic stress levels of both males and females were significantly decreased after exposure to CBT. It was evident that the effectiveness of CBT was sex neutral. Therefore, it can be utilized with male and female senior students in secondary school who are academically stressed. This finding also suggests that males

and females experience and view academic stress the same, and therefore, there is an equal need for psychological support that would enhance coping and emotional concerns. It also implies that the CBT principles are sex neutral. Using the CBT techniques, both males and females were able to identify irrational academic thinking, challenge their negative thinking, and adopt a more positive thinking towards academic challenges and their Expectations of academic performance. This finding supports Beck's Cognitive Theory and Stress Theory and Coping Theory by Lazarus and Folkman.

This finding also agrees with David, Cristea, and Hofmann (2018), who noted the broad evidence base and applicability of Cognitive Behavioural Therapy across psychological problems.

Jagiello, Wuthrich, and Ellis (2022) reported that a cognitive behavioural therapy programme implemented among secondary school students was effective in helping students manage stress. In connection to the research question which investigated whether CBT could alleviate academic-related stress for students of each sex, the outcomes provided concrete evidence that the intervention curtailed stress levels for both the male and female participants. The null hypothesis which claimed that there was no considerable difference in stress reduction pertaining to academic-related stress for male and female students who underwent CBT was rejected based on the outcome of the analysis.

Fourthly, the study revealed that Cognitive Behavioural Therapy lessened academic stress of students aged 13-15 and 16-18. While differences between the age groups were observed, they were not statistically significant. Therefore, it can be concluded that CBT was successful with both age groups. The implication of the finding is that Cognitive Behavioural Therapy is useful in the reduction of the academic stress of adolescents of all ages at the higher levels of secondary school. The finding shows that the flexibility and adaptability of Cognitive Behavioural Therapy work with adolescents of varied ages and at different developmental levels. Using cognitive restructuring, relaxation, behavioural activation, goal

setting, and problem-solving all of which are CBT skills—students in both age groups learned to identify unhealthy academic coping thoughts and to manage academic stress, as well as developed healthier coping skills. The findings collaborate with the work of Putwain, Connors, Symes, and Douglas (2020) who reported that CBT based management programmes significantly reduced stress and psychological distress and improved self-efficacy compared with those in the control group. The study recommended the implementation of school-based CBT programmes to support students in managing academic stress and promoting emotional well-being.

The findings of the study support the adaptability, effectiveness, and applicability of CBT in both age groups and school settings. The research concern of the study was if CBT would be successful in the reduction of academic stress with students of varied ages; clearly, the findings of the study indicate that students of both age groups experienced a positive reduction of academic stress.

Based on the findings from the analysis, the hypothesis which claimed there would be no statistically significant difference in the reduction of academic stress with the exposure of students in varying age groups to CBT, was rejected.

Lastly, the results of the study indicated that parental involvement had a statistically relevant, but low impact on the efficacy of Cognitive Behavioural Therapy (CBT) with regard to the mitigation of academic stress of senior secondary school learners. This implies that parental involvement had some degree of impact on students' academic adjustment and stress relief; however, in comparison to the therapeutic intervention, this impact was limited. As a result, it can be inferred that CBT was the primary intervention that alleviated academic stress of the participants. Furthermore, it can be said that while parental involvement may result in the provision of encouragement and emotional support to the students, the stress relief in this case was the result of the provision of coping skills and cognitive restructuring that were reinforced through CBT. It

can be implied that the participants of the CBT sessions of this study gained the coping skills and psychological support and stress relief that this intervention provided, and that it was not provided through parental support. This finding is in accordance with Beck's Cognitive Theory and the Stress and Coping Theory of Lazarus and Folkman.

Gautam and Sharma (2024) found that parental involvement had a significant effect on the academic stress experienced by adolescents. The present finding indicated that supportive parental involvement had a positive effect on students' emotional adjustment and had a limited effect on students' academic adjustment compared with the effect of Cognitive Behavioural Therapy.

This study aligns with the findings of Li (2025), where it was found that parental support of school activities was related to lower academic stress and greater psychological well-being in secondary school students. In addition, Li (2025) found that parental involvement in the school activities of students who received little support or who were under a lot of academic pressure was related to students who were stress resilient and had no stress-related problems. Hence, it can be said that supportive parental involvement relates to the enhancement of the effectiveness of CBT.

The present finding is also in accordance with Kim (2022), who found that parental involvement is generally associated with positive academic outcomes, although the effects vary according to the type and quality of parental involvement.

Similarly, Jagiello et al, (2022) found that a cognitive behavioural therapy programme implemented among secondary school students was effective in helping students manage stress. In the present study, the influence of parental involvement on the effectiveness of CBT in reducing academic stress was low but statistically significant. The null hypothesis, which stated that there would be no significant influence of parental involvement on the effectiveness of CBT in reducing academic stress, was therefore rejected. During the treatment sessions, students with supportive

parents appeared more enthusiastic about participating in the counselling activities and demonstrated greater emotional stability and readiness to engage in the sessions. However, students with less parental involvement also showed improvements in emotional stability and stress reduction following the CBT sessions. These findings suggest that parental involvement may contribute positively to the emotional well-being of students, but the implementation of the CBT programme remained the major factor associated with the reduction of academic stress among the students.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

Summary

This study examined the efficacy of cognitive behavioural Therapy on the reduction of Academic stress among senior secondary school students in Selected secondary school in Benin city. The study specifically investigated.

1. The level of academic stress among senior secondary school students in Benin City Edo State.
2. The effect of cognitive behavioural Therapy on the level of academic stress among sample of senior secondary school students in Benin City Edo state.
3. The effect of cognitive behavioural Therapy on the level of academic stress among sample of senior secondary school student in Benin City Edo state based on sex.
4. The effect of cognitive behavioural Therapy on the level of academic stress among sample of senior secondary school students in Benin City Edo state based on age.
5. The impact of parental involvement on the effect of cognitive behavioural Therapy on the level of academic stress among sample of senior secondary school students in Benin City Edo state

To guide the study, five research questions were raised and their corresponding hypotheses were formulated and tested at a 0.05 alpha level of significance as shown below;

Research Question

1. What is the level of academic stress among senior secondary school students in Benin city, Edo state?

2. What is the effect of cognitive behavioural therapy on the level of academic stress among sample of senior secondary school students in Benin City Edo state?

3. What is the effect of cognitive behavioural therapy on the level of academic stress among sample of senior secondary school student in Benin City Edo state based on sex?

4. What is the effect of cognitive behavioural therapy on the level of academic stress among sample of senior secondary school students in Benin City Edo state based on age?

5. What is the impact of parental involvement on the effect of cognitive behavioural therapy on the level of academic stress among sample of senior secondary school students in Benin City Edo state?

Hypotheses

1. The level of academic stress among sample of senior secondary school students in Ugiomo and Idogbo Benin City Edo state is not significant

2. There is no significant effect of cognitive behavioural Therapy on the level of academic stress among sample of senior secondary school students in Benin City Edo state.

3. There is no significant effect of cognitive behavioural Therapy on the level of academic stress among sample of senior secondary school students in Benin City Edo state based on sex.

4. There is no significant effect of cognitive behavioural therapy on the level of academic stress among sample of senior secondary school students based on age.

5. There is no significant impact of parental involvement on the effect of cognitive behavioural therapy on academic stress among sample of senior secondary school students in Benin City Edo state.

This study adopted a quasi-experimental research design using a pre-test and post-test non-equivalent control group design to determine the effectiveness of Cognitive Behavioural Therapy (CBT) on academic stress among students.

The population of the study consisted of 2,762 SS II students in mixed public secondary schools in Benin City, Edo State. A sample of 60 students was selected using simple random sampling technique.

The instruments used for data collection was the Academic Stress Scale (ASS The instruments were validated by three experts from the Faculty of Arts and Education, Benson Idahosa University. Reliability was established using the test–retest method, and a reliability coefficient of 0.78 was obtained.

Data collected were analyzed using mean, standard deviation, t-test, and ANOVA

The results gotten from the study showed that:

1. Academic stress among senior secondary school students was high across cognitive, emotional, and physical symptoms, and the results were statistically significant.

2. Cognitive Behavioural Therapy (CBT) was found to be effective in reducing academic stress, as students in the experimental group showed a greater reduction in stress levels compared to the control group.

3. CBT was effective for both male and female students, with both groups showing a significant reduction in academic stress after the intervention.

4. CBT was also effective across different age groups (13–15 and 16–18 years), with both groups showing similar and significant reductions in academic stress.

5. Parental involvement had a low but statistically significant influence on the effectiveness of CBT in reducing academic stress among students.

Educational implication

The educational implications from this study are as follows:

1. The results of this study show the need for school counsellors to use CBT counselling to give students the ability to manage stress. CBT offers many techniques for dealing with stress, such as the use of cognitive restructuring and the use of behavioural activation.

2. The study provides an indication for policymakers to strengthen the mental health support system in schools. This could be achieved by increasing the availability of counselling and psychological services for students.

3. The results highlight the need for teachers to be aware of the stress and anxiety they may be causing students. Teachers should use methods of teaching that are supportive as opposed to those that may increase academic pressure.

4. Parents should support students by helping to reduce stress levels as opposed to increasing stress levels by focusing on determining the academic goals to be achieved and then supporting them to achieve those. This may be achieved by setting realistic expectations to be achieved with a supportive and encouraging approach.

Contribution to knowledge

This study contributed to knowledge by establishing the effectiveness of Cognitive Behavioural Therapy (CBT) on alleviating academic stress among Senior Secondary School students. The study provided data on the utility in the application of CBT techniques of cognitive restructuring, relaxation, and stress management in coping with the academic hurdles.

This research built on knowledge by measuring the impact of Cognitive Behavioural Therapy (CBT) on alleviating academic stress among Senior Secondary School students. The study provided data on the utility in the application of CBT techniques of cognitive restructuring, relaxation, and stress management in coping with the academic hurdles.

The study further built on the existing literature on academic stress by assessing the role of sex and age, and the role of parents, in the academic stress of students. The findings may also be useful to counselors, teachers, researchers, and administrators, in developing intervention programs for students with academic stress.

Conclusion

The results of this study have shown that academic stress is a common experience for seniors secondary school students in Benin City. Academic stress is a cross-cutting phenomenon consisting of the cognitive, emotional, and physical aspects of stress. Academic stress negatively affects students' academic performance and general well-being.

The study demonstrated that Cognitive Behavioural Therapy (CBT) is a valid method of managing academic stress. Students who were offered CBT experienced a considerable reduction in stress levels in comparison to students who did not participate in the therapy.

The study also revealed that the impact of CBT was equally effective for both sexs and various age groups, which implies that the therapy is widely applicable to all categories of students. While some degree of statistically significant impact was observed with parental engagement, the extent of that impact was minimal concerning the overall effect of CBT.

The findings of this study have shown that the use of CBT for the management of academic stress for secondary school students is both reliable and effective.

Recommendations

The recommendations derived from this study are as follows:

1. To reduce academic stress among students, an important recommendation of the study is that school counsellors implement Cognitive Behavioural Therapy (CBT) during regular counselling sessions.
2. More time, space, and support to implement the CBT Program in secondary schools will strengthen counselling services, and are recommended for secondary school administrators.
3. Development of the guidance counsellor's capacity to use CBT to address the academic stress of students should be the focus of government and educational authority sponsored training and development workshops.

4. Since the effectiveness of CBT was the same regardless of sex, age, or level of parental involvement, academic stress should be the only reason for the counsellor's decision to provide the CBT intervention.

5. Referral for CBT-based counselling should be made to all students assessed to have high levels of academic stress, and should be made before stress reaches a crisis level.

Suggestions for Further Studies

Since this research studied "The efficacy of cognitive behavioural Therapy on the reduction of academic stress among senior secondary school students in Selected secondary schools in Benin City." the researcher suggested that the study be replicated in other Local Government Area of Edo State to improve generalization.

REFERENCES

Agboola, J. O. (2021). Efficacy of cognitive behavioural therapy on the reduction of depression among secondary school students in Ikpoba-Okha Local Government Area of Edo State. American Journal of Humanities and Social Sciences Research, 5(12), 75–83.

Alika, H. I., & Egbochuku, E. O. (2015). Parental pressure and academic anxiety among secondary school students in Edo State, Nigeria. Journal of Educational and Social Research, 5(1), 45–52.

Beck, J. S. (2020). Cognitive behavior therapy: Basics and beyond (3rd ed.). The Guilford Press.

Bandura, A. (2018). Toward a psychology of human agency: Pathways and reflections. Perspectives on Psychological Science, 13(2), 130–136. DOI: 10.1177/1745691617699280

Beck, J. S. (2021). Cognitive behavior therapy: Basics and beyond. New York, NY: Guilford Press.

Bedewy, D., & Gabriel, A. (2015). Examining perceptions of academic stress and its sources among university students: The Perception of Academic Stress Scale. Health Psychology Open, 2(2), 1–9.

Boonk, L., Gijselaers, H. J. M., Ritzen, H., & Brand-Gruwel, S. (2018). A review of the relationship between parental involvement indicators and academic achievement. Educational Research Review, 24, 10–30.

Deb, S., Strodl, E., & Sun, J. (2015). Academic stress, parental pressure, anxiety and mental health among Indian high school students. International Journal of Psychology and Behavioural Sciences, 5(1), 26–34.

Dobson, K. S., & Dozois, D. J. A. (2019). Handbook of cognitive-behavioural therapies. New York, NY: Guilford Press.

Dückert, S., et al. (2017). Effects of cognitive behavioural therapy with relaxation vs. imagery rescripting on test anxiety: A randomized controlled trial. Journal of Affective Disorders, 208, 677–684.

Eneogu, N. D., Ugwuanyi, C. K., & Ugwuanyi, C. S. (2024). Efficacy of cognitive behavioural therapy on academic stress among rural community secondary school economics students: A randomized controlled evaluation. Journal of Rational-Emotive & Cognitive-Behavior Therapy, 42(2), 245–262.

Jagiello, T., Wuthrich, V. M., and Ellis, L. A. (2022). Implementation trial of a cognitive behavioural therapy programme for reducing student stress in the final year of secondary school. British Journal of Educational Psychology, 92(2), 502–517. https://doi.org/10.1111/bjep.12460

Juhász, Á., Varga, E., Szabó, É., et al. (2024). We need better ways to help students avoid the harms of stress: Results of a meta-analysis on the effectiveness of school-based stress management interventions. Journal of School Psychology, 106, 101352.

Jeyasingh, E. S. (2022). Coping strategies for adolescents dealing with academic stress. Saudi Journal of Nursing and Health Care, 5(1), 7–11.

Kim, S. (2022). Fifty years of parental involvement and achievement research: A second-order meta-analysis. Educational Research Review, 37, 100463.

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

Li, X. (2025). The impact of secondary school students' perceptions of parental academic involvement and academic stress on internalizing problem behaviors: The mediating roles of psychological resilience and materialism. Frontiers in Psychology, 16, 1582493.

Mahmood, S., Fareed, H., & Amin, R. (2023). The mediating influence of academic self-efficacy on students' scholastic stress and performance: The study of perceived parental expectations. Academy of Education and Social Sciences Review, 3(2).

Ng, Q. X., Venkatanarayanan, N., & Ho, C. Y. X. (2017). Clinical use of Cognitive Behavioural Therapy for anxiety and related disorders in children and adolescents: A meta-analysis. Journal of Affective Disorders, 208, 425–433.

Ogundokun, M. O., and Olowo, V. A. (2021). Cognitive behaviour therapy and relaxation technique on examination anxiety among senior secondary school students in the Ibadan metropolis, Nigeria. Journal of Humanities Therapy, 12(2), 151–186.

Pascoe, M. C., Hetrick, S. E., & Parker, A. G. (2020). The impact of stress on students in secondary school and higher education. International Journal of Adolescence and Youth, 25(1), 104–112.

Putwain, D. W., Connors, L., Symes, W., & Douglas, K. (2020). Study without stress: A cognitive behavioural therapy programme to reduce stress in students in the final year of high school. School Psychology International, 41(4).332–348

Pienyu, K., Margaret, B., & D'Souza, A. (2024). Academic stress, perceived parental pressure, and anxiety related to competitive entrance examinations and the general well-being among adolescents: A cross-sectional survey from Karnataka, India. Journal of Education and Health Promotion, 13(1), 474.

Pascoe, M. C., Hetrick, S. E., & Parker, A. G. (2020). The impact of stress on students in secondary school and higher education. International Journal of Adolescence and Youth, 25(1), 104–112.

Reiss, N., Warnecke, I., Tibubos, A. N., Tolgou, T., Luka-Krausgrill, U., and Rohrmann, S. (2019). Effects of cognitive-behavioural therapy with relaxation vs. imagery rescripting on psychophysiological stress responses of students with test anxiety in a randomized controlled trial. Psychotherapy Research, 29(8), 974–985.

Schunk, D. H., & DiBenedetto, M. K. (2020). Motivation and social cognitive theory. Contemporary Educational Psychology, 60, 101832.

Ulaş, S., and Seçer, İ. (2022). Developing a CBT-based intervention program for reducing school burnout and investigating its effectiveness with mixed methods research. Frontiers in Psychology, 13, 884912.

Van Loon, A. W. G., Creemers, H. E., Beumer, W. Y., Okorn, A., Vogelaar, S., Saab, N., Miers, A. C., & Westenberg, P. M. (2020). Can schools reduce adolescent psychological stress? A multilevel meta-analysis of the effectiveness of school-based intervention programmes. Journal of Youth and Adolescence, 49(6), 1127–1145.

Vestad, L., & Tharaldsen, K. B. (2021). Building social and emotional competencies for coping with academic stress among students in lower secondary school. Pedagogisk forskning i Norge, 106(2), 907–921.

World Health Organization. (2021). Guidance on community mental health services: Promoting person-centred and rights-based approaches. World Health Organization.

DEPARTMENT OF EDUCATION
FACULTY OF ARTS AND EDUCATION
BENSON IDAHOSA UNIVERSITY
UGBOR, GRA, BENIN CITY.

February, 2026.

Dear Sir/Ma,

I hope this message meets you well, my name Patience Izegboya Ohiorenoya, and I am currently pursuing my post graduate studies in the Department of Education at Benson Idahosa University. As part of my academic endeavours, I am caring out a research study on "Efficacy of cognitive Behavioural Therapy on the Reduction of Academic Stress Among Senior Secondary Schools in Benin city" Your input, as a student is important for the success and validity of the study.

I humbly request your participation in the completing the attached questionnaire. I assure you that all responses will remain confidential, and the information gathered will be used for academic purpose.

Warm regards,

Patience Izegboya Ohiorenoya.
Researcher

QUESTIONNAIRE

SECTION A: DEMOGRAPHIC INFORMATION

Please tick the option that applies to you

1. **Sex: ☐ Male ☐ Female**
2. **Age: _____**
3. Who do you live with? Parent(s) ☐ Guardians ☐
4. How involves are your parents in your personal studies? Very often ☐ Often ☐ sometimes Rarely ☐ Not at all ☐

SECTION B: ACADEMIC STRESS

Key: 5= Very High, 4=High, 3 = Medium, 2 =Low, 1 = Very Low.

S/N	To what extent are the following true about you?	5 VH	4 H	3 M	2 L	1 VL
Psychological/Emotional Symptoms						
1	I worry a lot about failing my exams					
2	I feel very tired emotionally because of schoolwork.					
3	I get easily annoyed because of school pressure.					
4	My mood changes a lot because of school stress.					
5	I feel I have no control over school rules and expectations.					
6	I sometimes feel sad because of schoolwork.					
Cognitive/Behavioural Symptoms						
7	I find it hard to concentrate in lessons.					
8	I put off doing my schoolwork because I feel stressed.					
9	I avoid going to classes and doing school tasks when I feel pressured.					
10	I take a long time to reply to school messages.					
11	I put too much pressure on myself to get top grades.					
12	I feel that no matter what I do, it is never enough.					

13	I stay away from friends and social activities because of school pressure.					
14	I get mental blocks during exams.					
Physical Symptoms						
15	I have trouble sleeping because of school work.					
16	I feel tired all the time because of school demands.					
17	I get headaches, when stressed by school work.					
18	My heart beats faster when I think about school tasks.					

FORM B

SECTION A: DEMOGRAPHIC INFORMATION

Please tick the option that applies to you

1. Sex: ☐ Male ☐ Female
2. Age: _____
3. Who do you live with? Parent(s) ☐ Guardians ☐
4. How involves are your parents in your personal studies? Very often ☐ Often ☐ sometimes Rarely ☐ Not at all ☐

SECTION B: ACADEMIC STRESS

Key: 5= Very High, 4=High, 3 = Medium, 2 =Low, 1 = Very Low.

S/N	To what extent are the following true about you?	5 VH	4 H	3 M	2 L	1 VL
Cognitive/behavioural Symptoms						
1	I put off doing assignments when I feel stressed					
2	I sometimes skip lessons because of school pressure					
3	I take a long time to reply to school tasks					
4	I find it hard to focus during study					
5	I feel my school work efforts are not enough					
6	I get mental blocks in exams					
Physical Symptoms						
7	I often feel very tired because of school work					
8	I cannot sleep well because of school stress					
9	I get headaches when stressed at school					
10	My heart races when I think about school tasks					
11	I feel tired most of the time because of school work					
12	I struggle to get a good night's sleep because of school pressure					

Psychological/Emotional Symptoms						
13	I feel emotionally drained because of school work					
14	My mood changes because of school pressure					
15	I sometimes feel sad because of school work					
16	I feel I have little control over school expectations					
17	I get easily annoyed by school tasks					
18	I worry about failing exams					

RELIABILITY TEST

VARIABLES=VAR00001 VAR00002 VAR00003 VAR00004 VAR00005 VAR00006 VAR00007 VAR00008 VAR00009 VAR000010 VAR000011 VAR000012 VAR000013 VAR000014 VAR000015 VAR00016 VAR000017 VAR000018

TYPE: EQUIVALENCE-STABILITY RELIABILITY TEST

/SCALE('ALL VARIABLES')

/MODEL=PPMC/BIVARAITE

/STATISTICS=CORRELATION

/SUMMARY=TOTAL

Correlations

		A_1	B_1	A_2	B_2
A_1	Pearson Correlation	1	.841**	.782*	.871**
	Sig. (2-tailed)		.000	.000	.000
	N	30	30	30	30
B_1	Pearson Correlation	.841**	1	.801**	.795**
	Sig. (2-tailed)	.000		.000	.001
	N	30	30	30	30
A_2	Pearson Correlation	.782*	.801**	1	.761**
	Sig. (2-tailed)	.011	.000		.000
	N	30	30	30	30
B_2	Pearson Correlation	.871**	.795**	.761**	1
	Sig. (2-tailed)	.000	.001	.000	
	N	30	30	30	30

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

KEY: A_1 = QUESTIONNAIRE TYPE A IN FIRST ADMINISTRATION

B_1 = QUESTIONNAIRE TYPE B IN FIRST ADMINISTRATION

A_2= QUESTIONNAIRE TYPE A IN SECOND ADMINISTRATION

B_1 = QUESTIONNAIRE TYPE B IN SECOND ADMINISTRATION

TEST ESTIMATES

ESTIMATE FOR EQUIVALENCE: CORR BETWEEN A_1 AND B_1 = .841

ESTIMATES FOR STABILITY: CORR BETWEEN A_1 AND A_2 /B_1 AND B_2 = .782 / .795 RESPECTIVELY