

**EFFECT OF STUDY SKILLS TRAINING COUNSELLING TECHNIQUE ON
DEFECTIVE STUDY HABITS AMONG SENIOR SECONDARY SCHOOL STUDENTS
IN NASSARAWA ZONAL EDUCATION DIRECTORATE, KANO STATE, NIGERIA**

By

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DEDICATION

I dedicate this work to my parents Malam A.A Kundila and HajiyaAishatu Usman

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In the Name of Allah, the Compassionate, the Merciful. All Praise to ALLAH (S.W.T) for giving me the strength, and endurance to complete this study. May the peace and blessings of Allah be upon Prophet Muhammad (SAW) his companions and members of his household.

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OPERATIONAL DEFINITION OF TERMS

Study Habit: This is a behavior style that is systematically formed by students towards learning and Academic achievement.

Study Skills Training: Refers to the use of (SQ3R), survey, question, read, recite and review technique as well as time management strategies to facilitate the process of information of the students with Defective Study Habits s.

Defective Study Habits: Refers to having wrong attitude to study or Inability to study Appropriately as identified by the research instrument(Defective Study Habit Inventory).

Abstract

The study investigated the effect of Study Skills Training on defective study habit among Senior Secondary School Students in Nassarawa Zonal Education Directorate, Kano State. The main objective of the study is to find out the effect of Study Skills Training Counselling Technique on defective study habit among Senior Secondary School Students of Nassarawa Zonal Directorate, Kano State. Based on these, one research question and three correspondent hypotheses were tested. The study adopted quasi experimental design in form of pretest posttest design. The population of this study comprised 141 Senior Secondary School Two (S.S.S. II) with defective study habit in Nassarawa Zonal Education Directorate, Kano State, while 60 students were proportionately sampled. The data collection instrument used for the study was an adapted instrument namely: Defective Study Habit Inventory, which was adapted from Academic Resource Center. Content validity of the instrument was obtained and the reliability of the instrument used for this study was established using the test re-test method, Pearson Product Moment Correlation Co-efficient was used to compute the correlation co-efficient of the instrument. The reliability index of 0.68 was established. Descriptive statistics in form of frequency and percentage was used to analyze the research question, while t-test for related sample was used to test hypothesis one and t-test for independent was used to test hypotheses two and three at 0.05 level of significance. The study found that: the prevalence of defective study habit among senior secondary school students in Nassarawa Zonal Education Directorate, Kano State is high 39.39%, there is significant effect of Study Skills Training Counselling Technique on defective study habit among senior secondary school students of Nassarawa Zonal Education Directorate, Kano State, there is significant difference in the posttest mean scores of defective study habit between male and female senior secondary school students exposed to Study Skills Training Counselling Technique in Nassarawa Zonal Education Directorate, Kano State and there is no significant difference in the posttest mean scores of defective study habit between Fagge and Nassarawa Local Government senior secondary schools students exposed to Study Skills Training Counselling Technique in Nassarawa Zonal Education Directorate, Kano State. Based on the findings, it was recommended that school counsellors should encourage the use of Study Skills Training counselling technique in handling defective study habits and other related academic concerns.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Study habit are approaches students apply to learning and are generally critical to academic success. They can be negative or positive and many counselling interventions can help in imposing positive or good study habits on students. Good study habits are an array of skills which tackle the process of organizing and taking in new information and retaining it. They include effective memories which aid the retention of lists of information, effective reading styles, collaborative learning, concentration techniques and efficient note taking. Therefore, inability by the learner to take, organize and retain information lead to defective study habits.

Good study habit is one of the most integral inputs on the part of the learner which makes effective learning to take place. For students to attain successful achievement in their academic pursuit, they need to have good study habits. Each individual needs to understand the pattern of studies to adopt in order to excel in the course of one's studies. Most students perform below average due to defective study habits (Abdullahi, 2008). Some students usually have problem getting started, some researchers are of the opinion that it is not easy to ascertain study habits as they are not universal but relative among individuals. For instance, Premalakshmi (2012) stated that there is no yardstick to measure the types of study habit because it is an individual ability which may be inherited or acquired. Some children like to study alone, some prefer to study in group, and some read aloud while some read silently. In addition, Katelyn (2013) is of the opinion that there is no doubt different people study in different ways and that it is a near certainty that what works for one person may not work for another.

The researcher was motivated to go into this study because of the rate at which students in Nassarawa zonal Directorate tend towards defective study habits nowadays. The situation has degenerated to a point where most students are involved with so many activities aside their studies, they skip reading their notes after lessons; they keep postponing their time of studies and end up studying for exams very late therefore all books are piled up to be read at once, the researchers experience as a teacher reveals that most students do not want to study judiciously. There is need to encourage good study habits among students in order to attain standard and qualitative education. Each individual needs to understand suitable approaches to use when studying. Students often get confused on how to start studying for exams with lots of unread notes within a short period of time. This shows clearly that there is urgent need to improve the study habit of students for better attainment of results.

The issue of Defective Study Habits among students might result to malpractice during examination or failure. Therefore, a lot of counselling efforts and interventions are needed from the school counsellors, in order to enhance the study habits of the students such as cognitive restructuring counselling technique which help in changing the perceptions of students towards positive study habits.

Study skills Training are learning strategies that help students organize process and use information effectively. (Kerka, 2007). They can be classified into two, namely broad and specific study skills. The Broad study skills include cognitive based strategies, repetitive strategies, meta-cognitive based strategies and procedural or organizational-based strategies. The specific study skills include reading strategies, time management skills, note taking methods, consultations/help seeking strategies, library use skills and concentration strategies.

1.2 Statement of the Problem

This study assessed the effect of Study Skills Training on Defective Study Habit among senior secondary school students in Nassarawa Zonal Education Directorate, Kano State. The issue of defective study habits has been very rampant in various institutions of learning in Nigeria and in Kano state in particular. It is self-evident Defective Study Habits that widespread and availability of personal computers, mobile phones, internet and satellite television channels ushered in this era which create bad study habit are detrimental to students' academic achievement. This has led to massive failure, school drop-out, examination malpractice, truancy, and hard drugs to mention but a few. This trend is dangerous not only to the educational sector but also health wise. This has been an issue of immense concern to the teachers, parents, and counsellors.

When a student fails to possess competencies of organizing his time, effective studying of course materials and not meeting academic requirement and successful completion of their studies, then such will not be successful academically because the students do not have good study habits. Defective Study Habits make homework and assignments become tougher, workload gets heavier and studying ahead of exams becomes more of a challenge for secondary school students in Nigeria. But with effective acquiring effective study habits through Study Skills Training Counselling Technique which most of parents and teachers are ignoring is the best way to tackle the issue of bad study habits among students. Through effective study habits training students learn to improve their ability to better retain reading materials, organize a time table for study, approaching studies with the right attitude, choosing the right environment, minimizing distractions, setting a realistic schedule among others. Study Skills Training counselling technique is found worthy in shaping students' attitude towards learning.

Students prefer to watch movies, home videos, spend hours or even a whole night browsing at cyber cafes instead of reading their books (Omoegun, 2012 as cited in Segun, 2017). It is therefore necessary for students who will soon be graduating from secondary school and looking forward to enrolling in tertiary institutions to develop good study habits.

1.3 Objectives of the Study

The following are the objectives of the study:

1. To find out the prevalence of defective study habits among senior secondary school students in Nassarawa Zonal Education Directorate, Kano State.
2. To find out the effect of Study Skills Training Counselling technique on defective study habits among senior secondary school students in Nassarawa Zonal Education Directorate, Kano State.
3. To find out the difference in the mean scores of defective study habits between male and female senior secondary school students exposed to Study Skills Training Counselling technique in Nassarawa Zonal Education Directorate, Kano State.
4. To find out the difference in the mean scores of defective study habits between Fagge and Nasarawa Local Government senior secondary school students exposed to Study Skills Training Counselling technique in Nassarawa Zonal Education Directorate, Kano State.

1.4 Research Questions

The following research questions were formulated to guide the study:

1. What is the prevalence Defective Study Habits among senior secondary school students in Nassarawa Zonal Education Directorate, Kano State?

1.5 Hypotheses

The following null hypotheses were tested at 0.05 level of significance:

Ho1: There is no significant effect of Study Skills Training Counselling technique on Defective Study Habits among senior secondary school students of Nassarawa Zonal Education Directorate, Kano State.

Ho2: There is no significant difference in the posttest mean scores of the Defective Study Habits between male and female senior secondary school students exposed to Study Skills Training Counselling technique in Nassarawa Zonal Education Directorate, Kano State.

Ho3: There is no significant difference in the posttest mean scores of the Defective Study Habits between Fagge and Nassarawa Local Government senior secondary schools students exposed to Study Skills Training Counselling technique in Nassarawa Zonal Education Directorate, Kano State.

1.6 Significance of the Study

The study investigated the effect of study skills training on defective study habits among senior secondary school students of Nassarawa Zonal Education Directorate, Kano State. The Outcome of this study is significant as it will benefit the following: students, teachers, counsellors, researchers and parents. The study will benefit the students as it gives them good hints and techniques to be used for their studies. The study will be useful to the students as it helps in creating better understanding of good study habits which will lead to successful attainment of their pre-planned goals.

The outcome of the study may persuade secondary school teachers that problem of bad study habits among students could be greatly remedied using study skills training and bring to light the importance of counselling in the achievement of some important educational objectives by making referrals to school counsellors.

The outcome of this study may also help authorities and parents to understand the destructive effect of Defective Study Habits s which will encourage them to accord it the attention it deserves. In addition, the outcome will bring to light causes, manifestations and remedies of defective study habits among secondary school students. This will help authorities and teachers in reducing the exposure of students to forces that attract students to develop Defective Study Habits s such as the Internet, entertainment industry and drugs.

The study will also serve as a further enrichment of current literature especially in counselling profession and study habits among students. This will help researchers, students, policy makers, parents, school counselors and school administrators in curbing the menace of defective study habits among students.

1.7 Scope and Delimitation of the Study

This study assessed the effect of study skills training on defective study habits among senior secondary school students in Nassarawa Zonal Education Directorate, Kano State. The scope of the study was senior secondary school students under Kano state senior secondary school management board (KSSSMB), therefore, the secondary schools under science board and other private schools were delimited from the study. The study covered senior secondary school students both male and female in Nassarawa Zonal Education Directorate, Kano State, therefore junior secondary school students were delimited from the study. The study also covered senior

secondary school students who shows symptoms of defective study habits as measure the instrument of the study.

The study also covered senior secondary school students two, this implies that other class level such as SSS I and SSSIII students were delimited from the study. And the study assessed the effect of study skills training on defective study habit, therefore all other behavior problems such as truancy, bullying stealing and alike were delimited from the study.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

This chapter presents the review of related literature on the problem under investigation. It covers the following sub-topics: Clarification of concepts, study habits, styles of study habits, defective study habits theoretical framework, Review of empirical studies and Summary and uniqueness of the study.

2.2 Conceptual Framework

2.2.1 Concept of Study Habits

Study habits have been defined by many researchers. These include Azikiwe (1998) who defined study habits as the adopted way and manner a student plans his private readings, after classroom learning so as to attain mastery of the subject. Crede and Kuncel (2008) referred to study habits as the degree to which the student engages in regular acts of studying that are characterized by appropriate studying. In addition, Kaur and Pathania (2015) defined study habits as a well-planned and deliberate pattern of study that have attained a form of consistency on the part of the students towards understanding academic subjects and passing examinations.

Studying is very important in learning process because it is a key factor and different from the learning that occurs during classroom instruction that is led by the teacher, (Gettinger& Seibert, as cited in Awabil, 2013). The following are special features that have to be present to make study effective and qualitative (Gettinger& Seibert as cited in Awabil, 2013):

1. Studying is Intentional: Effective studying is purposeful and requires a deliberate and conscious effort on the part of the student. Studying requires not only the knowledge and application of skills, but volition as well. Studying is different from incidental learning.

2. Studying is Skillful: It requires training and constant practice with specific techniques that help a learner acquire, organize, retain and use information. Although students are expected to apply study skills in completing homework or preparing for tests, teachers typically devote little time to providing explicit instruction in such skills.

3. Studying is Self-regulatory in Nature: Self-regulation (e.g. initiative, persistence, goal setting) is an important aspect of studying, not only during the initial development of study skills, but also during application of skills outside of formal learning contexts.

4. Studying is Personal and Individualized: Whereas classroom learning occurs within a social context through interaction and guidance from teachers, classmates and others. Studying is expected to be carried out by an individual. In some cases, learning can be fostered through social communication. In such situation, individual study behaviors still play a critical role in academic competence

Most students do not know how to study or cannot comprehend what they are set out to read, while some lack the understanding of the materials probably because they are not aware of what techniques to apply in the study situation or they study in odd places at odd times. Study habit determines the academic achievement of students to a great extent and a student can have good or bad study habits.

However, students can study for hours on end and retain very little. Developing goodtime study habits is very important. Students must realize that there is a time to be in class, a time for study,

time for family, time to socialize with friends and time to just be alone, student needs to make friends that have good study habits and thus can share similar study habits and those who have developed effective study habits which will help them develop sound study habits too. There must be an appropriate balance for learning to take place effectively. Students should also have vision, a clearly articulated picture of the future they intend to create for themselves it will be of great benefit to students' success in school. This will promote a passion for what they wish to do and in turn leads to an intense interest, dedication and commitment to achieving career goals and objectives throughout the students' academic pursuit. The component of study habits as categorized by Llavore, Duran and Dungan (2015) are:

- (a) time management, study environment and test taking/preparation skills and
- (b) note-taking, reading, writing and mathematical skills.

Hassan (2013) also listed activities that entail good study habit among learners. These are; regular class attendance, good note-taking, good study place, concentration and developing good memory. Defective Study habits stems from bad attitudes and habits students developed towards their studies. Ozigi as cited by Abdullahi (2008) was of the view that a poor factor that accounts for the academic performance of students and failure at school is their application of wrong study habits. However, Emievil (2013) put forward some bad attitudes and habits exhibited by secondary school students that lead to Defective Study Habits s include the following:

1. Poor Attendance: For any subject, especially subjects like accounting and statistics attendance is really a must. Unless, of course the student is a genius who can just scan the teacher's or classmates' notes and can readily understand the lesson. The best thing is to hear firsthand what the teacher has to say and to read through your own eyes everything written on

the board. If the student fails to attend classes, his/her chance of understanding the subject might be very shallow and his/her points for attendance will go down as well

2 No Assignments: The only way a student can learn is through practice. And practicing the subjects/topics means diligently doing the exercises and the assignments all on your own. Overdependence on others for assignments regularly might affect ones understanding of the subject. The ones who did the assignments stand better chance of understanding the topics.

3 Failing to take down notes: Some students are fond of always photocopying notes from their classmates'. This may not really serve the purpose for every student. Taking down notes mean you are listening and are focused on the subject. A student who doesn't take down notes is either somebody who has a photographic memory or just plain lazy or is not concentrating on the subject at hand. The first reason is a good one but is quite rare. The second reason may be okay if the student is intelligent in the first place (but this is still not an excuse). The third reason may be the worst because the student is really not absorbing anything from the class. And when this happens, your grades are bye-bye.

4. Poor Time Management: Some students don't know how to manage their time, they accommodate everything that comes their way even the ones that intercept their studies. When a student fails to properly prepare and planned their time, it will continually coincide with their school schedules.

5. Not Following Teacher's Instructions: In every learning process, the teachers do give instructions to the learners. Some students developed the attitude of ignoring such. For example, during examination students are asked to write T for True and F for False. Some will ignore the instruction and write the whole word or worse, give entirely different answers. Failing to follow

instructions could mean deduction of marks or a failed grade in that exam or worse, in the subject itself.

6. Negative Thinking: This one bad habit can wipe out all the student's good study habits. If a student perennially thinks he or she does not understand the subject or that the subject is just too hard for him or her, no amount of studying or copying notes or doing assignments can really make up for this one bad habit. It will just simply block everything because the student is setting himself or herself up for failure. This attitude is so bad that it can cause one to fail perpetually.

7. Procrastination: This one can follow poor time management skills, but it's a habit that can be left on its own. Procrastination often leads to cramming. Students have so many distractions these days. These distractions (like Face book, online games, play-stations, texting/chatting) make cramming or procrastination a more dangerous bad habit now than it was before. However, it is pertinent to note that no amount of intellectual knowledge will be useful to a Learner if the bad attitude, approaches and habits are not killed. Hence, to cultivate the rightful habits, there has to be decision to develop and practice the good qualities of mindfulness, punctuality, organization, time management and positive-thinking.

Effective study habit refers to a situation in which the student is able to manage time and study regularly in order to complete an academic pursuit successfully. Most scholars consider it mainly as one of the intervention of reducing Defective Study Habits s (Abdullahi, 2008). According to Ogbodo (2010) effective study habits refers to a situation in which a learner studies regularly to achieve maximum success in his/her school work. Howell (as cited in Abdullahi, 2008) noted that working with children in grades four to eight was able to demonstrate that a year of intensive emphasis on work study skills produced reasonable improvement in achievement.

The interest on study skills has also caught the attention of Ranson (as cited in Abdullahi, 2008) who reported that a group of students who spent between ten to fifteen hours in a study skills clinic had a significantly higher grade point average than an equated group of students who had not made use of the clinic.

Otto and Smith (as cited in Abdullahi, 2008) stated that reading study skills require more than a simple way of study skills. Rather they require careful and developed study habits as well. Skills focus on specific behaviours required for study type reading. On the other hand, habits focus on ability and inclination to apply the skills. This simply signifies that successful academic achievers typically have arrays of study skills well cultivated which help them to develop effective study habits.

Hoston (as cited in Abdullahi, 2008) mentioned that there is a great need to teach study skills to student as majority of them have ineffective study habits and this has put the students in the position of developing Defective Study Habits. He further stated that there is no formal teaching of study skills which has also attributed to the students developing Defective Study Habits. Due to the fact that they had developed Defective Study Habits, they usually opt and solely depend on frantic cramming during examination. This is not a good standard to develop in the field of studying because the understanding has not been established.

(Denga, 1983) noted after carrying out a study that majority of the students expressed a need for developing effective study habits, choosing the right subject combination and passing examinations. This study has actually brought an awareness to authorities concerned on issues of students' successful performance as it pinpoints the necessity for training students on the use of study approaches in order to tackle the issue of Defective Study Habits (Abdullahi, 2008). According to Adegbija (1987) studentship is a lifelong career. Therefore, studying and learning

are process that continues throughout life time. He therefore saw the development of effective study habits as basic requirement for any individual who wants to maintain a well-informed state of mind for students' success in any academic and development Endeavour.

Ozigi (as cited in Abdullahi, 2008) expressed that most secondary school students in northern Nigeria did not received any formal instruction in study techniques. Never the less, some students put much effort on reading preferred subjects and depend on their lecture notes as source of information.

Ogbodo (2002) explained that teaching students study skills and approaches was genuinely necessitated-by dramatic short fall and downturn in students' performance which cut across tiers of institutions of learning, resulting in massive failures, carryover deficiencies and related problem. In a study carried out by Pressey as cited in Abdullahi (2008) showed that college students who were having difficulty and were given instruction in study skills were much likely to pass their exams than similar students who received no help.

An effective study habit comprises several factors like the location of study activity, study technique, time management, physiological and psychological factors. According to Thinkport in Abdullahi (2008) good study habits are important part of any student's success. This doesn't just mean studying hard when a test is coming up. Studying is a continuous process that helps learners collect their thoughts and reflect on all the new things they learn each day. Abdullahi (2008) opined that it takes time and effort for the student to fully understand everything he/she is presented with in the classroom.

Katelyn (2013) therefore, identifies fourteen positive or good study habits which students can employ in order to improve their academic performance. They are: attending all classes

regularly, reviewing your notes daily, reading material Prior to it being covered in class study, have at least one conference with the teacher, develop and learn a word list for the course, read materials to improve your background in the course (other than text), attend help session, attend learning resource lab when available, develop a list of possible questions, ask questions in class, study an old exam (when available), avoid a last minute cram session, and sleep at least 8 hours the night before exams commence.

Good study habits help individual student to form understanding effectively, Harper and Row (2009), highlight students good study habits as thus:

1. Studying every day
2. Creating a quiet place at home or anywhere to study
3. Turning off the phone, TV and other devices that may disturb you when studying
4. Listening to soft music or white noise
5. Studying in a way that suits your learning style
6. Taking regular breaks
7. Studying early (do not wait for last minutes)
8. Studying the hardest things first, spending more time.
9. Asking for help if one is struggling with his studies, taking notes as one studies as well as organizing notes in a notebook or folder.

2.2.2 Styles of Study Habits

Harper and Row (2009) grouped styles of study habits into:

- i. Group or individual study
- ii. Class attendance
- iii. Study in or outside the library
- iv. Day or night study

Katelyn (2013) provided several elements that characterize effective study techniques. These are:

- 1. Learning to select important information
- 2. Learning to summarize information's
- 3. Learning to organize information
- 4. Learning to take affection notes in the classes
- 5. Learning to underline appropriately
- 6. Learning to construct question
- 7. Learning to facilitate elaboration processing

The following are tips for study habits:

Time Management Tips:

Kerka (2007) suggested some time management tips, including the following:

Determine your best time of the day to study and study then.

Do it now. Fight procrastination. Explore procrastination patterns and break them.

Set deadlines for yourself.

Write out your short-term and long-term goals.

Concentrate on one thing at a time.

Use television time as a reward, after you have finished studying.

Plan to take short breaks

Divide a big assignment into small pieces that can be done one at a time.

Have a central work list and make a daily “things to do” list.

Be flexible, when you become bored with certain parts of studying, change topics.

Learn to discipline yourself and feel good about it.

Write down all assignments and due dates in your time management book.

Plan in the morning or the night before the priorities for that day.

Learn to say “No” to interruptions when you study. Separate study time from play time.

Give yourself time off and special rewards when you have done important things.

It helps one to distribute accumulated work load.

It enables the student to make adequate preparations ahead of his or her class tests, assignments and examination.

Freeman as cited in Abdullahi (2008) mentioned that successful students invariably have a well-designed plans and time table. According to Abdullahi (2008) a time table is a detailed day to day division of time and covers not only study but to some extent the other activities necessary to life. Guez and Allen in Awabil (2013) have provided some guidelines to enable students prepare and use personal study timetable. Some of these are stated below:

1. Relate your personal timetable to the class timetable. If the class timetable indicates that the following day you will learn certain subjects in class, you should schedule your personal study timetable to study at least one of the subjects the day before.
2. Schedule your difficult courses more frequently than any other. Do not neglect it in favour of an easier course or one you find more interesting.

3. Allow enough time for recreation. When you feel you are not concentrating on study, you can go for a short break, or do work that involves writing rather than reading.
4. Go over the daily work before you go to sleep. This revision will refresh your memory.
5. Prepare the timetable so that you have enough time to sleep.

Note-taking Methods

Note-taking is very important in learning as it helps the learner to remember what has been thought. Ipaye (2005) argued that effective study behaviour begins with effective methods of taking notes during lectures. Taking notes properly is a very significant part of learning because it helps the student remember information presented in a class or read from a textbook (Taylor & Buku as cited in Awabil, 2013). Ipaye (2005) provides some suggestions on taking notes as shown below:

1. Be legible enough to be able to read your notes later.
2. Take complete notes.
3. Use abbreviations that make sense.
4. Rewrite or recopy your notes to facilitate understanding and to fill in gaps.
5. Do not rely completely on your study materials, use additional sources.
6. Write down questions and request for further explanations and make comment.

Ipaye (2005) further described a method used in taking notes called the Cornell Note taking system. The method has six steps. These are: Record, Reduce (or question), Recite, Reflect, Review, and Recapitulate.

1. Record: simply write as many facts and ideas as possible, but do not be tempted to get down everything that is presented by the teacher. After the class, fill in gaps or make incomplete sentences complete.

2. Reduce or question: after reading through your notes, the next step is to reduce important facts and ideas to key words or phrases, or to formulate questions based on the facts and ideas. For instance, acronym can be formed to reduce a long statement or sentences.
3. Recite: recitation facilitates retention of information. When reciting cover up your notes, while leaving the cue words and questions uncovered. Next, read each key word or question, then recite and state aloud, in your own words, the information.
4. Reflect: reflection is pondering or thinking about the information you have learned. Reflecting is a step beyond note content. It reinforces deeper learning by relating of facts and ideas to other learning and knowledge.
5. Review: review and recite your notes frequently in order to prevent forgetting. A good guideline to follow is to review your notes nightly or several times during the week by reciting, not rereading. This will bring about complete comprehension and retention than will cramming the day before a test.
6. Recapitulate: recapitulation or summary of your notes goes at the bottom of the note page in the two-inch block column. Taking a few minutes after you have reduced, recited and reflected to summarize the facts and ideas in your notes will help you integrate your information. The summary should not be a word-for-word rewriting of your notes. The summary should be in your own words and reflect the main points you want to remember from your notes.

Taylor and Buku as cited in Awabil (2013) also added some methods. These include the following:

- i. Patterning notes: arranging notes in a way that it gives a pattern. That is, bringing together cluster of ideas, concepts, principles and key words on segments of the topic.

- ii. Paraphrasing: taking the materials paragraph by paragraph and presenting them in your own words to bring out only the major ideas.
- iii. Summarizing: writing a brief or short version, in your own words, of whatever materials have been read or given.

Kagu (2001) also gave some suggestions. These are:

- iv. Notes can be made easier by using well-known abbreviations.
- v. Listen carefully and record main points.
- vi. Start each topic on a new sheet.
- vii. Review notes for corrections and understanding.

Consultation/Help-Seeking Strategies

Another name given to consultation is help-seeking. Aleven, McLaren, Roll and Koedinger (2006) defined help-seeking as the ability to solicit help from a teacher, textbooks, internet, peers or colleagues when the need arises. Consultation is basically seeking help from another person so as to fully understand some materials or information. They identified a model of help-seeking which has the following steps:

1. Become aware of a need to look for help.
2. Decide to seek help.
3. Identify potential helper(s).
4. Use strategies to elicit help.
5. Evaluate help seeking episode. Aleven et al (2006) gave the following explanation on help-seeking model. The student must first become aware that he or she needs help. This can be done by self-assessment of progress or skill. In the second step the student must consider all available information and decide whether to seek help. This decision may involve a range of factors besides self-assessment of progress or skill, such as threats to self-esteem, fear of

embarrassment, and reluctance to be indebted to the helper. In the third step, the learner must find a suitable helper. This suitable helper could be a teacher, classmate or a friend. Ohene (2010) stated that students can turn to others for assistance. Someone's area of weakness may be another's area of strength. In step four; the student must decide how to request help, based on his or her knowledge and skills of discourse. Essentially, the request must match the task demands. In the end, the student reflects upon the help seeking event to decide if it was helpful and to determine whether further help is required. Taplin et.al in Awabil (2013) opined that an important aspect of help-seeking behavior is forming and use of study group. The senior secondary students may make use of study groups so as to enhance their learning. This will be very helpful especially those preparing for West Africa Senior Secondary Certificate Examination (WASSCE) and National Examination Council (NECO). According to Ohene (2010) study group should comprise a maximum of five people and a minimum of three. Ipaye (2005) added that members of the group can come together regularly to study discuss and carry out assignments and projects. Simply discussing source materials with others, as opposed to memorizing, is a great way to learn new concepts and practice applying new analytical methods. Study groups have the benefits of multiple students' perspectives on classroom set of notes through the efforts of the group. Ipaye (2005) also added that Group study affords you the opportunity to assess your colleagues, know their areas of strength and compare your ability with theirs. Thus, identifying those who are stronger than you are academically and who can help you answer difficult questions when you are faced with such. For a study group to bring out good proceeds, group members should agree on some rules to be followed. Such entails Information about length, frequency, location and the structure of the meeting (Hazard and Nadeau as cited in Awabil, 2013). The group might decide that each meeting will be a review of the readings and

lectures for the week. Each topics and sub-topics can be discussed so that everyone can have a thorough understanding of them (Hazard & Nadeau as cited in Awabil, 2013). However, a leader can be appointed for the group. Johnson in Awabil (2013) noted that from time to time the leader will summarize what has been said and sometimes talk about how various contributions are interrelated to the topic, may offer additional information or insights about what has been said and try to see that every member of the group participates in the discussion.

Library Use Skills/Strategies

Libraries are valuable source of books, journals, periodicals and articles for research and learning. Modern libraries also have internet facilities to enable users' access materials electronically. The importance of libraries cannot be over-emphasized. Egbule (2009) suggested that students should cultivate the habit of reading in the library as much as possible because of the availability of reference books, in addition to its quietness and fewer distracting influences. Similarly, Ohene (2010) indicated that libraries provide students with up-to-date books, magazines, periodicals and other sources of materials on many subjects. The availability of these resources help students writes good assignments. Johnson in Awabil (2013) outlined some strategies to assist students in making use of libraries. These are stated below:

1. Study the plan of the library and leaflets that are available.
2. Take advantage of any guided tours of the library offered by library staff.
3. Ask the librarians for help when the need arises.
4. Enter and walk around the library yourself and get an idea of where materials are located.

Concentration Strategies/Skills

Kagu (2001) states that many students have difficulty in concentrating during hours of study. He cited some concentration strategies suggested by Brass, including the following:

- i. Starting each study session on time.
- ii. Study in a quiet place.
- iii. Maintaining good sitting posture during long periods of active study.
- iv. Making sure that there is sufficient ventilation and brightness.
- v. Taking short breaks from time to time.

Similarly, Ipaye (2005) identified the following as effective concentration skills during hours of study:

- a. Get the materials to study ready at hand before you start studying. Examples are your books, pens and pencils. The aim is to avoid distractions.
- b. Make sure you have a chair on which to sit and a table on which to place your study materials for reading and writing.
- c. Avoid lying down to read, you will soon fall asleep no matter how determined you could be.
- d. Maintain good health at all times.

Study Skills Training is the process of providing coordinated teaching on skills to be use in studying. These teaching are in sessions. The sessions will bring about a student identifying the skill he/she wished to use. Study skills' training also involves teaching how to gain greater access to learning materials and developing better study skills which will help in reducing Defective Study Habits s. The Elementary and Middle Schools Technical Assistance Centre (EMSTAC) cited by Kerka (2007) opined that study skills training involve teaching students to utilize a process of thinking, usually in steps. It requires students to recognize, recall and execute the particular steps in the study skills or strategy. The training is done by giving tutorials in steps or session to the learners which will assist them in their study. During the training, the student

will learn about time management and its value, and teaching on making time table (schedule) for studying, home works and assignment, note taking and forming special notes when need arises. Gettinger and seibert as cited inAwabil (2013) have indicated that effective study skills promote academic excellence. They are of the view that study skills training/instruction is of immense importance to the students in numerous ways. Students become more efficient, thoughtful and independent learners. Likewise, even students who develop study skill on their own can learn to study more effectively and efficiently through training.

The training also teaches students how to comprehend the points when reading. They are taught on how to scan and understand the meaning, ask questions and answer appropriately. The students are taught to review, recite and recall what has been studied. The training will also help learners prepare for their examinations and suitable ways of tackling a question. Success in all academic content areas is often associated with good study skills. Whereas some students develop effective ways to study on their own, the majority of students will not develop such without coordinated and articulated training and regular practice. It is pertinent to note that educational researchers have found out that for students to be successful in class room, effective method or techniques must be used while learning. Hence, study skill training is taught to students so as to equip and help them to: feel competent and confident about their ability to learn, acquire the ability to learn how to learn and prepare for life-long learning not just academic learning. Specific skills such as organizing, listening and retaining information can be applied in a variety of settings like in business/enterprising, one's job or career field. It is very important for teachers and counselor to create awareness to the students on the different types of study skills and their benefits (Kerka, 2007). Study skills training if properly delivered to the students add tremendously to their academic performance.

Reading habits and academic performance are essential for research workers and educationist to know that every child whether he or she is gifted, average, normal or backward should be educated in his or her own way, but he or she possesses good study habit, he or she can perform well in academic and in every situation (Owusu-Acheaw, &Larson,2003). It is the reading habit which help the learner in obtaining meaningful and desirable knowledge. Good reading habits acts as a strong weapon for the students to excel in life. (Bashiru&Matto, 2012). Owusu-Acheaw and Larson (2003) categorized reading habit into:

1. Importance of reading novels
2. Numbers of novels
3. Materials read at library
4. Leisure time
5. Engagement in library
6. Perception about reading
7. Influence of reading on academic performance
8. Hindrance to reading habit.

Grade is always used as a yard stick or an indicator of how well and effective a learning material is learnt by the student. If a learner scores high grades it is assumed that he/she may have studied a lot, while scoring low grade indicates lack of proper studying or understanding of the learning materials. Many studies found out that there are also several factors that determines the grades scored which includes the learner's age, level of education, socio-economic status, gender, year, IQ etc. How a student takes his or her studies, greatly determines his/her level of academic achievements. The level of preparation and learning strategies developed and employed

consciously by students, go a long way to influence their level of academic performance (Ebele&Olofu, 2017).

A good study habit tends to have a positive influence on the grades of the student thus leading to productive and greater achievements academically, though many students do not realize that some study habit components skills can influence their academic performance. As emphasized by educators, counselors and psychologists, these skills may become predictors of academic performance of students at any level of education. The study habit component skills by Bakare (1970, include, homework and assignment; time allocation to work; reading and note-taking; study period procedures; concentration; Written work; Examination and Teacher consultation.

- a. Homework and Assignment covers the habits that students have in studying outside the class hours. It assesses how the student organizes his/her academic schedule at home to facilitate learning. According to Okafor (1981), the idea of giving students homework and assignments is because in the pursuit of their studies, instead of being on-lookers waiting for some authority (the teacher) to impose items of information on them, they become also initiators or active participants in learning.
- b. Time Allocation to work is the dimension that assesses the habit of a student to avoid certain factors that might distract his/her focus from succeeding in the course of studying.
- c. Reading and Note-taking is the dimension that assesses students' habits of note-taking. Orderly, labeled, and legible note written in a student's own words and the use of key words and some supporting detailed notes have been correlated with positive academic outcomes. Omoegun (2000),reported that students at all levels, to properly function in our society of today where information is rapidly increasing and knowledge becoming more complex must master how to read and take notes.

- d. The study period procedures subscales assesses habits related to spreading/spacing studying, while concentration assesses the habits a student has formed to avoid distraction while studying. Therefore, it is necessary that a student should have a good study environment. The library is about the best place to study in. Akinboye (1980) described it as the academic power house and a chief link between students and the wisdom of the ages.
- e. Written work assesses a student's habits in expressing his/her thoughts in an organized manner with attention to neatness and mistakes.
- f. The Examination dimension works at the habits of a student in preparing for examination and teacher consultation evaluates' habit of interacting with the teacher in studying effectively.

Jay (2013) recommended five (5) study skills to make students succeed in their studies, which are:

1. **Plan your work:** Great planning affects every level of the academic process, from mapping out a term to breaking down a problem set. Top students plan as soon as they receive their syllabi or assignments, determining what resources they need and when they'll do their work. This doesn't mean that they do everything immediately, but that they cultivate and maintain an awareness of exactly what they need to do to excel.
2. Set routines.

Successful students set very clear study routines. A student who devotes two hours to reading and reviewing for his or her biology class every Friday afternoon can rest assured that he or she never fall behind in biology. Similarly, a student who plans a schedule at the beginning

of the term using his or her syllabus will never be surprised about when his or her exams and papers are due.

3. **Build systems:** Top performers create systems to deal with different types of assignments and contingencies. One efficient and effective paper writer I know according to Jay (2013) developed a comprehensive system of research, preparation, outlining, writing, and revising to approach every paper, no matter the subject. He was able to rely on this system to knock almost every paper out of the park. Great students also take advantage of resources designed to help them keep their assignments, tasks, and lives in order.
4. **Collaborate with others:** Few people can do it alone, and successful students understand the value of collaboration. Collaboration doesn't mean cheating, but rather bouncing ideas off of one another to get different perspectives on a problem. Strong students might review problem sets or homework with friends before an assignment is due, while others might meet with their instructor to review paper outlines before beginning to write.
5. **Do it right the first time:** Whether taking notes, planning, executing, or calculating, great students know the value of doing something correctly the first time. They take notes carefully so they don't have to reread their textbooks, they compute carefully so they don't have to redo problems, and they plan carefully so they don't experience a backlog in work as important deadlines approach. Students are strongly encouraged to incorporate these principles and techniques into their study routine. This will make a huge difference in their academic performance.

2.3 Study Skills

Study skills have been defined differently by different Authors and writers. It is important to look at some of these definitions. Gettinger and Seibert as cited in Awabil (2013) states that

study skills are viewed as academic enablers; they function as critical tools for learning. He further opined that study skills encompass a range of coordinated cognitive skills and procedures that enhance the effectiveness and efficiency of students learning. Hoover and Patton, Gettinger and Seibert as cited in Awabil (2013) indicated that study skills include the competencies associated with acquiring, recording, organizing, synthesizing, remembering, and using information. Kerka (2007) opined that study skills are learning strategies that help students organize process and use information effectively. She also cited the following definitions of study skills:

Study skills are processes of meta-cognition, which is self-awareness of one's thinking and learning. Learners who are able to step back and monitor their thinking and learning are able to use strategies for finding out or figuring out what they need to do. Study skills are learning strategies that facilitate the processing of information. Study skills help us organise and process information. They also help us remember what we have learned. They work best when we are conscious of our learning processes. This awareness of our own thinking and learning is known as meta-cognition.

Kerka (2007) further mentioned some purposes of study skills. Study skills are important not just for academic learning, but also for everyday life. They can help individuals to be organised and successful life-long learner and manage their jobs, households and finances. Study skills can be critical especially for students with learning disabilities, who may have difficulties with staying focused and become discouraged by lack of success. Students attribute failure to internal factors like lack of ability, or external factors such as bad luck. This can make their self-confidence suffer and they see every effort as futile. Mastering the skills for studying and learning increases

their self-efficacy and empowers them to change their approach and different strategies if one fails.

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suffer and they see every effort as futile. Mastering the skills for studying and learning increases their self-efficacy and empowers them to change their approach and different strategies if one fails.

2.3.1 Types of Study Skills

Study skills can be classified into two namely; a) Broad study skills and b) Specific study skills.

1. **Broad Categories of Study Skills:** Various writers have provided different views, regarding the components of study skills. For instance, Christenson and Anderson (2002) identified four broad clusters of study skills that students need to acquire to facilitate their academic success. The four clusters are: Cognitive-based strategies, Repetition strategies, Meta-cognitive-based strategies and Procedural or organizational-based strategies;
2. **Cognitive-Based Study Skills:**The goal of cognitive-based study strategies is to guide students to engage in appropriate thinking about information they are required to learn. According to the information processing theory, the greater knowledge students have about content the more likely they are to think about, understand, and remember it (Christenson and Anderson, 2002). Studying is enhanced when new material is meaningful to learners, and integrated with their existing knowledge. Besides, information that is stored as a network of connected facts and concepts, called schemata, is more easily learned and retained. Other evidence based cognitive study strategies that assist students in activating and making connections with prior knowledge are question generation and summarising. Repetition Study Strategies Most basic study strategies

involve repetition re-reading of information. Repetitive strategies are most useful when storing small bits of information for the short-term or when the content being studied is used frequently. Repetition strategies are easy to learn and use and, therefore, are among the first study skills taught to young children. In early grades, teachers may rely on repetition strategies for helping children acquire basic reading and mathematics skills. For instance, flashcard sets are frequently used to help children learn spelling, vocabulary, sight words and mathematics facts (Christenson and Anderson, 2002).

Meta-cognitive-based Study Skills The extent to which students apply study skills when the need arises depends largely on their meta-cognitive capacities (i.e. the ability to assess the need for studying and to plan, implement, and monitor and evaluate their study approaches). Whereas cognitive-based study strategies relate to how learners process information, meta-cognitive strategies relate to how students select, monitor, and use strategies in their repertoire. Being meta-cognitive is essential for effective studying. Meta-cognitive ability enables learners to adjust their studying according to varying task demands. Students with well-developed meta-cognitive skills know how to study effectively; they understand which strategies to deploy, monitor their studying, and allocate time wisely. They are familiar with the cognitive strategies that help them study and regulate their use of such strategies (Christenson and Anderson, 2002)).

2.4 Study Skills Training Counselling Technique

Study skills training is the process of providing coordinated teaching on skills to be used in studying. These teachings are in sessions. The sessions will bring about a student identifying the skill he/she wished to use. Study skills' training also involves teaching how to gain greater access to learning materials and developing better study skills which will help in reducing poor study habits. The Elementary and Middle Schools Technical Assistance Centre (EMSTAC) cited

by Kerka (2007) opined that study skills training involve teaching students to utilize a process of thinking, usually in steps. It requires students to recognize, recall and execute the particular steps in the study skills or strategy. The training is done by giving tutorials in steps or session to the learners which will assist them in their study.

During the training, the student will learn about time management and its value, and teaching on making time table (schedule) for studying, home works and assignment, note taking and forming special notes when need arises. Gettinger and seibert in Awabil (2013) have indicated that effective study skills promote academic excellence. They are of the view that study skills training/instruction is of immense importance to the students in numerous ways. Students become more efficient, thoughtful and independent learners. Likewise, even students who develop study skill on their own can learn to study more effectively and efficiently through training. The training also teaches students how to comprehend the points when reading. They are taught on how to scan and understand the meaning, ask questions and answer appropriately. 37 The students are taught to review, recite and recall what has been studied. The training will also help learners prepare for their examinations and suitable ways of tackling a question. Success in all academic content areas is often associated with good study skills. Whereas some students develop effective ways to study on their own, the majority of students will not develop such without coordinated and articulated training and regular practice. It is pertinent to note that educational researchers have found out that for students to be successful in class room, effective method or techniques must be used while learning. Hence, study skill training is taught to students so as to equip and help them to feel competent and confident about their ability to learn and acquire the ability to learn how to learn and prepare for life-long learning not just academic learning.

Specific skills such as organizing, listening and retaining information can be applied in a variety of settings like in business/enterprising, one's job or career field. It is very important for teachers and counselor to create awareness to the students on the different types of study skills and their benefits (Kerka, 2007). Study skills training if properly delivered to the students add tremendously to their academic performance. The following are the main content and skills by a school counsellor in using Study Skills Training Counselling Technics in reducing defective study habits among students: Note-Taking Strategies, SQ3R Reading Comprehension Method and Test-Taking Strategies (Kerka, 2007).

2.4.1 Note-Taking Strategies

Thorough lecture notes are key to successful academic performance. Not only can you review them as you prepare for upcoming tests and exams, but you can also refer to them later when you take advanced courses. Note-taking helps you listen attentively and think critically about the material that your professor presents. In addition, just the act of writing helps to commit information to your long-term memory (Dendato&Diener, 1986).

Although professors share information not available in textbooks, they also make connections between concepts you've read about in your textbook. If you write notes in class, you will listen attentively and think critically. In addition, you'll remember more if you write things down. Studies show that if you don't take notes, you may forget half a lecture after 24 hours, eighty percent after two weeks, and ninety-five percent after one month. Keeping lecture notes provides you with a storehouse of information you can draw upon when you take more advanced courses. Sharpening your note-taking skills now will help you prepare for when a future employer requires you to take notes in a meeting or at a conference (Dendato&Diener, 1986):

- i. **Prepare for Success:** Before you go to class, complete assigned reading, research or other homework. Review previous class notes and prepare to ask clarifying questions. Remember to take the right materials, such as a notebook, pad, pencil, pen or highlighter with you to class. Sit front and center so that you can see and hear the professor and your classmates (Dendato&Diener, 1986).
- ii. **Focus During Class:** Participate actively in class activities. Think about how class-work relates to your personal goals. Reflect critically on what you hear. However, if you disagree with a statement, allow the instructor to finish before you ask a question or make an argument (Dendato&Diener, 1986).
- iii. **Watch for Clues:** Speakers may subtly emphasize key concepts, but you have to watch closely. Notice repetition as the instructor speaks. Listen for introductory, concluding and transitional words or phrases. Monitor the blackboard or overhead. If the instructor takes the time to write something down, you can be sure it is important. Watch the instructor's eyes and facial expression, and notice his or her level of interest in the material (Dendato&Diener, 1986).
- iv. **Use an Effective Note-Taking System:** Many students find the Cornell System of Note-Taking both fast and efficient. However, there is a variety of different note-taking methods. Whatever system you choose to use, adapt it to suit you. Label and date your notes, and number the pages. As you copy material from the board, make note of key words, diagrams, or pictures that will help you review the materials when you study later. Use standard acronyms or abbreviations so that you are not confused during your review. When material is particularly important, use complete sentences. If visual cues help you, take notes in different colors and use symbols to organize or emphasize concepts. Ask

questions to clarify if you feel lost. In addition, the instructor may be willing to email you copies of overheads or slides, or allow you to copy them later (Dendato&Diener, 1986).

- v. **Review Your Notes:** Review and edit your notes within 24 hours of each lecture. If you're using the Cornell Note-Taking System, now's the time to fill in key words in the left-hand column. Use the key words as cues when you study. As you review your notes, ask yourself, "What makes this important?"
- vi. **Reading Strategies:** York University Counselling and Development Centre's article Reading Skills for University help you develop and execute strategies for more effective reading comprehension (Dendato&Diener, 1986).

2.4.2 The SQ3R Reading Comprehension Method

Educational researcher Francis Pleasant Robinson developed the SQ3R Reading Comprehension method. He documented the method in his book *Effective Study*. The SQ3R method helps you organize your reading and retain information more easily. It takes some practice, but this approach eventually becomes second nature (Stahl & Armstrong, 2020). S = Survey Q = Question R = Read R = Recite R = Review (Stahl & Armstrong, 2020):

Survey to ascertain an overview of your reading. Read the introduction for a chapter outline. Skim the chapter headings and read the summary to identify key points. Read any chapter questions, and keep them in mind. You will be more aware of the author's organization. Main points should stand out more easily.

Question the reading to keep your mind active. Rephrase chapter headings as questions. Make note of your questions as you read. Try to answer the author's lists of questions at the beginnings

and ends of chapters. Use workbooks or study guides for review. Your reading becomes an active search for answers instead of a passive activity. As you perfect the questioning technique, test questions will seem more and more familiar (Stahl & Armstrong, 2020).

Read. Be aware of your reading habits. Seek answers to your questions. Look for main ideas and important details. Notice italicized or bold words. Make sure you know what they mean and how to spell them. Don't skip tables, graphs, or pictures that can help you remember information **visually**. Challenge your own understanding of the reading. You look at the material more critically for main ideas and important details, discovering answers to your questions and recognizing what is most important(Stahl & Armstrong, 2020).

Recite what you remember out loud immediately after reading. Stop periodically and try to recall what you've read. Recall the chapter's main headings and the principle ideas under each. You will be able to gauge what you learned and what you still need to work on.

Review what you have read to determine your strengths or weaknesses at comprehending the material. Look at each chapter heading and think about the information. Review chapter summaries to see if you can recite them. Revisit your notes from both the book and classwork on the same topic. Review at least once a week. Immediate review of information facilitates retention, but periodic review throughout the semester will help you not only remember, but also learn the information.

2.4.3 Test-Taking Strategies

The following are the test-taking strategies use in study skills training counselling sessions:

Preparing for an Exam: Establish good study habits early. Use your planner to map out your semester, then plan weekly and daily goals. You won't need to cram because you prepared early.

Read before each class: Review your notes after class or later that evening in order to retain what you've learned. Review material from each class cumulatively each week. Begin to review intensively one week before the exam. Visit your professor at least once before the week of the exam. This connection will help you understand the course objectives and show the professor that you are serious about his or her course. Find out what type of exam the professor will give and what the exam will cover. Your professor probably won't tell you exactly what to study, but can probably guide you to the main ideas. Find out if your professor makes sample exams available.

Preparing for a Multiple Choice Exam: Be careful not to fool yourself into believing that you don't need to study. Study for a multiple-choice exam as you would for an essay exam. Be prepared to recall information—don't rely on the answers choices.

Preparing for an Essay Exam: Identify concepts and their relationships to each other. Don't worry about the details at first. Make a general outline and gradually make it as compact as possible. Later, add details to each concept. Develop your own practice questions and write the answers. This will help you both to grasp the information and to practice formulating answers.

Test-Taking Tips: Plan to arrive early. Be sure to check your test taking material prior to leaving for the exam. (Showing up for an exam late or without a pencil is a sure way to focus unfavorable attention on yourself.):

- i. Read the directions, and underline key words that indicate how you should record or word your answers.
- ii. Answer easy questions first.
- iii. Budget your time. Survey the test to determine the type and number of questions as well as where in the test you will begin. Check your progress every 15 or 20 minutes.
- iv. Be aware that you may have problems remembering from time to time. If this happens, move on to the next question and come back to the one that gave you problems.
- v. Ask for help interpreting test questions you do not understand.
- vi. Be aware of what you may be telling yourself about the test. Such statements as “I’m failing, I didn’t study for this, and the test is too hard for me” are sure ways to increase anxiety.
- vii. Do not concern yourself with what other students are doing.

Answering Exam Questions

Multiple Choice:

- i. Pay attention to qualifying words like always or never.
- ii. Do not look for patterns.
- iii. Read through the questions and all the answer choices.
- iv. Estimate the alternatives.
- v. Look for clues in grammar or tense
- vi. Guess if you don’t know the answer.
- vii. Work backwards. Read the answers, then the question.
- viii. Choose the best alternative, because more than one answer may be correct.

Matching:

Matching requires you to recall information. Items on the left usually match responses on the right.

- i. Ask if you can use alternatives more than once.
- ii. Do not match if you are not sure.
- iii. For each item in the left column, try to think of the answer before reading the choices.
- iv. Choose the best answer and mark the answer sheet according to the directions.
- v. Completing those answers you know are correct first.
- vi. Avoid changing answers.

Fill-in-the-Blank:

Unlike the multiple choice and matching questions, fill-in-the-blank questions require you to supply the appropriate word or number to complete the question.

- i. Look for clues in grammar or tense.
- ii. Use common sense.
- iii. Choose the best word.
- iv. Pay attention to the length of the blank or to the number of blank lines.
- v. Read over your answers to make sure they sound right.

Short Answer:

- i. Pay attention to grammar.
- ii. Answer in the context of the course.
- iii. Use terms the instructor used.

- iv. If you are having a problem, answer by giving an example.
- v. Provide more detail if you have time.

True/False:

- i. Pay attention to qualifying words like always or never.
- ii. Remember that the answer is false if any part of the question is false.
- iii. Do not look for patterns.
- iv. Guess if you don't know. Statistically, tests tend to have more true statements than false ones.
- v. Stick with your first answer unless you are sure you are wrong.

Problem-Solving:

- i. Read the question.
- ii. Re-read to find important information.
- iii. If there are multiple answer choices, estimate your answer.
- iv. Apply logic. For example, if $2 + 3 = 5$ then $5 - 2 = 3$.
- v. Watch for careless errors.

Essay:

Essay questions call for analysis. Your instructor wants to know how well you apply course material and class discussion to the essay question.

- a. Read directions carefully. For example, do you have to answer every question or just three out of five?

- b. Re-read questions. Think about the meanings of key words like describe, explain, contrast, or compare.
- c. Outline your answer.
- d. Include an introduction, middle, and conclusion in your essay.
- e. Include details.
- f. Be general when you aren't sure of the exact detail. For example, if you are not sure of the date, write "late fifteenth century" rather than 1493 if the correct date is 1492.

Important Words in Essay Question:

The following terms appear frequently in essay questions. You should know their meanings and answer accordingly. This list is adapted from C. Bird and C. M. Bird, *Learning More by Effective Study*, Appleton Century Crofts, New York, 1945, pp. 195-198.)

Compare: Look for qualities or characteristics that are the same. Emphasize similarities in your essay.

Contrast: Stress dissimilarities or differences in your answer.

Criticize: Express your judgment about the merit or truth of the factors or perspectives in the question. Analyze carefully and discuss positive and negative points.

Define: Give concise, clear and authoritative meanings for words or concepts.

Describe: Recount, characterize, sketch, or relate in sequence or narrative.

Diagram: Draw, chart, or plan, to answer the question visually. Label a diagram. Add a brief explanations or descriptions when appropriate.

Discuss: Examine, analyze carefully, and give both pros and cons. Be complete and offer examples to support your claims.

Enumerate: Write in list or outline form, making points one after another.

Evaluate: Carefully appraise the problem, citing both advantages and limitations. Emphasize the appraisals of authorities and, to a lesser degree, your personal evaluation.

Explain: Clarify, interpret, and spell out the material you present. Give reasons for differences of opinion or of results, and analyze causes and effects.

Illustrate: Use a figure, picture, diagram, or concrete example to explain or clarify a problem.

Interpret: Translate, give examples of, solve, or comment on a subject, providing your judgment about it.

List: Write an itemized series of concise statements.

Outline: Organize main and subordinate points, omitting minor details. Stress arrangement or classification.

Test Anxiety Self-Assessment

In order to determine whether you have test anxiety, answer the following questions:

- i. Do I know the material well enough when I take a test?

- ii. Am I so anxious during tests that I can't concentrate?
- iii. Am I unable to recall material I know?
- iv. Do I work so fast that I make careless mistakes or misread questions?
- v. Does anxiety often interfere with my performance so much that my grade does not reflect how well I really know the material?

Self-Assessment Evaluation

If you answered no to question one, you do not have test anxiety. You have justified anxiety, either because you have not studied enough or because you are trying to learn material that is either too difficult or too advanced for you. If you answered yes to number one and no to the other questions, you do not have test anxiety. If you answered yes both to number one and to any of the other questions, you have test anxiety.

Techniques for Coping with Test Anxiety

Apply these strategies one by one. Don't overwhelm yourself by trying to apply all of them at once. Focus on improving and coping, not perfection.

1. Prepare. Know the material well.
2. Do not over-study. Once you know the material, do not raise your anxiety level by obsessing over it.
3. Avoid caffeine before the test.
4. Slow down. Use breathing techniques to help when your mind is racing.
5. Plan on not knowing. Avoid the expectation that you will know all the answers.
6. Answer the easiest questions first.

7. Read questions carefully so you understand what they are asking.
8. Be patient. When an answer won't come to mind immediately, relax.
9. Avoid distractions.
10. Use helpful self-talk and visualization.
11. Don't watch the clock.
12. Work at a steady, productive pace.
13. Look ahead in the test only if it helps you manage your time.
14. Don't let your brain start working on the next problem before you finish the one you're working on.
15. Ignore the students beside you. How fast they work is irrelevant.
16. Ignore students who finish before you do.
17. Stay focused. Don't let your mind wander or worry.
18. Ignore physical symptoms of anxiety. They will not interfere with your performance.

As school counselors, it's easy to talk to students about things that are bugging them, help with problems they are having, and be their champion when they need one. It's much more difficult to teach skills that provide documented data-driven results. When student progress is hindered by their lack of study skills, it is our job to help them learn the skills necessary to make improvements that will help them find academic success. But how can we teach these study skills and know that students made a meaningful improvement? It takes time, patience, practice opportunities, and good data recording.

Here's what I have done in my own program to help teach study skills.

Identify Target Student Group, Get Baseline Data

This means that you need to talk with teachers, review progress and report card data, and collect other information that may be blocking a student's progress. Ask yourself questions. Is attendance a contributor to poor grades? Does the student take advantage of extra help opportunities? Are they receiving academic improvement services? Does the student's home situation create an obstacle for homework? Keep a chart of this data, and leave room for notes and progress monitoring.

Set Goals and Make Them Public

This doesn't mean to broadcast them over your school's announcement system, but it does mean to share them with their teachers and their parents/guardians. Publicly announcing one's goals increases accountability and likelihood of followthrough. It's harder not to obtain them if everyone knows what they are and is helping to support them. Using a weekly goal setting sheet can be helpful in keeping everyone on task as well as by helping to break large goals into manageable chunks.

Teach Skills and Allow Practice Opportunities

Teaching the skills that you want your students to know isn't enough. You have to allow plenty of practice opportunities for them to really understand and habituate the skill. With this said, it's important that study skills groups last more than a few consecutive days, but rather span over a series of weeks.

Make Study Skills Fun

When starting any type of study skills program, make it fun. I try really hard to make sure that students have fun, are actively engaged, have small tasks, and are setting goals that are manageable to them. Part of teaching study skills is to also reinforce the concept that school and learning are fun, and they can be a part of that fun.

Remember Change Would Not Happen Overnight

Change takes time and a whole lot of work. Remember to track progress along the way. When your sessions are over, make sure to have students complete a session evaluation that asks them to recall information they learned over time. Feel free to pass this data onto your stakeholders as proof of the good work you do. It's also a great visual reminder for yourself on days when you feel like you are not making headway.

2.4.4 Effective Study Techniques

As a grad student, it's imperative to develop effective time management and study techniques that help you retain the most information. In grad school, cramming the night before doesn't cut it anymore. Go into the new year with a new strategy and try one of the study techniques below:

1. **Set the Stage:** First, you need to create the conditions—in your body and external environment to successfully learn and retain information.
2. **Get a good night's sleep:** A recent study found a positive relationship between students' grades and how much sleep they're getting. However, this doesn't only mean getting a full 8 hours of sleep before a big test. What matters, even more, is getting enough sleep for several nights before you do the bulk of your studying.
3. **Switch up your study environment:** Studies show that switching up your study environment can increase recall performance. Instead of studying at home every day, try checking out a new coffee spot each week or heading to your local library. A change in scenery can improve both your memory and concentration levels.
4. **Stick with an environment that works:** If you have a good space at home or a café that is reliably a productive place for you, it makes sense to stick with this when you are under pressure.
5. **Listen to calming music:** You can listen to any music you like, but many agree that classical, instrumental, and lo-fi beats make good background music for studying and can actually help you pay attention to the task at hand. Songs with lyrics can be distracting.
6. **Eliminate distractions:** Eliminate distractions by silencing your phone and any annoying background noises such as the TV or radio. Make a pact with yourself to avoid checking social media until your study session is over.

7. **Snack on smart food:** Coffee and candy will give you a temporary boost, but then you'll have a blood sugar crash. For energy that is more focused and sustainable, try healthy snacks such as edamame, apples, or nuts.

2.4.5. Study Methods and Tips Used in Study Skills Training

1. The SQ3R Method: The SQ3R method is a reading comprehension technique that helps students identify important facts and retain information within their textbook. SQ3R (or SQRRR) is an acronym that stands for the five steps of the reading comprehension process. Try these steps for a more efficient and effective study session:

- a. **Survey:** Instead of reading the entire book, start by skimming the first chapter and taking notes on any headings, subheadings, images, or other standout features like charts.
 - b. **Question:** Formulate questions around the content of the chapter, such as, What is this chapter about? What do I already know about this subject?
 - c. **Read:** Begin reading the full chapter and look for answers to the questions you formulated.
 - d. **Recite:** After reading a section, summarize in your own words what you just read. Try recalling and identifying major points and answer any questions from the second step.
 - e. **Review:** Once you have finished the chapter, it's important to review the material to fully understand it. Quiz yourself on the questions you created and re-read any portions you need to.
2. **Retrieval Practice:** Retrieval practice is based on the concept of remembering at a later time. Recalling an answer to a question improves learning more than looking for the answer in your

textbook. And, remembering and writing down the answer to a flashcard is a lot more effective than thinking you know the answer and flipping the card over early. If you practice retrieval, you are more likely to remember the information later on. Below are some ways you can implement the retrieval process into your study routine:

- i. **Utilize practice tests:** Use practice tests or questions to quiz yourself, without looking at your book or notes.
- ii. **Make your own questions:** Be your own teacher and create questions you think would be on a test. If you're in a study group, encourage others to do the same, and trade questions.
- iii. **Use flashcards:** Create flashcards, but make sure to practice your retrieval technique. Instead of flipping a card over prematurely, write the answer down and then check.

3. Spaced Practice: Spaced practice (also known as “distributed practice”) encourages students to study over a longer period of time instead of cramming the night before. When our brains almost forget something, they work harder to recall that information. Spacing out your studying allows your mind to make connections between ideas and build upon the knowledge that can be easily recalled later. To try this technique, review your material in spaced intervals similar to the schedule below:

- a. **Day 1:** Learn the material in class.
- b. **Day 2:** Revisit and review.
- c. **Day 3:** Revisit and review.
- d. **After one week:** Revisit and review.
- e. **After two weeks:** Revisit and review.

It is important to start planning early. At the beginning of each semester, schedule some time each day just for studying and reviewing the material. Even if your exams are months away, this will help you hold yourself accountable.

4. The PQ4R Method: This method takes an active approach to learning that improves memorization and understanding of the topic. Similar to the SQ3R method above, PQ4R is an acronym that stands for the six steps in the process.

- i. **Preview:** Preview the information before you start reading to get an idea of what the subject matter will be. Skim the material and read only the headers, subheadings, and highlighted text.
- ii. **Question:** Ask yourself questions related to the topic, such as, What do I expect to learn? What do I already know about this topic?
- iii. **Read:** Read the information one section at a time and try to identify answers to your questions.
- iv. **Reflect:** Did you answer all of your questions? If not, go back and see if you can find the answer.
- v. **Recite:** In your own words, either speak or write down a summary of the information you just read.
- vi. **Review:** Look over the material one more time and answer any questions that have not yet been answered.

5. The Feynman Technique: The Feynman Technique is an efficient method of learning a concept quickly by explaining it in plain and simple terms. It's based on the idea, "If you want to understand something well, try to explain it simply." What that means is, by attempting to explain a concept in our own words, we are likely to understand it a lot faster.**How it works:**

- a. Write the subject/concept you are studying at the top of a sheet of paper.
- b. Then, explain it in your own words as if you were teaching someone else.
- c. Review what you wrote and identify any areas where you were wrong. Once you have identified them, go back to your notes or reading material and figure out the correct answer.
- d. Lastly, if there are any areas in your writing where you used technical terms or complex language, go back and rewrite these sections in simpler terms for someone who doesn't have the educational background you have.

6. Leitner System: The **Leitner System** is a learning technique based on flashcards. Ideally, you keep your cards in several different boxes to track when you need to study each set. Every card starts in Box 1. If you get a card right, you move it to the next box. If you get a card wrong, you either move it down a box or keep it in Box 1 (if it's already there). Each box determines how much you will study each set of cards, similar to the following schedule:

- a. **Every day** — Box 1
- b. **Every two days** — Box 2
- c. **Every four days** — Box 3
- d. **Every nine days** — Box 4
- e. **Every 14 days** — Box 5

7. Color-Coded Notes: Messy notes can make it hard to recall the important points of a lecture. Writing in color is a dynamic way to organize the information you're learning. It also helps you review and prioritize the most important ideas. A recent study found that color can improve a person's memory performance. That same study found that warm colors (red and yellow) "can create a learning environment that is positive and motivating that can help learners not only to have a positive perception toward the content but also to engage and interact more with the learning materials." It also reported that warmer colors "increase attention and elicit excitement and information." Writing in color may seem like a no-brainer, but keep these tips in mind:

- i. Write down key points in red.
- ii. Highlight important information in yellow.
- iii. Organize topics by color.
- iv. Don't color *everything*—just the most important information.

8. Mind Mapping: If you're a visual learner, try mind mapping, a technique that allows you to visually organize information in a diagram. First, you write a word in the center of a blank page. From there, you write major ideas and keywords and connect them directly to the central concept. Other related ideas will continue to branch out. The structure of a mind map is related to the way our brains store and retrieve information. Mind mapping your notes instead of just writing them down can improve your reading comprehension. It also enables you to see the big picture by communicating the hierarchy and relationships between concepts and ideas. **So, how do you do it?:**

- a. Grab a blank sheet of paper (or use a tool online) and write your study topic in the center, such as "child development."

- b. Connect one of your main ideas (i.e., a chapter of your book or notes) to the main topic, such as “developmental stages.”
- c. Connect sub-branches of supporting ideas to your main branch. This is the association of ideas. For example, “Sensorimotor,” “Preoperational,” “Concrete operational,” and “Formal operational.”
- d. **TIP:** Use different colors for each branch and draw pictures if it helps.

9. Exercise Before Studying: Not only does exercise fight fatigue, but it can also increase energy levels. If you’re struggling to find the motivation to study, consider adding an exercise routine to your day. It doesn’t have to be a full hour at the gym. It can be a 20-minute workout at home or a brisk walk around your neighborhood. Anything to get your heart rate pumping.

Exercising before you study:

- a. Kickstarts brain function and can help improve memory and cognitive performance.
- b. Releases endorphins, which can improve your mood and reduce stress levels.

10. Study Before Bed: Sleep is crucial for brain function, memory formation, and learning. Studying before you sleep, whether it is reviewing flashcards or notes, can help improve recall. According to Scott Cairney, a researcher from the University of York in the United Kingdom, “When you are awake you learn new things, but when you are asleep you refine them, making it easier to retrieve them and apply them correctly when you need them most. This is important for how we learn but also for how we might help retain healthy brain functions.” When you’re asleep, the brain organizes your memories. Instead of pulling an all-nighter, study a few hours before bed and then review the information in the morning.

2.4.5 Cognitive Learning Strategies

Several psychologists have shaped the concept of cognitive learning through research. They came up with theories and learning strategies that can be implemented in a corporate learning environment. Jean Piaget termed learning as relating information to already existing knowledge. And each learner starts with their own knowledge and experience. According to his theories, learning begins with the accumulation of some basic knowledge and advancing deeper into the field with time. Material that was closely related to what the learner knew was meaningful and always turned out to be effective. Learners with relevant background knowledge find it easier to add new information. During the training of learners during Study Skills Training Session:

- i. There should be an emphasis on the meaningfulness of each session to the task at hand.
- ii. Background information on new material is essential.
- iii. New information should be instilled in learners in a sequence to build on what is already understood.

Learning Through Discovery strategy: Jerome Bruner is a psychologist who built his theory on top of Piaget's theory of cognitive development that was focusing on learning through discovery. His theory identified three stages of cognitive representation which are enactive, iconic, and symbolic. Enactive defining the representation of knowledge through actions, iconic being the visual summarization of images, and symbolic which is the use of words and symbols to describe experiences. Through his study of cognitive learning in children, he suggested that they should be allowed to discover information for themselves. He believed that learners review previously learned material even as they gain new knowledge. His interpretation of Cognitive Learning Theory in a corporate environment can be put by:

- a) Allow employees to learn new skills and get new knowledge through new tasks and challenges.
- b) Challenge trainees to solve real-world problems your organization faces.

Personalized Learning Strategy (L & D): All of these strategies can be combined into one personalized learning approach. Each learner is unique and has their own experience, knowledge, and perception. Which can greatly influence the way they interpret and consume new information. Creating learning experiences that fit each individual based on their own knowledge that is meaningful for their role which encourages them to discover new solutions can drive great results and improve their overall performance. L&D professionals should try to organize a learning environment, to allow employees to learn at their own pace, and with a variety of learning opportunities. A common practice in recent years to create personalized learning is the use of modern technologies: AI recommendations, learning paths, machine learning, natural language processing. For example, a digital learning assistant has the capability to recognize what the skills of the employees are, what they have learned so far, and automatically suggest to them what they should learn next. The reason why such modern technology is essential in employee development, because it can offer information they need without them even anticipating the need for it. Overall, it's a fantastic tool that can ensure better employee education and eventually drive greater performance.

Moreover, the company can save a significant amount of resources with a learning assistant as it can make your organization's learning environment flawless even if scalability is required. Furthermore, having the ultimate access to a range of company resources, no two employees need to learn or go through the same learning process as they can cherry-pick what

they want to learn from. Now you have a clear idea of what cognitive learning means. The following are various examples of cognitive learning:

1. Explicit Learning: It happens when you intentionally seek knowledge to attempt and learn a new skill or process that may be vital to your work. It requires you to be attentive and take action to acquire knowledge. An example of explicit learning would be undertaking an in-depth video editing course to understand the functionality of the software in order to be able to use it appropriately for the needs of your work.

2. Implicit Learning: Sometimes you passively gain new knowledge and learn some new skills. It is known as implicit learning, where you are unaware of the entire process until you realize you have retained something new. This type of learning may occur when you are working, talking, or going about your normal life. Typing fast and without looking at your keyboard is one good example of implicit learning that comes automatically over time.

3. Meaningful Learning: Meaningful learning is when you are capable of acquiring new information and relating it to past experiences. This is because this cognitive learning approach teaches employees to build transferable problem-solving skills that can be applied in other areas.

An example of meaningful learning is when you work in procurement and decide to take an advanced course in your department to deepen your understanding of the subject.

4. Discovery Learning: It happens when you actively seek new knowledge by researching new concepts, processes, and subjects. For example, if someone is set the task to proofread a particular report and they need to make use of a specific tool such as Grammarly, by using this tool in hand

with the manuals, this would cause them to learn the features and abilities of the tool through discovery.

5. Receptive Learning: Lectures where you sit in groups and a speaker feeds the audience with information on a specific subject is an example of receptive learning. It requires the learner to be active by asking questions and taking down short notes. During training in your workplace, this type of learning comes in handy where you get a deeper understanding of new information by being active and responsive to the speaker.

6. Non-Associative Learning (Habituation and Sensitization): It is a type of learning that enables humans to adapt to something by facing it frequently. When you get a new job at a factory where there are many machines making noise, it irritates for the first few days, but you later learn how to live with it. This is known as habituation. Sensitization is the vice versa whereby your reaction towards something increases as you get frequent exposure towards it. This type of learning happens in your typical situations in life and work. Working in an office teaches you to be more responsive to things like telephone calls.

7. Emotional Learning: Developing emotional intelligence is crucial to help us maintain friendly relationships with friends at work and in life. Emotional learning helps people learn how to take charge of their emotions and also understand others'. An employer requires to have control over their emotions so as to handle customers and also their superiors in a courteous manner.

8. Experiential Learning: Our experiences in life are our best lessons. Your interactions with other people always teach you some precious life lessons. What you learn depends on how you

interpret it. For example, an intern learns by shadowing an experienced senior employer to gain experience. He acquires new skills that are relevant to his line of work.

9. Observation Learning: One of the significant components of the social cognitive theory is observational learning. It is handy among employees since it mainly involves imitation of skills from colleagues and superiors. Observing your friends or work colleagues is an efficient way to learn a new skill. Your successful manager at work can help you improve your leadership qualities as you embrace and practice his habits.

10. Cooperative and Collaborative Learning: Working and learning in groups is encouraged in many institutions. Cooperative learning helps bring out one's best skills and deepens the collaboration between a group of people (read more about collaborative learning). However, for an individual to learn this way, he/she has to be an active and equal participant and interact with fellow group members. Some companies select individuals to train on new strategies that improve the success of an organization. The trained employees are then encouraged to pass on this knowledge to their team members. The types of cognitive learning above are vital in using your brain's features as much as possible. They make it easier for you to acquire new skills and knowledge in life.

2.4.6 Benefits of Cognitive Learning

The following are the major positive effects of cognitive learning (Jaeggi, Buschkuhl, Jonides, & Shah, 2011):

1. Enhances learning: Cognitive learning theory enhances lifelong learning. Workers can build upon previous ideas and apply new concepts to already existing knowledge.

2. Boosts confidence: Employees become more confident in approaching tasks as they get a deeper understanding of new topics and learn new skills.

3. Enhances Comprehension: Cognitive learning improves learners' comprehension of acquiring new information. They can develop a deeper understanding of new learning materials.

4. Improves problem-solving skills: Cognitive learning equips employees with the skills they need to learn effectively. They are thereby able to develop problem-solving skills they can apply under challenging tasks.

5. Help learn new things faster: Through the experience of learning, the employee will be able to recycle and use the same learning methods that worked previously. This will help them learn new things a lot faster as they already know what works for them when it comes to obtaining new knowledge.

6. Teaches to form concept formation (think abstract): Cognitive learning can also teach your employees to form a range of different concepts such as easily perceiving and interpreting information that could boost creativity and lead to innovations at the workplace.

2.5 Theoretical Framework (Learning Theory)

In study Skills Counselling Training counselling sessions, a counsellor need to use different perspectives of Learning Theories. Theories of learning related to education and classroom practice offers different occasion of how people learn. One of the root causes of this variation in theory is due to the fact that each theory presents its own definition of learning. However, what unites these theories is their aim to provide a guide to strong teaching practice that will lead to an improvement in the knowledge of learners (sotto, 2007). Each learner has individual needs and

slightly different ways of learning and because of this individuality, there will come a time when learning theories fail to enhance any sort of learning (sotto, 2007). This suggests that for there to be an effective use made of theories of learning they should be used simultaneously drawing on the benefits and overcoming the limitations of each (sotto, 2007). Burns (1995) viewed learning as a relatively permanent change in behavior with behavior including both observable activity and internal processes such as thinking, attitudes and emotions. Burns considers that learning might not manifest itself in observable behaviour until sometime after the educational program has taken place.

2.5.1 Cognitive Learning Theory

Cognitive learning theory explains how internal and external factors influence an individual's mental processes to supplement learning (Wu., Hsiao, Wu, Lin, & Huang, 2012). Delays and difficulties in learning are seen when cognitive processes are not working regularly. These processes are such as attention, observation, retrieval from long-term memory, and categorization. Several researchers have made significant contributions to this theory. Jerome Bruner focused on how mental processes are linked to teaching. Another researcher by the name Jean Piaget recognized that the environment plays a huge role and also focused on changes that take place in the internal cognitive structure. You can read more about Peaget's theory of cognitive development in our previous article. Cognitive learning theory is dominant in psychology. It is broken down into two categories: Social Cognitive Learning Theory and Cognitive Behavioral Theory (Wu., Hsiao, Wu, Lin, & Huang, 2012).

Cognitive theories focus on how our mental processes or cognitions change over time. The theory of cognitive development is a comprehensive theory about the nature and development of

human intelligence first developed by Jean Piaget. It is primarily known as a developmental stage theory, but in fact, it deals with the nature of knowledge itself and how humans come gradually to acquire it, construct it, and use it. Moreover, Piaget claims that cognitive development is at the center of the human organism and language is contingent on cognitive development.

2.5.2 Jean Piaget's Theory of Cognitive Development

Jean Piaget (1896-1980) is one of the most influential cognitive theorists in development, inspired to explore children's ability to think and reason by watching his own children's development (Huitt & Hummel, 2003). He was one of the first to recognize and map out the ways in which children's intelligence differs from that of adults. He became interested in this area when he was asked to test the IQ of children and began to notice that there was a pattern in their wrong answers. He believed that children's intellectual skills change over time that maturation rather than training brings about that change. Children of differing ages interpret the world differently (Piaget, 1976).

Piaget believed that we are continuously trying to maintain cognitive equilibrium or a balance or cohesiveness in what we see and what we know. Children have much more of a challenge in maintaining this balance because they are constantly being confronted with new situations, new words, new objects, etc. When faced with something new, a child may either fit it into an existing framework (**schema**) and match it with something known (**assimilation**) such as calling all animals with four legs "doggies" because he or she knows the word doggie, or expand the framework of knowledge to accommodate the new situation (**accommodation**) by learning a new word to more accurately name the animal. This is the underlying dynamic in our own

cognition. Even as adults we continue to try and make sense of new situations by determining whether they fit into our old way of thinking or whether we need to modify our thoughts. The following are the Piaget's stages of cognitive development as summarized from Huitt & Hummel (2003):

Sensorimotor Stage: The first stage is the sensorimotor stage, which lasts from birth to about 2 years old. During this stage, children learn about the world through their senses and motor behavior. Young children put objects in their mouths to see if the items are edible, and once they can grasp objects, they may shake or bang them to see if they make sounds. Between 5 and 8 months old, the child develops **object permanence**, which is the understanding that even if something is out of sight, it still exists (Bogartz, Shinsky, & Schilling, 2000). According to Piaget, young infants do not remember an object after it has been removed from sight. Piaget studied infants' reactions when a toy was first shown to an infant and then hidden under a blanket. Infants who had already developed object permanence would reach for the hidden toy, indicating that they knew it still existed, whereas infants who had not developed object permanence would appear confused.

Preoperational Stage: Piaget's second stage is the preoperational stage, which is from approximately 2 to 7 years old. In this stage, children can use symbols to represent words, images, and ideas, which is why children in this stage engage in pretend play. A child's arms might become airplane wings as he zooms around the room, or a child with a stick might become a brave knight with a sword. Children also begin to use language in the preoperational stage, but they cannot understand adult logic or mentally manipulate information (the term *operational* refers to logical manipulation of information, so children at this stage are considered to be *pre-*

operational). Children's logic is based on their own personal knowledge of the world so far, rather than on conventional knowledge. For example, dad gave a slice of pizza to 10-year-old Keiko and another slice to her 3-year-old brother, Kenny. Kenny's pizza slice was cut into five pieces, so Kenny told his sister that he got more pizza than she did. Children in this stage cannot perform mental operations because they have not developed an understanding of **conservation**, which is the idea that even if you change the appearance of something, it is still equal in size as long as nothing has been removed or added.

During this stage, we also expect children to display **egocentrism**, which means that the child is not able to take the perspective of others. A child at this stage thinks that everyone sees, thinks, and feels just as they do. Let's look at Kenny and Keiko again. Keiko's birthday is coming up, so their mom takes Kenny to the toy store to choose a present for his sister. He selects an Iron Man action figure for her, thinking that if he likes the toy, his sister will too. An egocentric child is not able to infer the perspective of other people and instead attributes his own perspective. At some point during this stage and typically between 3 and 5 years old, children come to understand that people have thoughts, feelings, and beliefs that are different from their own. This is known as **theory-of-mind** (TOM).

Concrete Operational Stage: Piaget's third stage is the **concrete operational stage**, which occurs from about 7 to 11 years old. In this stage, children can think logically about real (concrete) events; they have a firm grasp on the use of numbers and start to employ memory strategies. They can perform mathematical operations and understand transformations, such as addition is the opposite of subtraction, and multiplication is the opposite of division. In this stage, children also master the concept of conservation: Even if something changes shape, its

mass, volume, and number stay the same. For example, if you pour water from a tall, thin glass to a short, fat glass, you still have the same amount of water. Remember Keiko and Kenny and the pizza? How did Keiko know that Kenny was wrong when he said that he had more pizza?

Children in the concrete operational stage also understand the principle of **reversibility**, which means that objects can be changed and then returned back to their original form or condition. Take, for example, water that you poured into the short, fat glass: You can pour water from the fat glass back to the thin glass and still have the same amount (minus a couple of drops).

Formal Operational Stage:The fourth, and last, stage in Piaget's theory is the formal operational stage, which is from about age 11 to adulthood. Whereas children in the concrete operational stage are able to think logically only about concrete events, children in the formal operational stage can also deal with abstract ideas and hypothetical situations. Children in this stage can use abstract thinking to problem solve, look at alternative solutions, and test these solutions. In adolescence, a renewed egocentrism occurs. For example, a 15-year-old with a very small pimple on her face might think it is huge and incredibly visible, under the mistaken impression that others must share her perceptions.

Application of Piaget's theory of cognitive development in Study Skills Training Counselling Technic

A counsellor applying Piaget's theory of cognitive development in Study Skills Training Counselling sessions to reduce defective study habits need to consider the following (Huitt & Hummel, 2003); (Piaget, 1976):

1. Information-processing approaches have become an important alternative to Piagetian approaches.
2. Teachers can create specific strategies and techniques to apply these learning theories in their classroom. Teachers need to first focus on getting a well-rounded education to learn about all kinds of techniques for teaching and classroom management.
3. Teachers need to understand learning theories to be prepared to utilize them in their classroom. An understanding of learning theories helps teachers connect to all different kinds of students.
4. Teachers can focus on different learning styles to reach different students, creating teaching that focuses directly on student needs and aptitudes.
5. The theory is based on the idea that humans process the information they receive, rather than merely responding to stimuli.
6. As a model, it assumes that even complex behavior such as learning, remembering, categorizing, and thinking can be broken down into a series of individual, specific steps, and as a person develops strategies for processing information, they can learn more complex information. This perspective equates the mind to a computer, which is responsible for analyzing information from the environment.
7. The most common information-processing model is applied to an understanding of memory and the way that information is encoded, stored, and then retrieved from the brain but information processing approaches also apply to cognitive processing in general.

8. Psychologists who use information processing approaches examine how children tackle tasks such as the ones described above, whether it be through trial and error, building upon previous life experiences, or generalizing insights from external sources.
9. According to the standard information-processing model for mental development, the mind's machinery includes attention mechanisms for bringing information in, working memory for actively manipulating information, and long-term memory for passively holding information so that it can be used in the future.
10. This theory addresses how as children grow, their brains likewise mature, leading to advances in their ability to process and respond to the information they received through their senses.
11. The theory emphasizes a continuous pattern of development, in contrast with cognitive-developmental theorists such as Piaget who thought development occurred in stages.
12. Developmental psychologists who adopt the information-processing perspective account for mental development in terms of maturational changes in basic components of a child's mind. At the same time, they do not offer a complete explanation of behavior.
13. Piaget suggested three vital components of learning:
 - i. Accommodation - taking new information into account by modifying what we already know.
 - ii. Assimilation - the arrangement of new knowledge inside our heads beside what we know.
 - iii. Equilibration - balancing what we already know with the new information that we are trying to acquire.

14. Each company should develop their training programs with a personalized learning approach to make it engaging for their employees to achieve better results. To achieve that, counsellors should focus on the following points:

- i. Develop and introduce their programs based on already existing knowledge.
- ii. Provide more analogies to connect new knowledge with already existing knowledge.
- iii. Divide learning materials into stages and maintain a logical flow of lessons taught.
- iv. Provide examples or practical tasks that show how new information or principles can connect with previous knowledge, or enhance it.
- v. Encourage questions and comments from trainees.

2.5.3 Social Cognitive Learning Theory

This theory helps us understand how people are influenced and their influence on the environment. One of the major components of social cognitive theory is observational learning. It is the process of learning others' desirable and undesirable behaviors through observation. It is a quick way of acquiring information when you individually take action. A person who demonstrates behavior for another person is known as a model. These may be real people such as teachers, our peers, and supervisors, or symbolic models, also known as fictional characters that influence an observer's behavior (Nabavi, 2012).

Observational learning teaches people both positive and negative behaviors. For example, a manager within a company can teach the employees how they are supposed to behave ethically and be socially conscious when interacting and dealing with rude customers. Moreover, the

manager can also train his/her employees on the different procedures that they can take in case of fire or other low probability hazardous scenarios (Nabavi, 2012).

Social cognitive theory is a learning theory developed by the renowned Stanford psychology professor Albert Bandura. The theory provides a framework for understanding how people actively shape and are shaped by their environment. In particular, the theory details the processes of observational learning and modeling, and the influence of self-efficacy on the production of behavior(Nabavi, 2012).

Observational Learning

A major component of social cognitive theory is observational learning. Bandura's ideas about learning stood in contrast to those of behaviorists like B.F. Skinner. According to Skinner, learning could only be achieved by taking individual action. However, Bandura claimed that observational learning, through which people observe and imitate models they encounter in their environment, enables people to acquire information much more quickly. Observational learning occurs through a sequence of four processes (Money, 1995):

1. **Attentional processes** account for the information that is selected for observation in the environment. People might select to observe real-life models or models they encounter via media.
2. **Retention processes** involve remembering the observed information so it can be successfully recalled and reconstructed later.
3. **Production processes** reconstruct the memories of the observations so what was learned can be applied in appropriate situations. In many cases, this doesn't mean the observer

will replicate the observed action exactly, but that they will modify the behavior to produce a variation that fits the context.

4. **Motivational processes** determine whether or not an observed behavior is performed based on whether that behavior was observed to result in desired or adverse outcomes for the model. If an observed behavior was rewarded, the observer will be more motivated to reproduce it later. However, if a behavior was punished in some way, the observer would be less motivated to reproduce it. Thus, social cognitive theory cautions that people do not perform every behavior they learn through modeling.

Self-Efficacy

In addition to the information models can convey during observational learning, models can also increase or decrease the observer's belief in their self-efficacy to enact observed behaviors and bring about desired outcomes from those behaviors. When people see others like them succeed, they also believe they can be capable of succeeding. Thus, models are a source of motivation and inspiration (Zimmerman, 1989).

Perceptions of self-efficacy influence people's choices and beliefs in themselves, including the goals they choose to pursue and the effort they put into them, how long they're willing to persevere in the face of obstacles and setbacks, and the outcomes they expect. Thus, self-efficacy influences one's motivations to perform various actions and one's belief in their ability to do so (Zimmerman, 1989).

Such beliefs can impact personal growth and change. For example, research has shown that enhancing self-efficacy beliefs is more likely to result in the improvement of health habits than

the use of fear-based communication. Belief in one's self-efficacy can be the difference between whether or not an individual even considers making positive changes in their life (Zimmerman, 1989).

Modeling Media

The prosocial potential of media models has been demonstrated through serial dramas that were produced for developing communities on issues such as literacy, family planning, and the status of women. These dramas have been successful in bringing about positive social change, while demonstrating the relevance and applicability of social cognitive theory to media (Bandura, 2004).

For example, a television show in India was produced to raise women's status and promote smaller families by embedding these ideas in the show. The show championed gender equality by including characters that positively modeled women's equality. In addition, there were other characters that modeled subservient women's roles and some that transitioned between subservience and equality. The show was popular, and despite its melodramatic narrative, viewers understood the messages it modeled. These viewers learned that women should have equal rights, should have the freedom to choose how they live their lives, and be able to limit the size of their families. In this example and others, the tenets of social cognitive theory have been utilized to make a positive impact through fictional media models (Bandura, 2004).

Application of Social cognitive theory in Study Skills Training Counselling Technique

A counsellor applying Social cognitive theory in Study Skills Training Counselling sessions to reduce defective study habits need to consider the following(Bandura, 2004):

1. Bandura's (1986) findings suggest that there is interplay between the environment and the individual. We are not just the product of our surroundings, rather we influence our surroundings.
2. There is interplay between our personality and the way we interpret events and how they influence us. This concept is called **reciprocal determinism**. An example of this might be the interplay between parents and children.
3. Parents not only influence their child's environment, perhaps intentionally through the use of reinforcement, etc., but children influence parents as well. Parents may respond differently to their first child than with their fourth. Perhaps they try to be the perfect parents with their firstborn, but by the time their last child comes along, they have very different expectations of themselves and their child.
4. Our environment creates us and we create our environment. Today there are numerous other social influences, from TV, games, the Internet, i-pads, phones, social media, influencers, advertisements.
5. Social cognitive theory put greater emphasis on the cognitive components of observational learning and the way behavior, cognition, and the environment interact to shape people.
6. The theory views people as active agents who both influence and are influenced by their environment.
7. A major component of the theory is observational learning: the process of learning desirable and undesirable behaviors by observing others, then reproducing learned behaviors in order to maximize rewards.
8. Individuals' beliefs in their own self-efficacy influences whether or not they will reproduce an observed behavior.

2.5.4 Cognitive Behavioral Theory

Cognitive Behavioral Theory mainly refers to our mental processes, such as our thoughts and interpretations of life events. It explains how the thoughts, feelings, and behavior of a person interact with each other. Thoughts lead to particular emotions, which in turn lead to specific behavioral responses. When we change our thoughts, we can change our emotions and then our behaviors. It also works in reverse where changing how we behave leads to changes in our feelings and, ultimately, our thoughts (Elliott, Shapiro, Firth-Cozens, Stiles, Hardy, Llewelyn, & Margison, 2001).

The Behavioral Perspective: A Focus on Observable Behavior

The behavioral perspective is the psychological approach that suggests that the keys to understanding development are observable behavior and external stimuli in the environment. Behaviorism is a theory of learning, and learning theories focus on how we respond to events or stimuli rather than emphasizing internal factors that motivate our actions. These theories provide an explanation of how experience can change what we do (Prather & Golden, 2009).

Behaviorism emerged early in the 20th century and became a major force in American psychology. Championed by psychologists such as John B. Watson (1878–1958) and B. F. Skinner (1904–1990), behaviorism rejected any reference to mind and viewed overt and observable behavior as the proper subject matter of psychology. Through the scientific study of behavior, it was hoped that laws of learning could be derived that would promote the prediction and control of behavior. Russian physiologist Ivan Pavlov (1849–1936) influenced early

behaviorism in America. His work on conditioned learning, popularly referred to as classical conditioning, provided support for the notion that learning and behavior were controlled by events in the environment and could be explained with no reference to mind or consciousness (Fancher, 1987).

2.5.5 Classical Conditioning and Emotional Responses

Classical conditioning theory helps us to understand how our responses to one situation become attached to new situations. For example, a smell might remind us of a time when we were a kid. If you went to a new cafe with the same smell as your elementary cafeteria, it might evoke the feelings you had when you were in school. Or a song on the radio might remind you of a memorable evening you spent with your first true love. Or, if you hear your entire name (Isaiah Wilmington Brewer, for instance) called as you walk across the stage to get your diploma and it makes you tense because it reminds you of how your father used to use your full name when he was mad at you, then you've been classically conditioned (Sutton & Barto, 1981).

Classical conditioning explains how we develop many of our emotional responses to people or events or our "gut level" reactions to situations. New situations may bring about an old response because the two have become connected. Attachments form in this way. Addictions are affected by classical conditioning, as anyone who's tried to quit smoking can tell you. When you try to quit, everything that was associated with smoking makes you crave a cigarette (Sutton & Barto, 1981).

Pavlov and Classical Conditioning

Ivan Pavlov (1849–1936) was a Russian physiologist interested in studying digestion. As he recorded the amount of salivation his laboratory dogs produced as they ate, he noticed that they actually began to salivate before the food arrived as the researcher walked down the hall and toward the cage. “This,” he thought, “is not natural!” One would expect a dog to automatically salivate when the food hit their palate, but *before* the food comes? Of course, what happened is that the dogs knew that the food was coming because they had learned to associate the footsteps with the food. The keyword here is “learned” (Cambiaghi, & Sacchetti, 2015).

A learned response is called a “conditioned” response. Pavlov began to experiment with this “psychic” reflex. He began to ring a bell, for instance, prior to introducing the food. Sure enough, after making this connection several times, the dogs could be made to salivate to the sound of a bell. Once the bell had become an event to which the dogs had learned to salivate, it was called a conditioned stimulus. The act of salivating to a bell was a response that had also been learned, now termed in Pavlov’s jargon, a conditioned response. Notice that the response, salivation, is the same whether it is conditioned or unconditioned (unlearned or natural). What changed is the stimulus to which the dog salivates. One is natural (unconditioned) and one is learned (conditioned) (Cambiaghi, & Sacchetti, 2015).

2.5.6 Operant Conditioning B. F. Skinner

Now we turn to the second type of associative learning, operant conditioning. In operant conditioning, organisms learn to associate a behavior and its consequence. A pleasant consequence makes that behavior more likely to be repeated in the future. For example, Spirit, a

dolphin at the National Aquarium in Baltimore, does a flip in the air when her trainer blows a whistle. The consequence is that she gets a fish (Cambiaghi, & Sacchetti, 2015).

Psychologist B. F. Skinner saw that classical conditioning is limited to existing behaviors that are reflexively elicited, and it doesn't account for new behaviors such as riding a bike. He proposed a theory about how such behaviors come about. Skinner believed that behavior is motivated by the consequences we receive for the behavior: the reinforcements and punishments. His idea that learning is the result of consequences is based on the **law of effect**, which was first proposed by psychologist Edward Thorndike. According to the law of effect, behaviors that are followed by consequences that are satisfying to the organism are more likely to be repeated, and behaviors that are followed by unpleasant consequences are less likely to be repeated (Thorndike, 1911). Essentially, if an organism does something that brings about a desired result, the organism is more likely to do it again. If an organism does something that does not bring about a desired result, the organism is less likely to do it again. An example of the law of effect is in employment. One of the reasons (and often the main reason) we show up for work is because we get paid to do so. If we stop getting paid, we will likely stop showing up—even if we love our job (Cambiaghi, & Sacchetti, 2015).

Working with Thorndike's law of effect as his foundation, Skinner began conducting scientific experiments on animals (mainly rats and pigeons) to determine how organisms learn through operant conditioning (Skinner, 1938). He placed these animals inside an operant conditioning chamber, which has come to be known as a "Skinner box" (Figure 1). A Skinner box contains a lever (for rats) or disk (for pigeons) that the animal can press or peck for a food reward via the

dispenser. Speakers and lights can be associated with certain behaviors. A recorder counts the number of responses made by the animal.

Skinner believed that we learn best when our actions are reinforced. For example, a child who cleans his room and is reinforced (rewarded) with a big hug and words of praise is more likely to clean it again than a child whose deed goes unnoticed. Skinner believed that almost anything could be reinforcing. A reinforcer is anything following a behavior that makes it more likely to occur again. It can be something intrinsically rewarding (called intrinsic or primary reinforcers), such as food or praise, or it can be something that is rewarding because it can be exchanged for what one really wants (such as receiving money and using it buy a cookie). Such reinforcers are referred to as secondary reinforcers(Cambiaghi, &Sacchetti, 2015).

2.5.3 Facilitation Theory (The Humanist Approach)

Carl Rogers and others have developed the theory of facilitative learning. The basic premise of this theory is that learning will occur by the educator acting as a facilitator, that is by establishing an atmosphere in which learners feel comfortable to consider new ideas and are not threatened by external factors (Laird 1985). Other characteristics of this theory include: A belief that human beings have a natural eagerness to learn (Rogers, Lyon, &Tausch, 2013).

Facilitation Theory begins with the assertion that a person cannot teach another directly (i.e., there can be no transfer of information or knowledge from one to the other). According to this perspective, that means teaching can only be facilitating – which is understood in terms of the quality of the personal relationship between teacher and student. The teacher/facilitator is seen as playing the key role in the learning process, and that role relies on three core conditions: realness

(the teacher is authentic); prizing, acceptance, trust (the teacher cares, and the student is aware of that); empathy (the teacher can understand the student's perspectives, without judgment) (Rogers, Lyon, &Tausch, 2013).

There is some resistance to, and unpleasant consequences of, giving up what is currently held to be true. The most significant learning involves changing one's concept of oneself. Rogers' first significant area of interest was psychology and psychotherapy where since 1940s he started to apply a *client-centered therapy* which promotes trying to help or counsel the client viewing the problem through his eyes. In the second half of the 1960s he started to promote a similar approach for learning and the educational process. His starting beliefs were that people are by nature good and healthy and that every living creature strives to do best from his existence (*the actualizing tendency*)(Rogers, Lyon, &Tausch, 2013).

Facilitative teachers are:

- i. less protective of their constructs and beliefs than other teachers,
- ii. more able to listen to learners, especially to their feelings,
- iii. inclined to pay as much attention to their relationship with learners as to the content of the course,
- iv. apt to accept feedback, both positive and negative and to use it as constructive insight into themselves and their behaviour.

Learners:

- i. are encouraged to take responsibility for their own learning,

- ii. provide much of the input for the learning which occurs through their insights and experiences,
- iii. are encouraged to consider that the most valuable evaluation is self-evaluation and that learning needs to focus on factors that contribute to solving significant problems or achieving significant results.

In his works, Rogers addresses two kinds of learning introduced by earlier theorists (Rogers, Lyon, & Tausch, 2013):

- i. rote learning, referring to meaningless memorization of facts, and
- ii. experiential learning in everyday life, which has meaning and personal relevance. It is the result of a natural curiosity, and a recognized importance of the learned material, often acquired through doing, or at least facilitated by student's active participation in the learning process, and often self-initiated. Still, this kind of knowledge is difficult to communicate to another.

Rogers' theory therefore sees the teacher as the key role in the process of learning, but not as a walking textbook transmitting its contents, but as the **facilitator of learning**. The facilitation here occurs through the teacher's attitudes in his personal relationship with the students. Rogers suggests three attitudinal qualities necessary for facilitative practice (both in counseling and education). These so called *core conditions* are (Davis and Francis, 2019):

- a. **Realness**. “*It means that he [the teacher] is **being himself**, not denying himself.*” The teacher has to be a real person **aware of his feelings** and able to communicate them appropriately, no matter how exactly does he feel. He should not be just a role in the play

of education, “*a faceless embodiment of a curricular requirement or a sterile tube through which knowledge is passed from one generation to the next.*”

- b. **Prizing, acceptance, trust.** This refers to teacher's **caring about the student** and his acceptance of student's feelings (one that support learning as well as ones disturbing it). It is the trust and prizing of his capacity and abilities as a human being.
- c. **Empathy.** Empathy means being able to *walk in others shoes*. This means that a teacher can understand student's perspective on the process on learning and his reactions from the inside. The accent here is on *understand*, not *judge* or *evaluate*.

Other tasks of teachers include establishing a pleasant atmosphere in the classroom and thereby facilitating learning and acquisition of new ideas by reducing possible negative effects of external factors. A facilitative teacher should also be open to new ideas, listen to students, pay as much attention to his relationship with the students as he does to the content he is teaching, encouraging learners to take responsibility for their learning and actions and to take self-evaluation as the highest form of evaluation. He should also use **class feedback** for further improvements(Rogers, Lyon, &Tausch, 2013).

Still, not all of the work during the educational process can be done by the teacher. Its effectiveness does depend on the learner as well. In order to contribute to their own learning, students should be: aware of the facilitative conditions implemented for their benefit, aware that the problem to be learned is realistic, relevant and meaningful and motivated, since motivation is, according to Rogers, a tendency towards self-actualization present in all healthy individuals. If all the necessary conditions are satisfied, learning becomes life, and a very vital life at that.

The student is on his way, sometimes excitedly, sometimes reluctantly, to becoming a learning, changing being (Rogers, Lyon, & Tausch, 2013).

Rogers' theory, as stated, has rather clear implementation goals, yet they are not always so easy to introduce to the classroom. Establishing a close contact with the students, getting to know them and offering them empathy and support requires a great amount of effort from teachers, who mostly ignore this side of educational process and orientate only on knowledge they are supposed to pass on to the students (Davis and Francis, 2019).

Some of Rogers' Advice for implementing the *the core conditions* are the following:

1. Realness. Being real does not mean to release all the frustrations and anger on the students. That kind of teacher should not be in the classroom at all. “*The attitudes being expressed in being real must be attitudes of respect, warmth, caring, liking and understanding.*” The teacher must not pretend to be all-knowing and perfect, since the students know that can't be the truth.
2. Acceptance. Teachers should **prize all students** not for their positive/negative characteristics, but because they are all valuable human beings. This prizing can manifest as listening to what students are saying, but not necessary as listening to evaluate, but **listening** to learn his **ideas, thoughts** and **feelings**. Students need to feel free to explain their thoughts. Prizing can also manifest through responding to what the students say.
3. Empathy. Empathy enables teacher to understand the reasons that led the student to certain behavior or an answer, but also to understand his emotional situation that needs to be solved in order to enable significant learning.

Reported positive results of Rogers' theory in practice include: fewer disciplinary problems in the classroom, better knowledge and IQ test scores, usage of higher levels of thinking, fewer acts of vandalism, positive self-regard, increase in creativity and other (Davis and Francis, 2019).

Application of Facilitation Theory in Study Skills Training Counselling Technique

A counsellor applying Facilitation Theory in Study Skills Training Counselling sessions to reduce defective study habits need to consider the following (Rogers, Lyon, & Tausch, 2013):

1. Facilitation Theory is associated with a fairly robust and substantial body of evidence.
2. Teachers who are able to establish and maintain positive personal relationships with students tend to see fewer disciplinary problems, better achievement results, higher-order thinking, less vandalism, and improvements in self-regard (Davis and Francis, 2019).

2.6 Review of Empirical Studies

Several empirical studies were conducted in relation to dependent and independent variables of this study within and outside Nigerian context

A study conducted by Lawan (2016) on the effect of Cognitive Restructuring (CR) and Social Skills Training (SST) counselling Techniques on Avoidant Personality Disorder (APD) among Secondary School Students in Kano Metropolis. The study is a quasi -experimental design involving pre-test-posttest-control group design. The population of the study consist of Senior Secondary School two Students in Kano Metropolis who exhibited APD. Three male and three female senior secondary schools, making six schools, were selected in Kano Metropolis. A sample of 72 respondents from the six schools, twelve from each school, were sampled and put into 3 experimental groups (CR, SST and control group). Each group consists of 12 male and 12

female students. APD test (DSM-5) was used for data collection in the study. Each treatment group, either CR or SST, received treatment for 12 consecutive weeks (3 minutes a week) counselling sessions. Seven research questions and seven null hypotheses were formulated and the hypotheses were tested at 0.05 alpha levels of significance while Standard Deviation and t-test for independent sample were used to analyze the data collected. Also ANOVA was used on the pre-test results to confirm that there is no difference in the level of APD among the groups. The results indicated that CR Counselling Technique has effects in the reduction of APD ($t=8.086$, $p=0.000$). SST Counselling Technique has effects in the reduction of APD ($t=8.884$, $p=0.000$). There is no differential effect base on the technique between CR and SST ($t=0.617$, $p=0.540$). There is a differential effect base on gender in the CR treatment in favor of male ($t=0.014$, $p=0.006$) while there is no differential effects base on gender in the SST ($t=0.309$, $p=0.760$). Based on the findings of the study this research recommend among others; a structured treatment package of the two techniques (CR and SST) used in this study should be used by the school counsellors in conjunction or isolation for the treatment of APD among students. CR and SST counselling techniques could be use in the treatment of APD in both school and clinical settings. CR and SST counseling techniques should be designed and incorporated into national curriculum of secondary schools. And lastly, gender differences of the clients should be considered when structuring and implementing CR counselling techniques in the treatment of APD.

A study conducted by Ahmed (2016) investigated the effects of cognitive restructuring and graded exposure counselling technique on school phobia among secondary school students in Kaduna Metropolis, Nigeria. The study employed a quasi-experimental, non-equivalent control group, pre-test post-test design. The population of the study was 415 junior secondary school

students whereas 36 students were purposively sampled and used for the study. The instrument used for data collection was Screen for Child Anxiety Related Disorders (SCARED). Data were analyzed using mean, standard deviation, t-test and ANCOVA. Findings revealed that; male and female students exposed to CRT had a reduced school phobia in favor of female students with ($t = 0.819$, $p = 0.432$), male and female students exposed to GET had a reduced school phobia in favor of male secondary school students with ($t = 0.948$, $p = 0.366$), students exposed to CRT such as validity and testing, modelling, and systematic positive reinforcement had a reduced school phobia as compared to those in control group ($t = 20.108$, $p = 0.000$), students exposed to GET such as hierarchy fears had reduced school phobia than their counterparts in the control group ($t = 18.432$, $p = 0.000$) and gender was not a significant factor among those exposed to both CRT and GET on reducing school phobia among secondary school students ($f = 0.76$, $p = 0.783$). It was therefore recommended that school principals, counsellors, psychologists and form teachers should be exposed to training in CRT and GET in re-addressing students with school phobia among others.

A study conducted by Segun (2017) investigated the effects of cognitive restructuring and problem solving strategies in the treatment of poor reading skills and note taking among secondary school students in Ondo State. The study adopted quasi experimental pre-test, post-test and control group research design. One hundred and twenty subjects (120) were selected through purposive and stratified random sampling techniques from three secondary schools in Ondo State. One school from each of three senatorial districts of Ondo State. Samples were assigned to three groups: cognitive restructuring, problem-solving and control groups. Each group consisted of forty subjects. Instrument used for the study was Study Habit Inventory [SHI] adapted from Bakare's Study Habit Inventory (1977). Two hypothesis were tested at 0.05 alpha

level. Data collected were analyzed using analysis of co-variance [ANCOVA]. Results of the study revealed that there was significant difference in the reading and note taking of experimental and control group. The treatment strategies: Cognitive Restructuring, and Problem Solving techniques assisted in improving reading and note taking of the respondents. Based on the findings, it was concluded that application of Cognitive Restructuring and Problem-solving Strategies are capable of ameliorating poor reading skills and note taking of secondary school students.

A study conducted by, ChinyeluAnyamene and Chinyere (2017) on the effects of cognitive restructuring counselling Technique on Lateness among secondary school students in Gombe State, Nigeria. One research question guided the study and one hypothesis was formulated. The study was carried out using quasi-experimental design. The population of students with lateness behavior was one hundred and sixty-five (165) latecomers. A sample of ninety (90) students with very high late coming were selected from the schools from the study. An observation guide was adopted by the researchers for data collection. Pre-test and post-test were given to both groups. Observation guide was used in answering the research question and ANOVA was used in testing the hypothesis at 0.05 level of significance. The findings of the study showed that Cognitive Restructuring was effective in modifying lateness behavior and reducing the magnitude of times of lateness among secondary school students. Based on the findings, recommendations were made including that Cognitive restructuring should be adopted by school counsellors as an effective treatment technique on students' lateness behavior in school setting.

Also, Asikhia (2014) established the efficacy of Cognitive restructuring counselling technique in reducing anxiety among secondary school students in Ado-Odo, Ota and Ifo Local government Areas of Ogun state.

A study conducted by, Theophilus (2015) on the effect of cognitive restructuring on Delinquent Behavior among adolescent in Borstal training Institute, Barnawa, Kaduna state, Nigeria. The study employed a quasi-experimental, non –equivalent control group, pre-test-post- test design. The population of the study was 364 inmates out of which 40 inmates were purposively sampled and used for the study. The instruments used for data collection was conduct Disorder Scale (CDS) and inmate Therapeutic Technique Questionnaire (ITTQ). Research question and hypothesis were analyzed using mean, standard deviation and t-test. These hypotheses were drawn for this study and the findings reveal that significant difference exist between those in the experimental and control group in their aggressive ($p=0.05$, $t=1.96$), Hostility (0.30, $t=1.96$) and theft delinquent behavior ($p=0.000$, $t=1.96$) after exposure to cognitive restructuring treatment technique respectively. It was recommended among others that psychologist and those in the helping profession be encouraged to use cognitive restructuring technique to serve as corrective measures for delinquent adolescent. The study will serve as reference point for parents, teachers, owners of delinquent homes and the government.

In the same vein, Faloye (2016) revealed that the technique is effective in enhancing academic self-efficacy of low-achieving students in Akure, Ondo State. The technique was also proven by Umar, Abdullahi, Oligba, Sambo and Abdulwahid (2014) to be effective in reducing habit of tobacco smoking among secondary school students in Zaria.

Mikaeli, Zare and Alhashemi (2010) found that CRCT is effective in improving academic performance of secondary school girl students in Khalkhal, Iran. Saputra (2017) approved of the effectiveness of this technique in ameliorating academic procrastination among secondary school students in Indonesia.

Some studies carried out a comparative analysis of the efficacy of CRCT along with another counselling technique. These include Adeusi (2013) in which the efficacy of Cognitive Restructuring and Behavioral Rehearsal were compared in treating conduct disorder among adolescent in Special Correctional Centers in Lagos. This study revealed that the latter (Behavioral Rehearsal) was more efficient. Mohammed (2014) compared the effectiveness of CRCT with that of Systematic Desensitization counselling technique in controlling high-stakes test anxiety among final year senior secondary students in Kaduna metropolis. The study revealed that CRCT is more effective. Still in Kaduna metropolis.

A study conducted by Alabi (2003) studied “The Relationship between Study Habits and Attitudes of Secondary School Students towards Examination Malpractice in Kwara State. The design he used for the study was ex-post factor and a sample of four hundred (400) students. He developed two instruments which he used for the study. Student study habits questionnaire (SSHQ) and students attitudes toward examination malpractice questionnaire (SATEMQ). The findings revealed that there was no significant relationship between students study habits and their attitudes towards examination malpractice.

Another study conducted by Martha (2015) investigated the effect of study skills training on Defective Study Habits s among senior secondary school students in Fagge local government Area of Kano State, Nigeria. Five research questions and five null hypotheses were formulated. The quasi experimental, pre-test, post-test control design guided the study. The population of the study comprised all the SS II students of Fagge local government area of Kano state. The sample was made up of 100 respondents who were assigned to two groups: study skills training (experimental group) and the control group. Each had 50 participants (25 males and 25 females). Purposive sampling was used in selecting students with Defective Study Habits s for the

research. The instrument used to measure the Defective Study Habits of students was Study Habits Inventory developed by Bakare (1977). Data were analyzed using percentages, mean, standard deviation and t-test. The results showed that, there is significant effect between secondary school students exposed to study skills training and the control group ($t=17.308$, $p=0.000$); there is significant effect of the study skills training between the treatment and control group on home work and assignment ($t=4.577$, $p=0.000$); there is significant effect of the study skills training between the treatment and control group on time allocation, reading and note taking, and study period procedures ($t=13.999$, $p=0.000$); there is significant effect of the study skills training between the treatment and control group on concentration, written works, examinations and teacher consultation ($t=18.374$, $p=0.000$); there is significant difference between Defective Study Habits of male and female respondent in the treatment group ($t=6.126$, $p=0.000$). Based on these findings, it was recommended that school counsellors should organize study skills training for their students often; this can be done every term or per session.

A study carried out by Adekunle T and Simeon A (2016) assessed the impact of study habit and gender on science achievement of secondary school students in Katsina State. The researchers adopted descriptive survey research design for the study. Two hundred and eighteen (218) senior secondary school students' in Katsina State were randomly selected for the study. A researchers' designed questionnaire titled "Students' Science Achievement Test and Study Habit Questionnaire" (SSATASHQ) with Cronbach's Alpha show a reliability test coefficient of 0.81 was used to collect data for the study. Analysis of data was carried out using regression, t-test and Pearson correlation coefficient statistics at 0.05 alpha level. Findings revealed that there is significant combine relative effect of study habit and gender on science achievement of secondary school students in Katsina State; there is significant difference between gender and

students science achievement and there is significant relationship between students' study habit and science achievement. Based on these findings, it was recommended that teachers and parents should assist the students to cultivate effective study habit in other to improve their achievement in science subjects in Nigerian secondary schools. Also, Government should provide reinforcement to motivate the students to improve their study habit

2.6 Summary and Uniqueness of the Study

This chapter reviewed the literature of others. The key topics reviewed are Clarification of Concepts, study habits, styles of study habits, Study Skills Training Counselling Technique, Note-Taking Strategies, the SQ3R Reading Comprehension Method, Test-Taking Strategies, Effective Study Techniques, Ten Study Methods and Tips Used in Study Skills Training, Cognitive Learning Strategies, Theoretical Framework (Learning Theories), Cognitive Learning Theory, Benefits of Cognitive Learning, Jean Piaget's Theory of Cognitive Development, Social Cognitive Learning Theory, Cognitive Behavioral Theory, Classical Conditioning and Emotional Responses, Operant Conditioning B. F. Skinner, Facilitation Theory (The Humanist Approach), review of empirical studies.

This work is unique compared to various empirical studies reviewed in the work. For example in a study conducted by Lawan (2016), on the effect of Cognitive Restructuring and Social Skills Training (SST) Counselling Techniques on Avoidant Personality Disorder (APD) among Senior Secondary School Students in Kano Metropolis, the study is a quasi-experimental design in form of pre-test post-test control group design, also ANOVA was used on pretest result. Whereas this research was carried on study habits of students, and it employed quasi experimental design in form of pretest posttest design, t-test was used to analyze data. Also a study by Ahmed (2016), investigated the Effect of Cognitive Restructuring and Graded Exposure Counselling technique

on school phobia among Senior Secondary School Students in Kaduna Metropolis, the population of the study was Junior Secondary School Students that were purposely sampled, instrument for data collection was Screen for Child Anxiety Related Disorders (SCARED), data were analyzed using ANCOVA. This present study is unique as it investigated the effect of Cognitive Restructuring Counselling Technique on Study Habits among Senior Secondary Students in Kano, and the population was proportionately sampled, also Study Habit Inventory (SHI) was used as an instrument and T-test was used to analyze data. In another study by Segun (2017), investigated the effect of Cognitive Restructuring and Problem Solving strategies in the treatment of Poor Reading Skills and Note Taking among Senior Secondary Students in Ondo State, quasi experimental pre-test post-test and control group research design was adopted, ANCOVA was used to analyze results. This study differs because it employed Cognitive Restructuring Counselling Technique only, and quasi experimental was in form of pretest posttest design only, and also T-test was used to analyze data.

A study conducted by ChinyeluAnyamene and Chinyere (2017) on the effects of Cognitive Restructuring counseling technique on Lateness School among Senior Secondary School Students in Gombe State, ANOVA was used to analyze the results. This present study is unique because it studied the Effect of Cognitive Restructuring Counselling Technique on Study Habits among Senior Secondary Students of Nassarawa Zonal Education Directorate in Kano and T-test was used to analyze data. In another study by Asikhia (2014) which studied the efficacy of Cognitive Restructuring Counseling Technique in Reducing Anxiety among Senior Secondary School Students in Ado-Odo, Ota and Ifo Local Government Areas of Ogun State. The present study is unique because it investigated the Effect of Cognitive Restructuring Counselling Technique on Study Habits among Senior Secondary School Students of Nassarawa Zonal

Education Directorate, Kano. Theophilus (2015) investigated the effect of Cognitive Restructuring on Delinquent Behavior among adolescent in Borstal Training Institute, Barnawa, Kaduna, the study employed a quasi-experimental, non-equivalent control group, pre-test post-test design, instrument for data collection was Conduct Disorder Scale (CDS) and Inmate Therapeutic Technique Questionnaire (ITTQ). This study is unique as it studied study habits of Senior Secondary Students in Nassarawa Zonal Education Authority, Kano State, quasi experimental in form of pretest posttest was used and Study Habit Inventory (SHI) was used as an instrument.

The present study is unique compared to a study by Faloye (2016) which carried a studies on effectiveness of Cognitive Restructuring Counseling Technique in Enhancing Academic Self-efficacy of Low-achieving Students in Akure, Ondo State. While this present study investigated the Effect of Cognitive Restructuring Counselling Technique on Study Habits among Senior Secondary School Students of Nassarawa Zonal Education Directorate, Kano State. The technique was also proven by Umar, Abdullahi, Oligba, Sambo, and Abdulwahid (2014) to be effective in reducing habit of tobacco smoking among Secondary School Students in Zaria. Mikaeli, Zare, and Alhashemi (2010) also carried out a study on effect of CRCT in improving academic performance of Secondary School Girl Students in Khalkhal, Iran. Adeusi (2013) carried a study on the efficacy of Cognitive Restructuring and Behavioral Rehearsal in treating conduct disorder among Adolescent in Special Correctional Centers in Lagos. This study differs from the above mentioned as it was carried out on Senior Secondary School Students (male and female) of Nassarawa Zonal Education Directorate, Kano State.

This present study is also unique when compared with that of Mohammed (2014), which compared the effectiveness of study skills training counselling technique with that of Systematic

Desensitization Counselling Technique in controlling high stakes test anxiety among final year Senior Secondary School Students in Kaduna Metropolis. While this study investigated the Effect of study skills training counselling technique on Study Habits among Senior Secondary School Students (SSSII), in Kano State. However, Alabi (2003), conducted a research on The Relationship between Study Habit and Attitudes of Secondary School Students towards Examination Malpractice in Kwara State, the design used for the study was ex-post factor and Student Study Habit Questionnaire (SSHQ) and Students Attitude towards Examination Malpractice Questionnaire (SATEMQ) was used to collect data. This study differs because it was carried out on Study Habits of Senior Secondary Students in Kano State, the study used quasi experimental in form of pretest posttest and Study Habit Inventory (SHI) was used to collect data. Another study by Martha (2015) on the Effect of Study Skills Training on Defective Study Habits among Senior Secondary School Students in Fagge Local government Area, Kano State. Quasi experimental in form of pre-test post-test control group design guided the study, also instrument used for data collection was Study Habit Inventory by Bakare. This study is unique because Cognitive Restructuring Counselling was used as the main Counselling Technique, quasi experimental in form of pretest posttest was used and Study Habit Inventory (SHI) by University of Puget Sound Learning Center was used as an instrument for data collection. Furthermore, Adekunle and Simeon (2016) assessed the impact of Study Habit and Gender on Science Achievement of Secondary School Students in Katsina state. The study employed descriptive survey research design. A researchers designed questionnaire titled Students Science Achievement Test and Study Habit Questionnaire (SSATASHQ), Cronbach Alpha was used to test the reliability of the instrument. This study is unique as it employed quasi experimental

design, Study Habit Inventory (SHI) was used to collect data, while Pearson Product Momentum Correlation Coefficient was used to test the reliability of the instrument.

This study is unique in terms of dependent and independent variable where Cognitive Restructuring Counseling Technique was used to manage low level of study habits among Senior secondary school students in Nassarawa Zonal Education Directorate, Kano State Nigeria. It is also unique in terms of population and sample which was focused on SSS II while some of the review mentioned above were conducted on other class level and tertiary institutes.

The study is also unique because some of the empirical studies mentioned above used other counselling techniques in managing study habits such as cognitive behavior therapy, social skills counseling techniques and others. Similarly this study is also unique in terms of research design whereby the researcher used quasi experimental and focused only on one group i.e pretest and posttest group, in which some of the reviews use either Descriptive or quasi experimental design in form of experimental and control groups. Also the study adapted an instrument used for data collection namely Study Habit Inventory while some of the review above used different instruments.

In view of the above, this study attempt to breach the gap by providing new empirical data which demonstrates the effect of Study Skills Training Counselling Technique on Defective Study Habits s among Senior Secondary Schools Students in Nassarawa Education Zone of Kano State, Nigeria.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter deals with the methodology that was employed by the researcher in the process of research. Therefore, the chapter explains the research design, population of the study, sample and sampling technique. The description of the instrument, the validity and reliability of the instrument and how it was administered and scored also are discussed. Other items include the procedure for data collection, how to control intervening variables that may affect the treatment group as well as the finding of the study. However, the breakdown of the counseling session and procedure for data analysis were also explained.

3.2 Research Design

The research employed quasi experimental design in form of pretest posttest design. According to Kolo (2003), quasi experimental design involves the manipulation of one or more independent variables, but there is no random assignment of subjects to conditions. The reason for choosing this design was to find out how effective the treatment given is and the possibility of comparisons between groups in order to examine the effectiveness of the treatment given or otherwise. Therefore, this research assessed the effect of study skills training on defective study habit among senior secondary school students in Nassarawa Zonal Education Directorate, Kano.

3.3 Population and Sample

3.3.1 Population of the Study

The population of this study comprised one hundred and forty-one (141) Senior Secondary School Two (S.S.S. II) students with defective study habit in Nassarawa Zonal Education Directorate, Kano. The zone comprised of two local governments Nassarawa and Fagge Local Government and it has 38 senior secondary schools out of which 19 are girls and 19 are boys (Kano State Senior Secondary School Management Board, Department of Planning and Statistics). Two schools were selected from each Local government, the researcher used SS II students because they stand a better chance of correcting their defective study habits before the commencement of West Africa Senior Secondary Certificate Examination (WASSCE) and National Examination Council (NECO).

3.3.2 Sample Size

Total of (60) SSII students were proportionally selected from the target population to form the sample size, because is not feasible to the researcher to cover all the students due to size. Four schools were sampled one male and one female school from each local government making four schools. 60 SS II students were proportionally distributed across the schools. The use of 60 as sample size was guided based on the fact that sample size is determined to some extent by the style of the research (Cohen, Marion & Morrison 2011). Below is the table of sample size:

Table: 3.1 Table of Sample Size:

S/No	Name of Schools	Gender	Local Govt.	N	Instrument Distributed	Students Identified With Defective	Sample Size
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					Study Habit		
1	ADSS Bukavu	Male	Fagge	3433	100	34	14
2	ADSS Bukavu	Female	Fagge	1811	52	32	14
3	GSS Tarauni	Male	NSR	3623	108	37	16
4	GGSS Giginyu	Female	NSR	3365	98	38	16
Total					358	141	60
12232							

1.3 Sampling Technique

Proportionate sampling technique was used in drawing up the sample for the study, because the sample size were drawn based on the subpopulation number, this is because it will increase credibility of the study. Proportionate sampling is a method of sampling in which the researcher divides a finite population into subpopulations and then applies random sampling technique to each subpopulation (Neil, 2010). The researcher used proportional sampling technique because the population is composed of several subgroups that are vastly in number, therefore the number of students from each subgroup is determined by their number relative to the entire population.

3.4 Data Collection Instrument

The data collection instrument used for identification, pretesting and post-testing of students with defective study habit is an adapted instrument namely: Defective Study Habit Inventory, which was adapted from Academic Resource Center (arc.geogefox.edu). The original scale of the instrument contains 19 items on a 5 point likert scale with responses ranging from Never (0), Rarely (1), Sometimes (2), Frequently (3) and Always (4), the response “Sometimes” was removed and two items were added to the original instrument by the researcher. The instrument has 2 sections A and B, the A section of the inventory contained demographic information such as name, sex, age, class, school, and Local government and B contained items on study habit.

3.4.2 Scoring Procedure

The inventory questionnaires were scored on a 4 point likert scale. The responses categories of the instruments were weighted by assigned numerical value as: Never=1, Rarely = 2, Frequently=3, and Always=4 points. The sum of the weight of all the items chose by the subjects represent the individual's total score. Based on the twenty-one (21) items in the questionnaire the highest score will be 84 points and the lowest score is 21 points. The average score was 42 ($84 - 21 = 63/2 = 31.5$). Therefore, any students score below 32 was considered as having low level of study habit.

3.5 Validation of the Instrument

3.5.2 Validity of the Instrument

Content validity of the instrument was obtained by the researcher with the assistance of the Supervisor, experts in Education, Tests and Measurement and English, so as to have assurance on the quality, content and language use and all necessary corrections were made before final production of the instrument.

3.4.3 Reliability of the Instrument

The original reliability index as it was used at University of PUGET was 0.82. The reliability of the instrument used for this study was established using the test re-test method. Twenty (20) SSS II students who did not participate in the actual study were sampled and conducted a pilot study. The instrument was administered to them for the first time and second time within an interval of two weeks. Pearson Product Moment Correlation Co-efficient was used in computing the correlation co-efficient of the instrument. The reliability index of 0.68 was established.

3.6 Procedure for Data Collection

The researcher collected a letter of introduction from the Department of Education Bayero University, Kano and presented it to Kano State Senior Secondary School Management Board for appropriate data and seeking permission to conduct the study at the sampled schools. After granting the permission the researcher went round to sampled schools and contact the principals for discussion on the conduct of the research and also solicited the help of the school counsellors or teacher counsellors at respective schools to assist in distributions and collection of the questionnaire. The researcher personally explained the content of the questionnaire items to students using Hausa language and instructions of the questionnaire in their respected classes.

The inventory as a data collection instrument was administered to the subjects of this study who are senior secondary school students two. Some school counselors of the school rendered help in the administration of the instruments to many students. The questionnaire was administered in their respective classes. The researcher explained the need of the respondents to give reliable and objective responses.

The subjects responded to the questionnaires within 20 minutes which was administered by the researcher and school counsellors and the instrument was explained to them item-by-item in their classes to make them understand the questions effectively. And they also assured that all responses will be treated confidentially. After the subjects have appropriately ticked the items on the instrument, the researcher collected the same for further scoring and analysis.

3.6.1 Pretest Phase

After the students with defective study habits were been identified by the researcher with the help of research assistant from the sampled schools, the students were pretested using (SHI) and

the result obtained was kept up to the time that the researcher administers posttest to the groups and used it to determine the differences or otherwise on the treatment groups.

3.6.2 Treatment Phase

This segment was engaged with interaction meeting between the researcher and the identified students with low level of study habits from sampled schools, which involve the use of counseling for intervention in which the researcher used social skills training on the students identified with defective study habits. The treatment lasts for about 25-30 minutes session and it was once in a week (Thursdays) for the period of six weeks.

3.6.3. Posttest Phase

In this segment the researcher administered study habit inventory questionnaire (S.H.I.Q) after Two weeks interval between the treatment and post-test, the post-test used the same procedure used in pre-test, these include those that received study skills training intervention in the treatment phase. Pre-test and post-test results were analyzed and compared for differences. The extent of the difference in the behavior mean score determine the significant effect of the Study Skills Training Counselling Technique on the treatment given to experimental group during the period of intervention.

3.7 Data Analysis Procedure

The statistical tools used by the researcher to analyze and interpret the data was descriptive statistics and inferential statistical techniques. Descriptive statistics in form of frequency and

percentage was used to answer the research question, while t-test for related sample was used to test hypothesis one and t-test for independent was used to test hypotheses two and three at 0.05 level of significance. t-test was used because it is applicable statistical technique for determining the differences or otherwise between means of two samples or between two groups.

CHAPTER FOUR

RESULTS AND DISCUSSIONS

4.1 Introduction

The chapter presents the analysis of data collected from the experimental study. Summary of findings and discussion of results were also presented in the chapter. The basis for the determination of the rejection or acceptance of the hypotheses is 0.05 level of significance. Both inferential and descriptive statistics that suits each hypothesis and research questions were used in arriving at conclusions. The t-test for relative sample and for independent sample were used to test the hypotheses. Frequency and percentage were used for the descriptive analysis in answering research questions.

4.2 Data Presentation

The result of data analysis is presented here with tables indicating different result of the findings from table 4.1 to 4.20 below.

4.2.1 Summary of Data

Table 4.1 Distribution of Respondents by Gender and Local Government:

Gender	Frequency	Percentage
Male	30	50%
Female	30	50%
Total	60	100%
Fagge	28	46.67%
Nasarawa	32	53.33%
Total	60	100%

Source: Field Work (2019).

Table 4.2 above shows frequency and percentage of the distribution of respondents according to gender and local government. It present that, the total male respondent were 30 (50%) and that of female were 30 (50%). The total number of the respondents from Fagge local government were 28 (46.67%) and that of Nasarawa local Government were 32 (53.33%).

4.2.1 Answering Research Questions

Frequency, percentage, mean and standard deviation were used to answer the research questions raised in chapter one.

Research Question One: What is the prevalence of defective study habits among senior secondary school students in Nassarawa Zonal Education Directorate, Kano State?

Table 4.1 Prevalence of Defective Study Habits among senior Secondary School Students:

S/No	Local Govt.	Gender	N	Students Identified with Defective Study Habits s
1	Fagge LG	Male	100	34 (34%)
2	Fagge LG	Female	52	32 (61.54%)
3	Nasarawa LG	Male	108	37 (34.26%)
4	Nasarawa LG	Female	98	38 (38.78%)
Total			358	141 (39.39%)

Source: Field Work (2019)

Table 4.1 above showed defective of defectivestudy habits among senior secondary school students in Nassarawa Zonal Education Directorate, Kano State. It shows that out of 100 male students 34 (34%) were identified with defectivestudy habit from Fagge local government while out of 52 female students 32 (61.54%) were identified with defectivestudy habit from Fagge local government. Out of 108 male students 37 (34.26%) were identified with defectivestudy habit from Nassarawa local government while out of 98 female students 38 (38.78%) were identified with defectivestudy habit from Nassarawa local government. Out of the total number of 358 senior secondary school students 141 (39.39%) were identified with defectivestudy habit. Therefore, the above analysis revealed that, the defective of study defectivehabit among senior secondary school students in Nasarawa Zonal Education Directorate, Kano State is 39.39%.

4.4 Hypotheses Testing

Three (3) null hypotheses were raised specifically to determine the Effect of Study Skills Training Counselling Technique (SSTCT) on defectivestudy habit among senior secondary

school students of Nassarawa Zonal Education Directorate, Kano State. The hypotheses were tested at 0.05 level of significance and results were presented as follows:

Hypothesis One: There is no significant effect of Study Skills Training Counselling Technique on defective study habit among senior secondary school students of Nassarawa Zonal Education Directorate, Kano State.

Table 4.3 t-test for Related Sample for Pretest and Posttest Defective Study Habit Mean Scores of SSS II Students Exposed to SST Counselling Treatment:

	N	Mean	SD	df	t-value	P-Value (2-tailed)
Pre-Test	60	23.97	1.92	59	96.59	0.000
Post-Test	60	62.07	5.78	59	83.21	

Source: Field Work (2019)

Table 4.3 above shows t-test analysis for pre-test and post-test defective study habit mean scores of senior secondary school students of Nassarawa Zonal Education Directorate, Kano State exposed to Study Skills Training Counselling treatment. It shows that, t-value for pre-test is (96.59) and that of post-test (83.21), 59 degree of freedom at 0.05 level of significance and p-value of (0.000). The p-value is less than 0.05 level of significance, as such the null hypothesis which says there is no significant effect of Study Skills Training Counselling Technique on defective study habit among senior secondary school students of Nassarawa Zonal Education Directorate, Kano State is rejected and maintain that, there is significant effect of Study Skills Training Counselling Technique on defective study habit among senior secondary school students of Nassarawa Zonal Education Directorate, Kano State.

Hypothesis Two: There is no significant difference in the posttest mean scores of defective study habit between male and female senior secondary school students exposed to Study Skills Training Counselling Technique of Nassarawa Zonal Education Directorate, Kano State.

Table 4.4 t-test Analysis for Posttest Mean Scores of Defective Study Habit between Male and Female SSS II Students:

	N	Mean	SD	df	t-value	P-Value (2-tailed)
Post-test Male Students	30	65.23	4.16	58	5.05	0.000
Post-test Female Students	30	58.90	5.47			

Source: Field Work (2019)

Table 4.4 above shows t-test for independent sample Post-test Mean Scores of Defective Study Habit between Male and Female senior secondary school students of Nassarawa Zonal Education Directorate, Kano State. It shows that, the t-value is (5.05), 58 degree of freedom at 0.05 level of significance and p-value of (0.000). The p-value is less than 0.05 level of significance, as such the null hypothesis which says there is no significant difference in the post-test mean scores of defective study habit between male and female senior secondary school students of Nassarawa Zonal Education Directorate exposed to Study Skills Training Counselling Technique, Kano State is rejected and maintain that, there is significant difference in the post-test mean scores of defective study habit between male and female senior secondary school students exposed to Study Skills Training Counselling Technique in Nassarawa Zonal Education Directorate, Kano State.

Hypothesis Three: There is no significant difference in the posttest mean scores of defective study habit between Fagge and Nassarawa Local Government senior secondary schools students exposed to Study Skills Training Counselling Technique in Nassarawa Zonal Education Directorate, Kano State.

Table 4.5 t-test for Independent Sample for Defective Study Habit Mean Scores between Fagge and Nassarawa Local Government SSS II Students Exposed to SSTCT:

Gender	N	Mean	SD	df	t-value	P-Value (2-tailed)
Fagge LG Students	28	62.82	5.28	58	0.946	0.348
Nasarawa LG Students	32	61.41	6.18			

Source: Field Work (2019).

Table 4.5 above shows t-test for independent sample analysis for defective study habit mean scores between Fagge and Nassarawa Local Government SSS II students exposed to Study Skills Training Counselling Technique of Nassarawa Zonal Education Directorate, Kano State. It shows that, the t-value is (0.946), 58 degree of freedom at 0.05 level of significance and p-value of (0.348). The p-value is higher than 0.05 level of significance, as such the null hypothesis which says there is no significant difference in the post-test mean scores of defective study habit between Fagge and Nassarawa Local Government senior secondary schools students exposed to Study Skills Training Counselling Technique of Nassarawa Zonal Education Directorate, Kano State is retained and maintained that, there is no significant difference in the posttest mean scores of defective study habit between Fagge and Nassarawa Local Government senior secondary schools students exposed to Study Skills Training Counselling Technique of Nassarawa Zonal Education Directorate, Kano State.

4.5 Summary of Findings

The findings of the study are summarized as follows:

1. The prevalence of defective study habit among senior secondary school students in Nassarawa Zonal Education Directorate, Kano State is high 39.39%.
2. There is significant effect of Study Skills Training Counselling Technique on defective study habit among senior secondary school students of Nassarawa Zonal Education Directorate, Kano State.
3. There is significant difference in the posttest mean scores of defective study habit between male and female senior secondary school students exposed to Study Skills Training Counselling Technique in Nassarawa Zonal Education Directorate, Kano State.

4. There is no significant difference in the posttest mean scores of defective study habit between Fagge and Nassarawa Local Government senior secondary schools students exposed to Study Skills Training Counselling Technique in Nassarawa Zonal Education Directorate, Kano State.

4.6 Discussion

The study assessed the effect of Study Skills Training Counselling Technique on defective study habit among Senior Secondary School Students of Nassarawa Zonal Education Directorate, Kano State. The first finding of the study revealed that, the level of defective study habit among senior secondary school students in Nasarawa Zonal Education Directorate, Kano State is high 39.39%.Azeez (2009) revealed that Defective Study Habits s ranked highest among factors responsible for poor academic performance among students. The issue of low level of study habit among students might result to malpractice during examination or failure. Therefore, a lot of efforts and interventions are needed from the counsellors, parents, teachers, and the government in order to enhance the study habits of the students.

The second finding of the study revealed that, there is significant effect of Study Skills Training Counselling Technique on defective study habit among senior secondary school students of Nassarawa Zonal Education Directorate, Kano State. This finding is in line with the study conducted by Mahwish, Naima, Hira, &Wajiha, (2017) in which they found that, there is significant relationship between study habits and academic performance of the students. Issa et al. (2012) recommended that everyday reading activities in which students engage influence their studying skills and subsequent academic performance. There is a general sense in which one appreciates the link between good habits of reading and the academic performance of students generally. Singh (2011) examined academic achievement and study habits of higher secondary

students. The study was conducted on hundred higher secondary school students, randomly selected from higher secondary schools. The results indicate that girls and boys differ significantly in their study habits and academic achievement.

This finding is also in line with the study conducted by Simon (2015) on Effects of study skills training on poor study habits among senior secondary school students in Fagge Kano state, Nigeria, who found out that, there is significant effect between secondary school students exposed to study skills training and the control group ($t=17.308$, $p=0.000$); there is significant effect of the study skills training between the treatment and control group on home work and assignment ($t=4.577$, $p=0.000$); there is significant effect of the study skills training between the treatment and control group on time allocation, reading and note taking, and study period procedures ($t=13.999$, $p=0.000$); there is significant effect of the study skills training between the treatment and control group on concentration, written works, examinations and teacher consultation ($t=18.374$, $p=0.000$); there is significant difference between poor study habits of male and female respondent in the treatment group ($t=6.126$, $p=0.000$).

Deavers (2000) believed that reading is a process of thinking, evaluation, judging, imaging reasoning and problem solving. Reading is an essential tool for knowledge transfer and the habit of reading an academic activity that increases skill in reading strategies. To know about the world and its environment a child helps himself through reading book, newspapers and other magazines. Once the child has been taught to read and has developed the love for books, he can explore for himself the wealth of human experiences and knowledge through reading. Children, who miss the opportunity of getting in touch with books in their early stages of life, find it hard to acquire good reading habits in their years.

Bhan and Gupta (2010) conducted a study for academic achievement and study habit among the students belonging to scheduled caste and non-scheduled caste group. The result revealed that sex has no significant impact on academic achievement and study habit of students. Also according to Hills (2000), a very good and conducive learning environment encourages students study habit and might have positive impact on their academic performances but students reading in an unfavorable environment might find it difficult to study which may affect their academic achievements. Students with financial constraints might also find it difficult to perform excellently well in their academics. However, students study habit should contribute to their academic performance. Some students do not attend classes, do not takedown notes, do not do their assignments, do not read their books or make use of the library. These attitudes may negatively affect their academic performances especially in mathematics. This study intended to identify various study habits used by the students and the relationship with their academic performances. The distressing phenomena: scholastic under performance and failure have caused serious concern to educationists, guidance counsellors and educational planners for several decades as this amount to colossal wastage of resources available for education. This necessitates serious probe into the causes that underlie and factors that lead to under achievement and failure, so that means could be devised to grapple with these enormous problems.

Chukwu (2008) as cited in Abisola and Kudirat (2017) revealed that effective counselling services will help to promote students' adjustment in school and enhance good academic performance. Onwuegbuzie (2001) as cited in Abisola and Kudirat (2017) in his study suggested that guidance services are needed on student study attitude and study habit for a better academic performance. Sorenson (1991) as cited in Abisola and Kudirat (2017) while listing the good basic study habits stated that one must study with the primary aim of understanding. This

requires one not to be in a hurry of getting through, rather sustained concentration is necessary. This view strength that, using effective counselling technique such as cognitive restructuring is viable ways of improving study habit of the students.

In a study conducted by Segun (2017) used quasi experimental pre-test, post-test and control group research design to investigated the effects of cognitive restructuring and problem solving strategies in the treatment of poor reading skills and note taking among secondary school students in Ondo State. The study found that, Cognitive Restructuring, and Problem Solving techniques assisted in improving reading and note taking of the respondents. Based on the findings, it was concluded that application of Cognitive Restructuring and Problem-solving Strategies are capable of ameliorating poor reading skills and note taking of secondary school students.

Crow and Crow (2002) as cited in Abisola and Kudirat (2017) stated that effective study habits include plan/place, a definite time table and taking brief of well-organized notes. Many studies have been carried out by researchers like Adeyemo (2005) and Gbore (2006) on effective study habits. They argue that study habits have strong relationship with the academic performance of students. A student who cultivates certain study habit will perform differently from a student who has another set of study habit. It is believed that student who lacks effective and efficient means of studying would be building on shaking foundation and consequently have weak foundation. The teachers teach all the students collectively but all the students do not have the same grades, here we see under achievers and high achievers in mathematics. With these the teachers get puzzled with the sight of such situations and then try or push too much (Riaz, Asma&Niaz, 2002).

There may be a number of reasons like different levels of intelligence, lack of good infrastructural facilities, and lack of good libraries and so on. But one of the reasons is that students fail to make good an effort to learn what their teachers taught them in the school and also do not study at home because they fail to recognize the importance of study habits to their academic achievement. According to Riaz, Asma&Niaz, (2002), the study habits of the students could play pivotal role in the learning process reflected in the academic performance of the students in mathematics. Abid (2006) as cited in Abisola and Kudirat (2017) stated that the quality of a nation depends upon the quality of its citizen while quality of citizen depends on the quality of its education which in turn depends on the study habits of the students. Quality of education is reflected through academic achievements which is a function of students' study habits.

Another finding of the study revealed that, there is significant difference in the posttest mean scores of defective study habit between male and female senior secondary school students exposed to Study Skills Training Counselling Technique of Nassarawa Zonal Education, Kano State. This finding is in contrast with the study conducted by Bhan and Gupta (2010) as cited in Mahwish, Naima, Hira, &Wajiha (2017) on academic achievement and study habit among the students belonging to scheduled caste and non-scheduled caste group. The result revealed that sex has no significant impact on academic achievement and study habit of students.

The last finding of the study discovered that, there is no significant difference in the posttest mean scores of defective study habit between Fagge and Nassarawa Local Government senior secondary schools students exposed to Study Skills Training Counselling Technique inNassarawa Zonal Education Directorate, Kano State. This shows that a structured cognitive therapy could be used at different geographical location in the country to improve positive study

habits as discovered the same finding by Segun (2017) who investigated the effects of Study Skills Training Counselling Technique and problem solving strategies in the treatment of poor reading skills and note taking among secondary school students in Ondo State. The study found that, Study Skills Training Counselling Technique, and Problem Solving techniques assisted in improving reading and note taking of the respondents in Ondo state.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of work on effect of Study Skills Training counselling technique on defective study habit among senior secondary school students of Nassarawa Zonal Education Directorate, Kano State. It also brings the conclusion of the study, recommendations and suggestion for further studies.

5.2 Summary

This study investigated the effect of Study Skills Training counselling technique on defective study habit among senior secondary school students in Nassarawa Zonal Education Directorate, Kano State. The issue of Defective Study Habits has been very rampant in various institutions of learning in Nigeria and in Kano state in particular. It is self-evident that widespread and availability of personal computers, mobile phones, internet and satellite television channels ushered in this era which create bad study habit are detrimental to students' academic achievement.

The objectives of the study are to find out the level of defective study habits among senior secondary school students, effect of Study Skills Training counselling technique (SSTCT) on defective study habit, difference in the mean scores of defective study habits between male and

female and difference in the mean scores of defective study habits between Fagge and Nasarawa Local Government senior secondary school students of Nassarawa Zonal Education Directorate, Kano State. Based on these objectives one research question and three correspondent hypotheses were formulated. The scope of the study is senior secondary schools' students under KSSMB identified with defective study habits, therefore, the secondary schools under science board and other private schools were delimited from the study.

Chapter two of the study presents the review of related literature on the problem under investigation. It covered Conceptual framework, study habits, Defective Study Habits, effective study habit, styles of study habits, reading habits and its effects on academic performance, Study Skills Training Counselling Technique, Note-Taking Strategies, the SQ3R Reading Comprehension Method, Test-Taking Strategies, Effective Study Techniques, Ten Study Methods and Tips Used in Study Skills Training, Cognitive Learning Strategies, Theoretical Framework (Learning Theories), Cognitive Learning Theory, Benefits of Cognitive Learning, Jean Piaget's Theory of Cognitive Development, Social Cognitive Learning Theory, Cognitive Behavioral Theory, Classical Conditioning and Emotional Responses, Operant Conditioning B. F. Skinner, Facilitation Theory (The Humanist Approach), review of empirical studies and summary and uniqueness of the study.

Chapter three explained the research design, population of the study, sample and sampling technique. The description of the instrument, the validity and reliability of the instrument. However, the chapter discussed the break down for the counseling session and procedure for data analysis. The design adopted for the study was quasi experimental design in form of pretest posttest design. The population of this study comprises 358 Senior Secondary School Two (S.S.S. II) students with defective study habit in Nassarawa Zonal Education Directorate, while

60 students were proportionately sampled as a sample size. The data collection instrument to be used for identification, pre-testing and post-testing of students with low level of study habits is an adapted instrument namely: Defective Study Habit Inventory, which was adapted from Academic Resource Center (arc.geogefox.edu). Content validity of the instrument was obtained and the reliability of the instrument used for this study was established using the test re-test method. The statistical tools used by the researcher to analyze and interpret the data was descriptive statistics and inferential statistical techniques. Descriptive statistics in form of frequency and percentage was used to answer the research question, while t-test for related sample was used to test hypothesis one and t-test for independent was used to test hypotheses two and three at 0.05 level of significance.

Chapter four presents the analysis of data collected from the experimental study. Summary of findings and discussion of results were also presented in the chapter. The study found out that: The prevalence of defective study habit among senior secondary school students in Nassarawa Zonal Education Directorate, Kano State is high 39.39%, there is significant effect of Study Skills Training Counselling Technique on defective study habit among senior secondary school students of Nassarawa Zonal Education Directorate, Kano State, there is significant difference in the posttest mean scores of defective study habit between male and female senior secondary school students exposed to Study Skills Training Counselling Technique in Nassarawa Zonal Education Directorate, Kano State and there is no significant difference in the posttest mean scores of defective study habit between Fagge and Nassarawa Local Government senior secondary schools students exposed to Study Skills Training Counselling Technique in Nassarawa Zonal Education Directorate, Kano State.

5.3 Conclusion

Base on the findings of this study, the following conclusions were drawn:

It was concluded that, the level of defective study habit among senior secondary school students in Nassarawa Zonal Education Directorate, Kano State is higher with 39.39%.

It was concluded that, there is significant effect of Study Skills Training counselling technique on defective study habit among senior secondary school students of Nassarawa Zonal Education Directorate, Kano State.

It was concluded that, there is significant difference in the post-test mean scores of defective study habit between male and female senior secondary school students exposed to Study Skills Training counselling technique in Nassarawa Zonal Education Directorate, Kano State.

It was concluded that, there is no significant difference in the posttest mean scores of defective study habit between Fagge and Nassarawa Local Government senior secondary schools students exposed to Study Skills Training counselling technique in Nassarawa Zonal Education Directorate, Kano State.

5.4 Recommendations

5.4.1 Recommendations from the Study

Base on the outcome of this research work the following recommendations were made:

1. Since the level of defective study habit among senior secondary school students in Nasarawa Zonal Education Directorate, Kano State is high (39.39%) Study Skills Training counselling technique should be taken as a measures to reduce its affects.
2. Since there is significant effect of Study Skills Training counselling technique on defective study habit among senior secondary school students of Nassarawa Zonal Education Directorate, Kano State, school counsellors and para counsellors should

encourage its use in handling the issue of defective study habit and other related concerns.

3. Since there is significant difference in the post-test mean scores of defective study habit between male and female senior secondary school students exposed to Study Skills Training counselling technique of Nassarawa Zonal Education Directorate, Kano State, gender disparity and stereotype should be considered when preparing Study Skills Training counselling technique treatment package.
4. Since there is no significant difference in the post-test mean scores of defective study habit between Fagge and Nassarawa Local Government senior secondary schools students exposed to Study Skills Training counselling technique in Nassarawa Zonal Education Directorate, Kano State the same Study Skills Training counselling treatment package could be used in the reduction of defective study habits.

5.5 Recommendation for Further Studies

The following recommendations were made for further studies:

1. The scope of this study covered only senior Secondary School Students, thus it is important to extend this empirical study to other institutions like correctional institutions, junior secondary schools, tertiary institutions and other non-educational institutions.
2. One of the limitations of this study is that it did not examine whether group or individual session with Study Skills Training counselling technique is significantly different. Therefore, a further study is being recommended to examine the effectiveness of group or individual counselling session in using Study Skills Training counselling technique in the reduction of low level of study habits.

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APPENDIX I

DEFECTIVE STUDY HABIT INVENTORY

This defective study habits questionnaire is designed to determine the extent of defective study habits among senior secondary schools' students. Please kindly give an appropriate response, all the information given will be protected with confidentiality.

Instruction; - You are required to tick any of the response options which will be considered to be true regarding your study habits. This instrument is on four Likert scale; - Never, Rarely, Frequently, and always.

Section 'A': Student information

Name: School:

Class: Local Government: NassarawaF

Gender: - Male: Female:

Section "B"

S/N	ITEMS	Never	Rarely	Frequently	Always
1	I follow a daily time table?				
2	I keep a personal time table for reading, assignments and homework				
3	I study between classes?				
4	I have a regular place to study				
5	I study where there are no distractions				
6	I remain focused on what I am reading or studying?				
7	I take study breaks				
8	I preview assignments before reading them				
9	I underline in textbooks while reading				
10	I complete my reading assignments before class				
11	I look up new words in the dictionary				
12	I keep track of new words i learnt				
13	I take lesson notes in class				
14	I have a note taking system				
15	I preview my notes within 24 hours				
16	I also preview my notes before test				
17	I go over previously marked tests				
18	I get eight hours of sleep each night				

19	I get regular exercise				
20	I participate in group discussions with my classmates				
21	I go for consultations to have clear understanding				

APPENDIX II

TREATMENT PACKAGE

(Study Skills Training Counselling Sessions)

The major objective of this treatment package is to reduce defective study habit by improving the study skills habit among students who have effect in study habits and lack or find it difficult to read, writing and passed the examinations.

Week one: - formal introduction, establishing rapport and assurance of confidentiality.

Objectives: -

- i. To make a formal introduction with the respondents.
- ii. Building rapport with the students in order to achieve the objectives of the treatment.
- iii. Informing the respondents about the nature of the treatment and explain the rules and regulation of the counseling session.

Activities: the above objectives will be achieved through the following steps.

- i. The researcher will introduce himself inform the participants more about his self, Name, Address and the purpose of his/her research. In order to build good rapport between the researcher and the participant, the researcher will also give the room to the respondents to introduce themselves one after the other, such as names, class, like and dislike. This will give the chance to the researcher to get acquainted with each respondent and call them with his /her names.
- ii. The researcher will also explain the nature and the rules and regulation of the program to the respondents in term of contents, time, day and number of session during the program.
- iii. The researcher will explain the target behavior to be modify (poor study habits) to the respondents.

- iv. The researcher will also discuss the benefit of the session to the respondents
- v. The researcher will also seek maximum co-operation from the respondents and inform them the program will last for six weeks, each session will last for 25-30 minutes twice in per week.

Week two: - Study Habit

Objective: - explaining the meaning and form of Study Habits.

Activities: - the above objectives will be achieved through the following steps.

- i. The researcher will explain the meaning of study habits to the respondents.
- ii. The researcher will mention and explain types of study habits.
- iii. The researcher will identify the causes of good and poor study habits.
- iv. The researcher will describe the major characteristics of good and poor study habits.

Home work: - the respondents will ask to find out some of the causes of good or poor study habits that match his/her behavior.

Week three: - Reading Strategies SQ3R

Objective; - To throw more light on SQ3R strategies and how it can be used effectively as some procedures for creating good study habits.

Activities: - the above objective will be achieved through the following steps.

SQ3R is a reading strategy and the acronym SQ3R stands for *Survey, Question, Read, Recite, Review*. This 5-step reading method is being used as a Study Skills Training counselling strategies as a way of helping students learn more effectively from readings. Here's how the 5 steps work:

(1) Survey: Pay attention to the way the paragraphs are laid out into sections. Glance over any highlighted words to see if they are vocabulary words or if the highlights are added for emphasis. Look at graphs or pictures that may contain additional information and see where they are in relationship to the rest of the page, paragraph or chapter.

Gather the information necessary to focus and formulate goals

- i. Read the title – Help your mind prepare to receive the subject at hand.
- ii. Read the introduction and/or summary – Orient yourself to how each chapter fits the author's purposes, and focus on the author's statement of most important points.
- iii. Notice each boldface heading and subheading – Organize your mind before you begin to read and build a structure for the thoughts and details to come.
- iv. Notice any graphics – Charts, maps, diagrams, etc. are there to make a point. Don't overlook them.
- v. Notice reading aids – Italics, bold face print, chapter objective, and end-of -chapter questions are all included to help you sort, comprehend, and remember.

Pay attention to layout, chapters, sections, graphs, pictures, words in bold and italics. In general, these provide important information about the contents of the text. By quickly scanning through the text first, you create an overview and structure. This serves as the foundation for the active reading and understanding of the text.

(2) Question: That is where the “Q” in SQ3R comes in. During your initial survey of the material, you are encouraged to create questions about the text. These questions not only give you a study guide for later, they help you consider what you already know and how that fits in with what you are about to learn.

Help your mind engage and concentrate

Turn the boldface heading for each section into as many questions as you think will be answered in that section. The better the questions, the better your comprehension is likely to be. You may always add further questions as you proceed. When your mind is actively searching for answers to questions it becomes engaged in learning.

Ask yourself questions about the text that you scanned during the previous step. You can for instance turn the chapter titles into questions. Write down the questions. Ask yourself what you already know about the topic and what your goal is for reading the text. Try to understand what it is that the author wants to convey. You can use the left margin to write down your questions about the text in a structured way. At a later stage, you can note down the answers in the right margin.

(3) Read: Now that you have skimmed the text and created questions, it is finally time to read. At this point you have already created an organized plan for what you are about to learn. You are just plugging in the rest of the information. Aim to answer the questions you asked in the “Q” step, and write down any additional questions you may have while you are reading.

Fill in the information around the mental structures you've been building

Read one section at a time with your questions in mind and look for the answers. Recognize when you need to make up some new questions.

Read the text while keeping the structure from step 1, “S” and the questions from step 2, “Q” in the back of your mind. Pay attention to chapters, sentences printed in bold, explanations under graphs and images. Read ‘actively’, write down (additional) questions while you are reading and try to find answers to previously asked questions. Write down answers and explanations in the right margin of the text. Take your time for the more complicated parts of the text and read it

again if you need to. Give less attention to unimportant information. Reread per part and repeat these parts to yourself in your own words.

Week four: -Reading Strategies SQ3R (continuation)

(4) Recite: Once you have finished reading the paragraph, section, page, or chapter, it is time to “test yourself” on what you have learned. Recite involves setting aside the text and saying out loud everything you have learned. Reciting out loud what you have read not only gives you a sound to associate with the reading, it also forces you to solidify the information in your mind. This step is what really sets SQ3R apart from re-reading or taking notes. Researchers are discovering that the process of testing actually helps you recall information better than if you are not quizzed at all. But you do not want to have to wait for your teacher to give that pop quiz. Use self-testing as a key learning technique and be ready to nail the quiz.

Retrain your mind to concentrate and learn as it reads

After each section, stop and recall your questions and see if you can answer them from memory. If not, look back at the text again (as often as necessary), but don't move to the next section until you can recite the answers from the previous one.

Repeat (aloud) in your own words what you have read. Ask yourself questions about the text. Explain what you have read to someone else, you can also do this in your imagination. Making a summary in your own words provides extra support.

(5) Review: After reciting everything you can remember, it is time to review the text for anything you skipped, didn't understand or could not recall. This review gives you instant,

meaningful feedback about how well you read the material in the first place and how well you recalled what you learned.

Refine your mental organization and begin building memory

Once you have finished the entire chapter using the preceding steps, go back over the questions you create for every heading. See if you can still answer them. If not, look back and refresh your memory and then continue.

Read all the relevant parts of the text again, look at your notes. Possibly improve on your notes, paying extra attention to the parts you found difficult. Read your own questions on the left side of the text (cover the answers on the right) and try to answer them. This step is the most effective if you do it a day after step 1 through 4. After following these five steps, you will have actively read a text and you will be better able to remember and explain what it is about.

Week Five: Time management and Effective Study Tips

Objectives: - Creating time for study

Activities: - the above objective will be achieved through the following steps.

- i. Explained time management as social skills.
- ii. Devoting much time to study: here the researcher emphasized on not to devote much time to the subjects they like while neglecting the difficult subjects.
- iii. How to shoulder home activities and devoting time for study.
- iv. How to arrange personal time table.

Objective: - the objective of this session is to reduce the problem of poor study habits.

Activities: -the above objective will be achieved through the following steps.

- i. The researcher welcomed the participants into the sixth session
- ii. The researcher used the instructional technique of study skills and taught the students ten important study tips:

Instructions:

1. Try not to do too much studying at one time
2. Plan specific times for study
3. Try to study at the same time each day
4. Set specific goals for their study times
5. Start studying when planned
6. Work on the assignment they find most difficult first
7. Review their notes before beginning on assignment
8. Tell these friends not call them during their study times
9. Contact other students when they have difficulty with an assignment
10. Review their school work over the week end.

Home work: write ten good study habit strategies.

Week six: Evaluation the effect of study skills counselling technique, Termination of the session and appreciation.

Objectives: - To provide reward for performing a good study habits.

- i. To formally inform the respondents that today session will mark the end of the programme.

- ii. To remind the respondents to maintain all desirable behaviors mention during the sessions.
- iii. To formally appreciate the efforts of research participants and all others that contributes to the success of the program.

Activities: - the above objectives will be achieved through the following steps.

- i. The researcher will reward the respondents based on the performance and commitment to the program
- ii. The participants will further engage with the techniques of survey, questions, reading, recite, review and other strategies that will encourage them to have a good study habits.
- iii. The researcher will encourage the respondents to strictly follow and practicing the changes learns.
- iv. The researcher will allow the respondents and the research assistants to express their felling about the sessions.

APPENDIX III
SPSS ANALYSIS

APPENDIX IV

RAW DATA

