EFFECT OF COGNITIVE BEHAVIOUR THERAPY ON INTELLECTUAL ACHIEVEMENT RESPONSIBILITY AMONGS STUDENTS OF KADUNA STATE COLLEGE OF EDUCATION GIDAN WAYA, NIGERIA

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FEBUARY, 2018

DECLARATION

The researcher hereby declares that this dissertation titled, "EFFECT OF COGNITIVE BEHAVIOUR THERAPY ON INTELLECTUAL ACHIEVEMENT RESPONSIBILITY AMONG STUDENTS OF KADUNA STATE COLLEGE OF EDUCATION GIDAN WAYA", is an original research conducted by me in the Department of Educational Psychology and Counselling, Ahmadu Bello University Zaria. The information derived from the literature has been duly acknowledged in the text and the list of references provided. No part of this dissertation was previously presented for another degree or diploma at this or any other institution.

_____	_____	_____
Alexander YOHANNA	Signature	Date

CERTIFICATION

This dissertation titled, "THE EFFECT OF COGNITIVE BEHAVIOUR THERAPY ON INTELLECTUAL ACHIEVEMENT RESPONSIBILITY AMONG STUDENTS IN KADUNA STATE COLLEGE OF EDUCATION GIDAN WAYA, NIGERIA", carried out by Alexander Yohanna meets the requirements governing the award of Master's Degree of Ahmadu Bello University, Zaria, and is approved for its contribution to knowledge and literary presentation.

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DEDICATION

The researcher dedicates this research report to his Mother, Uwani Yohanna and his wife, Mrs. Tina Alexander and his brothers: Mr. Anthony Yohanna Mr. James Yohanna for their love and interests to see him undertaking such an endeavour.

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ABSTRACT

This research was carried out to find out the effect of cognitive behaviour therapy on intellectual achievement responsibility among students of Kaduna State College of Education Gidan Waya, Nigeria. The population of the study includes all the NCE1 students of 2015/2016 session which was summed up to three thousand eight hundred and fifteen (3815) students out of which sixty (60) participants were selected for the study by employing stratified sampling technique. Pretest-Posttest quasi experimental research designed was used in the research and four null hypotheses were raised in line with the objectives of the study as a guide. Cognitive behaviour therapy treatment package was adapted and the training lasted for eight weeks. Data were collected by administration of the instruments at pretest and posttest. Crandall's Model of Intellectual Achievement Responsibility scale adapted and modified was used for the data collection. Descriptive statistics and inferential statistics (t-test) were employed to analyze the data collected and the results revealed that Cognitive Behaviour Therapy has significant effect on both internal and external intellectual achievement responsibility with (t= 7.239, P=.000) and (t=2.265, p= .0269) respectively. It was also found that there was significant differential effect of gender on posttest of Internal Intellectual Achievement Responsibility in favour of male participants with (t=4.397, p=.002) and (t=1.7367, p=.018) respectively on the external IAR. It was therefore, recommended that Colleges of Education should give psychological intervention such as Cognitive Behaviour Therapy to students to improve their IAR.

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ABBREVIATIONS

Below are abbreviations which were used in the research work. Therefore, they are explained as follows:

IAR**:** Intellectual Achievement Responsibility

PPMC: Pearson Product Moment Correlation

SPSS**:** Statistical Package for Social Science

NCE: Nigerian Certificate in Education

GPA: Grade Point Average

CGPA: Cumulative Grade Point Average

ICT: Information and Communication Technology

ECU: Examination Compilation Unit

CBT: Cognitive Behaviour Therapy

OPERATIONAL DEFINITIONS OF TERMS

The following are terms which were used in the study and they are therefore defined operatively as stated below.

Cognitive Behaviour Therapy: This refers to the treatment programme for changing students' pattern of thoughts and feelings from irrational to more rational ones.

Intellectual Achievement Responsibility: This refers to a pattern of thought in which students think that they are responsible for their success or failure in school learning or others are responsible for it. It could be internal or external.

External Intellectual Achievement Responsibility: This means the act of attributing one's academic success or failure to external events or powerful others.

Internal Intellectual Achievement Responsibility: This refers to the acts of accepting that one is responsible for his/her success or failure in school performance.

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CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

When a student fails examination, who is to be blamed for the failure or what factor is the student likely to consider as being responsible for the failure? In another way, who do students attribute their success in exams to? According to Piper (2016), students are supposed to contribute a lot to their examination fortunes and therefore, a student should be blamed for his/her success or failure in school examinations. However, on the part of the students, a collection of responses in Mellon (2008) states that a good number of students attribute the causes of their poor performance in examinations to difficult examination questions. Some of them put blame to examination questions which have unclear direction while others complained that teachers are fond of setting tests and examination questions on areas or topics not taught to the students. In a nutshell, more of the students' responses show that students indulge in putting the blame of their examination failure to other persons without looking inward to see their own contributions to the problem.

This behavior of seeing only others to be responsible for one's academic success or failure may serve as one of the factors affecting students and their school performance. Therefore, since students keep failing in their various examinations, especially in the Colleges of Education (Dwyer, 2012 &Valli, 2014) and continue to put blame on external factors without seeing anything wrong on their part, it is likely to be a problem because it tends to make an individual omit his/her own roles in contributing to the desired educational fortunes. These erroneous impressions of students have the tendency to manifest automatically with no notice of these students. In other words, it is a salient variable which is capable of discouraging hard work

among students. In short, this factor can be best described as Intellectual Achievement Responsibility (IAR). Though several scholars have reviewed on some related factor as being responsible for school achievements such as self-esteem, self-efficacy (Pajares, 1997 & Tukur, 2000) but little has been done on Intellectual Achievement Responsibility and how it can be affected by Cognitive Behaviour Therapy (CBT).

It is worthy of note that though mental ability is no doubt a predictor of academic performance, it appears that the factor of Intellectual Achievement Responsibility (IAR) has influence on the mental effort expended to learn academic tasks. Intellectual Achievement Responsibility as seen by Mannarini (2008), is the degree to which students believe they are responsible for the outcome of their academic situations. According to Colman (2009), it was Rotters who first came up with the factor of Intellectual Achievement Responsibility from her concept of locus of control on a broader sense before Bialer also worked on locus of control and came up with a scale on it. Many writers since then have continued to write on the topic. According to Solomon, Houlihan and Perelius (2000), Intellectual Achievement Responsibility is a dimension of locus of control they describe as a variable closely related to locus of control and the Intellectual Achievement Responsibility (IAR) Scale was constructed by Crandall, Katkovsky, and Crandall (1965) which differs from the locus of control in that it is limited to intellectual-academic situations and focuses on significant persons in the school environment: parents, teachers and peers as reinforcing agents, while the locus of control measure attempts to be general.

In each of the variables stated above, it is believed that an individual who attributes the cause of his success and failure to himself tends to improve than the one who attribute it to other people, event or situations. Therefore, in school, those that the IAR scale rates low are likely to be those

students who have external Intellectual Achievement Responsibility that is, those who believe they are not responsible for their situation. On their part, those who have little or no Intellectual Achievement Responsibility lack mental motivation to control events. They therefore, depend on luck, fortunes, chance and help from other people. Those who have the tendency to make excuses for their deficiencies, inadequacies, and laziness and would like to make such expressions like: "I can do nothing, I have no choice, I was not lucky", etc. On the other hand, there are students who feel they are responsible for their situations and are likely to be rated high by the IAR scale. This means that the sense of being responsible for their academic failure and success is great motivator for students to work hard while the belief of being irresponsible for one's academic successes or failure tends to make the person quit out the struggle to fate. Those who have high Intellectual Achievement Responsibility feel they have control over events and therefore, when in difficulty they tend to utter statements such as:

1. I know what to do on this issue
2. I am the cause of this problem.
3. I just have to act rightly.

Intellectual Achievement Responsibility and students' academic performance in schools are likely to move in the same direction.

One other important factor that is likely to affect both Intellectual Achievement Responsibility and academic performance is the Cognitive Behaviour Therapy (CBT). According to Mayor Clinic Staff (2016), CBT is a common type of talk therapy in which the students walk with the therapist in a structured way, attending a limited number of sessions to overcome the challenge of negative and inaccurate thinking and to be able to interpret situation and act accurately. Ellis, (1957) puts that Cognitive Behaviour Therapy is based on the idea that how we

think (cognition) and how we feel (emotion) and how we act (behaviour) all interact together. That is to say that our thoughts can influence our behaviour and if those thoughts are negative or inaccurate, it tends to results in distress. Elis in Solomon, Houlihan and Perelius (2000), states that Cognitive Behaviour Therapy is based on changing the following assumptions which he called irrational thoughts:

i. The idea that it is catastrophic when things are not working in the desired way
ii. The idea that people have no control over their happiness
iii. The idea that the past history has influence over ones present life
iv. The idea that you need someone greater than you to depend upon

There appears a link between cognitive behaviour therapy and Intellectual Achievement Responsibility. Since the Cognitive Behaviour Therapy aims at helping one to change his/her irrational thoughts to the rational thought and from inaccurate interpretations to the more accurate interpretation of self, others, events, situation and the world, and Intellectual Achievement Responsibility has to do with feelings and thoughts of students of being responsible for their academic failure or success, it is likely that the two variable affect each other.

Powers (2006), states that sometime some students may think of themselves as people who cannot control their destiny and therefore imagine that they are victims of the system and it can lead to poor academic performance. These can lead to low self-confidence that make students render themselves to be incapacitated by having impression of being incapacitated. When a student is in such a condition, the options are unlikely for him/her to work hard but to depend on luck, chance or examination malpractice. Therefore, this research intended to look

into the effects of Cognitive Behaviour Therapy on Intellectual Achievement Responsibility and academic performance among NCE students in Kaduna.

1.2 Statement of the Problem

This research work aimed at finding out effects of Cognitive Behaviour Therapy on Intellectual Achievement Responsibility among students in Colleges of Education. Through random interaction with the students of Kaduna State College of Education, preliminary investigations showed that a salient trend has continued to exist among the students with adverse effect unnoticed of the students. They magnify examination failure and address it as if that is what the school is good at. Students describe their problem as if the College technically arranges academic achievement to be difficult to them.

What then makes students complain about their misfortunes as if someone is in control of their destinies? It could be that these students have a type of tendency to feel that they are not responsible for their failed or passed courses during test or examination and that someone must always help to change things around them. Those who feel they are not responsible for their successes are likely to be lazy even when they can do better while those who feel that they are responsible for the things happening to them put efforts to control all events. This might have caused students to indulge in complaints and consequently attribute the cause of their failure in test and examinations to the difficulty of the course of study, bad and poor learning environment, wickedness of lecturers, their health condition, wicked or strict examination invigilators, too much course work load, mistake in marking and calculation of marks by the lecturers, error in computation of CGPA by the Examination Computation Unit (ECU) and Information Communication Units (ICT) and frustration by the entire school management. These wrong

beliefs may make students think that they are doing their bests but the school system keeps frustrating them while in the actual sense, they are not putting in their best.

Therefore, the researcher assumed the factor of Intellectual Achievement Responsibility might be one of the root causes of the problem and it could negatively affect achievement of students in school. Therefore, the researcher wondered what factor could be used to improve the Intellectual Achievement Responsibility. To change the feelings of students on responsibility for their success or failure, the researcher thought that Cognitive Behaviour Therapy might have a role to play and that investigation into the situation was likely to reveal the result which would assist in proffering suggestions that would go a long way in helping the students understand the nature of the problem and a way out of the problem for better academic performance. On that premise, this research was set to investigate the influence and relationship among effects of Cognitive Behaviour Therapy on Intellectual Achievement Responsibility, among students in Kaduna State College of Education GidanWaya, Kafanchan

1.3 Objectives of the Study

In this research work, the researcher aimed at achieving the following objectives:

1. To find out the difference in the effect of Cognitive Behaviour Therapy on pretest and posttest mean score of internal Intellectual Achievement Responsibility among NCE students of Kaduna State College of Education
2. To examine the difference in the effect of Cognitive Behaviour Therapy on pretest and posttest score of external Intellectual Achievement Responsibility among NCE students of Kaduna State College of Education
3. To determine the difference in the posttest score of internal Intellectual Achievement Responsibility of male and female students.

4. To examine the difference in the posttest score of external Intellectual Achievement Responsibility of male and female students.

1.4 Research Questions

The researcher raises the following research questions.

1. What is the difference in the pretest and posttest mean score of internal Intellectual Achievement Responsibility among NCE students of Kaduna State College of Education?
2. What is the difference in the pretest and posttest mean score of external Intellectual Achievement Responsibility among NCE students of Kaduna State College of Education?
3. What is the difference in the posttest score of internal Intellectual Achievement Responsibility of male and female NCE students?
4. What is the difference in the posttest score of external Intellectual Achievement Responsibility of male and female NCE students?

1.5 Hypotheses

The following null hypotheses were raised by the researcher.

Ho_1 There is no significant difference in the pretest and posttest mean score of internal Intellectual Achievement Responsibility among NCE students of Kaduna State College of Education.

Ho_2 There is no significant difference in the pretest and posttest mean score of external Intellectual Achievement Responsibility among NCE students of Kaduna State College of Education

Ho_3 There is no significant difference in the posttest score of internal Intellectual Achievement Responsibility of male and female students.

H_{O4} There is no significant difference in the posttest score of external Intellectual Achievement Responsibility of male and female students.

1.**6 Basic Assumptions**

The researcher assumes that:

1. Cognitive Behaviour Therapy may have effect on internal Intellectual Achievement Responsibility among students
2. Cognitive Behaviour Therapy may have effect on external Intellectual Achievement Responsibility among students
3. difference may exist in the posttest score of internal Intellectual Achievement Responsibility of male and female NCE students of Kaduna State College of Education
4. difference may exist in the posttest score of external Intellectual Achievement Responsibility of male and female NCE students of Kaduna State College of Education

1.7 Significance of the study

This research work has become a body of knowledge that will be relevant to various persons, particularly psychological therapists, teachers, school administrators, education policy makers, other researchers, parents and students. By publishing this research in a journal, making it available in the library and going on media, the findings of this work would be made available for the persons mentioned above.

The numerous benefits of the research will include enlightenment therapists and teachers are encouraged to carry out on the need for the treatment of Intellectual Achievement Responsibility of students and how to carry out so that academic performance of students can be improved in schools. It will also be guide for school and educational policies that ensure the improvement of learners' IAR through application CBT on students. This research will also

provide referential material for data collection which can be used in further academic research by other scholar and students who will later embark on similar topics. It will also serve as source of reference for students' assignments and projects. Policy makers in education and school proprietors will also find this research as helpful as a source of inputs in making policies that would improve Intellectual Achievement Responsibility of the students and their Academic Performance.

1.8 Scope and Delimitation of the Study

This investigation focused on the concept of Cognitive Behaviour Therapy and its effect on Intellectual Achievement Responsibility among NCE students.

The study was carried out in Kaduna State College of Education Gidan Waya which operates in two campuses of Gidan Waya and Kafanchan. The College is made up of five schools with each having several departments. The various schools include: School of Education, School of General Studies, School of Science, School of Arts and Social Sciences, School of Technical and Vocational Education and School of Primary and Early Childhood Education.

The study is also delimited to School of Art and Social Science being the second largest school in the College. This investigation included male and female students as respondents.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

This chapter presents the review of related literature such as books, journals, newspapers, magazine and other documents written by other researchers in areas related to the topic. The review therefore, covers the following broad areas.

2.2 Concept of Cognitive Behaviour Therapy

2.3 Gender Difference in Cognitive Behaviour Therapy

2.4 Concept of Intellectual Achievement Responsibility

2.5 Gender Difference in Intellectual Achievement Responsibility

2.6 Related Theories to the work

2.7 Review of Related Empirical studies

2.8 Summary

2.2 Concept of Cognitive Behaviour Therapy (CBT)

It refers to a process of treating people who have problem with the way they think and interpret events or actions of others. Human are not all rational in their thoughts and feelings on situations. That is why one of the early theorists of CBT, Ellis (1957) states that each individual is unique and holds assumption about self and the world, which guides him through life and determines reactions to the various situations encountered. Unfortunately, the assumptions of some people are irrational and therefore, cognitive therapy employed to put them right. Ramalingam (2006) defines Cognitive Behaviour Therapy as a treatment approach for changing the way we think so that there will be changes in the way we act and feel based on the theory that

our cognitions or thoughts control a large part of our behaviours and emotions. To that regard, Kearns (n. d) states the following five interacting elements in Cognitive Behaviour Therapy:

a) **Cognition**: This refers to our thoughts which can suddenly occur or pop up in respond to a triggered action.
b) **Behaviour**: This is a person's action as a result of thoughts and feelings.
c) **Body**: This the physical build-up of a person
d) **Emotions**: These are the mood of individual
e) **Environment**: Our circumstances and relationships.

These element rhymes with what Ellis (1957), summarizes as presented below:

Table 1: Diagram of Elements of Cognitive Behaviour Therapy



Source: McLeod, S. A. (2015) p.12

This means human *thoughts* receive signals through *feelings* and feelings are strengthened through thinking so that the result is the *behaviour* pattern. It suggests that to terminate the feelings, one has to treat the thinking pattern of that individual. Ellis (1967) also came up with these as assumptions of Cognitive Behaviour Therapy as follows:

1. Abnormality stems from faulty cognitions about others
2. These cognitions cause distortions in the way we see things
3. We interact with the world through our mental representation of it.

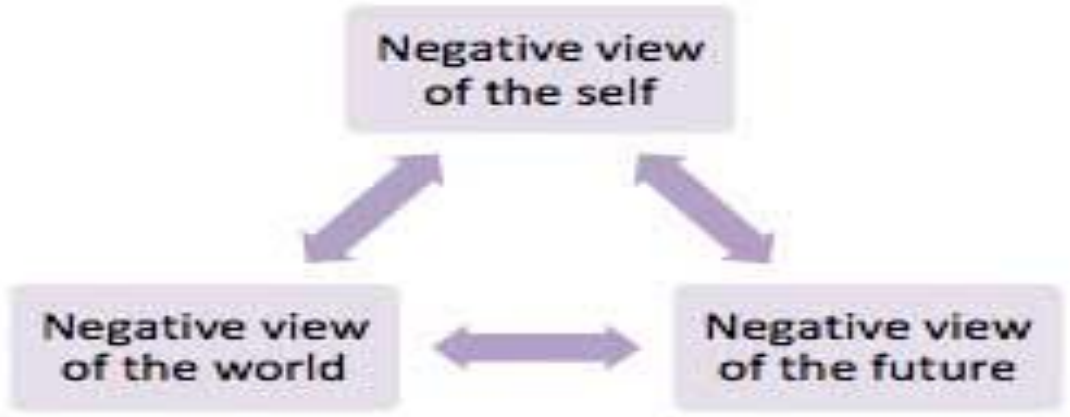
In essence, the students here learn to demonstrate between their thoughts and reality. The therapist sets home work for the student. The home wok usually consists of tasks that are capable of challenging his/her irrational thoughts.

2.2.1 Mechanisms of Cognitive Behaviour Therapy

These mechanisms focus on the areas cognitive therapy should capture in the treatment. The following are the three mechanism of Cognitive Behaviour Therapy by Beck (1967):

1. Negative self-scheme: This is the instance where an individual has negative understanding of self in terms of what he or she can do or not do.
2. Errors in logic: The inability of a person to accurately process well the available information.
3. Cognitive Triad for negative automatic thinking which include negative view of the self, negative view of the world and negative view about the future as diagrammed below:

Table 2: Cognitive Triad



Source: McLeod, S. A. (2015) p.13

In the same way, Ellis (1957) refers to the mechanism of Cognitive Behaviour Therapy as the ABC of Cognitive Behaviour Therapy.

2.2.2 Behaviour Therapy Techniques

In Mason (2000) and Mohammed (2014), the following techniques of Cognitive Behaviour Therapy were enumerated.

Socratic Questioning: This refers to questioning which allows the therapist to stimulate the client's self- awareness, focus on the definition of the problem, expose the client to belief system and challenge irrational beliefs while revealing the clients' cognitive processes.

In vivo exposure: It is the Latin phrase for *in life'* which refers to the therapeutic procedure that takes place in the students' natural environment. It is the gradual exposure to the actual feared stimulus. In this technique, the treatment is based on the theory that the feared response has been classically conditioned and the avoidance negatively reinforces and maintains that fear. Through this technique, conditioning can be unlearned through extinction and habituation

Homework Technique: Clients are often given assignments so as to enable him/her picture the problem. For example, CBT's homework may include activities in behavioural activation, monitoring automatic thought, reviewing previous therapy and preparing for the next therapy session

Self-Instructional Training: This is seen as a cognitive behavioural therapy that teaches students to instruct themselves verbally so that they may cope with difficult situations. The pattern here is to guide an individual to say self-statements that can help the person control his behavior or perform some tasks.

Self-Monitoring: This is used to record the amount and degree of thoughts and behavior. This updates the therapist on the information relating to the client's negative affirmations.

Stress Inoculation: It is a Cognitive Behaviour Therapy in which students learn coping skills for dealing with stressful situations and then practice the skills while being exposed to the situation

Behavioural Experiment: It is a process of experiment which includes experiencing, reflecting, observing and planning. It is done through thought testing, discovery, activity, and or observation

Imaginal Flooding: Unlike systematic desensitization which is gradual, in imaginal flooding, student is exposed to a mental image of a frightening or anxiety-producing object or event and continues to have the mental image of the event until the anxiety gradually diminishes. Exposure is not to the actual event but to an image of a frightening situation such as past question papers and being seated in the examination hall for test anxiety students.

Systematic Desensitization: Systematic desensitization is a type of behavioural therapy used to overcome phobias and other anxiety disorders. More specifically, it is a type of Pavlovian therapeutic procedure (Chauhan 1982). It gradually teaches people to be relaxed in a situation

that would otherwise frighten them. It is often used to treat phobias and other anxiety disorders. The word desensitization refers to making people less sensitive to or less frightened by certain situations. Systematic desensitization is sometimes called graduated exposure therapy. Systematic Desensitization (SD) is known for the effective control of general anxiety and specifically tested to minimize test anxiety. It is also called graduated exposure therapy. SD is one of the techniques under the behaviour therapy, which is often applied in cognitive-behaviour therapy. Success is more likely when skills deficits are not causing the anxiety. That is, if you develop anxiety about taking exams in school and if you have a tendency not to study or do your hard work well, your anxiety is probably a result of not knowing the material; systematic desensitization may not be of any help in this case. As the therapy procedure has evolved, the anxious patient is first trained in progressive muscle relaxation exercises and then gradually exposed imaginably or *in vivo* to feared stimuli while simultaneously relaxing. This study will adopt this Systematic Desensitization order by the following steps

1. Relaxation;
2. Construction of an anxiety hierarchy;
3. Pairing relaxation with the situations described in the anxiety hierarchy

Jane & Steven (2003) refer to Wolpe‘s description of systematic desensitization as an effective therapeutic treatment in the reduction of maladaptive anxiety. It is a process by which a person is induced into deeply relaxed state and is presented with a series of graduated anxiety evoking situation using imaginable exposure. When anxiety is experienced during exposure, the image is terminated and a relaxed state is induced. With continued exposure to each situation, the person‘s level of anxiety weakens progressively until the person no longer experiences anxiety in response to the aversive stimuli.

Systematic desensitization has been used with recorded success in other parts of the world, especially among adolescents. Ellis (1967) holds that it involves the use of classical conditioning method in relaxing an individual who is anxious. It is a counter conditioning whereby an established habit can be weakened or off-set by learning something else. The feeling of relaxation is made to dominate over the feeling of fear and anxiety for certain critical situation in a person‘s life.

2.2.3 Steps in Cognitive Behaviour Therapy

According to Purva (2007), the following are some basic steps to behaviour therapy

1. Observe and identify situations that change your thinking**:** This is done by the client as he/she carefully reflect on events which change the pattern of thinking of such a person. These techniques are based on the assumption that your feelings and behaviour result from how you think about yourself and the life you lead
2. Start becoming aware of your beliefs and thoughts: This takes place when the client begins to acknowledge or get the accurate picture of his/her belief.
3. Pinpoint the irrational thoughts : Those particular irrational thoughts must be pinpointed here by the client
4. Try to question your negative or irrational thought patterns**:** Start the process of mental filtering. May be you will observe that you can only see negative things and worry about them. May be this thought pattern does not allow you to visualize that person or situation or your life in the right perspective.
5. Try to bring a change to your thoughts and belief: Here a conscious effort must be put by the client to reject negative thoughts.

2.2.4 Methods of Assessment of Behaviour in Cognitive Behaviour Therapy

The following are some assessment methods employed by Cognitive Behaviour Therapists as stated in Sharf, (2008).

i. **Behavioural Interviews:** It is essential in understanding the problem in behavioural terms. If for example a student says he becomes very anxious when he is to write a test, the therapist may want to know the level of anxiety and at what stage it occurs. Many of the questions that a therapist may ask have to do with the details about the target behaviour.

ii. **Behavioural Reports and Writing:** Written instruments developed to assess problems of behaviour are used for this purpose. Many self-report inventories have been designed to assess depression, fear, anxiety, social skills, health-related disorders, sexual dysfunction, and marital problems.

iii. **Behavioural Observations:** Direct observations can also be made in assessing the unwanted behaviour. The student may be asked to record the number of times and intervals in which the unwanted behaviour is performed.

iv. **Physiological Measurement:** Physical functioning such as blood pressure, heartbeat, respiration, may be used to assess the rate of some unwanted behaviours. The problems may be psychological, but the symptoms are mostly physiological in nature

2.2.5 Criticisms of Cognitive Behaviour Therapy

Though Cognitive Behaviour Therapy has become popularly used, it also has criticisms from other scholars. According to Mohammed (2014), Cognitive Behaviour Therapy has come under fire from non-CBT therapists who claim that the data do not fully support the extent of attention and funding it receives nor its extension beyond psychotherapy, and that the limitations of the CBT model has conspicuously appeared to be heavily practised by many when

It is just to blanket-address psychological suffering. Some psychotherapists even opined that this constitutes "a coup" a power plays by a community that has suddenly found itself on the brink of controlling an enormous amount of money. They argue that science is not the appropriate perspective from which to look at emotional difficulties, and that everyone has been seduced by CBT's apparent cheapness. The following are the summary of criticisms of the method which include the following:

i. As more research focuses on CBT, more studies are published on CBT. This reinforces the logical error that CBT is superior and this has a direct negative effect on other forms of therapy, which are well documented but have smaller bodies of research.
ii. People who get therapy improve substantially, regardless of the type of therapy they get. When therapies are compared to one another, they usually appear to be equally effective.
iii. Excessive spending on CBT and discouraging other forms of therapy hurts the public.
iv. That no trial employing both blinding and psychological placebo has found CBT to be effective in schizophrenia.
v. It was also found that there were few well-controlled studies of CBT in depression that found the therapy to be effective, and in those found, the effect was small.
vi. CBT was also found to be ineffective in preventing relapses in bipolar disorder.

2.2.6 Gender Difference in Cognitive Behaviour Therapy

It is believed that Cognitive Behaviour Therapy would have effect on various mental irrational thoughts but on the issue of whether the effect has a gender differential pattern or not has become an issue of discussion as opinions and findings have been put forward by several scholars. To that note, Pieh, Altmeppen, Neumeier, Loew, Angerer and Lahmann (2012) states that it has remained unclear whether men and women differ in the effect of treatment of

Cognitive Behaviour therapy though, their findings eventually showed women scoring higher than men in posttest score. On his part, Kornstein (1997) opines that data have consistently shown that Cognitive Behavioural problems are twice in women than in men. By implication is that, female students need Cognitive Behaviour attention than male students. It could also mean that it is difficult to help the female than male individual through Cognitive Behaviour Therapy even though reverse can be the case.

The research of Renuka and Kanchan (2016) reported that about 21.3% of women and 12% of men would normally experience a serious cognitive Behaviour problem or irrational pattern of thinking sometime during their lives. He added that more women are victims of cognitive behavioural illness probably because their economic depression, preoccupation with failure, low self-esteem, sense of self-helplessness, pessimistic attitude towards the world and narcissistic vulnerability.

2.3 Concept of lntellectual Achievement Responsibility (IAR)

It is the way in which a person acts and feels he is responsible for his success and failure. As far as responsibility is concerned, persons differ in the degree to which they believe that they are responsible for the outcomes of their situations and they may believe that their behavior causes the reinforcements which follow their actions or they may feel that their successes and failures depend on powerful others or are due to luck or fate (Mannarini, 2008). The concept of Intellectual Achievement Responsibility as viewed by Solomon, Houlihan and Parelius (2000) it is the degree to which an individual believes that he is responsible for his academic success or failure which has effect in his academic performance. The term describe the level at which people differ in their beliefs that they are responsible for the consequences of their actions.

It was Rotters (1966) and Phares (1957) that first wrote on this concept of Intellectual Achievement Responsibility and its relevance in explaining the *why* of behaviour. However, Rotters coined the concept as locus of control of reinforcements which she defines as an individual's perception about the underlying main causes of events in his or her life (Neill, 2006). According to Halpert and Hill (2011) a person's Locus of Control is where that person places the primary causation of events in his or her life. To Colman (2009) the term refers to a cognitive styles or personality trait characterized by a generalized expectancy about the relationship between behaviour and the subsequent occurrence of reinforcement in the form of rewards and punishment. For instance, is a poor grade in an exam due to poor study habits or the inadequacy of the professor? Or perhaps you were fated to fail the class? The term locus of control is a broad concept which looks into an individual's general causal attribution. That is why the scales constructed by Rotters and Blair in Mannarini (2008) were designed to measure the construct broadly. Therefore, Crandall, Katkovsky, and Crandall (1965) came up with an Intellectual Achievement Responsibility scale to measure just an area of locus of control which is concerned with academic achievement. According to Mannarini (2008), the Intellectual Achievement Responsibility is an aspect of locus of control which has to do with the perception of students as to whether their academic grades are earned through their power or due to luck, fate, leniency of the examiner, simplicity of the questions, helps from other examinees, etc.

There exists the continuum of Intellectual Achievement Responsibility. In their findings, Solomon, Houlihan, and Perelius, (2000) distinguishes two polarities of students Intellectual Achievement Responsibility. There are those learners with *internal* Intellectual Achievement Responsibility and those who have *external* Intellectual Achievement Responsibility as discussed below.

2.3.1 Concept of External Intellectual Achievement Responsibility

The external Intellectual Achievement Responsibility is the perception of students that they are not responsible for their action whether success or failure. Students with external responsibility believe that they are not in control of events surrounding them. Kalantarkousheh, (2013), states that such learners do not attribute the causes of their success or failure to their efforts, ability, etc. Kutanis, Mesci, Ovdour, (2011) attempts to describe the externally achievement responsible person thus:

a) The individuals with external locus of control prefer the activities in which they can show the role of chance on their lives. They try to increase good conditions
b) They make an effort to reduce the level of bad conditions
c) They usually view change as a danger as they do not feel the control of the forces affecting their lives. They prefer to be at a status where they can be passive in case of a change.
d) They do not have a different performance-prize expectation from the individuals with internal locus of control**.**
e) External locus of control has a negative correlation with job satisfaction; however it is in a positive correlation with mental and physical health.

2.3.2 Concept of Internal Intellectual Achievement Responsibility

Internal Intellectual Achievement Responsibility is the feelings of those who admit that they are responsible for their situation. According to Miller (1969), there are certain groups of people who have the belief that they are responsible for their successes or failure. These are said to be internally intellectually responsible. Bong (1998) has shown that people who have internal intellectual achievement responsible tend to predict their performance more accurately

compared with those with external IAR. Mesci and Ovdour, (2011) enumerate the following features of those with the external Intellectual Achievement Responsibility:

1. They have the tendency to choose the activities in which they can display their abilities.
2. They feel that they are responsible for their own decisions, and they perceive that their fate is not affected by the factors out of their control, but by their own decisions.
3. Their belief that they have control over their fate prevents them from getting suspicious of the changing period since they feel responsible for their own actions
4. They mostly believe that their efforts will end with a good performance and they are more self-confident and they trust their abilities.
5. They have expectation that their good performances will be awarded as they work hard

2.3.3 Internal Versus External Intellectual Achievement Responsibility

It is obvious that one would want to know whether the internal or external Intellectual Achievement Responsibility is better than the other or which one to be desired. It has been reported that an internal orientation is viewed as more desirable than the external one because internal avail themselves of information more than the "external", make better use of received information, and are more attentive to cues that help them and solve uncertainty (Lefcourt and Wine 1969, Phase 1968). In the same way, Tenembaum (1988) researched and their data analysis shows that the Intellectual Achievement Responsibility indicate preference of the internal responsibility to the external achievement responsibility students. However, Feltz, and Ewing (1987), Gould (1896) believe that research on children's locus of control of Intellectual Achievement Responsibility is still lacking. It would therefore, be necessary that more researches should be carried out in Intellectual Achievement Responsibility including intellectual responsibility in sport dimension.

2.3.4 Roles of Schools in improvement of Intellectual Achievement Responsibility

According to Miller (2000), educational institutions have roles to play in improving the Intellectual Achievement Responsibility of students as follows:

1) Teaching styles should be created which reflect the individuality of teachers and which incorporate the positive strengths of all children
2) Schools need to make a more determined effort to develop positive attitudes in teachers towards their own ability to make a noticeable difference in the teaching of both boys and girls.
3) Schools should be concerned with new patterns of organization based on individualized instruction.
4) More emphasis needs to be placed on items supported by research such as the belief that all children can learn.
5) In-service programmes need to be developed to help all educational personnel understand that the real problem with regard to the education of the youth may be with the institution and the negative attitudes of those who represent it. Although much research has been done that deals with self-esteem, particularly with regard to boys and girls.

2.3.5 Ways of Developing Internal Intellectual Achievement Responsibility

Apart from the various therapies which can be used for Cognitive Behaviour Therapy by Ellis, (1957) and Beck (1960), and Scott (2014) state that the following tips can be used to improve Intellectual Achievement Responsibility.

1. *Notice your language and self-talk.* If you tend to speak in absolutes, stop. If your self-talk is generally negative, read this article on the effects of negative self-talk and how to make your self-talk more positive.

2. *Phase out phrases like, 'I have no choice'*, and, 'I can't". You can replace them with, 'I choose not to,' or, 'I don't like my choices, but I will…' Realizing and acknowledging that you always have choice (even if the choices aren't ideal) can help you to change your situation, or accept it more easily if it really is the best of all available options.
3. *Your attitude affects your stress* level more than you may realize. You can to learn more about mental and personality factors that influence your stress level, so you can make changes to keep stress down
4. Realize that you always have choice to change your situation. Even if you don't like the choices available at the moment, even if the only change you can make is in your attitude, you always have some choices.
5. When you feel trapped, make a list of all possible courses of action. Just brainstorm and write things down without evaluating them first.
6. You may want to also brainstorm with a friend to get more ideas that you may not have initially considered. Don't shoot down these ideas right away, either; just write them down.
7. When you have a list, evaluate each one and decide on the best course of action for you, and keep the others in the back of your mind as alternative options. You may end up with the same answer you had before the brainstorming session, but this exercise can open your eyes to the amount of choices you have in a given situation. Seeing new possibilities will become more of a habit.

Repeat this practice when you feel trapped in frustrating situations in your life. In more casual, everyday situations, you can still expand your mind to new possibilities by doing this quickly. Attitude will undoubtedly affect other people**.** When you can look on the bright side of

life you will definitely inspire others to do the same. This will encourage you to do the right thing, as facing a problem with the right attitude is not just good for you, but your friends and colleagues as well.

2.3.6 Gender Difference in Intellectual Achievement Responsibility

Though Intellectual Achievement Responsibility appeared to be manifesting in students and plays some role in their academic activities, it seemed that the problem vary from male students to female students. Crandall, Katkovsky, & Crandall, (1965) states no significant difference in the Intellectual Achievement Responsibility of male students and that of female students but also discovered that generally female students have the tendency to manifest higher Intellectual Achievement Responsibility than female both in term of the internal and the external IAR. However he also states that the increase in IAR occurs with age, particularly from age 12 upward. Mannarini (2008) holds that males seemed to assume more credit for positive events and seemed to feel less responsible for failures than girls. Though such result represented a tendency and was not statistically demonstrated but that assumption suggests that male students are likely to score high scores on positive item on the internal Intellectual Achievement Responsibility scale while female students score higher in the negative items of the internal Intellectual Achievement Responsibility scale. In line with the above, Hollingshea and Redlicher (2009) believes that it is apparent that there is a tendency for fourth grade lower-class boys to score higher than fourth grade lower-class girls, while sixth grade lower-class girls score higher than sixth grade lower-class boys. There is room for more research on the issue of male and female students' Intellectual Achievement Responsibility.

2.4 Theoretical Frame Work

This section deals with some relevant theories which help to explain the variables of the study. The following are the theories to be used in this research work:

2.4.1 Theory of Rational Emotive Behavior Therapy (REBT)

This theory as propounded by Ellis (1957) proposes that each of us holds a unique set of assumptions about ourselves and our world that serve to guide us through life and determine our reactions to the various situations we encounter. Unfortunately, some people's assumptions are largely irrational, guiding them to act and react in ways that are inappropriate and that prejudices their chances of happiness and success. Ellis (1958) calls these basic irrational assumptions. He believes that people often forcefully hold on to this illogical way of thinking, and therefore he employs highly emotive techniques to help them vigorously and forcefully change this irrational thinking. A major aid in cognitive therapy is what Ellis in Mcleod (2015) called the ABC Technique of Irrational thought. The first three steps are to analyze the process by which a person has developed irrational beliefs.

A - Activating Event or objective situation. The first thing is to records the objective situation, that is, an event that ultimately leads to some type of high emotional response or negative dysfunctional thinking.

B - Beliefs. In the second step, the student writes down the negative thoughts that occurred to them.

C - Consequence. The third act is for the negative feelings and dysfunctional behaviors that ensured the negative thoughts of the second step are seen as a connecting bridge between

the situation and the distressing feelings. The very step is next explained by describing emotions or negative thoughts that the student thinks are caused by another and it could be anger, sorrow, anxiety, etc.

2.4.2 Cognitive Behaviour Therapy Model

It was propounded by Beck (1960). Beck's theory is based on the theoretical rationale that the way people feel and behave is determined by how they perceive and structure their experience. The theoretical assumptions of CBT are: that people's communication is accessible to introspections: that, students' beliefs have highly personal meanings and that these meanings can be discovered by the student rather than being taught or interpreted by the therapist. It is a process of teaching, coaching, and reinforcing positive behaviors. CBT helps people to identify cognitive patterns or thoughts and emotions that are linked with behaviors. Beck's (1967) system of therapy holds that cognitive therapists help students to recognize the negative thoughts and errors in logic that cause them to be depressed.

The therapist therefore, guides students to question and challenge their dysfunctional thoughts, try out new interpretations, and ultimately apply alternative ways of thinking in their daily lives. He believes that a person's reaction to specific upsetting thoughts may contribute to abnormality. As we confront the many situations that arise in life, both comforting and upsetting thoughts come into our heads. Beck calls these unbidden cognition's *automatic* thoughts.

When a person's stream of automatic thoughts is very negative you would expect a person to become depressed (I am never going to get this essay finished, my girlfriend fancies my best friend, I'm getting fat, I have no money, my parents hate me). Have you ever felt like this?. Quite often these negative thoughts will persist even in the face of contrary evidence. Different

people can think differently about the same event. The way we think about an event influences how we feel and how we act. A classic example is that when looking at a glass of water filled halfway, one person will see it half empty and feel discouraged and the other sees it half full and feels optimistic. Secondly, when a person thinks he can control events around him tends to feel it is necessary to work hard persistently to change unfavourable conditions.

General core rational and irrational beliefs are coded in our cognitive system as schemas and/or propositional networks. In specific situations they bias the perception of the activating events and thus generate specific rational and irrational beliefs, often in the form of automatic thoughts. They are called automatic thoughts because they come to our mind automatically and are specifically related to various activating events. The automatic thoughts once generated, then reinforce and maintain the core beliefs. The same model seems to work for descriptions and inferences too.

2.4.3. Social Learning Theory by Rotters (1966)

The main idea in Rotter's social learning theory is that personality represents an interaction of the individual with his or her environment. One cannot speak of a personality, internal to the individual that is, independent of the environment. Neither can one focus on behavior as being an automatic response to an objective set of environmental stimuli. Rather, to understand behavior, one must take both the individual (i.e., his or her life history of learning and experiences) and the environment (i.e., those stimuli that the person is aware of and responding to) into account. Rotters describes personality as a relatively stable set of potentials for responding to situations in a particular way. Rotters sees personality, and therefore behavior, as always changeable. Change the way the person thinks, or change the environment the person is responding to, and behavior will change. In times of thinking, it is believed here that an individual who thinks internally is

more responsible to his/her situation than the one who thinks external factors are responsible to his situations. He does not believe there is a critical period after which personality is set. But, the more life experience one has building up certain sets of beliefs, the more effort and intervention required for change to occur. Rotters conceive people in an optimistic way. He sees them as being drawn forward by their goals, seeking to maximize their reinforcement, rather than just avoiding punishment.

Rotter's concept of generalized expectancies for control of reinforcement, more commonly known as locus of control is relevant in explaining effort put by different people in performing the same task. Locus of control refers to people's very general, cross-situational beliefs about what determines whether or not they get reinforced in life. People can be classified along a continuum from very internal to very external. People with a strong internal locus of control believe that the responsibility for whether or not they get reinforced ultimately lies with themselves. Internals believe that success or failure is due to their own efforts. In contrast, externals believe that the reinforcers in life are controlled by luck, chance, or powerful others and as such the individual is not intellectually responsible to it. Therefore, they see little impact of their own efforts on the amount of reinforcement they receive. Therefore, those having internal locus of control is what Miller, (1969) refers to as internal Intellectual Achievement Responsibility while the latter is internal intellectual responsibility.

2.4.4 Self-regulated Theory of Achievement Motivation

Bandura (1991) brought together behavioral and cognitive components in which he concluded that "humans are able to control their behavior through a process known as self-regulation. The theory holds that learners' motives to learn manifest in self-observation, self-judgment, and self-response. Self-observation (also known as introspections) a process involving

assessing one's own thoughts and feelings in order to inform and motivate the individual to work towards goal setting and become influenced by behavioural changes. Judgment involves an individual comparing his or her performance to their personal or created standards. Lastly, self-response is applied, in which an individual may reward or punish his or herself for success or failure in meeting standard(s). An example of self-response would be rewarding oneself with an extra slice of pie for doing well on an exam. The higher, the degree of self-regulated actions a student has, the better his/her academic performance. These types of learners feel responsible for their academic outcome either good or bad. That is why they tend to be proactive in organizing and planning ahead. One good aspect of them according to Bandura is their ability to judge themselves, reward or blame self for failure. That is to say that the lesser the sense of self-regulation in a student, the lower he/she tends to perform academically.

Expanding on the self-regulated theory of learning, Zimmerman (1990), believed that the ultimate goal of education is to shift to the learner the burden of pursing his education. Zimmerman describes self-regulation as process directed at acquisition of information or skills that involve purpose and instrumentality perceptions by learners. He adds that self-regulated learners are distinguished by awareness of strategic relationship between regulatory processes and learning outcome as well as the use of these strategies to achieve their academic goals.

The relevant of this theory to the present study is that when learners are incline to control or regulate self-efforts to achieve must have believed that they are responsible for their situations and therefore can be referred to as students with internal Intellectual Achievement responsibility. Therefore, this theory sheds light that belief that one is responsible for his fortunes is contribute to success while depending on external factors has negative effects on effort and intellectual achievement.

2.5 Review of Related Empirical Studies

This section is made of the various empirical studies conducted in relation to the topic under study. The areas that were covered are the effect of CBT on IAR and gender difference in the effect of CBT on IAR.

Tarrier, Maguire and Kincey (2000) found Cognitive Behaviour Therapy to have significant effect on only the internal Intellectual Achievement Responsibility of students. They conducted their study to find out the relationship between Intellectual Achievement responsibility and Cognitive Behaviour Therapy among school children in Britain. A Cognitive Behaviour training programme was designed while pretest-posttest quasi experimental designed was employed. T-Test and PPMC were used to analyze the data and the result showed that Training improved external and internal Intellectual Achievement Responsibility of the Participants. Therefore, it was clearly proven that every level of Intellectual Achievement Responsibility can be bettered by application of Cognitive Behaviour Therapy on the participants.

A particular study by Cardace, (2009) was carried out to look into the difference and correlation between Cognitive Behaviour Therapy and Intellectual Achievement Responsibility among selected secondary school students. Quantitative research design was applied, Correlation and ANOVA were used to analysed the collected data and it was ascertained that Cognitive Behaviour Therapy has relationship with internal Intellectual Achievement Responsibility. This means that the cognitive therapy made impart on Intellectual Achievement Responsibility. It is a confirmation that Cognitive Behaviour Therapy has effect on Internal Intellectual Achievement Responsibility among students. It was therefore, it is worthy of note for a student to realize that he/she is having external or low internal intellectual Achievement Responsibility and need to

voluntarily avail self for cognitive training through Cognitive Behaviour Therapy by a professional psychological therapist.

Another study carried out by Gerontol (2010), to determine whether training improves internal Intellectual Achievement Responsibility. Therefore, the design of the study was quasi experimental research. Eighty (80) participants were used for the study. Simple random technique was employed to select the subjects for the research, multi-regression was adopted to analyse the data and the result showed that cognitive training has effect on Intellectual Achievement Responsibility among students. That is to say that Cognitive Behaviour training influenced Intellectual Achievement Responsibility of the participants.

Another study was carried out by Nwoke, Eskay, and Micheal, (2013) to investigate the effect of Cognitive Behaviour Therapy on achievement orientation of low achieving students and their Intellectual Achievement Responsibility. Quasi experimental research of non-equivalent control pretest-posttest, involving one treatment group and control group was used. The sample consisted of one hundred and five (135) low achieving senior secondary students two of which were drawn from each of the two educational zones of Yenagoa and Okolobiri in Yenagoa Local Government Area of Bayelsa States. Purposive sampling technique was employed to draw the participants which were from public secondary schools. The experiment was subject to Cognitive Restructuring treatment, data collected and the analysis of results done by means of Mean, Standard Deviation and Anova. The result of the analysis showed that Cognitive Restructuring significantly enhanced the achieving orientation of low achieving students. In other words, Intellectual Achievement Responsibility of the low achieving student was improved. It was also revealed that cognitive behavior therapy had significant effect on external Intellectual Achievement Responsibility of the students.

Weinberg, (2000) embarked on an investigation into the effect of attribution training package on Intellectual Achievement Responsibility and age factor. A Cognitive Behaviour Therapy package for training of Intellectual Achievement was developed and 2x2x2 factor design was employed for the study. The subjects selected for the research were 106 participants and purposive sampling technique was used for selecting the subjects that would be exposed into cognitive Behaviour Therapy. The result of the study showed that Cognitive Behaviour Therapy had effect on luck or chance. That is to say there was significant effect of Cognitive Behaviour Therapy on External Intellectual Achievement Responsibility. The researcher therefore, stressed the need to apply Cognitive Behaviour Therapy to reduce the external Intellectual Achievement Responsibility of Students.

The findings of Vincent, Walsh and Lewyky (2010) did not differ from the above when they subjected one hundred (100) participants into a five (5) weeks treatment and Cognitive Behaviour Therapy had effects on Intellectual Achievement Responsibility of the participants. In a 2-phase design study with a total of one hundred and fifty nine (159) participants who were all 6^{th} graders and were selected simple random sampling technique, the study focused on the relationship of the causal perception of intellectual failure and task difficulty which was examined and the results reveals that causal perception of intellectual failure related to ability and task difficulties. The findings also show that causal perception of intellectual failure did not differ between boys and girls. That is to show that the findings did not reveal any significant difference between the Intellectual Achievement Responsibility between male and female students.

Another research conducted by Hussainl, Allas, Othman and Aziz (2015) which aimed at finding the effectiveness of brief Cognitive Behaviour Therapy Module on Intellectual

Achievement Responsibility among Primary school students. Quasi experimental of experimental and control group was adopted as the design with one group and four measurement (pre-post1, post2 and post3) were employed in the study. The sample used was 108 participants who were selected using purposive sampling procedure. The samples were distributed into groups. Data was collected by the use of Students Psychometric Instrument (SPI) including internal control index by Duttweiler (1984). The data were analyzed and the result revealed Cognitive Behaviour Therapy had positive effect on Intellectual Achievement Responsibility as there was improvement on the internal Intellectual Achievement Responsibility. It was therefore, recommended that there was need to make use of Cognitive Behaviour Therapy in training the Intellectual Achievement Responsibility of Students.

Cooper, Burjer and Good, (2000) embarked on a study in the form of statistical combination on past research to examine the gender difference in the academic locus of control. Rasch Model Intellectual Achievement Responsibility (IAR) Scale was used as the academic locus of control and the results showed that female tend to score more internally in total and failure outcome as measured by IAR. Female students however, were more internal than male students for both success and failure outcome but only at the end of the school year. But in elementary school, Male proved more internality than female students. The researcher concluded that male students are more internal at elementary school age than female students while female students have more internal Intellectual Achievement Responsibility than male students at the end of school age.

Basavarajappa (2013), conducted a research to investigate the effectiveness of effectiveness of Cognitive Behaviour Therapy on Intellectual Achievement Responsibility among high school students in Iran. The population of the study consisted of four hundred (400)

students while Sixty (60) high school students were the participants for the study. Pretest posttest Quasi experimental design of experimental and control group was adopted while the experimental group and the experimenter developed a Cognitive Therapy package which was used so the participants received intervention for ten (10) sessions. Data was collected before and after the treatment with a Likert rating scale instrument developed and validate. Independent t-Test and Anova were employed for the data analysis. The result showed that Cognitive Behaviour Therapy had significant effect on both the internal and the external Intellectual Achievement Responsibility but with no significant differential effect of Cognitive training on the basis of genders.

In the study earlier mentioned conducted by Nwoke, Eskay and Michael (2013), where pretest- posttest quasi experimental design was employed, using the sample of 135 senior secondary school (SSII) in four (4) secondary school students in Bayelsa State to determine the effect of Cognitive Behaviour Therapy on Intellectual Achievement Responsibility, data was gathered from the subjects on the construct of Intellectual Achievement Responsibility. Therefore, the analysis of results also showed that there was no significant difference in the effect of Cognitive Behaviour Therapy on the basis of gender. The result also showed that Cognitive Behaviour Therapy had more effect on the Intellectual Achievement Responsibility of Male students than that of female participants.

Solomon, Houlihan and Perelius (2000) conducted a descriptive survey to look into the Intellectual Achievement Responsibility among children of various socio-economic status, and race of the White and Negro black America. The sample of the study was one hundred and thirteen (113) pupils and 4-way ANOVA was employed in the analysis of the data collected and the result shows that there is significance effect of gender factor on Intellectual Achievement

Responsibility. Particularly, female children were reported to score higher on the internal Intellectual Achievement Responsibility than their male counterpart.

A study was conducted by Guril (1966) using four hundred (429) participants in South-Eastern Michigan schools on the Intellectual Achievement Responsibility. Therefore, the aim of the study was to find out if difference really exists in the intellectual Achievement Responsibility between male and female students. Descriptive survey design was employed, Three null Hypotheses were raised to guide the study and data were collected by the used of questionnaire. After data collection, Multi-variate analysis was employed to analyze the data and the result showed a significance difference in the mean score of IAR on the basis of gender with that of female students higher in external IAR while male students score higher in the internal IAR.

Khanehkeshi (2014), conducted a research aiming at finding out the effect of Cognitive behavior Therapy on Intellectual Achievement Responsibility. Four (400) students were used as the participants in the study and survey design was employed for the research. t-Test was used to analyze the data and 15 item instrument in form of forced-choice was administered to collect relevant data. After the data was collected and analyses done the result appeared that Cognitive Behaviour Therapy did not differ between males and females students. The result shows that there is no significant differential effect of Cognitive Behaviour Therapy Between male and female students.

Another which agrees with the research result above was conducted by Gardner, (2016) carried out an investigation into the difference in Intellectual Achievement Responsibility on the basis of gender among Jamaican University students. The students of Jamaican University Made up the population of the study. Seven hundred and one (701) Jamaican University students of eighteen to thirty years old were selected as the participants for the study. Interview was used to

collect the data in line with the relevant raised null hypotheses, the result of the study showed that more female were having external Intellectual Achievement Responsibility. That is to say that there was a significant difference in External Intellectual Achievement Responsibility between male and female students. The result also shows that female students score higher than male students in external IAR of the participants.

Susan and Dennis (1997), embarked on research to find out the relationship among ethnicity, gender and vulnerability factors in Intellectual Achievement Responsibility of children referred for gifted programme. Survey design was employed for the study and three hundred and fifty participants were also used for the study. Simple random sampling technique was adopted in selecting the sample size for the research and questionnaires in form of Likert rating scale was adopted to collect the data. Therefore, a2x2x4 ANOVA was applied in analyzing the data. The result showed that significant difference exists in the Intellectual Achievement Responsibility of the Participants and male students score higher in internal Intellectual Achievement Responsibility.

McPhearson and Martins (2017) made a thorough study to find if there exists gender difference in intellectual achievement responsibility. Descriptive survey design was employed in the study and stratified sampling technique was employed to choose the participants for the research. The sample used was two hundred and forty five participants and a 4-points questionnaire which ranges from strongly agreed, agreed, disagreed and strongly disagreed was used for the data collection while t-test and Pearson Product Moment Correlation was adopted for the data analyses and the result revealed that male scored higher than female students in the internal intellectual achievement responsibility. It was therefore concluded that there is significant role of gender on Intellectual Achievement Responsibility of students.

2.6 Summary

This chapter has presented the review of literatures related to this research topic: Effect of Cognitive Behavioural Therapy on Intellectual Achievement Responsibility'. Various concepts have been discussed on the problem external Intellectual Achievement Responsibility from the review of articles of Kalantarkousheh (2013) and Merci and ovdour (2011) who attempted to state the difference in the thinking pattern and behavior of a student who has internal and those who have the external IAR. The former tends to blame self for failure, praises same and makes efforts to control academic events he/she is concerned with while the later blames others for failure, depends on people's assistance to succeed and indulges in hoping on and waiting for luck and fade or helps from powerful others. Roles of schools in improvement of Intellectual Achievement Responsibility of their students were discussed from the view of Miller, (2000).

The role of Cognitive Behaviour therapy was also explained as being capable of changing and training of Intellectual Achievement Responsibility of students who have external Intellectual Achievement Responsibility. Ramalingam (2006) and gave compressive definition of CBT while Kearns (n. d.) stated the interactive elements of CBT to include cognition, behavior, body emotion and environment. Mechanism of CBT were stated by Mcleoud (2015) and they include: negative self-scheme, errors in logic and cognitive traid while cognitive triad consists of negative view of self, negative view of the world and negative viewed of the future as working together to cause irrational thought, feeling and irrational behavior.

Social Learning theory, Self-regulated theory and Attribution theory of Haider dwelled on the concept of Intellectual Achievement Responsibility and the type of behavior it produces in an individual while the theory of rational emotive cognitive behavior of and cognitive behavior therapy model discussed the various angles through which a pattern of thinking can be trained.

It is not that researches were not being conducted in that direction because from the literature, previous studies on the effect of Cognitive Behaviour were stated from article such as Solomon, et'al (2000) and Basavarajappa (2013). There were empirical studies on therapy concerning both the internal and the external Intellectual Achievement Responsibility. There were also empirical studies reviewed on the differential effect of Cognitive Behaviour Therapy between the IAR of male and female students for example, Tarrier, et'al (2000), Nwoke, et'al (2013). Thus it was obvious that many researchers had run numerous studies related to the topic, though there still remains a space which this study has now attempted to fill up.

Solomon, et,al (2000), Basavajappa (2013), Husainl, et'al (2015) and Tarrier, et'al (2000) conducted their researches in America (among whites and negro children), Iran, Malaysia and Europe respectively. Nwoke, et'al (2013), carried out theirs in Bayelsa State of Nigeria. In short, among all theprevious empirical studies reviewed by the researcher, only one was carried out in Nigeria (in the South-South) and none of them was carried out in Kaduna state, particularly in Kafanchan. Therefore, the major vacuum this research aimed at filling up was to bridge up the existing gap between foreign findings on Intellectual Achievement Responsibility and what would be obtained in Kafanchan, Kaduna state. Therefore, the researcher considered it as a gap to fill up if a research on cognitive training of Intellectual Achievement Responsibility among students in Kaduna State College of Education Gidan Waya was to be carried out. It was the interest of the researcher to find out whether the result would differ or confirm what others had found in other places.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter presents the research design, population and sample for the study and sampling procedures. The chapter also includes the research instruments, pilot study, validity and reliability of the instrument, methods of data collection and the methods of data analysis.

3.2 Design

In this research work, quasi experimental research design was adopted. The design took the pattern of pretest and post-test research design. According to Williams (2006), "quasi experimental design is a research design similar to the true experimental design except that it has no random assignment". It is a research most suitable for the establishment of cause and effect and it involves the manipulation of independent variable as the treatment of the psychological phenomena under study (Kowalczyk, 2003). Therefore, quasi experimental research design appeared most appropriate for the research. Secondly, to avoid the interference of extraneous variables or other factors on the control group, the researcher opted for pretest and post-test experimental research rather than experimental and control group design. More so, Barry and Joan (1997) states that when an experimental research does not involve more than an intact class or large population figure, then the pretest-posttest quasi experimental research should be used instead of experimental and control group design.

Therefore, this study made use of an single group, taking a pretest on the group before subjecting it to Cognitive Behaviour Therapy or training after which the posttest was administered. The design can be summarized as follows:

Table3: Table of Presented Quasi experimental Design of the Study

Group	Pretest	Treatment	Post test
Group1	O1	x	O2

Below is the key interpreting he symbols used in the quasi experimental research of this study.

Key: O***1***--- Observed characteristics of participants at pretest

O***2***--- Observed characteristics of participants at posttest

X---- Treatment

3.3 Population

The population of this study included all the 2015/2016 NCE1 students of Kaduna State College of Education Gidan-Waya. They were about to complete their NCE one level going to NCE two level in their studies as at the time the research was being carried out. It was a heterogeneous population of students from different economic, socio-cultural and religious backgrounds. The students, as observed by the researcher, were all having their IAR each at various levels both the internal and external IAR.

The College is made up of five (5) schools and the data supplied had the distribution of the population thus: one thousand three hundred and nineteen from the School of Science, eight hundred and seventy nine students from the School of Arts and Social Sciences, four hundred and thirty five students from the School of Languages, five hundred and fifty students from the School of Primary Education and Early Childhood Education and six hundred and thirty two students from the School of Vocational and Technical Education. Therefore, summing them up together, there were three thousands, eight hundred and fifteen (3815) students at NCE One in the college tabulated as follows:

Table 4: Population Distribution of NCE One Students, 2015/2016 Session in KSCOE

S/N	SCHOOL	No of Males	No. of Females	Totals
1.	School of Science	782	537	1319(35%)
2.	School of Arts and Social Sciences	536	343	879(23%)
3.	School of Languages	208	227	435(11%)
4.	School of Primary & Early Child Care Education	274	276	550(14%)
5.	School of Vocational and technical Education	387	245	632(17%
	Total Number	**2187**	**1628**	**3815**
	Total Percentage	**(57%)**	**(43%)**	**(100%)**

Source: *Students Statistics (2016). Research and Statistical Unit, Kaduna State College of Education Gidan Waya*

3.4 Sample and Sampling Technique

. An intact class was` used for the study and sixty (60) participants were selected as sample for the study just as Lazzarro (2012) states that for as high degree of confidence as .95, the sample should be at least 40 or above. Therefore, to enable equal representation between male and female participants the techniques employed for selection of the participant was stratified sampling technique. Donald (2002), states that when selecting a sample from any research population that is made up of subjects with different attributes, stratified sampling technique is appropriate. Therefore, the respondents were divided into male and female strata so that fifty percent of each stratum was randomly selected for the study as stated in Holdcroft (2007). The sample used in the research can be viewed as shown below.

Table 5: Tabulated Sample of NCE 100 Level Selected for the Research

Group	No of Male	No of female	Totals
Intact Class	30	30	**60**

Source: Selected by the researcher: Field trip (2016)

3.5 Instrumentation

The quality of instruments used in research determines quality of the data of the research and the instruments used for data collection were adapted, modified and used. The instruments include the Rasch Model Intellectual Achievement Responsibility Scale and the Cognitive Behaviour Treatment Package.

3.5.1 Rasch Model Intellectual Achievement Responsibility Scale

According to Mannarini (2008), the 34 items Rasch Model Intellectual Achievement Responsibility scale was developed by Crandall, Katkovski and Crandall (1965) and it was y3adapted by the researcher so as to take care of cultural diversities. It has 34 items with reliability index ranges from 0.84 and 0.97 (Mannarini, 2008). The scale has the highest possible scores of 170 while 68 and below (<40%) is low IAR, 69-118 (41-69%) scores is moderate and 119 and above (70-100%) is high. Generally, less than 50% (below 84) score is considered external IAR because it represents the external proportion of scores on the Rasch Model IAR scale. Scores of 84 and above is considered internal IAR. The instrument is in form of 5- points Likert scale

Instrument Scoring System

The Rasch Model IAR Instrument is scored as follows:

Strong Agreed (SA) = 5 points

Agreed (A) =4 Points

Undecided (U) = 3 point

Disagreed (D) = 2 points

Strongly Disagreed (SD)= 1 point

Table 6: Scoring and Determining Intellectual Achievement Responsibility

IAR	SCORES RANGE	PERCENTAGE RANGE
External	Less than 84	Less than 50%
Internal	84-170	50-100%

Source: Solomon, Houlihan and Perelius (2000)

3.5.2 Pilot Testing

The instrument used in this research was pilot tested within the research population other than the experimental research sample. The pilot study was conducted by the researcher on Crandall Intellectual Achievement Responsibility to ensure that the respondents understand the items and they could be answered within the allocated time. Simple random technique was used to select thirty (30) students as the sample for the pilot study and they were selected from NCE one students outside the sample of the study to ensure they possess similar characteristics with the sample used for actual research. The data was collected, Cronbach Alfa reliability coefficient was obtained and the result showed reliability coefficient of .91 confirming that the instrument was reliable and good enough for the research.

3.5.3 Validity of the Instrument

To ensure that the Rasch Model Intellectual Achievement Responsibility instrument is valid both in terms of face and construct validity, it was validated. This was ensured by experts

from the Department of Educational Psychology and Counselling, Ahmadu Bello University, Zaria. Some of the corrections made include:

1. Typographical Errors in which some words were missing and others wrongly spelt (Item 5 and 19, page 69)
2. Unfamiliar Words and phrases such as “cranky” and “thought up an idea” were replaced with “moody” and “brought up an idea” (Item 14 and 24)
3. Informal language such as couldn’t, and wasn’t were replaced with could not and was not (Item 4)
4. The rating language was corrected from “totally disagreed” to ‘strongly disagreed’

3.5.3 Reliability of the Instrument

The psychometric property of the instrument was established through a conducted pilot study and the Rasch Model Intellectual Achievement Responsibility scale recorded a reliability coefficient of .91 (within the original .84 to .97 reliability of the scale). This reliability coefficient is high and it confirms the original reliability of the instrument. Thus, the instrument can be said to be reliable and suitable for the research. For the reliability print out, see Appendix D (page 83)

3.6 Control of Extraneous Variables

Extraneous variables such as experimental mortality, absenteeism, test administration, and gender bias, effect of testing environment, ecological factor and language problem tend to distort the validity of research data. Therefore, to ensure that any difference or relationship this research would yield by the pretest and post test result stand as the true effect of treatment, the researcher did best to control the above mentioned extraneous variable as follows:

In each administration of the instruments, were administered and collected immediately completed by respondents so as to avoid the effect of experimental mortality and absenteeism. Attendance record of the students was taken in each day of the treatment and the students appreciated for keeping their promise to be regular in each treatment. The researcher also ensured that the sample of 50% of the participants were male and 50% female so that each gender had equal representation. It was done that way to eliminate gender bias interference on the results which is in line with Holdcroft (2007), who states that equal representation of gender in the research sample is the best way of controlling the effect of gender bias in a research. To curb effect of test administration, the researcher personally administered the instruments and conducted the treatment to maintain consistency. In line with that, the same testing environment and instruments were used during both the pretest and posttest. In addition to the introductory letter, introducing the researcher to the participants, the researcher personally introduced himself to the students, an assurance that their responses would be treated with confidentiality and be used for the purpose of research solely. To correct the effect of ecological factor, the instrument was modified in consonant with words familiar to the target population. For instance, the word cranky was replaced with the word moody. Finally, to avoid misunderstanding of the language, the researcher read the instrument to the participants and also entertained their questions on the test instructions and items some of them wanted clarity.

3.7 Procedure for Data Collection

In this study, Intellectual Achievement Responsibility (IAR) scale was used for data collection. There was first a discussion with the sixty (60) participants so as to establish familiarity with them before the pretest. The administration was personally done by the researcher. Being a pretest and post-test quasi experimental research the Rasch Model

Intellectual Achievement Responsibility instrument was administered before the treatment (pretest) and after the treatment (posttest) to collect the desired data. The instrument was administered at the pretest for the identification of the students with internal and those with external Intellectual Achievement Responsibility, and was later used as the posttest after the subjects had been exposed to the therapeutic treatment and the difference between the pretest result and posttest result helped the researcher to evaluate the effectiveness of the treatment package. The treatment lasted for eight weeks and took place once in a week. An hour and a half was used for each session. The data was gathered by the researcher alone. The data were later analysed to arrive at the findings of this study.

3.8 Summary of Treatment Package

A Cognitive Behaviour Therapy Package was used to improve Intellectual Achievement Responsibility of the participants. The package was adapted from Mohammed (2014) and modified in line with Eight (8) ways in cognitive restructuring of students (Boyes, 2013). Therefore, it covered all elements of Cognitive Behaviour Therapy such as emotion, feeling and thought or thinking pattern. It aims at changing the thinking of the students from feeling of irresponsibility to being responsible for their academic successes or failure. The treatment took place in eight (8) weeks as stated below:

Week1: Introduction of all participants and pretest

Week2: Cognitive Therapy and Negative Feeling

Week3: Tracking Accuracy of Thoughts

Week4: Internal Thoughts and School Achievement

Week5: Involuntary Thoughts and Self-compassion

Week6: Challenging externally dependent factors or thoughts

Week7: Evaluating evidence for or against one's thoughts

Week8: Conclusion and posttest

(Details of the package is in Appendix E, page 73)

3.9 Procedures for Data Analyses

This researcher made use of descriptive statistics such as frequency count, simple percentage to determine the mean and standard deviation in the analysis of the bio-data of the respondents while inferential statistics (t-test) was used to analyse all the null hypotheses. All the hypotheses were tested at .05 level of significance.

CHAPTER FOUR

RESULTS AND DISCUSSIONS

4.1 Introduction

This chapter presents the results of this research work by presentation of the data collected for the study. The analyses of the data and discussion of the findings are stated from demographic data to hypotheses testing.

4.2 Demographic Data

The demographic data consists of the respondents' gender and their type on Intellectual Achievement Responsibility which is presented in frequency counts of result in both cases as shown in the tables.

Table7: Distribution of Participants By Gender

Gender	Count	Percentage
Male	30	50%
Female	30	50%
Total	**60**	**100%**

This table shows that out of the sixty (60) students used for the study, thirty (30) were male which constitutes fifty percent (50%). Female students were also thirty which also represents the fifty percent (50%) of the participants. This shows equal gender representation.

Table 8: Distribution of Students by Intellectual Achievement Responsibility

IAR	N	PERCENTAGE
External	39	65%
Internal	21	35%
Total	**60**	**100%**

Table 8 shows that 35 (65%) of the students have their Intellectual Achievement Responsibility external while 21 (35%) of them have internal Intellectual Achievement Responsibility before treatment. This suggests more of the participants having external IAR than those who had internal IAR

4.3 Testing of Hypotheses

Hypothesis One: There is no significant difference in the pretest and posttest score of internal Intellectual Achievement Responsibility among NCE students of Kaduna State College of Education

Table 9: t-test Difference Between Pretest and Posttest of Students' Internal IAR

Internal IAR	N	Meanف	Std. Deviation	df	t-Cal	t-Crit.	P-Value	Decision
Pretest	21	95.4762	7.8587	20	7.239	1.721	.000	Significant
Posttest	21	123.8571	21.08147					

p-value<.05 at 20 df 2-tailled

Table 9, reveals the pretest mean of 95.4762and the posttest mean of 123.8571 indicating a difference between the posttest and the pretest result attributed to treatment. The analysis also reveals the t-calculated value of 7.239, and the t-critical value of 1.721at .05 level of

significance. Since the t-calculated is greater than the t-critical, it also supports that there is difference between the pretest and the posttest of internal Intellectual Achievement Responsibility of the participants. More so, the p-value of .000 is less than .05 in the analysis denoting that significant difference exists between the pretest mean score and posttest mean score. From the above evidence, the null hypothesis which states that there is no significant difference in the pretest and posttest score of internal Intellectual Achievement Responsibility among NCE students of Kaduna State College of Education is hereby, rejected. This implies that the treatment of Cognitive Behaviour Therapy has effect on IAR of students by increasing the internal IAR

Hypothesis Two: There is no significant difference in the pretest and posttest score of external Intellectual Achievement Responsibility among NCE students of Kaduna State College of Education

Table 10: t-test Difference Between Pretest and Posttest of Students' External IAR

External IAR	N	Mean	Std. Deviation	df	t-Cal	t-Crit	P-Val	Decision
Pretest	39	63.5833	11.59054	38	2.265	1.697	.0269	Significant
Posttest	39	52.5333	18.97316					

P-value<.05 at 38 df 2-tailled

Table 10 above shows the pretest mean score of 63.5833 and posttest mean score of 52.5333. The difference of 11.05 indicates a reduction in the external Intellectual Achievement Responsibility accountable to treatment. The t-Calculated value of 2.265 is higher than the t-critical value which is 1.697 at .05 level of significance, which suggests difference between the posttest and the pretest results. Supporting it, the p-value is .0269 which is less than .05 to prove

that a significant difference exists between the pretest and posttest of external Intellectual Achievement Responsibility. It is evident that CBT has effect on IAR by decreasing the external IAR of students. This justifies the rejection of the null hypothesis which states that there is no significant difference in the pretest and posttest score of external Intellectual Achievement Responsibility among NCE students of Kaduna State College of Education.

Hypothesis Three: There is no significant difference in the posttest score of internal Intellectual Achievement Responsibility of male and female students

Table 11: t-test Difference in Posttest Internal IAR Between Male and Female Students

Sex	N	Mean	S. Dev	df	t-Cal	t-Crit	P-Value	Decision
Male	11	131.800	25.66515	19	4.397	1.721	.002	Significant
Female	10	113.2000	1.78885					

P-value<.05 at df 19 (2-tailled)

The above table reveals that the internal IAR mean score of male participants is 131.800 and that of female students is 113.2000, showing the difference of 50.6 in favour of male students. The t-calculated value of 4.397 and the t-critical value of 1.729 at .05 level of significance were also found. Thus, the t-calculated value is higher than the t-critical value to mean that difference exists between the posttest mean scores of Internal Intellectual Achievement Responsibility of male and that of female students. More so, the p-value is .002, lower than .05 which denotes that there is significant differential effect of gender factor on Internal Intellectual Achievement Responsibility. It thus implies that CBT has differential effect on IAR on the basis of gender by favouring the internal IAR of the male students. Therefore, the

hypothesis which states that there is no significant difference in the posttest score of internal Intellectual Achievement Responsibility between male and female students is rejected.

Hypothesis Four: There is no significant difference in the posttest score of external Intellectual Achievement Responsibility of male and female students

Table 12: t-test Difference in Posttest External IAR Between Male and Female Students

Sex	N	Mean	Std Deviation	df	t-Cal	t-Crit	P-Value	Decision
Male	20	48.0000	6.01197	38	1.7367	1.697	.018	Significant
Female	19	57.000010	.49784					

P-value<.05 at df 37 (2-tailled)

Table 12 reveals the posttest mean score of 48.0000 for male students and 57.0000 for the female participants revealing the mean difference of 9.00 to the side of the female students. The table also shows the t-calculated value of 1.7367 and t-critical value of 1.697 at .05 level of significance. Therefore, the t-calculated is higher than the t-critical, suggesting differential effect of sex factor on the posttest mean score of external Intellectual Achievement Responsibility of students. More so, the p-value of .018 in the table of analysis above is lower than .05 level of significance, affirming a statistically significant difference between the two variables. By implication, it means that there is differential effect of CBT on IAR on the basis of gender by external IAR favouring the female students. Therefore, the null hypothesis which states there is no significant difference in the posttest score of external Intellectual Achievement Responsibility between male and female students is hereby rejected.

4.4 Summary of the Findings

The summary of the major findings of this research work is as follows:

1. Significant difference exists between pretest and posttest of internal IAR which means that CBT has significant effect on IAR by decreasing the internal IAR with (t=7.239, p=.000).
2. It was also revealed that CBT has significant effect on IAR by decreasing the external IAR of the students as the mean of pretest internal IAR with(t= 2.265, p= .029)
3. This finding shows that significant difference exists in the posttest internal Intellectual Achievement Responsibility in favour of the male students with (t=4.397, p=.002)
4. It was revealed that significant difference exists in posttest external IAR of students in favour of the female students with (t=1.7367, p=.018)

4.5 Discussion of Findings

The discussions of this finding cover all the hypotheses and the analyses of the research results in this manner.

The results of this research in table 9 shows a significant difference between the means scores of Internal Intellectual Achievement Responsibility before and after cognitive behaviour treatment. This represents a significant effect of Cognitive Behaviour Therapy on the Intellectual Achievement Responsibility of the participants. This result is in agreement with the findings of Hussainl, et'al (2015) which reveals that cognitive Behaviour Therapy improved the internal IAR of the students. Also confirmed the result of this study are the research works of Tarrier, et'al (2000), Cardiace, (2009), and Gerontol, (2010) who also found significance effect of cognitive Behaviour Therapy of participants. That means that at any level of internal IAR, a student can improve on his/her internal IAR through the right Cognitive Behaviour Therapy.

Under the same hypothesis one, table 10 also shows a significant effect of Cognitive Behaviour Therapy on the posttest external Intellectual Achievement Responsibility. This means that Cognitive Behaviour Therapy significantly affects students' Intellectual Achievement Responsibility external. Supporting these discoveries is the finding of Weinberg (2000) whose study also reveals that Cognitive Behaviour Therapy has effect on the Intellectual Achievement Responsibility of students on both the internal and the external responsibility. This result is not contrary to the findings of Basavarajappa, (2013) which found that cognitive training has significant effect on external Intellectual Achievement Responsibility. This suggests that cognitive training is capable of improving the Intellectual Achievement Responsibility from external to internal.

This study in the second hypothesis, table 12 reveals that there is a significant difference in the posttest internal Intellectual Achievement Responsibility of subjects on the basis of gender. The study reports the posttest means score of male students higher than the means score of female students. This finding agrees with the result of study carried out by Guril (1966)who earlier found difference in the posttest mean scores of male and female students' internal Intellectual Achievement Responsibility with the male students scoring higher than their female counterparts. However, Basavarajappa, (2013) found no significant differential effect CBT between male and female students. A more contrary result is the research work of Solomon, et'al (2000) who found significance differential effect of CBT on internal IAR on the basis of gender with the female scoring higher than male students in the internal IAR. We can balance the gap with the result of the work of Cooper, et'al (2000) who put girls to have scored higher than boys at the end of the school year while boys scored higher than girls in the elementary school in the internal to settle the debate, Susan and Denis, (1997) found male students scored higher than

female students in internal IAR. Here it shows the effect of gender factor on internal achievement responsibility to be in favour of boys. It means that male students are more internally responsible than female student. Just as Santrock (2004) emphasizes the role of social environment on personality, it is obvious that societal culture plays a conditioning role on the woman, making her feel she has to depend on men and relate her fortunes to helps received from powerful others.

In table 12, it also shows a significant difference between the posttest mean score of external intellectual achievement of male and female students with the female students scoring higher. In other words, female students manifest more external intellectual responsibility than male students. Contrary to this result, are the findings of Khanehkeshi, (2014) and Lewycky, (2010) who found no significant effect of gender factor on external IAR. However,Nwoke, Eskay and Ngboke (2013), Susan and Dennis (1997), Guril, (1966) and Gardner, (2016) all confirmed that a significant different exists in the effect of CBT on IAR external between male and female students and female students scored higher than male students. This shows the effect of CBT on external IAR differ between male and female students.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of this research, conclusions based on analyses from the study and recommendations made as follows:

5.2 Summary

The research was conducted on the effect of Intellectual Achievement Responsibility and academic performance among NCE students in Kaduna State. The scope of the studies covers all the 100 level of 2015/2016 session of Kaduna State College of education GidanWaya. Pretest and posttest quasi experimental design was employed in the research. Four hypotheses in line with the objectives were raised to guide the study and previous literature were consulted for conceptual and theoretical frame works, and review of empirical studies. Cognitive behaviour training package of eight sessions was adopted and modified and used in the treatment of the Intellectual Achievement Responsibility of the subjects. The training lasted for two months and the data from both pretest and posttest were analyzed using both t-test and PPMC correlation. An instrument was also used in the study, namely, the Crandall Model Intellectual Achievement Responsibility. A pilot study was conducted within the research population outside the sample for the study so that their reliability coefficients were determined and found to be positively very high in each case.

Using Statistical Package for Social Science (SPSS) for the data analysis, the results of this study reveals that Cognitive Behaviour Therapy had significant effect on students' Intellectual Achievement Responsibility. It was also discovered that there was significant difference in the

differential effect of gender on the external Intellectual Achievement Responsibility of the participants and significant difference was found between the mean score of male and female students' posttest internal Intellectual Achievement Responsibility.

5.3 Conclusion

The following conclusions were made from the results of the data analyses and interpretation of this study.

Cognitive Behavior Therapy increases Intellectual Achievement Responsibility internal and reduces the external Intellectual Achievement Responsibility among students. Thus, CBT has positive effect on IAR by increasing internal IAR and decreasing external IAR. More so, differential effect exists between male and female students and internal IAR favours male students while external IAR favours the female students.

5.4 Recommendations

From the findings of this study and conclusions made, the researcher recommends the following:

1. Counselling psychologists in school should use psychological intervention such as Cognitive Behaviour Therapy in promoting internal Intellectual Achievement Responsibility of students
2. Cognitive Behaviour Therapy should also be used in reducing external Intellectual Achievement of students.
3. More attention should be given to the female students with respect to the application of CBT in to improve the internal Intellectual Achievement Responsibility of students.

4. More effort should be made on the part of female students in reducing their external intellectual Achievement Responsibility.

5.5 Contributions to Knowledge

This research work has made a significant contribution to the field of learning. Below are the contributions of this study to knowledge.

1. This study has brought to the fore that Cognitive Behavior Therapy has significant effect on IAR of students with (t=7.239, p=.000) for the internal IAR and (t=2.265, p=.0269) for the external IAR.

2. The study has clearly revealed that differential effect exists on gender in favour of male students on internal IAR with (t=4.397, p=.002) and in favour of female students on external IAR with (t=1.7367,p=.018)

5.6 Suggestions for Further Studies

The following suggestion is put forward by the researcher for further studies:

1. Effect of Cognitive Behaviour Therapy on Intellectual Achievement Responsibility among primary school students.

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Appendix a: Introduction Letter to Kaduna State College of Education

DEPARTMENT OF EDUCATIONAL PSYCHOLOGY AND COUNSELLING,
FACULTY OF EDUCATION,
AHMADU BELLO UNIVERSITY, ZARIA

Our Ref: _____ **Date:** 13/07/2016

DEPUTY PROVOST
KADUNA STATE COLLEGE
OF EDUCATION GIWAYA
KAFACHAN, KADUNA STATE

Dear Sir,

STUDENTS' FIELD RESEARCH

The Department of Educational Psychology and Counselling, Ahmadu Bello University, Zaria requires each student working for a Degree to complete a research ~~Project~~/~~Thesis~~/Dissertation. They are therefore required to collect data for the research studies.

Most of them will need to be allowed access to certain relevant documents and some valuable information which you may have.

Please accord them all the necessary assistance.

TOPIC OF RESEARCH:
EFFECT OF COGNITIVE BEHAVIOUR THERAPY ON INTELLECTUAL ACHIEVEMENT RESPONSIBILITY AND ACADEMIC PERFORMANCE AMONG NCE STUDENTS OF KADUNA STATE, NIGERIA

Thank you for your continued cooperation

Yours sincerely,

Research Adviser 2/8/16

DEPARTMENT OF EDUCATIONAL PSYCHOLOGY AND COUNSELLING A.B.U. ZARIA

APPENDIX B: REPLY FROM KADUNA STATE COLLEGE OF EDUCATION

KADUNA STATE COLLEGE OF EDUCATION, GIDAN-WAYA

P. M. B. 1024

KAFANCHAN, NIGERIA

PROVOST: Gajere Hope Joseph
NCE, B. Ed, M. Ed.

AG. REGISTRAR: Suleiman Tasiu Isma'il
BA(HONS), Graduate Cert., NIM.

☎: 061-20515
TELEGRAM. KADSOLEG
GIDAN-WAYA, KAFANCHAN
E-mail: Infookscoedu@yahoo.co.uk
08064565761, 08182078188

EDUCATION FOR HUMANITY

Mr Alexander Tohanna
REF: Department of Psychology.

Date: 6th September, 2016

Sir,

RE:APPLICATION FOR ACADEMIC RESEARCH DATA.

I am writing to acknowledge the receipt of your letter dated on the above subject matter.

(2) The statistical unit has worked tirelessly to sample out all the records requested by you.

(3) In respect of the above, I kindly write to provide you with data you requested.

(4) It is hoped that the data would be useful to you to lift up the image of the college to a standard of excellence.

Thank you.

DEPUTY REGISTRAR
ADMISSION EXAMS & RECORDS

D.J. Tukurah
Deputy Registrar
Admission/Exams & Records
For Ag. Registrar

Motto: Education for Humanity

Appendix C: Questionnaire

Department of Educational Psychology and Counselling

Faculty of Education

Ahmadu Bello University, Zaria

Nigeria

Dear Sir/Madam

I am a post graduate student of Educational Psychology from the above named institution carrying out a research on, The Effect of Cognitive Behaviour Therapy on Intellectual Achievement Responsibility among Students of Kaduna State College of Education Gidan Waya, Nigeria. Therefore, Intellectual Achievement Responsibility instrument is designed for your appropriate responses. You are assured that all information provided will be treated in strict confidentiality and be uterlized purely for academic purpose.

Thank you for the anticipated co-operation

Yours Faithfully,

……

Alexander Yohanna

***Section One*: Demographic Data**

Fill in the provisions below with the required information

1. Name of School……
2. Registration number…….
3. Sex……..Male/Female

Section Two: Intellectual Achievement Responsibility Instrument

Responses are to follow the format below

Strongly Disagree (SD) =1

Disagree (D) =2

Undecided (U) =3

Agree (A) =4

Strongly Agree =5

The Intellectual Achievement Responsibility Scale

S/N	**ITEMS/ QUESTIONS**	**SA**	**A**	**U**	**D**	**SD**
01	If a teacher passes you to the next grade it would probably be because she/she likes you.					
02	When you do well on a test at school, is it more likely to be that the test was easy.					
03	When you have trouble understanding something in school, is it usually because the teacher did not explain it well.					
04	When you read a story and can't remember much of it, is it usually because the story wasn't well written.					
05	Suppose your parents say "you are doing well in school", is it likely to happen because they are in good mood.					

06	Suppose you did better than usual in a subject at school. It would probably happen because someone helped you.					
07	When you lose at a game of cards or checkers, it usually happens because the other player is good at game.					
08	Suppose a person does not think you are very bright or clever, it happens because they are people who will think you're not very bright no matter what you do.					
09	If you solve a puzzle quickly, is it because it was not a very hard puzzle.					
10	If a boy or girl tells you that you are dumb, is it more likely that they say that because they are mad at you.					
11	Suppose you study to become a teacher, scientist, or doctor and you fail. It is because you seek some help, and other people didn't give it to you.					
12	When you learn something quickly in school, is it usually because the teacher explained it clearly					
13	If a teacher says to you, "Your work is fine," is it just something teachers usually say to encourage students?					
14	When you find it hard to work on arithmetic or mathematics problems at school, it is because the teacher gave problems that were too hard					
15	When you forget something you heard in class, is it because the teacher did not explain it very well.					
16	Suppose you were not sure about the answer to a question your teacher asked you, but your answer turned out to be right. It happened because she wasn't as particular as usual.					
17	When you read a story and remember most of it, is it usually because the story was very interesting.					
18	If your parents said you act silly and not thinking clearly, is it more likely to be because they happen to be feeling moody.					

19	When you do not do well on a test at school, is it because you did not study well.					
20	When you win at a game of cards or checkers, it happens because you play really well.					
21	If people think you are bright or clever, is because you usually act that way.					
22	If a teacher didn't pass you to the next grade, it would probably be because your school work was not good enough.					
23	Suppose you do not do as well as usual in a subject at school, it would probably happen because you were not as careful as usual.					
24	If a boy or girl tells you that you are bright, it is usually because you brought up a good idea.					
25	Suppose you became a famous teacher, scientist or doctor. Do you think this would happen because you worked very hard.					
26	Suppose your parents say you aren't doing well in your school work. Is this likely to happen more because your work isn't very good.					
27	Suppose you are showing a friend how to play a game and he/she has trouble with it, it would happen because you could not explain it well.					
28	When you find it easy to work arithmetic or mathematics problems at school, is it usually because you studied your book well before you tried them.					
29	When you remember something you heard in class, is it usually because you tried hard to remember.					
30	If you cannot work on a puzzle, it is more likely to happen because you are not especially good at puzzles.					
31	If your parents tell you that you are bright or clever, it is more likely because of something you did.					

32	Suppose you are explaining to someone how to play and he learns quickly, it would happen because you explain well.					
33	Suppose you are not sure about the answer to a question your teacher asks you and the answer you supplied turns out to be wrong. It is likely to happen because you answered too quickly.					
34	If a teacher says to you, "Try to do better," it would be because your work was not as good as usual.					

Source: Adapted from Crandall, Katkovski and Crandall (1965)

Appendix D

COGNITIVE BEHAVIOUR THERAPY PACKAGE

SESSION ONE

Topic: Introduction

Time: 1 Hr 30 min

Objectives:

i) The introduction of selves by both the therapist and the students.

ii) The therapist's explanation of his mission

iii) Establishing a friendly relationship with the students.

iv)To establish the goal of the counselling process

Step I: The therapist introduces himself to the students

Step II: The therapist introduces to the students the type of relationship he intends to establish: that is, counsellor-client relationship for Cognitive Behaviour Therapy

Step III: The therapist explains to the students his responsibilities during the therapy, which are to give each of them assignments and guide them to discuss how the issue affects them.

Step IV: The therapist then emphasizes the importance of developing a cooperating relationship

Step V: The goals of the whole counselling relationship will then be set collectively between the therapist and the students which is treatment of cognitive behavioural problem

Step VI: The therapist then asks for the responds of the students in accepting the commencement of the process or otherwise eg can we now commence our therapeutic process?.

Step VII: The therapist concludes the session and appreciates the students for their time.

Assignment: *Practice to notice 5 instances you feel that either: charm, spirit or witchcraft makes you fail or succeed in school.*

COGNITIVE BEHAVIOUR THERAPY SESSION TWO

Topic: Cognitive therapy and Negative Feeling

Time: 1HR 30 min

Objectives:

5.6.1 Focus of Cognitive Behaviour Therapy

5.6.2 Making students to practice noticing if they are having negative feelings that charm, spirit, or witchcraft make them to succeed or fail academically.

Step I: The therapist welcomes students to the second session of the therapeutic process. For instance, students how are you today?

Step II: Introduction of the main objectives of the session by the therapist as stated earlier.

Step III: Introducing what CBT can do to the students' negative feelings. For instance, what do you think CBT can do to your thinking pattern?

Step IV: The therapist asks students to state from the assignment, good or bad events they practice to notice during the week which they attribute to charm, spirit or witchcraft. Eg, in your practice, what are the events you quickly realized you were as usual, attributing to charm, spirit, witchcraft or powerful others?

Step V: The therapist guides the students to discuss each of their responses as stated in IV above as being related to Cognitive Behavioural problem.

Step VI: The therapist gives the students homework which will form part of the next session. *List five factors you inaccurately feel are responsible for your academic grades in the courses you did well and five factors for the courses you did not do well.*

COGNITIVE BEHAVIOUR THERAPY SESSION THREE

Topic: Tracking Accuracy of thoughts

Time: 1hr 30hr

Objectives:

i)To identify inaccuracy of thought of the students

ii) To track the accuracy of thoughts through rumination

iii) Help students see relationship between external Intellectual Achievement Responsibility and failure.

Step II: The therapist gives the students a very warm reception so they feel at home and be relaxed for the collaborative session to commence;

Step III: The therapist and the students discuss on the homework given in the previous session. Eg, did you sense any inaccurate thought relating the courses you scored well and those you did badly?

Step IV: During the discussion, inaccurate thoughts will be identified one by one from the previous assignment for the students, eg were you unlucky when you scored low marks or there was something you needed to do which you did not?

Step V: The therapist guides the students to track the accuracy of thoughts by record of difficult academic activities in which ruminated thought led to the solution to the problem. Eg, could you see that the more time spent ruminating leads to a better solution?

Step V: The therapist guides the students to relate the inaccurate thought to academic failure and express their feelings. For instance, what is your tendency to study hard when it appears to you that hard work does no longer pay?

Step VI: While expressing their feelings, the therapist explains what the therapeutic process can do to help the students to change the unwanted cognitive behaviour.

Assignment: *Analyze the previous homework and identify areas where you feel to be blamed for your academic achievement.*

COGNITIVE BEHAVIOUR THERAPY SESSION FOUR

Topic: Internal thoughts and school achievements

Time: 1.30 min

Objectives:

i. To help the students to identify internal thoughts from their homework responses.
ii. To help the students see relationship between internal thoughts and learning effort.

Step I: The therapist welcomes the students to another session of the therapeutic process

Step II: The therapist requests responses from the previous assignment and guides the students to identify the areas they manifest inward thoughts. For instance, what academic achievement have you ever noticed that came about as result of your effort?

Step III: The therapist allows the students to discuss the relationship between the Internal thoughts and express their feelings. Eg, when you notice that the more you practice an activity that is how you perfect it more: does that make you practice it more?

Step IV: The therapist stresses to the students on how the therapy can help in changing negative cognitive behaviour. Thus, don't you think that your experience worth you changing your pattern of thinking?

Step V: The therapist gives opportunity for teacher- students' interaction and asking questions.

Step V: The therapist appreciates the students in conclusion of the session

Assignment: *Write down ten most frequent involuntary thoughts and feelings of your life that attribute situations to chance, luck, fate or powerful others.*

COGNITIVE BEHAVIOUR THERAPY SESSION FIVE

Topic: Involuntary thoughts and Self -compassion

Time: 1hr 30 min

Objectives:

i) Identify most frequent areas of involuntary thoughts or feelings that chance, luck, and powerful others are to be blamed for academic success.

ii) Examine evidence against the negative assumptions as a result of involuntary feelings.

Step I: The therapist warmly welcomes the students into another session, expressing unconditional regards for them. Eg, I am happy to have you again!

Step II: The therapist and the students discuss on the students' negative involuntary thoughts about situation as written down during the home work. For instance, can you feel guilty for not taking responsibility? Are you not ashamed for not putting in your best but giving up to fate?

Step IV: The therapist asks the students to reason on the written thoughts for a while and involuntary feelings. Eg, pause for three minutes and think of opportunities you can enjoy by controlling your events and the world around you.

Step V: Students discuss the evidence against the believing in the thought that chance, fate and powerful others control a person's academic situation. For instance, if one is careful to write clearly will there be chance that the examiner will find his/her answers difficult to be read?

Step VI: The therapist informs the students of the end of the session and gives room for questions

Assignment: *Write down ten (10) academic situations you considered demanding to depend on powerful others, chance, luck or fate to perform them.*

COGNITIVE BEHAVIOUR THERPY SESSIONS SIX

TOPIC: Challenging Externally Depended Factor and thoughts

Time: 1hr 30min

Objectives:

i) To challenge the externally depended factors stated in the assignment,

i) To guide the students to positively think of effort that could be made to improve their grades.

Step: As usual, the therapist welcomes the students into another session of the therapy in a cordial manner.

Step II: The therapist asks the students to submit their assignments as he goes through them

Step III: Each assumed difficult academic situation is discussed in class with the students, reasoning on ideas or efforts that could have improved each academic difficulty.

Step IV: Each situation is picked and critically re-examined to see whether they were actually demanding external dependency

Step V: The therapist then clearly offers his support to the students appreciating the kind of collaborative sessions they have had.

Step VI: The therapist gives room for question or contributions from the students from any related areas.

Assignment: *i) Think of five incidences where you quit and 5 incidences where extra effort earned success for you in the past. ii) record five bad mistakes or events this week where you*

tend to attribute it to luck, chance or external powerful others and control your feelings to consider it your mistake and feel regretful.

COGNITIVE BEHAVIOUR THERAPY SESSION SEVEN

Topic: Evaluating Evidence for/against one's thought

Time:1hr 30 min

Objectives:

i) To discuss instances in which students quit struggle at the edge of success

ii) To discuss instances where extra effort yielded success to the students in life situations

iii) To discuss instances where the students control negative thoughts during the week

Step I: The therapist welcomes the students into another session of the therapy.

Step II: The therapist leads the students to read and discuss their home works on areas where they gave up at the edge of success. . Eg, have you ever failed and later discovered that an extra effort could have yielded success?

Step III: The therapist asks the students to think and discuss instance where extra effort earned them success. Eg, have you ever lost patience waiting for someone but in the extra few minutes added, the person arrived?

Step IV The therapist then discusses with the students the recorded negative events that they challenge their feelings due to chance or powerful others and regretted for being the cause of it. Eg, do you see that if you had studied well, you would have passed the test?

Step V: The therapist asks the clients how the therapeutic sessions are affecting them. For instance, what is your experience in the Cognitive Behaviour Therapy.

StepVI: The therapist concludes the session by thanking the student and reminds them of the last session in the following week

COGNITIVE BEHAVIOURAL THERAPY SESSION EIGHT

Topic: Conclusion

Time: 1hr 30 min

Objectives:

- To summarize the treatment process
- Conduct posttest
- Appreciate the students

Step I: The therapist welcomes the students to the last session of the interaction with them.

Step II: The therapist recapts the process of the therapy reflecting on Cognitive Behaviour Therapy as a means of treatment of inaccurate thoughts such as Intellectual Achievement Responsibility.

Step III: The therapist states the objectives of the session and explains instructions of the test

Step IV: The researcher administers the Intellectual Achievement Responsibility Scale

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Source: Adapted from Boyes (2013) and Mohammed (2014)

Schedule of Treating Intellectual Achievement Responsibility

Days	*Hours*	*Activity*
Tuesday	1hr 30 min	first session
Tuesday	1hr 30 min	Second session
Tuesday	1hr 30min	Third session
Tuesday	1hr 30min	Fourth session
Tuesday	1hr 30min	fifth session
Tuesday	1hr 30min	sixth session
Tuesday	1hr30min	Seventh session
Tuesday	1hr30min	Eight week

AppendixE

IAR Reliability on Cronbach Alpha

```
RELIABILITY   /VARIABLES=Q1 Q2 Q3 Q4 Q5 Q6 Q7 Q8 Q9 Q10 Q11 Q12 Q13 Q14 Q15
Q16 Q17 Q18 Q19 Q20 Q21 Q22 Q23 Q24 Q25 Q26 Q27 Q28 Q29 Q30 Q31 Q32     Q33
Q34   /SCALE('ALL VARIABLES') ALL   /MODEL=ALPHA.


[DataSet1] C:\Users\user\Documents\Reliability CronbachAlpha.sav
```

Case Processing Summary

		N	%
Cases	Valid	30	58.8
	Excluded[a]	21	41.2
	Total	51	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.913	34

Appendix F: Print Out of Analysis

Pretest and Posttest of Internal Intellectual Achievement Responsibility

```
T-TEST PAIRS=postinternIAR WITH preInternlIAR (PAIRED)   /CRITERIA=CI(.9500)
/MISSING=ANALYSIS.

[DataSet1] C:\Users\user\Documents\A pre-post internal IAR scale raw.sav
```

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	postinternIAR	123.8571	21	21.08147	4.35213
	preInternlIAR	95.4762	21	7.85887	1.71495

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper			
Pair 1	postinternIAR - preInternlIAR	36.00000	22.79035	4.97326	25.62596	46.37404	7.239	20	.000

Pretest and Posttest of External Intellectual Achievement Responsibility

```
T-TEST PAIRS=postinternIAR WITH preInternlIAR (PAIRED)
  /CRITERIA=CI(.9500)
  /MISSING=ANALYSIS.
```

Group Statistics

	PosttestIAR	N	Mean	Std. Deviation	Std. Error Mean
PretestIAR	>= 37.00	24	63.5833	11.59054	2.36591
	< 37.00	15	52.5333	18.97316	4.89885

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper			
Pair 1	Postextern IAR pretexternl IAR	31.00000	20.45035	3.17396	19.62596	39.37404	2.265	38	.0269

Posttest of Female and Male Student's Internal Intellectual Achievement Responsibility

```
T-TEST PAIRS=postinternIAR WITH preInternlIAR (PAIRED)
  /CRITERIA=CI(.9500)
  /MISSING=ANALYSIS.
```

Group Statistics

	FemaleINTERNIAR	N	Mean	Std. Deviation	Std. Error Mean
MaleInterIAR	>= 97.00	5	131.8000	25.66515	11.47780
	< 97.00	5	113.2000	1.78885	.80000

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
MaleInterIAR	Equal variances assumed	18.128	.003	4.397	8	.002	50.60000	11.50565	24.06792	77.13208
	Equal variances not assumed			4.397	4.039	.011	50.60000	11.50565	18.77605	82.42395

Posttest of male and female IAR

T-TEST GROUPS=exterIARmale(76) /MISSING=ANALYSIS
/VARIABLES=exterIARfemale /CRITERIA=CI(.95).

Group Statistics

	exterIARmale	N	Mean	Std. Deviation	Std. Error Mean
ExterIARfemale	>= 77.00	1	57.0000	10.49784.	.
	< 77.00	18	48.5556	6.01197	1.41704

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
ExterIARfemale	Equal variances assumed	.	.	1.767	17	.018	8.44444	6.17671	-4.58728	21.47617
	Equal variances not assumed			.	.	.	8.44444	.	.	.