# EFFECT OF STUDY SKILL TRAINING AND MULTIPLE INTELLIGENCE INTERVENTION IN ENHANCING READING HABIT OF JUNIOR SECONDARY SCHOOL STUDENTS IN IBADAN, NIGERIA

 $\mathbf{BY}$ 

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A thesis in the Department of Guidance and Counselling,
Submitted to the Faculty of Education
In partial fulfilment of the requirements for the award of the Degree of

**DOCTOR OF PHILOSOPHY** 

of the

UNIVERSITY OF IBADAN

**MARCH, 2017** 

#### **ABSTRACT**

Reading plays a vital role in the educational attainment of students. However, poor reading habit among students is a great concern to the society. This habit undermines the educational attainment and career actualization of most students. Literature has focused on the factors precipitating poor reading habit with little emphasis on intervention efforts in Nigeria. Therefore, the objective of this study was to investigate the effectiveness of Study Skill Training (SST) and Multiple Intelligence Intervention (MII) in enhancing reading habit of junior secondary school students in Ibadan, Nigeria. The moderating effect of gender and academic self-efficacy were also examined.

Bandura's Social Cognitive Theory served as the framework. A pre-test-post-test, control group, quasi-experimental design with a 3x2x3 factorial matrix was adopted. Purposive sampling technique was used to select a secondary school each from Ibadan North, Ibadan South West and Ibadan South East respectively. The participants below 15 years accounted for 76.1% while the participants above 15 years accounted for 23.9%. The selected schools were each assigned to SST, MII and the Control groups. Ninety participants across the three secondary schools who scored below 30 out of 60 marks in the screening exercise were randomly selected for the study but eighty-eight completed the programme. The participants were randomly assigned to SST (28), MII (30) and Control (30). The training lasted for two months. Cognitive Style (r = 0.78), Reading Habit (r = 0.89) and Academic Self-Efficacy (0.91) scales were used for data collection. Analysis of covariance and Scheffe post hoc test were used to analyse the data.

Study skill training and Multiple intelligence intervention had significant main effect on reading habit ( $F_{(2,\ 71)}=53.25$ , partial  $\mathfrak{g}^2=0.60$ ). Reading Habit mean scores of the participants in the experimental groups, MII ( $\bar{x}=44.43$ ) and SST ( $\bar{x}=41.17$ ) increased significantly than those in the Control group ( $\bar{x}=23.73$ ). The percentage of female participants was 53.4 while the percentage of male participants was 46.6. Gender had a significant main effect on reading habit among the participants ( $F_{(1,\ 71)}=5.163$ , partial  $\mathfrak{g}^2=.07$ ). Females ( $\bar{x}=38.66$ ) have improved reading habit than their male counterparts ( $\bar{x}=33.51$ ). There was no significant main effect of academic self-efficacy on reading habit. There was no significant two-way interaction effect of treatment and gender in enhancing reading habit. Also, there was no significant two-way interaction effect of treatment and academic self-efficacy on reading habit. There was no significant three-way interaction effect of treatment, academic self-efficacy and gender on reading habit.

Study skill training and Multiple intelligence intervention were effective in enhancing reading habit of junior secondary school students. Multiple intelligence intervention was more effective. Educational and counselling psychologists should constantly assist students to improve their reading habit using these interventions.

Keywords: Study skill training, Multiple intelligence intervention, Reading habit, Junior

secondary school students, Ibadan, Nigeria.

Word count: 498

# **CERTIFICATION**

I certify that this work was carried out by Akanbi Lateef AKINBODE (Matric No 112466) of the Department of Guidance and Counselling, Faculty of Education, University of Ibadan, under my supervision

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# **DEDICATION**

This work is wholeheartedly dedicated to the Almighty Allah, the Sustainer, the Cherisher, the Giver, the Nourisher, the Provider and the Bestower, who has been with me from my cradle to this present situation and has made all things extremely possible for me throughout the programme. (Alhamdullillah)

#### **ACKNOWLEDGEMENTS**

Thanks to the Almighty Allah (SWT) for being with me from the beginning to the end of this work. Glory and adoration be unto Him, the all Sufficient and Infallible.

My utmost appreciation goes to my amiable, passionate, exemplary and enterprising supervisor, Dr Emmanuel Adesoji Awoyemi for his unquantifiable encouragement, suggestion, constructive corrections and endless patience in the successful completion of this study. Sir, you are a superb and wonderful supervisor. The Almighty Allah will reward you abundantly.

My special thanks to the Head of the Department, Professor Jonathan O. Osiki for the fatherly and sterling leadership role he played throughout the programme and for creating harmonious environment for quality learning to achieve this success. Also, it is of very much significance for me to appreciate Dr Buchi Oparah, Dr Ndidi Ofole and Dr A.A Owodunni for their indelible contributions to the success of this work, the Almighty Allah will reward you all in million folds.

I express my unalloyed gratitude to Prof. C.B Uwakwe, Prof. D. A. Adeyemo, Prof.S.O.Salami, Prof. Oyesoji Aremu, Prof. T.A. Hammed, thank you all and may God grant all your efforts positively. My profound gratitude goes to Dr Oluwole, Dr Chioma C. Asuzu, Dr A.M.Jimoh, Dr J.O. Fehintola, Dr A.K. Taiwo for their mentoring efforts, priceless guidance and huge contribution to my success story. May you all enjoy Allah's blessings in all your endeavours.

I appreciate the contributions, comments and constructive criticisms of all my lecturers in the Department of Guidance and Counselling; Prof. A.O Falaye, Dr R.A. Animasahun, Dr Adeyemi, Dr Adebunmi Alade, Dr A.O. Busari and Dr M.O. Ogundokun and non teaching staff members in the department are also appreciated. My sincere gratitude goes to Dr O.A Fakolade of the Special Education Department and Prof S.O. Popoola of the Department of Library, Archival and Information Studies for their immense role, support and encouragement.

Lacknowledge the spiritual, moral and financial support of Alh. M.A.Bada, Alh. YA Raheem, Alh. K.O. Yussuf, Alfa Sheriff Alao, Alfa Lukmon Abisogun, Alfa S. Bakrin, Mr Abdul Jeleel Akeusola, Mr M.O. Odediran, Mr I.O.Akande, Mr M.A. Alatise, Mr K.O. Ajagbe. Mr A.A. Kareem, Mr A. Bayo, Mrs T.A. Oke, and Mrs J.B. Oyadoyin. I thank you all. I also appreciate the contributions of Mrs D.D. Betiku, Mrs O.M. Akinsanya, Mr O.O. Ladeji, Mrs

F.A. Akinyinka, Mr J.A.Ojeleke, Mr Mufutau Akinsola, Mr Wasiu Alimi, Dr Surajudeen Olayinka, Mrs Kuburat Ogunremi, Mr and Mrs Ayodele, Mr Tajudeen Tijani, Mrs Serifat Aderounmu, Mrs A.B Alao, Mr Saheed Sodiya, Mr Mayowa Onatunde, Toheeb Akinbode, Roqeeb Akinbode, Jeleel Bankole, Akeem Oparinde, Akeem Adeosun and my bosom friend, Dr Oluwole Amid for their moral support during the programme. My heartfelt gratitude goes to my sisters and brothers; Serifat Abike, Fausat Abake, Rasheedat Anike, Sakirat Adufe, Fatimoh Aduke, Wasiu Isola and Akeem Ayinde for their utmost moral and spiritual support. May you all reap bountifully the fruits of your labour.

I am greatly indebted to my parents, Mr Hassan Adisa Akinbode and Mrs Sadiat Animoh Akinbode (Nee Oguntade) for their endless supplications, unflinching support and encouragement. I dearly appreciate my mother-in-law, Mrs Sikirat A Alabede for her ceaseless prayers, staunch support and understanding all the time. I thank my father in-law Late Kamoru Alabede for his remarkable life. May he be in Aljannah Firdaous (Ameen).

My special heartfelt appreciation goes to my loving and understanding wife, Sidikat Ajoke Oluwatoyin Akinbode (Nee Alabede) for her outstanding efforts and support spiritually, morally and financially. Indeed, you're my rock of gibralter. Thanks so much my dear, for believing in me and standing solidly behind me through the rough road of my academic ladder to reach this academic height. You're so wonderful and you're a rare gem. The Almighty Allah will continue to be with you. May you lack nothing in this life and hereafter. I appreciate my loving and charming children; Sodiq Akanji Babatunde, Hammed Alani Owolabi and Ridwan Adio Opeyemi for their strong support and understanding during the programme. May you all excel in all your endeavours.

I thank all the authors cited in this work and finally return all the glory, adoration, thanks and esteem honour to Almighty Allah (SWT).

Akinbode, A. L.

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# CHAPTER ONE INTRODUCTION

# 1.1 Background to the study

It is an undeniable fact that some years back, a family that produced a School Certificate holder had cause to rejoice. This was because the School Certificate holder was not easy to come by in those days. The products of the missionary and government schools were better when compared to the secondary school learners today. Reading skills demonstrated then by secondary school leavers made them essential commodities in the various fields of work under government and private establishments. Equally, their fluency in reading dexterity in English language was evidence of better education received as they were regarded as elite in the society. The same cannot be said of school adolescents today.

Majority of today's secondary school learners find it difficult to take minutes at meetings while primary school leaving certificate is no more accorded recognition (Bashir,& Mattoo,2012). The performance of students is attributed to their poor background in the reading culture which is a carryover from their primary to secondary schools. To read is to get ideas from print or written materials and it is a way of acquiring knowledge. Fabunmi (2010) observes that reading is a means of tapping knowledge from superior minds. Thus, reading is an essential tool for lifelong learning. It is important for everyone to develop the rudiments of reading and the culture of reading always so as to obtain valuable information needed to survive in life (Tella & Akande, 2007; Oji, 2010). According to Holte, Marieke and Sander-Ten (1998), reading adds quality to life and provides access to culture and cultural heritage. Okeke (2000) reaffirms that the art of reading is a priceless instrument for everyone. It is one of the most important activities of life through which an individual enters into the life and experiences of others and extends his knowledge, scope of experience and enjoyment.

Reading is an important gateway to personal development and to social, economic and civic life (Holden, 2004; Philip, 2009). It allows an individual to learn about other people, about history and social studies, the language arts, science, mathematics, and the other content subjects that must be mastered in school (Lyon, 1997; Arican & Yilman, 2010; Durualp & Cicekoglu, 2013). As noted by the Department for Culture, Media and Sport (2003), people cannot be active or informed citizens unless they can read.

Collins and Cheek (1999) describe reading as a process that requires the use of complex thought processes to interpret printed symbols as meaningful units and comprehend them as a thought unit in order to understand a printed message. According to Rubin (2002), reading is a total integrative process that starts with the reader and includes the affective, perceptual, and cognitive domains. Okebukola (2004) affirms that, through reading, humans have the tools to transmit knowledge to each succeeding generation; it allows one to listen to the wisdom and people of the ages. Douglas (2000) asserts that every child must become fully competent in reading to succeed in school and discharge responsibilities as a citizen of a democratic society. Reading is the foundation of much enjoyment in life and is closely related to vocational efficiency. Students and employees in every field must read to keep abreast of what is happening in their fields. Students must rely on written or digital words to convey information and data. The ability to read well is absolutely critical to success in life.

Moreover, reading is seen as an interactive exercise and a not passive one. It could be viewed as sense making, an art of becoming, where new questions, insights and understandings that were once held are subject to modification, re-interpretation and even dismissal. Reading can also be seen as a psycholinguistic process involving the interaction of languages and thought as language is decoded and meaning is reconstructed. The importance of good reading culture cannot be under estimated. It provides individual's welfare, social progress and international understanding, provides skill, knowledge, right attitude and frees one from boredom or idleness. Reading is not just for school but also for life because it enhances the chances of success at school and beyond, (Arslan & Celik, 2009; Mete, 2012). Tracy (2008) asserts that, reading is not only the form of entertainment but also an essential life skill. Reading is a skill that must be nurtured from a child's earliest years. Once children know how to read, they still need support to reach their full potential as readers. Most children with learning disabilities have problems with reading and related language skills. The decline in reading among children is an offshoot of technological advancements that have brought about overall changes in family, social, and economic conditions.

Kaufman (2001) observes that children spend their time watching television and playing video games when they are not spending a great deal of time in reading. According to Kaufman (2001), statistics collected by the U.S Department of Education "National Centre for Educational Statistics" shows that students' achievement in reading has been declining in recent times.

Ikpaahindi (2008) rightly observes that information and communication technology especially internet technology is having adverse effect on the reading culture of Nigerians. This is because it discourages lazy students from engaging in serious reading. Many students prefer to spend most of their time on phone browsing, playing games and chatting with friends. Ezema and Ekere (2009) opine that only few schools have good libraries while majority have limited old books locked up in few cupboards. Obafemi (2006) elucidates that the poor reading culture among Nigerians was due to the economy that was prostrate; reading was expensive and had become a leisure most people could ill afford.

Also, the in-thing, according to him, was that people prefer to stay in their homes and watch home videos. Due to technological development, reading habits are changing. In our society today, while technology is slowly taking a steady control over individual lives, the reading habit is fast vanishing into thin air (Abe, 1991; Abioye, 2010; Imam, 2004). Shabi and Udofia (2009) note that active learning from books is better than passive learning such as watching televisions and playing games.

Poor reading habits occur in children and young people because reading is not considered a relevant leisure activity as it does not form part of children's social interaction. Therefore, reading is considered as a solitary pursuit and is not attractive compared with interactive activity on the internet. There is also an overriding desire amongst young people to spend more time with their friends than to stay at home reading. Adults and children alike may stay glued to watching television and films as a way of enjoying their leisure instead of reading (Akinbola, 2007; Duran & Sezgin, 2012). Tracy (2008) also argues that being a former British colony, Nigeria's literacy culture ought to be as standardized as that of the Britain because about 99% of British citizens can read. The same cannot be said of Nigeria.

Henry (2004), reports that out of the 814 million illiterates in the world, the third world countries, most especially in Africa, have a huge percentage of these illiterates. However, Latin America, Asia, and others are making frantic efforts to drastically reduce illiteracy rate, but owing to the following reasons, the same cannot be said of Africa. Poverty, corruption, lack of reading habit, dearth of libraries, noise culture and undue importance attached to material wealth. Many Nigerian people celebrate mediocrity at the expense of intellectualism. This is manifested in people's rush for worldly things. Some people abandon their educational careers for the pursuit of money. Many have abandoned their education in search of "quick money" which they

believe can be gotten from business or politics. Several studies had examined factors precipitating poor reading habit among secondary school students with little emphasis on intervention efforts in Nigeria. Therefore, the objective of this study was to investigate the effect of Study Skill Training (SST) and the Multiple Intelligence Intervention (MII) in enhancing reading habit of the Junior Secondary School students in Ibadan, Oyo State.

Study skill training that was adopted in this study is defined as a learning strategy meant to assist the students to organize, process and use information effectively in order to enhance good performance. Although, some students may naturally possess good study skills, most people do not. However, Cottrell (2008) explains that a skill is a learned activity, something that can be developed through practice. Time management, active listening, reading comprehension, presentation skills, memory techniques, critical thinking skills and writing skills are all categorized as study skills and whether a natural attribute or an acquired, skills have to be fine tuned and developed in order to be effective. Biggs and Purdie (1996) observe that study skill training can be taught and that they can add between one and two grades to a student's results. The impact of study habit is immeasurable to the benefit of students in general. A good study habit will help the student to be effective in reading, academically oriented, and her academic achievement is very sure. Study habit makes students who have positive concept of themselves to have higher academic achievement. But students with good study habit who have negative self conception of their ability, seldom succeed in school or have a better academic achievement.

On the other hand, Multiple Intelligence Intervention (MII) refers to a learner-based philosophy that characterizes human intelligence as having multiple dimensions that must be acknowledged and developed in education. MI is based on the work of Howard Gardner of the Harvard Graduate School of Education (Gardner, 1993). Gardner notes that traditional Intelligence Quotient (IQ) tests measure only logic and language, yet the brain has other equally important types of intelligence. He argues that all humans have these types of intelligence, but people differ in the strengths and combinations of intelligence. He believes that all of them can be enhanced through training and practice. The Multiple intelligence teaching approach has evolved and has been embraced widely especially in the United States. The approach has been found to be very effective in changing situations for the better, in the teaching and learning of any subject. Multiple intelligence suggests that lessons be presented through a variety of ways

using pictures/ drawings, music, cooperative learning, field trips, activities, role playing, games, and much more so that each child has the opportunity to learn in ways harmonious with his/her God given talents.

One of the moderating variables which affect reading habit is gender. Gender differences on reading habit among secondary school students has been widely studied. For instance, Chen (2008) observes that females are more likely to be avid readers than males. Males across the continents are continually not performing as well in reading as their female counterparts. Much of this is blamed on lack of literature and that males are interested in, television, video games, and teaching methods (Haupt, 2003; Scieszka, 2003). However, this performance factor begins before they enter school. Males begin school with a lower reading level and their growth in reading occurs at a slower pace than in females (Morgan, Farkas, & Hibel, 2008). Typically, males read at a level that is a grade and a half lower than females of the same age (Scieszka, 2008). Studies have also shown that girls and boys differ in their reading attitudes and other measures of motivation, with girls typically having more positive attitudes toward reading, demonstrating more positive reading self-concept, and engaging more often in reading activities outside of school (Mullis, Martin, Gonzalez, & Kennedy, 2003; Meece, Glienke, & Burg, 2006). These differences have often been cited as explanation of national and international results showing that girls have higher reading achievement than boys (Wagemaker, 1996; Perie, Grieg, & Donahue, 2005).

Self-efficacy which may affect reading is defined by Bandura (1977) as a person's evaluation of his or her ability or competency to perform a task, reach a goal, or overcome an obstacle. Research suggests that having high self-efficacy when attempting different tasks creates feelings of calmness or serenity while low self-efficacy may result in a student perceiving a task as more different than reality which in turn may create anxiety, stress and narrow the idea of how best to solve a problem or to tackle an activity (Downey, Eccles & Chatman, 2005; Adeyemo & Ogunyemi, 2006). On the other hand, academic self-efficacy as the second moderating variable refers to an individual's belief (conviction) that they can successfully achieve at a designated level on an academic task or attain a specific academic goal (Bandura, 1997; Eccles & Wigfield, 2002). It also pertains to students' perceived capability to manage their own learning behaviour, to master academic material, and to fulfill academic expectations (Bandura, Pastorelli, Barbaranelli, & Caprara, 1999). Academic self-efficacy can also be described as the extent to

which students believe that they will be able to succeed in school, has been identified as a positive predictor of academic performance within a diverse number of disciplines (Lee & Bobko, 1994), english (Pajares & Johnson, 1994), mathematics (Pajares & Miller, 1995), health sciences (Eachus, 1993), physics (Fenci & Scheel, 2005); statistics (Finney & Schraw, 2003); chemistry (Smist, 1993); and anatomy and physiology (Witt-Rose, 2003).

In sum, this study examined the effectiveness of time managing, note-taking, concentration and comprehension under the Study Skill Training and verbal/linguistic, visual/spatial, interpersonal and intrapersonal intelligence under Multiple Intelligence Intervention on reading habit among Junior Secondary School students in Ibadan, Oyo State. Gender and academic self-efficacy served as moderating variables in this study.

#### 1.2 Statement of the Problem

There is a general belief that poor reading skill among Nigerian students had negative educational implications in the society. The menace of poor reading skill is calling for urgent and drastic attention. It has been observed that the effect of poor reading skill is ranging from slow comprehension rate, slow reading and writing rate, difficulty in differentiating main ideas from irrelevant details, poor retentive memory, shortage of vocabulary or word power, inadequate reading and writing interest and habits, indecipherable handwriting, distractions from television and film viewing and lack of interest and relevant reading materials among others has resulted in poor reading skill.

It, therefore, resulted in the astronomical failure rate in examinations most especially in English Studies by the Nigerian students in Junior Secondary Schools particularly in Ibadan which can be attributed to poor reading skill. According to Oyo State Ministry of Education reports of 2014, students who sat for the final Junior Secondary School Examination performed below expectation in both English Studies and Mathematics. The result showed that 28% passed English Language at credit level while 32% passed Mathematics at credit level. Government's effort in fighting illiteracy is being thwarted by the students who showed negative attitude to reading. The children with poor reading skill receive poor grades at school, get easily distracted and frustrated, have behaviour problems, seem to dislike school, often fail to develop to their full potentials and also exhibit low self-esteem. In the same vein, children with poor reading skill have a higher chance of anti-social behaviour, such as, delinquency; school violence, substance

abuse, bullying, hacking computers, and even examination malpractices have a correlation with poor reading habit.

Majority of male students with poor reading skill engaged in menial jobs, such as commercial motor cycle riders popularly called 'okada' or bus conductors while a handful of female ones engaged in street hawking or being sex workers for their sustenance after they left school as early school leavers. Also, many joined cults or gang to serve as an avenue for terrorizing and harassing innocent people and become a nuisance to the society. Their parents became restless and worried. Many developed high blood pressure as a result of unwholesome attitudes of their children. The parental dreams and hopes on such children had been shattered and money being spent on them for their educational pursuit became a waste.

This therefore raises the issues of whether the habit of poor reading culture can be reversed. Will the introduction of Study Skill Training help to check poor reading habit of students? Can the provision of Multiple Intelligence Intervention discourage poor reading habit among students? It is on this basis, that this study was carried out to determine the effect of Study Skill Training and Multiple Intelligence Intervention on reading habit of Junior Secondary School students in Ibadan, Oyo State.

# 1.3 Purpose of the Study

The purpose of this study was to investigate the effects of Study Skill Training (SST) and the Multiple Intelligence Intervention (MII) on reading habit of the junior secondary school students in Ibadan, Oyo State. Specifically, the study was set to:

- Investigate the main effect of the two therapeutic programmes on reading habit of the participants.
- Examine the main effect of gender on reading habit of the participants.
- Find out the main effect of academic self-efficacy on reading habit of the participants.
- Determine the interactive effect of treatment and gender on reading habit of the participants.
- Ascertain the interactive effect of treatment and academic self-efficacy on reading habit of the participants.
- Look into the interactive effect of gender and academic self-efficacy on reading habit of the participants.

 Assess the three-way interaction among treatment groups, gender and academic selfefficacy on reading habit of the participants

# 1.4 Significance of the Study

Nigerian secondary school students are battling with poor reading culture which is seriously affecting the standard of education. However, with adequate understanding of the psychological intervention strategies that could enhance good reading habit, parents, stakeholders, educational policy makers, educational managers and students would immensely benefit from the expected outcome of this study. The study stands to offer prompt and effective guidance and support on the improvement of students' reading skill for better academic performance.

The outcome of this study would serve as a pointer for the stakeholders to contribute their own quotas immensely by establishing educational resource centres in the communities where the students would have access to different types of books to borrow and read to enhance their academic performance and also to imbibe reading skill as applicable in the past years.

Furthermore, this study also serves as guide for guidance counsellors, school administrators and teachers in formulating effective counselling intervention programmes and creating a serene atmosphere for effective teaching and learning. It would prompt teachers and school counsellors to understand that there is need for constant interaction with students in order to facilitate a cordial relationship and encourage a sense of belonging among students and teachers. This is important since students who exhibit academic self-efficacy in a school are likely to be motivated to participate more in classroom teaching and learning which would influence their reading skills to enhance their academic performance.

Also, the curriculum planners would find the study beneficial to know that a variety of things go into designing educational curricula apart from the stated objectives. This is because this study would give them an insight into how best to design syllabus that captures and engages students to use their cognitive, affective and psychomotor domains.

Parents would greatly benefit from the outcome of this study for them to monitor and guide their children towards inculcation of effective reading culture that could improve their children's academic performance at home.

More importantly, some of the skills acquired by the students exposed to study skill training and multiple intelligence intervention might help them develop skills and understanding

of effective reading skill both in school and at home. It is also expected that, this study would contribute to the existing knowledge base with regards to reading of students and more importantly in the light of strategies that would enhance such habit

In addition, the researchers especially those in the field of educational psychology would benefit greatly from the study because it is an example of research work that shows systematic way of enhancing reading skill among secondary school students. It would also serve as a reference material to consult by future researchers.

# 1.5 Scope of the Study

This study investigated the effect of Study Skill Training and Multiple Intelligence Intervention in enhancing reading habit of Junior Secondary School students in Ibadan, Oyo State, Nigeria. The participants were Basic 8 students of public secondary schools in Ibadan metropolis. The study covered three local governments out of the five local government areas in Ibadan metropolis. Gender and academic self-efficacy were the moderating variables in the study.

# 1.6 Operational Definitions of Terms

The following concepts relevant to this study were operationalized as follow;

**Study Skills Training:** as used (within the context) in the study are learning strategies or training that would help junior secondary school students to organize, process, and use information effectively and correctly for the betterment of their academic performance.

**Multiple Intelligence Intervention** as used in the study, is an intervention that refers to a learner-based philosophy that characterizes human intelligence as having multiple dimensions that must be acknowledged and developed for Junior Secondary School students training.

**Reading Habit**: The abilities and capabilities of Junior Secondary School students to study effectively, recognize words, sentences and get the meaning from the printed materials.

**Academic Self-efficacy**: as implied in this study is the Junior Secondary School student's confidence in his/her ability to organise, execute and regulate performance in order to solve a problem or accomplish a task at a designated level of skill and ability

**Basic 8 students:** These are the second year students of Junior Secondary Schools (JSS). They are in intermediate class preparing for Basic Education Certificate Examination (BECE)

#### CHAPTER TWO

#### LITERATURE REVIEW

# 2.1 Reading Habit

Reading is a complex cognitive process of decoding symbols in order to construct or derive meaning (reading comprehension). It is a means of language acquisition, of communication, and of sharing information and ideas. Like all languages, it is a complex interaction between the text and the reader which is shaped by the reader's prior knowledge, experiences, attitude, and language community which is culturally and socially situated. The reading process requires continuous practice, development, and refinement (Nation ,2009).

Readers use a variety of reading strategies to assist with decoding (to translate symbols into sounds or visual representations of speech) and comprehension. Readers may use morpheme, semantics, syntax and context clues to identify the meaning of unknown words. Readers integrate the words they have read into their existing framework of knowledge or schema (schemata theory). Other types of reading are not speech based writing systems, such as music notation or pictograms. The common link is the interpretation of symbols to extract the meaning from the visual notations (Wheat, Cornelissen, Frost & Hansen, 2010).

A requirement for reading is a good contrast between letters and background (depending on colours of letters and background, any pattern or image in the background, and lighting) and a suitable font size. In the case of a computer screen, it is important to be able to see an entire line of text without scrolling. The field of visual word recognition studies how people read individual words (Wheat, et al, 2010; Mefor, 2010). A key technique in studying how individuals read text is eye tracking. This has revealed that reading is performed as a series of eye fixations with movement of eyes between them. Humans also do not appear to fixate on every word in a text, but instead fixate to some words while apparently filling in the missing information using context. This is possible because human languages show certain linguistic regularities.

The process of recording information to be read later is writing. In the case of computer and microfiche storage, there is the separate step of displaying the written text. For humans, reading is usually faster and easier than writing. Reading is typically an individual activity, although on occasion a person will read out loud for the benefit of other listeners. Reading aloud for one's own use, for better comprehension, is a form of intrapersonal communication. Reading to young children is a recommended way to instill language and expression, and to promote

comprehension of text. Before the reintroduction of separated text in the late Middle ages, the ability to read silently was considered rather remarkable (Alberto & Manguel, 1999; Potter, 2011).

#### **Reading Skills**

Moje (2008) states that literacy is the ability to use the symbols of a writing system. To be able to interpret the information symbols represent, and to be able to re-create those same symbols so that others can derive the same meaning. Illiteracy is not having the ability to derive meaning from the symbols used in a writing system. Dyslexia refers to a cognitive difficulty with reading and writing. It is defined as brain-based type of learning disability that specifically impairs a person's ability to read. The term dyslexia can refer to two disorders: developmental dyslexia (Heim, Tschierse & Amunts 2008; Chung, Ho, Chan, Tsang&Lee, 2010) which is a learning disability; alexia (acquired dyslexia) refers to reading difficulties that occur following brain damage, stroke, or progressive illness (Cherney, 2004; Sinanovic, Mrkonjic, Zukic, Vidovic & Imamovic, 2011). Major predictors of an individual's ability to read both alphabetic and non alphabetic scripts are phonological awareness, rapid automatized naming and verbal intelligent quotient (Powell, Stainthorp, Stuart, Garwood & Quinlan, 2007).

#### **Reading Skill Development**

Both lexical and sub-lexical cognitive processes contribute to how students learn to read. According to Borowsky, Esopenko, Cummine and Sarty (2007), sub-lexical reading involves teaching reading by associating characters or groups of characters with sounds or by using phonics or synthetic phonics learning and teaching methodology. On the other hand, Borowsky, et al (2007), assert that lexical reading involves acquiring words or phrases without attention to the characters or groups of characters that compose them or by using whole language learning and teaching methodology. Sometimes argued to be in competition with phonics and synthetic phonics methods, and that the whole language approach tends to impair learning how to spell.

Learning to read in a second language, especially in adulthood, may be a different process than learning to read a native language in childhood, (Hughes, Diana, Stainthorp & Rhona, 1999). There are cases of very young children learning to read without having been taught. Such was the case with Truman Capote who reportedly taught himself to read and write

at the age of five. There are also accounts of people who taught themselves to read by comparing street signs or Biblical passages to speech. Brain activity in young and older children can be used to predict future reading skill. Cross model mapping between the orthographic and phonologic areas in the brain are critical in reading. Thus, the amount of activation in the left dorsal inferior frontal gyrus while performing reading tasks can be used to predict later reading ability and advancement. Young children with higher phonological word characteristic processing have significantly better reading skills later on than older children who focus on whole-word orthographic representation (Hughes, et al, 1999).

# The Components of Study Habit

A good way to know what reading is, is to examine what fluent readers do and how students get meaning from words in the complex process. As a matter of fact, a fluent reader comprehending texts by resorting to multiple skills and strategies displays the skills of effective reading (Bazerman & Wiener, 2005). Grabe (1991) claims that fluent readers bring together the following six general component skills and knowledge during reading.

- i. **Automatic recognition skills:** virtually unconscious ability, ideally requiring little mental processing to recognize text, especially for word identification.
- ii. **Vocabulary and structural knowledge:** a sound understanding of language structure and a large recognition vocabulary.
- iii. **Content/world background knowledge:** prior knowledge of text related information and a shared understanding of the cultural information involved in text.
- iv. **Formal discourse structure knowledge:** an understanding of how texts are organized and how information is put together into various genres of text for example, a report, a letter, a narrative.
- v. **Synthesis and evaluation skills/strategies:** the ability to read and compare information from multiple sources, to think critically about what one reads, and to decide what information is relevant or useful for one's purpose.
- vi. **Metacognitive knowledge and skill monitoring:** the awareness of one's mental processes and the ability to reflect on what one is doing and the strategies one is employing while reading. Besides, Grabe and Stoller (2001), propose what fluent reader typically does as follows.

- Read rapidly for comprehension.
- Recognize words rapidly and automatically.
- Draw on a very large vocabulary structure.
- Integrate text information with their own knowledge.
- Recognize the purpose of reading.
- Comprehend the text as necessary.
- Shift purpose to read strategically.
- Use strategies to monitor comprehension.
- Recognize and repair misconception.
- Read critically and evaluate information.

In summary, within the reading process, fluent readers will flexibly apply all the component skills in a complicated process (Ediger, 2001). That is, the readers will adopt their knowledge of the structure of the language, semantic and syntactic information from the text, personal experiences and knowledge of the topic to promote the comprehension of the texts.

# **Methods of Reading**

Reading is an intensive process in which the eye quickly moves to assimilate text. Very little is actually seen accurately. It is necessary to understand visual perception and eye movement in order to understand the reading process, (Hunziker & Hans-Werner, 2006; Akyo & Ulusay, 2010). There are several types and methods of reading, with differing rates that can be attained for each, for different kinds of material and purposes:

- Subvocalized reading combines sight reading with internal sounding of the words as if spoken. Advocates of speed reading claim, it can be a bad habit that slows reading and comprehension, but other studies indicate the reverse, particularly with difficult texts (Rayner & Keith, 1995).
- Speed reading is a collection of methods for increasing reading speed without an
  unacceptable reduction in comprehension or retention. Methods include skimming or the
  chunking of words in a body of text to increase the rate of reading. It is closely connected to
  speed learning.
- *Proofreading* is a kind of reading for the purpose of detecting typographical errors. One can learn to do it rapidly, and professional proofreaders typically acquire the ability to do so at

high rates, faster for some kinds of material than for others, while they may largely suspend comprehension while doing so, except when needed to select among several possible words that a suspected typographic error allows.

- Rereading is reading a book more than once. "One cannot read a book: one can only reread
  it," Vladimir Nabokov once said. A paper published in the *Journal of Consumer Research*(Cristel & Antonia, 2012) found re-reading offers mental health benefits because it allows for
  a more profound emotional connection and self-reflection, versus the first reading which is
  more focused on the events and plot.
- Structure-Proposition-Evaluation (SPE) is a method in which one reads writing in three passes: (a) for the structure of the work, which might be represented by an outline; (b) for the logical propositions made, organized into chains of inference; and (c) for evaluation of the merits of the arguments and conclusions. This method involves suspended judgment of the work or its arguments until they are fully understood.
- Multiple intelligence-based methods, which draw upon the reader's diverse ways of thinking and knowing to enrich his or her appreciation of the text. Reading is fundamentally a linguistic activity: one can basically comprehend a text without resorting to other intelligences, such as the visual (e.g., mentally "seeing" characters or events described), auditory (e.g., reading aloud or mentally "hearing" sounds described), or even the logical intelligence (e.g., considering "what if" scenarios or predicting how the text will unfold based on context clues). However, most readers already use several intelligences while reading, and making a habit of doing so in a more disciplined manner, that is, constantly, or after every paragraph can result in more vivid, memorable experience.
- Rapid Serial Visual Presentation (RSVP) reading involves presenting the words in a sentence
  one word at a time at the same location on the display screen, at a specified eccentricity.
  RSVP eliminates inter-word saccades, limits intra-word saccades, and prevents reader control
  of fixation times (Legge, Mansfield, & Chung, 2001). RSVP controls for differences in
  reader eye movement, and consequently is often used to measure reading speed in
  experiments.

# **Types of Test**

- Sight word reading: reading words of increasing difficulty until students become unable to read or understand the words presented to them. Difficulty is manipulated by using words that have more letters or syllables, are less common and have more complicated spelling sound relationships.
- Non word reading: reading lists of pronounceable nonsense words out loud. The difficulty is
  increased by using longer words, and also by using words with more complex spelling or
  sound sequences.
- Reading comprehension: a passage is presented to the reader, which students must read
  either silently or aloud. Then a series of questions are presented that test the reader's
  comprehension of this passage.
- Reading fluency: the rate with which individuals can name words.
- Reading accuracy: the ability to correctly name a word on a page.

# **Studying Motivation**

Researchers and practitioners have become increasingly aware of the importance of reading motivation in explaining literacy behaviour. Cramer & Castle (1994) even suggest that attention to the affective aspects of reading, such as motivation, may help combat the increasing disaffection from reading. Indeed, motivation for learning is thought to be one of the most critical determinants of the success and quality of any learning outcome (Mitchell, 1992), and it is therefore likely "that motivational processes are the foundation for coordinating cognitive goals and strategies in reading" (Guthrie & Wigfield, 2000). According to Baumann & Duffy (1997), "motivation to read and reading ability are synergistic, mutually reinforcing phenomena". Many teachers also acknowledge that a lack of motivation causes many of the problems they face in teaching (O'Flahavan, Gambrell, Guthrie, Stahl & Alvermann, 1992; Akyo & Ulusay, 2010).

Motivation to read is also thought to mediate the so-called "Matthew effect" (Stanovich, 1986) which refers to the circular relationship between practice and achievement. Better readers tend to read more because students are motivated to read, which leads to improved vocabulary and better skills. As a result, the gap between good and poor readers grows over time. The same circular relationship holds for other areas in literacy, including writing and speaking/listening skills. So, what is reading motivation? Reading motivation is defined as "the individual's

personal goals, values and beliefs with regard to the topics, processes, and outcomes of reading (Guthrie & Wigfield, 2000).

When children, young people and adults read, why do they read? According to Benton and Fox (1985): stories provide the possibility of educating the feelings and can offer their readers potential growth points for the development of a more subtle awareness of human behaviour. A handful of studies have explored this issue, which have yielded comparable results. For example, the Nestle Family Monitor (2003) asked 11-18 year-olds why students read. 55% of these young people stated that books help them understand different people/cultures, 40% wanted to learn more about new subjects, and 33% stated that books encouraged them to try new hobbies. When asked how they would describe reading, 50% of the respondents described it as relaxing, while 33% described it as fun. 40% also described reading as educational, while 25% believed it to be informative or for school/learning. Older pupils in particular were more likely to mention the educational value of reading.

However, 25% also described it as boring. Dungworth and colleagues (2004) also ask pupils why they liked reading and found that the most popular reason for reading was emotional and related to the way reading made them feel. Pupils also stated that they read for enjoyment and because it was relaxing. Others viewed reading as educational and informative. Similar questions were also asked in a recent Reading Connects survey (Clark & Foster, 2005), which showed that the majority of pupils emphasised skills-related reasons. More specifically, 50% of the pupils read because it is a skill for life and because it will help them find what they need/want to know. Reading as a fun activity was the third most frequently chosen reason. Fewer pupils read because it helps them understand the world, teaches them about other people and helps them understand about themselves. More boys than girls reported that they read because it will help them get a job or because they have to, while girls indicated reading because it is fun, it teaches them how other people live and because it gives them a break.

Therefore, reading books and writing are among brain-stimulating activities shown to slow down cognitive decline in old age, with people who participated in more mentally stimulating activities over their lifetimes having a slower rate of decline in memory and other mental capacities (Marina, 2013). According to Guthrie and Wigfield (2000), reading motivation is a multifaceted construct that includes reading goals, intrinsic and extrinsic motivation, self-efficacy and social motivation for reading. Two related aspects of reading motivation are reading

attitude and reading interest. Although these three terms are frequently used interchangeably, the constructs that underlie each are different (Mazzoni, Gambrell & Korkeamaki, 1999; Potter, 2011):

- Reading attitudes refer to the feelings and beliefs an individual has with respect to reading
- Reading interest relates to people's preferences for genres, topics, tasks or contexts
- **Reading motivation** refers to the internal states that make people read.

Research has repeatedly shown that motivation to read decreases with age, especially if pupils' attitudes towards reading become less positive (McKenna, Ellsworth & Kear, 1995). Thus, if children do not enjoy reading when they are young, then they are unlikely to do so when they get older. There is some tentative evidence that reading for pleasure at home and reading for school are predicted by different variables. For example, Cox and Guthrie (2001) find that motivation was affected by reading for enjoyment over and above other factors, such as past reading achievement and cognitive strategy use, such as questioning.

According to Cox and Guthrie (2001), these results are in line with a socio-cognitive perspective, which suggests that different variables predict reading depending on the social context (Abadi, 2006; Mefor, 2010). As a result, "the socially constructed practices in a particular setting (for instance, the classroom) are associated with forms of expertise that are relatively distinctive to that setting". The school context, with its emphasis on assignment and assessments places particular demands on cognitive competence and strategy use. With reading for enjoyment, however, individual interests prevail and reading amount is determined most strongly by motivation.

There are two aspects of reading motivation that are based on different reasons or goals that give rise to an action – namely intrinsic and extrinsic motivation. According to Ryan and Deci (2000), intrinsic motivation refers to engagement in an activity that is based on personal interest in the activity itself. Readers who are intrinsically motivated are more likely to find a variety of topics that interest them and to benefit from an accompanying sense of pleasure (Hidi, 2000). Studies have linked intrinsic reading motivation to:

- Greater reading frequency and greater breadth of reading (Hidi, 2000)
- Greater reading enjoyment (Cox & Guthrie, 2001; Wang & Guthrie, 2004)
- Greater retention of key information (Guthrie et al., 1998)

- Greater persistence in coping with difficulties, mastering the required skills and becoming self-determined in reading tasks (Deci, 1982). Wigfield and Guthrie (1997) report that several aspects of intrinsic motivation predict breadth of reading and reading comprehension: importance, curiosity, involvement and challenge:
- **Importance** of reading refers to the belief that reading is valuable
- Curiosity is the desire to learn about a particular topic of personal interest
- •Involvement refers to the enjoyment of reading certain kinds of literary or information texts
- Preference for challenging reading is the satisfaction of mastering or assimilating complex ideas in text. By contrast, extrinsic motivation involves engagement in an activity in response to external values and demands (Ryan & Deci, 2000). For example, when children read to avoid punishment or to meet teachers' or parents' expectations, they are extrinsically motivated because their desire to read is controlled externally (Hidi, 2000). Extrinsically motivated pupils may therefore not read because they are interested but because they want to attain certain outcomes (for example, recognition from others or good grades; Deci et al., 1991). Wigfield and Guthrie (1997) report that extrinsic motivation was made up of three aspects: recognition, grades and competition. According to Wigfield (1997), these aspects can be defined as follows:
- Reading for recognition is the pleasure in receiving a tangible form of recognition for success
- Reading for grades refers to the desire to be favourably evaluated by the teacher
- **Competition** in reading is the desire to outperform others in reading.

However, several studies have shown that both forms of motivation predict amount and breadth of reading, but that the relationship is stronger for intrinsic motivation (Wigfield & Guthrie, 2001). Research has also shown that intrinsic but not extrinsic motivation predicts reading for pleasure (Cox & Guthrie, 2001; Wang & Guthrie, 2004). For example, in Wang and Guthrie's (2004) study, children who were intrinsically motivated read fiction at least once a week, and in some cases almost daily. By contrast, extrinsic motivation was negatively associated with reading for pleasure, suggesting that children who read for the outcomes of reading are less likely to get enjoyment from books. The literature also indicates that the two forms of motivation have different relationships with text comprehension. Wang and Guthrie (2004), report that intrinsic motivation was positively related to text comprehension after other variables, such as extrinsic motivation and reading amount, were controlled for.

Extrinsic motivation, on the other hand, was negatively associated with text comprehension. Indeed, there are some indications in the literature that pupils who are extrinsically motivated readers are more likely to use strategies at surface level, such as guessing and memorization (Pintrich & Schrauben, 1992). In general, the different forms of motivation have also been associated with different learning strategies and different qualities of learning. Intrinsic motivation has typically been related to learning that leads to conceptual understanding and higher level thinking skills (Kellaghan, Madaus & Raczek, 1996), while extrinsic motivation tends to lead to "surface" rather than "deep" learning (Crooks, 1988).

# **Learning Styles**

The term "learning styles" is commonly used throughout various educational fields and therefore, has many connotations. In general, it refers to the uniqueness of how each learner receives and processes new information through their senses. The National Association of Secondary School Principals in Britain (1982) defines learning style as, "the composite of characteristic cognitive, affective, and physiological factors that serve as relatively stable indicators of how a learner perceives, interacts with, and responds to the learning environment. Acharya and Chandrama (2002) define learning styles as the manner in which a learner perceives, interacts with and responds to the learning environment. On the other hand, Artherton (2005) defines learning styles as a consistent pattern of behaviour and performance by which an individual approaches educational experience. Therefore, each person is born with certain preferences toward particular styles, but culture, experience, and development influence these preferences.

However, the four most common learning styles are visual, aural, reading/writing, and kinesthetic/tactile. Most people learn through all modalities, but have certain strengths and weaknesses in a specific modality. Some people have an equal propensity for more than one style, which is titled as the multimodal style. This preference can be determined through various testing instruments, (Bagby, 2014). Once a person's learning style is ascertained, accommodations can be made to increase academic achievement and creativity, as well as improve attitudes toward learning. The four learning styles are the following:

#### The Visual Learning Style

Visual learners process information most effectively when the information is seen. Depictions can include charts, graphs, flow charts, and all the symbolic arrows, circles, hierarchies and other devices that instructors use to represent what could have been presented in worlds. These learners think in pictures and have vivid imaginations. Most people are classified as visual learners (Sladaty & Taghiyareh, 2007).

#### The Aural Learning Style

Aural learners process information most effectively when spoken or heard. These learners respond well to lectures and discussions and are excellent listeners. They also like to talk and enjoy music and dramas. When trying to recall information, aural learners can often "hear" the way someone told them the information (Jenkins, 2008).

# The Reading/Writing Learning Style

Reading/Writing learners process information most effectively when presented in a written language format. This type of learner benefits from instructors and use the chalkboard to accent important points or provide outlines of the lecture materials. When trying to recall information, reading/writing learners remember the information from their mind's eye (Pashler, McDaniel, Rohrer & Bjork, 2008).

# The Kinesthetic/Tactile Learning Style

Kinesthetic/Tactile learners process information actively through physical means. Kinesthetic learning refers to whole body movement while tactile learning refers only to the sense of touch. These learners gesture when speaking, are poor listeners, and lose interest in long speeches. Most students that do not perform well in school are kinesthetic/tactile learners. The crux of this learning style is that the learner is connected to real situations through experience, example, practice, or simulation (Holden & Constance, 2010).

# **Learning Strategies for Each Learning Style**

According to (Jenkins, 2008; Glen-David, 2010, Holden & Constancce, 2010; Bagby, 2014). There are specific learning strategies for each learning style and these strategies are being discussed as follow:

#### The Visual Learning Style

- Replace words with symbols or initials.
- Translate concepts into pictures and diagrams.
- Underline or highlight notes or textbooks with different colours.
- Practice turning the visuals back into words.
- Make flashcards of key information with words, symbols, and diagrams.

# The Aural Learning Style

- Attend lectures and tutorials.
- Discuss topics with instructor and other students.
- Put summarized notes on tape and listen to them.
- Join a study group or have a "study buddy."
- Tape record lectures.
- When recalling information or solving problems, talk out loud.

# The Reading/Writing Learning Style

- Write out important information again and again.
- Read notes silently.
- Organize any diagrams into statements.
- Rewrite the ideas and principles in other words.
- Make flashcards of words and concepts that need to be memorized.

# The Kinesthetic/Tactile Learning Style

- Sit near the instructor in classroom situations.
- Read out loud from textbook and notes.
- Copy key points onto large writing surfaces (i.e. chalkboard or easel board).
- Copy key points using word processing software.

- Listen to audiotapes of notes while exercising.
- Take in information through field trips, laboratories, trial and error, exhibits, collections, and hands-on examples.
- Put real life examples into notes summary.
- Recall experiments and role-play.
- Use pictures and photographs that illustrate an idea

# 2.2 Study Skill

Study skills are learning strategies that help students organize, process, and use information effectively. Study skills are processes of metacognition, 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 (Anderson, 2002). Mace (2002) points out that study is a systematic acquisition of knowledge and an understanding of facts and principles that calls for retention and application. Kelly (1998) states that study is the application of one's mental capacity to the acquisition, understanding and organization of knowledge; it often involves some form of formal learning. Crow and Crow in Okorodudu (2000), explain that study is a programme of subject matter mastery. It involves hard work.

However, study involves the individual's thinking, feeling, personality, social interaction, physical activities and health rather than mental learning of fact on the thought system for the purpose of recall when asked. Studies require time spent in a deliberate attempt to learn. It should be differentiated from simple leisure to reading. Thomas and Robinson (1990), emphasize that the learner needs to use a systematic discipline and purposive approach to study. Effective study consists of a conscious sequential series of inter-related steps and processes. Okorodudu (1995), asserts that, study involves the total of all behavioural patterns (addition, verbal, psychomotor, emotional) determined purpose and enforced practices that the individual adapts in order to learn and achieve competence.

#### **Study Techniques**

Most students do not know how to study probably because they are not aware of what techniques to apply in the study situation or they study at odd times and in odd places. Hills and

Ballow (2000) had an understanding of this deficiency in students approach to study and they developed a comprehensive study skill manual for college students. Effective study cannot be acquired without the application of these skills and methods. Some of which include reading, note-taking, time consideration, organizing material in a study and choosing a good study environment among others and are explained as following:

Environment of study: Environment of study needs to be considered before a meaningful study can take place. It has been emphasized that environment of study as it appears to have adverse effect on the whole concept of study. Where one studies has an important effect on one's efficiency because the location and all of its characteristics are stimuli. The stimulus of the study situation should produce the response of studying and no other response. It has been suggested that an important approach is to have a set aside specifically for study. It should be well ventilated, noise free and well lighted room or open place with a desk and a chair. Ruch (1995) writes on the need to consider the type of chair and desk used for study. These should be such that allow the individual to maintain an erect and comfortable sitting posture. The study desk should be spacious enough for the books and materials but should contain only what one needs at a time. Hepher (1990) reveals that the effect of temperature and humidity on the body temperature of the individual can cause a reduction in the body function and mechanism.

Therefore, the need for abundance of fresh air in the study environment to avoid unnecessary fatigue is essential. Hills and Ballow (2000), point out that glaring light could cause eye strain and headaches. Therefore covered light bulbs and light coloured, blotters be used if possible to reduce light intensity. In effect, light should not shine directly on the table or reading desk. Taking to consideration a rural setting where students have to study under locally made lamps and hurricane lanterns, these should be adjusted well enough to reduce light intensity or place at a considerable distance away from the reading desk. It has been observed that some people cannot study without music, Hills and Ballow (2000), agree that music is good if it does not constitute noise in itself or when used to neutralize other external noise.

**Effective and fast reading:** Nowadays, student has much to read because of the great demand inherent in core curriculum. This is more apparent at the junior secondary school level in which the students are expected to study about fourteen different subjects or more in some cases. The ability to read fast will be an advantage. Quick readers take in and retain more than slow readers

because the quick reader catches the drift and flow on the passage better whereas the slow readers delay over each word.

According to Solomon (1999), the poorest readers are the too slow ones. They were often concerned with unimportant details while the good and fast readers often adopt a wider view of all the paragraphs. There are a number of bad habits which poor readers adopt most of which involve using extra body movement in the reading process inefficient reading; the muscles of the eyes should make the external movement. Extra body movement such as pointing with the fingers or moving the lips, do not help reading and often only help in slowing it down. There are many cases in which slow reading can however be adopted depending on the subject matter and the purpose of reading Maddox (2002), formulates about four different types of reading which include mastery reading, exploratory and revision reading critical and pleasure reading. He stresses that these types of reading have different rates for the individual.

Time planning: Whatever time a student spends on study, what time of the day he sets aside for work only by organizing and planning their time that student can avoid distraction from regular studies. Determining time limits for study sets the immediate goal for completing ones work within specific time limits and also helps one to resist recreational distraction (Robinson, 1990). As regards time planning, Hills and Ballow (2000), suggest the use of work diary, a work diary allows the student to look at everything he has to do and to apportion time to every subject. Organizing time in this way helps to minimize worry and indecision that may arise in case of any extra work that has to be slotted in, the diary should be planned on the basis of needs and purposes; allocating adequate time to each task so that no particular task consume more time than necessary.

**Note-taking:** This is one of the activities that is believed to aid learning and remembering and consequently academic success. Note-taking when properly done, involves not only reading and writing or listening to lectures and jotting down points but also requires concentration and reading out for necessary facts. It may not be as easy as it seems to be the observer. It involves the thought and hearing ability of the individual. Note-taking may have detrimental effect for students who are slow in listening efficiency. In view of this, Derville (1998), suggests certain aids for effective note-taking in the form of short abbreviations; for example, "b/w" to mean between, "b4" to mean before and so on. These abbreviations would be helpful to the slow

writer. Care need to be taken to see that only relevant ideas are included in a note, whether it is in a lecture or from a text book for easier comprehension of the subject.

**Remembering:** The ability to remember what has been read is a vital skill. The term "remembering" means retaining past experiences. It is thought that in remembering, a memory trace is laid down on the mind and being a sensory impression, by repetition the traces are made deeper and therefore are more lasting (Hallas, 2002). Remembering must involve either recall or recognition. The former necessitates the reproduction of material that is not actually present before the senses at the moment.

According to Oladele (2000), there are four kinds of remembering and they include recognition, recall, reproduction and performance, he held the view that our failure to recall emanates from non practice He also maintains that performance, a fourth kind of remembering, is the also performance of habits so well learned that they are highly automatic. But for Hallas (2002), remembering is in three parts, viz:- attending to, which is associated with short term memory, the second and the third being the need to think about and use the material associated with long term memory respectively.

Most students make the mistake of reading and re-reading without actually training to think over what they have read. A very effective technique in remembering is to study the passage or diagram as the case may be for a given period of time. Try to reproduce it immediately and then later at increasing intervals of time, for example, every day for a week and then every week for a month. This method is known as repeated reproduction and has been found to be very useful.

Concentration: The ability to focus ones attention on the task at hand is essential for effective study. Robinson (1990) outlines five major conditions that affect concentrations. These include distractions, (internal and external situations) associated with other activities, study materials not convenient, poor lightening and physiological conditions. Oladele (2000) suggests that to avoid external distraction, students could choose place of study which can stimulate them to study. The importance of this is that once they are in such environment associated only with study, distraction such as anxiety and indecision, day dreaming, mental and physical fatigue that impair the ability to concentrate will be avoided.

**Comprehension:** Reading with difficulty and without comprehension is no use. Robinson (1990), states that reading with one's head instead of one's eyes is what effective study habit

involve. The students must learn to read with an active attitude of seeking what is important in the material and subordinating what is merely explanatory. He suggests that the techniques of pre-comprehension help in speeding up comprehension. Many students do not seek to understand the basic concepts that seem simple and relevant but later in their studies they realize that without learning the basics, adequately comprehension of more difficult materials is difficult. Students complain that they do not understand what they have read. It is suggested that reader searches for the meaning in the mind of the writer to know what to emphasize in his reading.

**The SQ3R model:** This is an effective formula developed by Hail-Quest and reviewed (2000) and expatiated upon by several other authors. It places emphasis on the principle of preparation for learning and knowledge of results.

"S"stands for survey

"Q" for Question

"3Rs" for Read, Recite and Review

**Survey:** Oladele (2000) suggests that in doing survey, one needs to read the section headings to get a general idea of what the chapter is about, depending on what the student wishes to study, a text book, a chapter of a textbook, a journal or an article. Read the introduction and summary if the chapter has them. Read few sentences at the beginning and at the end of the paragraphs. Make notes of few words, terms and ideas. The essence of this is that it arouses some expectations and familiarization with the structure of the material and the author's style.

Akinboye (2000) presents the need for the students to look at the preface, the table of contents and then scan through each topic. Scanning familiarizes the readers with the overall organization of the material by providing the intellectual scaffolding from which the material might be related and providing the students with knowledge about the general features of the material. From the initial reading, the reader should know what to expect. In essence the strategy allows the reader to develop personalized advance organizers.

Question: The merit of setting questions for oneself or using past questions related to the study is that it acts as a guide. Questioning the material enables one to develop a set of concepts within which to fit the ideas one will be studying. One of the best techniques for generating questions is to turn to the major headings of the chapters into who, what, where, why and how questions. Studies have shown that students benefit from student-generated questions. Frazier and Schwart (1995) conduct a research using high school students. They were made to set questions for

themselves as they studies a prose passage either individually or collectively during tutorials, Results of this study showed that recall was greater in the question study than in the study only.

**Reading:** The importance of reading is to get the whole meaning of the passage. Students spend time reading in order to get the actual meaning of the chapter. Reading seeks to equip the students with many ideas that would otherwise have been overlooked when surveying. Reading with the intent to understand should be the major goal. It is expedient to read each line and take note of each sentence and sequence of events or arrangement of facts in the materials. Hills and Ballow (2000) explained that reading those phrases and sentences bring out the meaning in the passage, reading should not be done just once but several times until the meaning in the passage is got. While reading, it is advised that student be in a relaxed mood in order to concentrate and assimilate what he / she is reading.

**Recite:** Lovell (1993) was one of the earliest psychologists to carry out a study on recitation as a learning strategy. In the study, children in grades 4-6 were given either diagrams or short biographies to memorize. Results of this study obviously showed that recitation affected the children's learning positively. Lovell (1993) states that instead of re-reading a material to be learnt, it is better to recite to oneself or to a friend, or write it out, making use of prompts whenever necessary. He recalls that relevant experimental evidence shows that with children and adults, the more time devoted to recitation, the quicker will be the rate of learning.

The importance of recitation is further stressed by a later study carried out by Del Giono, (1998), it was a comparison between the read-recite and read-re-read procedures. Retention in these two groups were tested immediately after study and one week later, the read-recite group scored significantly higher on both tests than the learner to check on his own efforts. It should be noted however that though recitation is advantageous, it can only yield results when materials have been well understood and short.

**Review:** Necessary as recitation is as a study strategy, review is equally very useful; it has been defined as recall and rehearsal of information presented in a study. The major benefit is that it aids both immediate and long term retention As the students go through the material over and over again, the tendency is for them to get used to the material while being reminded as well as of those points they may have overlooked or forgotten, Lovell (1993) asserts that retention can be aided by thorough learning, by studying at a suitable period of the day, by constantly reviewing and by avoiding circumstances likely to cause interference. He also points out that

when materials have been learnt, partly forgotten and learn again, the rate of forgetting is slower after the re-learning and it becomes lower still after further periods of review. This would appear to consume a lot of the student's time and can only be utilized by those who determined to study for excellence

#### 2.3 Gardner's Multiple Intelligence

According to Gardner (2004) multiple intelligence is an approach to teaching, that focuses on his belief that the learners' intelligence is not a single structure like intelligent quotient but a conglomerate of different types of "intelligences" such as verbal/linguistics, logical/mathematical, visual/spatial, bodily/kinesthetic, naturalistic, musical, interpersonal and intrapersonal intelligences. Gardner's multiple intelligence extends the concept of the one intelligence and defines a broader variety of intelligences for everyone. This takes into account the idea that a person who is good at mathematics is not necessarily good at other tasks. Furthermore it questions the concept that a person with low mathematical skills is considered to be less intelligent even though he or she might be a high achiever in other areas like music, sports and so on.

The concepts of multiple intelligence and learning style are widely encountered and used today in education, business, arts and other areas of daily life. There is a substantial research on multiple intelligence and learning style in different fields and with different purposes. In particular, as individual differences were shown to constitute a significant factor in learning process, there has been a parallel increase in the emphasis on multiple intelligence and learning style in the field of education. In ensuring that students achieve full learning in line with the desired objectives of the learning process, requires identifying their individual learning styles and multiple intelligence domains.

In order to contribute to effective assimilation in a learning environment, teachers should inevitably possess sufficient knowledge about the learning styles and multiple intelligence of their students and plan the learning process accordingly. The theory of multiple intelligence is helpful in the attempts to interpret individual differences, assumption, combining individual multiple intelligence and learning style in education may help students learn in fields other than those in which they are strong (Silveret, 1997).

Multiple intelligence as introduced by Gardner, argues that high scores in mathematics and language tests cannot alone serve as a proof of human intelligence. Intelligence is something

beyond the scores made in standard paper-and-pencil tests used to estimate success at schools. In other words, traditional intelligence tests cannot measure the abilities of a chess player, an athlete or a violinist. Gardner (2004) maintains that intelligence incorporates too many abilities not to be explained by a single factor. He describes intelligence as the capacity of an individual to create products that are valued in one or more cultural setting, his/her skill to produce effective and efficient solutions to problems in daily life and also his/her ability to discover new and complex problems demanding solutions (Saban, 2004).

Gardner (1997) defines seven different types of intelligence and then introduces "naturalistic intelligence" as the eighth type. Regarded as the ninth intelligence type, "existential intelligence" is still under discussion and investigation (Checkley, 1997; Gardner, 2004; Saban, 2004). The "theory of multiple intelligence" is now widely accepted with several revisions and developments in the years until now. For the theory argues: "Individual differences result from the difference in their capacity to use their intelligences.

Humans have different types of dominant intelligences, and each individual's intelligence consists of different combinations of intelligences at certain levels". So it is assumed that individuals do not possess a single type of intelligence but different people have different levels of dominant types of intelligence, which brings us to the multiple intelligence domains. These dominant intelligence domains in the theory of multiple intelligence may vary among all individuals in terms of their types, levels and capacity of use. To put it differently, along with his/her dominant intelligence, an individual also possesses non-dominant intelligence domains. Different intelligences could be independent and an individual may well lack any ability in a specific domain, while possessing a very high level of ability in another and to adopt the view that "all intelligence domains are important" (Gardner, 2004).

According to Gardner, one should consider the effects of dominant and non dominant intelligence domains upon individuals' learning processes. Intelligence domains and related abilities of students should be incorporated into the learning process. Therefore, it seems inevitable that the theory of multiple intelligence will influence curriculum, learning approaches and assessment-evaluation processes. For the display of high levels of cognitive, affective and psychomotor behaviours by students in the learning process as well as their active participation is to a certain extent related to the integration of their intelligence domains and learning process. On the other hand, learning styles of individuals originate from their perceptional preferences

and difficulties, motivational differences, psychological differences and individual differences resulting from practices of processing knowledge.

Gardner's theory challenges traditional, narrower views of intelligence. Previously accepted ideas of human intellectual capacity contend that an individual's intelligence is a fixed entity throughout his lifetime and that intelligence can be measured through an individual's logical and language abilities. According to Gardner's theory, intelligence encompasses the ability to create and solve problems, create products or provide services that are valued within a culture or society. The key points of Gardner's theory were the following:

- All human beings possess all eight intelligences in varying degrees.
- Each individual has a different intelligence profile.
- Education can be improved by assessment of students' intelligence profiles and designing activities accordingly.
- Each intelligence occupies a different area of the brain.
- The eight intelligences may operate in consort or independently from one another.
- These eight intelligences may define the human species.

Although the theory was not originally designed for use in a classroom application, it has been widely embraced by educators and enjoyed numerous adaptations in a variety of educational settings Teachers have always known that students had different strengths and weaknesses in the classroom. Gardner's research was able to articulate that and provide direction as to how to improve a student's ability in any given intelligence. Teachers were encouraged to begin to think of lesson planning in terms of meeting the needs of a variety of the intelligences. According to Gardner (2004), multiple intelligence were:

# Verbal/Linguistic intelligence

Verbal/Linguistic intelligence refers to an individual's ability to understand and manipulate words and languages. Everyone is thought to possess this intelligence at some level. This includes reading, writing, speaking, and other forms of verbal and written communication. Students who possess this intelligence have the ability to manipulate: the structure or rules of language (e.g., punctuation for dramatic effect); the sounds of language (e.g., alliteration); the meaning of language (e.g., double entendre); the pragmatic dimensions of language; using language to convince (rhetoric); using language to remember information (mnemonics); using language to explain (expatiation); using language to talk about itself (meta language) (American

Education Network Corporation, 1999) Teachers can enhance their students' verbal/linguistic intelligence by having them keep journals, play word games, and by encouraging discussion

#### Logical/Mathematical intelligence

Logical/mathematical intelligence includes the ability to use inductive and deductive reasoning, solve abstract problems, and understand the complex relationships of interrelated concepts, ideas, and things. Reasoning skills apply to a broad array of areas and include using logical thinking in science, social studies, literature, and other areas (Bellanca, 1997). This intelligence also includes the skills of classifying, predicting, prioritizing, and formulating scientific hypotheses and understanding cause-and-effect relationships. Young children develop this intelligence as they work with concrete manipulatives and grasp the concept of one-to-one relationship and numeration. These critical thinking skills are taught in most schools' curricula, but need to be emphasized through active learning activities.

## Visual/Spatial intelligence

Visual/Spatial intelligence refers to the ability to form and manipulate a mental model. Individuals with strength in this area depend on visual thinking and are very imaginative. People with this kind of intelligence tend to learn most readily from visual presentations such as movies, pictures, videos, and demonstrations using models and props. They like to draw, paint, or sculpt their ideas and often express their feelings and moods through art. These individuals often daydream, imagine and pretend. They are good at reading diagrams and maps and enjoy solving mazes and jigsaw puzzles. Students with spatial intelligence have the ability to keenly perceive: colour, lines, shapes and forms, space, and the relationship that exists among these elements. Learners with visual/spatial intelligence also have the ability to visualize, graphically represent visual or spatial ideas and understand one's position in a special matrix (American Education Network Corporation, 1999). Teachers can foster this intelligence by utilizing charts, graphs, diagrams, graphic organizers, videotapes, colour, art activities, doodling, microscopes and computer graphics software. It could be characterized as right-brain activity.

# **Bodily/Kinesthetic intelligence**

Bodily/Kinesthetic intelligence refers to people who process information through the sensations they feel in their bodies. These people like to move around, touch the people they are talking to and act things out. They are good at small and large muscle skills; they enjoy all types of sports and physical activities. They often express themselves through dance. This intelligence

includes specific physical skills such as coordination, balance, dexterity, strength, flexibility, and speed, as well as tactile and haptic capacities (Armstrong, 2000). Teachers may encourage growth in this area of intelligence through the use of touching, feeling, movement, improvisation, "hands-on" activities, permission to squirm and wiggle, facial expressions and physical relaxation exercises.

#### **Naturalistic intelligence**

This is the intelligence of students who learn best through nature. For these students, most learning needs to take place in outdoor settings. These students enjoy doing nature projects, such as bird watching, butterfly or insect collecting, tree study, or raising animals. They like studying about ecology, nature, plants, and animals (Gardner, 1994). Armstrong (2000) argues that it is very beneficial for these students to have greater access to developing their naturalistic intelligence inside the school building. So the school's task is to bring the natural world into the classroom and other areas. Based on this, teachers can best foster this intelligence by using relationships among systems of species, and classification activities. Encourage the study of relationships such as patterns and order, and compare-and-contrast sets of groups or look at connections to real life and science issues.

# Musical/Rhythmic Intelligence

Musical intelligence refers to the ability to understand, create, and interpret musical pitches, timbre, rhythm, and tones and the capability to compose music. As students develop their musical awareness, they develop the fundamentals of this intelligence. It further develops as students, create more complex and subtle variations of musical patterns, develop talent on musical instruments, and advance to complex composition. This intelligence grows as students increase their sophistication when listening to music. It represents "the capacity to perceive, discriminate, transform and express musical form" (Armstrong, 2000). Teachers can integrate activities into their lessons that encourage students' musical intelligence by playing music for the class and assigning tasks that involve students creating lyrics about the material being taught.

# **Interpersonal intelligence**

This is the ability to quickly grasp and evaluate the moods, intentions, motivations, and feelings of other people. This can include sensitivity to facial expressions, voice and gestures; the capacity for discriminating among many different kinds of interpersonal cues; and the ability to respond effectively to those cues in some pragmatic way (Armstrong, 2000). This intelligence

"involves verbal and nonverbal communication skills, collaborative skills, conflict management, consensus building skills, and the ability to trust, respect, lead, and motivate others to the achievement of a mutually beneficial goal" (Bellanca, 1997). Teachers can encourage the growth of Interpersonal Intelligences by designing lessons that include group work and by planning cooperative learning activities.

#### **Intrapersonal intelligence**

This intelligence includes having an accurate picture of oneself (one's strengths and limitations); awareness of inner moods, intentions, motivations, temperament, and desires; and the capacity for self-discipline, self-understanding, and self-esteem (Armstrong, 2000). An individual of this type of intelligence thrives on time to think, to reflect, and to complete self-assessments. The need for such introspection makes this intelligence the most private. In Gardner's words, "the intrapersonal intelligence amounts to little more than the capacity to distinguish a feeling of pleasure from one of pain and, on the basis of such discrimination, to become more involved in or to withdraw from a situation" (Gardner,2004). Teachers can assign reflective activities, such as journaling to awaken students' intrapersonal intelligence. It's important to note that this intelligence involves the use of all others. An individual should tap into their other intelligences to completely express their intrapersonal intelligence.

However the principal claims underlying MI theory are discussed as follows:

#### i. Each person has all eight intelligences

MI theory, a cognitive functioning theory, proposes that each person has capacities in the eight intelligences to some degree and displays the eight intelligences uniquely (Armstrong, 2000). In other words, each person has a unique combination of these eight intelligences that trigger the individual differences (Gardner 1999).

# ii. Most people can develop each intelligence to an adequate level of competency

Gardner (1999) points out that almost everyone possesses the capacity to develop these eight intelligences well if provided adequate encouragement, enrichment as well as instruction. That people can change and grow the multiple intelligence in response to their biological and environmental experiences (Krechevsky & Seidel, 1998).

## iii. Intelligences usually interact in complex ways

Gardner (1999), believes that no intelligence exists in isolation from other intelligences in life. People will develop some of the intelligences in a complicated way simultaneously when stimulated by multi-sensory activities (Poole, 2000). This idea can also be proved by psychological studies claiming that although human brain is identified to have distinct functions at different areas in the two hemi-spheres, both hemi-spheres work together in a complementary manner to support holistic and integrated activities (Jenson, 1998).

# iv. There are a number of ways to be intelligent within each category

According to Gardner (1999), there is no fixed trait to determine how intelligent a person is in a particular field. People show their talents within intelligences and between intelligences in a variety of ways (Armstrong, 2000). For instance, a person with stronger linguistic intelligence may read a book but can't tell a story well.

#### **Application MI Theory**

After ,the theory of multiple intelligence was proposed by Howard Gardner in 1983, a large number of books, papers, journal articles have been published to discuss the application of MI theory has offered positive impact on both the teachers and the students through the implementation of MI theory (Christison, 1996; Feng, 2000).

The implementation of MI theory in language classroom brings teachers and students great benefits. First, the MI theory stimulates teachers to examine their teaching techniques and strategies in light of human differences (Chrisitison, 1996). Hall (2004) points out that teachers who incorporated the MI theory discovered multiple paths to enhance their overall effectiveness as educators and thus became more energetic and enthusiastic about their teaching. Besides, Campbell (1997) suggests that integrating multiple intelligence into the classroom setting does not require teachers to create a new curriculum or teaching methodology but to present and awaken every intelligence involving in classroom (Freeman, 1986). Hall (2004) emphasizes that teacher just need to supplement and revise existing lesson plans with creative and innovative ideas. Also, students are given more choices to learn and demonstrate their learning through the MI-based, which transfer control from teachers to learners (Christison, 1998). Thus the students may maximize their learning to higher academic achievement and enhance their motivation when

taking responsibility for their own learning through the learner-centered instruction (Lange, 1997).

Although multiple intelligence theory is not a prescribed teaching method, curriculum or technique, and there is no particular syllabus for MI-based language curriculum, Lazear (1991) offers some suggestions to help practitioners in the implementation of the MI theory in the second/foreign language instruction. First of all, a basic developmental sequence is offered to incorporate multiple intelligence concept in lesson planning. These are:

#### i. Awaken the intelligence

Students are given exercises and activities which make use of sensory bases (five senses), intuition, or metacognition to stimulate a particular intelligence.

# ii. Amplify the intelligence.

Students practice with the awakened intelligences and improve them through the activity. Intelligence will be strengthened with more use and practice like any skill.

#### iii. Teach for/with the intelligence.

Teachers design the lesson with the structure of multiple intelligence and put emphasis on adopting different intelligences in the teaching-learning process.

# iv. Transfer the intelligence.

Teachers help students reflect on their learning in the previous stages and relate the lesson to their real lives, such as solving problems and confronting challenges in the real life.

Furthermore, Christison (1996), points out three important steps to follow. First, teachers identify frequent teaching activities adopted in language classes and then categorize them. Next, teachers track what they are doing with multiple intelligence. Last, according to the track, teachers can understand the distribution of students' multiple intelligence and make good use of students' stronger intelligences in the teaching activities .Also, Christison and Kennedy (1999), offer the following four ways for teachers to involve MI theory with learners:

# i. Helping students understand and appreciate their own strengths and learning preferences

Through the MI inventory developed by Christison (1999), learners identify their preferred intelligences and teachers may adapt the activities to meet the need of learners.

# ii. Understanding learners' intelligences profoundly.

MI theory broadens teachers' awareness of learners' different knowledge and skill so as to realise each student's strengths and potentials.

## iii. Supplying multiple ways for learners to involve and present their learning.

The identification of personal strengths help students become more receptive to learning activities and gain successful experiences and confidence.

#### iv. Designing lesson plans to satisfy different learners' needs.

Learners become more interested in learning because they gain greater understanding for the lesson when they are allowed to learn in their favoured and comfortable way. Although, the MI theory cast light on language learning, there are still some criticisms on the application of MI theory in language instruction. First, the connection between MI theory and language education is insufficient and the MI theory lacks a few basic elements linking directly to language and language learning (Christison, 1999). Besides, Richards and Rodgers (2001) point out, that, some teachers think it is impractical to identify and respond to a wide range of students' differences in the real classroom.

Thus, the innovative courses infused with MI perspectives need to be evaluated. Gardner (1995), emphasizes several common misconceptions of multiple intelligence in classroom activities (i) all concepts or subjects can be taught using all of the multiple intelligence (ii) going through the motions of certain intelligences is sufficient (iii) the materials associated with intelligence used as a background will address the given intelligence for learning (iv) using intelligence as mnemonic devices is equivalent to teaching multiple intelligence (v) interpersonal intelligence implies cooperative learning and applies to out-going extroverted people (vi) intrapersonal intelligence suggests self esteem programmes or applies to people who are introverts or loners. Meanwhile, he provided some promising possibilities for the application of MI theory to improve the above misconceptions, cultivation of desirable capabilities skills, approaching concept and subject matter in a variety of ways, spending time on key concepts, generative ideas and essential questions but examining them from various angles, personalization of education.

Using Multiple intelligence theory in the classroom has many benefits:

- As a teacher and learner, it is to realize that there are many ways to be "smart"
- All forms of intelligence are equally celebrated.

- By having students create work that is displayed to parents and other members of the community, the school could see more parent and community involvement.
- A sense of increased self-worth may be seen as students build on their strengths and work towards becoming an expert in certain areas
- Students may develop strong problem solving skills that they can use real life situations
- More opportunities for developing children's strengths and achieving mastery
- More time for connecting the content areas
- More provision for improving assessment

# 2.4 Academic Self-efficacy

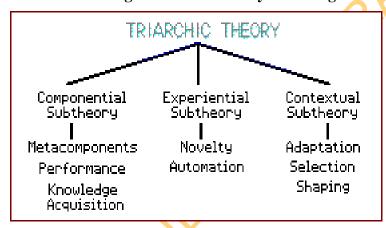
Academic self-efficacy refers to individuals' convictions that they can successfully perform given academic tasks at designated levels (Schunk, 1991). Bandura (1977) describes self-efficacy as a person's evaluation of his or her ability or competency to perform a task, reach a goal, or overcome an obstacle. According to Bandura (1997), academic domain assessments of self-efficacy, such as semester grades results, do not lend themselves well to generalized or global self-efficacy assessments, which typically seek a judgment of an individual's general competence or ability without specifying what exactly is being measured. Accordingly, in educational settings, self-efficacy judgments should be consistent with and tailored to the domain of specific academic tasks under investigation. Other researchers support the same findings that general self-efficacy measures were not found to be predictive of any college outcomes (Adeyemo, 2008; Akomolafe, Ogunmakin & Fasooto, 2013; Ferrari & Parker, 1992) while academic self-efficacy is a consistent predictor of grades and persistence in college.

Bandura (1993) postulates that self-efficacy beliefs affect college outcomes by increasing students' motivation and persistence to master challenging academic tasks and by fostering the efficient use of acquired knowledge and skills. Self-efficacy is shown to be associated with choice of task, motivational level, and effort and perseverance with the task (Compeau & Higgins, 1995; Hill, Smith, & Mann, 1987). Low self-efficacy is related to low academic motivation such as not persisting at a task or not working hard (Schunk, 1991). Regarding the number of hours students spent studying, Torres and Solberg (2001) found a positive association between academic self-efficacy and the motivation put forth to study.

## **Triarchic Theory of Intelligence**

The Triarchic Theory of Intelligence was formulated by Robert J. Sternberg, a prominent figure in the research of human intelligence. Sternberg's definition of human intelligence is "(a) mental activity directed toward purposive adaptation to, selection and shaping of, real-world environments relevant to one's life" (Sternberg, 1985), which means that intelligence is how well an individual deals with environmental changes throughout their lifespan. Sternberg's theory comprises three parts: componential, experiential, and practical.

# Overview of Sternberg's Triarchic Theory of Intelligence



Source: Sternberg 1985

#### **Analytical (componential) Facet (or Subtheory)**

Sternberg associated the componential subtheory with analytical giftedness. This is one of three types of giftedness that Sternberg recognizes. Analytical giftedness is influential in being able to take apart problems and being able to see solutions not often seen. Sternberg believes that Analytical Intelligence (Academic problem-solving skills) is based on the joint operations of meta components and performance components and knowledge acquisition components of intelligence (Sternberg, 1985).

- Meta components: control, monitor and evaluate cognitive processing. These are the executive functions to order and organise performance and knowledge acquisition components. They are the higher-order processes that order and organise the performance components. Used to analyze problems and pick a strategy for solving them. They decide what to do and the performance components actually do it.
- Performance Components: execute strategies assembled by the meta components. They are the basic operations involved in any cognitive act. They are the cognitive processes

that enable us to encode stimuli, hold information in short-term memory, make calculations, perform mental calculations, mentally compare different stimuli and retrieve information from long-term memory.

• Knowledge acquisition components: are the processes used in gaining and storing new knowledge, that is, capacity for learning. The strategies one uses to help memorize things exemplify the processes that fall into this category.

Sternberg feels that IDs in intelligence are related to IDs in the use of these cognitive processes. He feels that people with better reasoning ability generally spend more time understanding the problem but reach their solution faster than those who are less skilled at the task.

# **Experiential / Creative Subtheory**

Sternberg's 2nd stage of his theory is his experiential subtheory. This stage deals mainly with how well a task is performed with regard to how familiar it is. Sternberg splits the role of experience into two parts: novelty and automation. A novel situation is one that you have never experienced before. People that are adept at managing a novel situation can take the task and find new ways of solving it that the majority of people would not notice (Sternberg, 1997).

A process that has been automated has been performed multiple times and can now be done with little or no extra thought. Once a process is automatized, it can be run in parallel with the same or other processes. The problem with novelty and automation is that being skilled in one component does not ensure that you are skilled in the other (Sternberg, 1997).

The experiential sub theory also correlates with another one of Sternberg's proposed types of giftedness. Synthetic giftedness is seen in creativity, intuition, and a study of the arts. People with synthetic giftedness are not often seen with the highest IQ's because there are not currently any tests that can sufficiently measure these attributes, but synthetic giftedness is especially useful in creating new ideas to create and solve new problems.

# **Practical / Contextual Subtheory**

Sternberg's third subtheory of intelligence, called practical or contextual, "deals with the mental activity involved in attaining fit to context" (Sternberg, 1985). Through the three

processes of adaptation, shaping, and selection, individuals create an ideal fit between themselves and their environment. This type of intelligence is often referred to as "street smarts."

- Adaptation occurs when one makes a change within oneself in order to better adjust to one's surroundings (Sternberg, 1985). For example, when the weather changes and temperatures drop, people adapt by wearing extra layers of clothing to remain warm.
- *Shaping* occurs when one changes their environment to better suit one's needs (Sternberg, 1985). A teacher may invoke the new rule of raising hands to speak to ensure that the lesson is taught with least possible disruption.
- The process of *selection* is undertaken when a completely new alternate environment is found to replace the previous, unsatisfying environment to meet the individual's goals (Sternberg, 1985). For instance, immigrants leave their lives in their homeland countries where they endure economical and social hardships and go to other countries in search of a better and less strained life.

The effectiveness with which an individual fits to his or her environment and contends with daily situations reflects degree of intelligence. Sternberg's third type of giftedness, called practical giftedness, involves the ability to apply synthetic and analytic skills to everyday situations. Practically gifted people are superb in their ability to succeed in any setting (Sternberg, 1997).

# 2.5 Goal Orientation Theory

The earliest conceptualizations of goal orientation were proposed in the 1970s by the educational psychologist Eison (1979), argues that students who approached college as an opportunity to acquire new skills and knowledge possessed a learning orientation while students who approached college with the goal to exclusively obtain high grades possessed a grade orientation. Eison originally believed that these two orientations were two ends of the same continuum and developed the Learning Orientation-Grade Orientation Scale to measure the continuum. At about the same time, Nicholls (1978) was developing a related theory that achievement motivation would lead grade school children to set high task related goals.

Nicholls (1978) finds that when some high-ability children encountered difficult tasks, they would use maladaptive strategies, leading to eventual feelings of helplessness, while others would use more productive coping strategies. Nicholls later conceptualized these differences as

two types of achievement goals: (a) task involvement: where individuals seek to develop their competence relative to their own abilities and (b) ego involvement: where individuals seek to develop their competence relative to the abilities of others.

Dweck (1986) postulates that children with learning goals were believed to approach situations with the goal to master the acquisition of new skills, while children with performance goals were believed to approach situations with the goal of gaining approval from peers and teachers. Similar to Eison, Dweck conceptualized goal orientation as a two-dimension construct. Individuals with a learning goal orientation (sometimes referred to as mastery goal orientation), seek to develop their competence by acquiring new skills and mastering new situations. They are not concerned about their performance relative to others, but rather with furthering their understanding of a given topic or task. Individuals with a performance goal orientation seek to demonstrate and validate the adequacy of their competence in order to receive favourable judgments and avoid negative judgments.

Although Dweck's work in this area built on the foundation laid by Nicholls, the fundamental difference between the two scholars' works was the attribution of an individual's goal orientation. Nicholls believed that the goal orientation held by an individual was a result of the possession of either an internal or external referent, while Dweck considered the adoption of a particular goal orientation to be related to the theory of intelligence held by that individual.

Subsequent work by Eison and colleagues led to a change in the conceptualization of these orientations from two ends of a continuum to two separate constructs. More recently, researchers have embraced the idea that individuals can adopt the two orientation style simultaneously: persons can be high in both learning and performance orientations, low in both learning and performance orientations, or high in one orientation and low in the other. Ultimately, individuals can entertain multiple competing goal orientations at the same time, striving to both outperform competitors and improve their own performance. This led to the conceptualization of two separate continuums, one for learning goal orientation and one for performance goal orientation (Eison & Dweck, 1986).

## **Goal orientation conceptualizations**

#### • Goal orientation dimensionality

Researchers have conceptualized Goal Orientation (GO) from one dimension to a possible six dimensions; the most prominent number of dimensions used in the literature being two, closely followed by three (DeShon & Gillespie, 2005). While two or three dimensions are the most common ways to conceptualize GO, the actual dimensions used from study to study vary. The two most common dimensions utilized are mastery-oriented or learning-oriented, and performance-oriented or achievement-oriented. Button, Mathieu and Zajac (1996), define performance GO as the motivation to show one's competence or ability on a certain task or subject. They then define learning GO as the motivation to acquire new knowledge or attain a deeper understanding of a certain task or subject.

Performance GO may then be decomposed into two different dimensions, this process translates into the most-often encountered description of three levels of dimensionality. Researchers state that the motivation to perform can come in two different forms, performance—approach and performance—avoid (VandeWalle, 1997; Elliot & Harackiewicz, 1996). Elliot and McGregor (2001) conceptualize the different dimensions of GO in terms of valence, or the attractiveness of a certain goal method, and in terms of the definition of competence, or referent that is used in the evaluation of performance. They state that valence can be thought of as positive, approaching success, or negative, avoiding failure; and that the competence referent can be thought of as intrapersonal/absolute or normative. The intrapersonal/absolute referent refers to an individual's own maximum potential for attainment, and the normative referent refers to the performance of others. Different combinations of these four categories lay out Elliot and Mcgregor's (2001) typology.

The first combination of valence and the referent is positive valence and a normative referent, performance—approach. The performance—approach GO encompasses the motivation to prove/demonstrate one's competence or ability on a certain subject or task. The second combination is negative valence and a normative referent, performance—avoid. The performance—avoid GO encompasses the motivation to avoid looking incompetent or showing inability of a certain task or subject. The most common method of dealing with the absolute/intrapersonal referent is to lump positive and negative valence together to end up with the more common single dimension of mastery-oriented GO. These three dimensions;

performance–approach, performance–avoid, and mastery; is the second most common conceptualization of dimensions in the GO literature (Elliot & McGregor, 1999; Elliot & Harackiewicz, 1996).

Stemming from the three dimensions, slightly less common is the decomposition of the mastery GO into two subgroups of mastery–approach and mastery–avoid, translating into the conceptualization of four dimensions. Following the typology that Elliot and McGregor (2001) present, those that possess an absolute/intrapersonal referent and have positive valence are classified as mastery–approach, in other words they seek to gain all the knowledge or ability they are able to during the attainment of their goal. Those that possess an absolute/intrapersonal referent and have negative valence are classified as mastery–avoid, in other words they seek to avoid their knowledge regressing to a previous level of comprehension or competence.

Worth mentioning is the multiple goal perspective that takes into account the fact that utilizing both a mastery GO and performance GO might be beneficial above and beyond the normal view that a person can only take on a single GO. Barron and Harackiewicz (2001) show support for the multiple goal perspective by comparing students using a single GO versus the multiple GO approaches. The benefits stemmed from showing that having a high-mastery GO was associated with a high level of interest and having a high-performance GO was associated with a high level of performance on the task.

#### • Dominant conceptualizations

There are many different conceptualizations and operationalizations of the GO construct, some researchers point out the wide array of GO definitions a reviewer might find when reading the GO literature. However, a closer look into the literature reveals that when defining GO there are five distinct categories on how to define the construct, and these categories pertain to the different methods/areas of research on the topic. These categories represent the most common themes and perspectives on GO that various researchers utilize when conducting their research. The following summary of the five categories is taken from DeShon & Gillespie's (2005) article on GO.

The first, and most common, approach when defining GO is the "goal" approach, and in this approach researchers see GO as the pursuit and attainment of goals in an achievement context. For example, Elliot and Harackiewicz (1996) use completion of puzzle tasks as an outcome of whether or not the participants attained their goals.

The second approach when defining GO is the trait method. With the trait method GO is deemed a disposition or personality variable that an individual may possess that effects that individual's achievement of goals in a goal-attainment situation. With this approach researchers can measure a GO several times throughout an experiment or study to show the stability of GO, lending support to the dispositional outlook on GO (VandeWalle, 1997).

The third approach when defining GO is the quasi-trait method. The quasi-trait method is similar to the previous trait method except those that prescribe to the quasi-trait method state that when there is a high enough situational strength GO may be modified or changed. Button (1996) shows that when looking at the reports of students on their attainment of goals there is a general disposition in GO that a student will hold, but there are situations that may arise that cause a student to alter or modify their GO.

The fourth approach when defining GO is the mental framework method. Strage (1997) shows that depending on an individual's view of intelligence that individual may adopt different attitudes, beliefs, and cognitions and so on, that align with different GOs, such as mastery-oriented or achievement-oriented. The final approach to defining GO is the beliefs method. While slightly similar to the previous approach, the beliefs method focuses on the individual's self-efficacious beliefs when relating to the ability to attain a certain goal. Hertenstein (2001) states that the important determinants of GO for a person is the fact of whether that person believes that he or she should please others, or believes in attaining competence in ability.

#### Goal setting and goal orientation

Historically, goal setting theory has primarily been concerned with performance goals. Locke and Latham (Ames & Archer, 1998) summarize 25 years of goal setting research by stating that as long as an individual is committed to a goal and has the ability to achieve it, specific, high (hard) goals lead to a higher level of task performance than vague or easy goals.

However, the vast majority of goal setting studies have been conducted with a specific performance goal and often in laboratory settings where the task was fairly simple. It is possible that when tasks are more complex or require a long-term commitment, adopting a learning goal may lead to higher performance. Fan, Meng, Billings, Litchfield and Kaplan (2008) find that the

relationship between trait learning goal orientation and goal-setting was moderated by self-efficacy such that individuals high in learning goal orientation and self-efficacy set higher goal than those high in learning goal orientation but low in self-efficacy. This finding suggests that while learning goal orientation can have an impact on goal setting, the relationship also depends on other factors such as the individual's level of self-efficacy.

Fan et al. (1980) also find that learning and prove goal orientations facilitated challenge striving, suggesting that either orientation can effectively facilitate motivation for goal attainment. Another factor to consider when examining the relationship between goal orientation and goal setting is the level of complexity inherent in the situation or task. In situations with more complex tasks, it appears that "do your best" goals may actually lead to higher performance than specific goals. It is possible that in complex tasks, a specific, difficult goal imposes greater cognitive demands on employees, making it difficult for them to learn the complex task due to this increased pressure (Stipek & Kowalski, 1989).

Ford, Smith, Weissbein, Gully, & Salas (1998) postulate that in an air traffic controller simulation (a highly complex task), having a performance-outcome goal actually interfered with acquiring the knowledge necessary to perform the task. People performed better when they were asked to do their best. This suggests that adopting a learning orientation may be appropriate for complex tasks or in specific settings. However, it may be possible to set a specific, difficult learning goal. Latham and Brown (2006) find that when MBA students set specific, difficult learning goals such as mastering complex course material, they outperformed MBA students who set a performance goal for GPA. Locke and Latham (2006) claim that a creating a specific, difficult learning goal in this type of situation facilitates meta-cognition which is particularly helpful in complex environments with limited guidance, such as in an MBA program.

#### Self-efficacy

Bandura (1982) defines self-efficacy as "a belief in one's ability to effectively perform and to exercise influence over events". Individuals, who are high in self-efficacy set more difficult goals, exert more effort to achieve those goals, and seek to learn from the processes of pursuing those goals. In a meta-analysis by Payne, Youngcourt and Beaubien (2007), self-efficacy was identified as a proximal outcome of goal orientation. Similarly, VandeWalle, Cron & Slocum (2001), find that learning goal orientation was positively related to self-efficacy,

effort, and goal setting level. Since "self-efficacy functions as a primary motivational mechanism by which goal orientation influences subsequent learning processes", employees with higher levels of self-efficacy will exert more effort toward and learn more from task assignments (DeGeest & Brown, 2011).

#### • Metacognition

Metacognition is defined as "an individual's knowledge and control over one's own cognitions (Flavell, 1979). Individuals high in metacognitive awareness are skilled at monitoring their progress towards goals, identifying their strengths and weaknesses, and adjusting their learning strategies accordingly to achieve favourable outcomes. Although\_Ford, Smith, Weissbein, Gully and Salas (1998), affirm that, there have been relatively few research studies conducted on the role of metacognition in leader development outcomes, some studies have found that metacognition plays an important role in such outcomes. For example, Ford et al (1998), link learning goal orientation and metacognitive activity and found that metacognitive activity was significantly related to knowledge acquisition, post-training performance, and self-efficacy.

On the other hand, in a study by Schmidt & Ford (2003), metacognitive activity was positively related to LGO as well as cognitive, affective, and skill based learning outcomes. Similarly, Bell and Kozlowski (2002) postulated that LGO was significantly related to metacognitive activity. The National Research Council (2000) points out that it is important to remember that metacognitive skills can be taught and essential that teachers explicitly teach metacognitive skills across the curriculum in a variety of subject areas.

#### • Feedback seeking and interpretation

In an organizational context, the extent to which employees actively seek feedback can positively influence job performance. Payne, Youngcourt and Beaubien (2007) emphasize that goal orientation influences how individuals evaluate the costs and benefits of feedback-seeking opportunities.

According to VandeWalle (2003) when individuals have the opportunity to seek feedback, they face a cognitive dilemma between the need for self-assessment and the need for self-enhancement. Since individuals with a learning goal orientation are interested in developing

competencies, they more likely to interpret feedback positively and thus engage in more feedback-seeking behaviours to enhance performance. These individuals interpret feedback as valuable information about how to correct errors and improve future performance on a given task. Conversely, individuals with a performance goal orientation are likely to interpret feedback as "evaluative and judgmental information about the self" and as a result are less likely to seek feedback. Consequently, individuals with high levels of learning goal orientation are more inclined to seek feedback, while individuals with high levels of prove performance goal orientation or avoid performance goal orientation are less inclined to seek feedback (VandeWalle & Cummings, 1997).

#### Academic outcomes

As previously stated, goal orientation refers to individuals' behavioural tendencies in achievement-oriented tasks. Therefore, it seems intuitive that goal orientation would be associated with various academic outcomes. According to Payne et al, (2007), learning goal orientation is positively associated with self-regulatory behaviours such as planning and goal setting, which in turn are associated with academic performance. Thus, individuals with high levels of LGO are more likely to perform well on academic tasks than individuals with high levels of the PGO dimensions (Payne, Youngcourt & Beaubien, 2007). In addition, research has also shown that students' motivation can predict both the quality of the engagement in academic learning as well as the degree to which they seek out or avoid challenging situations, (Fadlelmula, 2010). If all students are to move "through the increasing challenges and academic rigours" of school, then their motivation to learn must be identified and nurtured (Long, Monoi, Harper & Murphy, 2007)

# 2.6 Motivation Theory

Motivation is a theoretical construct used to explain behaviour. It represents the reasons for people's actions, desires, and needs. Motivation can also be defined as one's direction to behaviour or what causes a person to want to repeat behaviour and vice versa (Ellliot and Covington, 2001). A motive is what prompts the person to act in a certain way or at least develop an inclination for specific behaviour (Pardee, 1990). For example, when someone eats food to

satisfy the need of hunger, or when a student does his/her work in school because he/she wants a good grade. Both show a similar connection between what we do and why we do it.

Motivation can be conceived of as a cycle in which thoughts influence behaviours, behaviours drive performance, performance impacts thoughts, and the cycle begins again. Each stage of the cycle is composed of many dimensions including attitudes, beliefs, intentions, effort, and withdrawal which can all affect the motivation that an individual experiences. Motivation can be divided into two different theories known as Intrinsic (internal) motivation and Extrinsic (external) motivation.

#### **Intrinsic motivation**

Intrinsic motivation has been studied since the early 1970s. Intrinsic motivation is the self-desire to seek out new things and new challenges, to analyze one's capacity, to observe and to gain knowledge (Ryan & Deci, 2000). It is driven by an interest or enjoyment in the task itself, and exists within the individual rather than relying on external pressures or a desire for reward. The phenomenon of intrinsic motivation was first acknowledged within experimental studies of animal behaviour. In these studies, it was evident that the organisms would engage in playful and curiosity driven behaviors in the absence of reward. Intrinsic motivation is a natural motivational tendency and is a critical element in cognitive, social, and physical development (Ryan & Deci, 2000).

Students who are intrinsically motivated are more likely to engage in the task willingly as well as work to improve their skills, which will increase their capabilities (Wigfield, Guthrie, Tonks & Perencevich, 2004). Students are likely to be intrinsically motivated if they:

- attribute their educational results to factors under their own control, also known as autonomy or locus of control
- believe they have the skills to be effective agents in reaching their desired goals, also known as self-efficacy beliefs
- are interested in mastering a topic, not just in achieving good grades

Starting from studies involving more than 6,000 people, Professor Reiss Steven has proposed a theory that found 16 basic desires that guide nearly all human behaviours (Reiss, 2002). Intrinsic motivation is the tendency to find challenges, to push to find out for more, explore, and learn as much as possible. It is about reaching the most possible potential as a

human being (Mark, David & Richard, 1973). The 16 basic desires that motivate human actions and define human personalities are:

- Acceptance, the need for approval
- Curiosity, the need to learn
- Eating, the need for food
- Family, the need to raise children
- Honour, the need to be loyal to the traditional values of one's clan/ethnic group
- Idealism, the need for social justice
- Independence, the need for individuality
- Order, the need for organized, stable, predictable environments
- Physical activity, the need for exercise
- Power, the need for influence of will
- Romance, the need for sex and for beauty
- Saving, the need to collect
- Social contact, the need for friends (peer relationships)
- Social status, the need for social standing/importance
- Tranquility, the need to be safe

#### **Extrinsic Motivation**

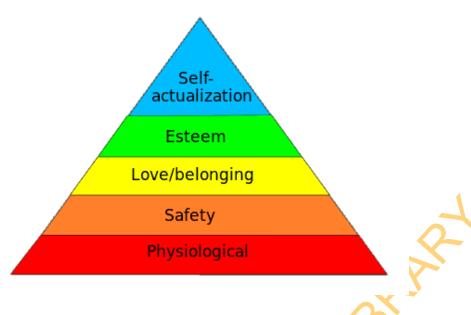
Extrinsic motivation refers to the performance of an activity in order to attain a desired outcome and it is the opposite of intrinsic motivation (Ryan & Deci, 2000). Extrinsic motivation comes from influences outside of the individual. In extrinsic motivation, the harder question to answer is where do people get the motivation to carry out and continue to push with persistence. Usually extrinsic motivation is used to attain outcomes that a person wouldn't get from intrinsic motivation (Mark, David & Richard, 1973). Common extrinsic motivations are rewards (for example money or grades) for showing the desired behaviour, and the threat of punishment following misbehaviour. Competition is an extrinsic motivator because it encourages the performer to win and to beat others, not simply to enjoy the intrinsic rewards of the activity. A cheering crowd and the desire to win a trophy are also extrinsic incentives (Barbara & Linda, 2008)

Social psychological research has indicated that extrinsic rewards can lead to over justification and a subsequent reduction in intrinsic motivation. In one study demonstrating this

effect, children who expected to be (and were) rewarded with a ribbon and a gold star for drawing pictures spent less time playing with the drawing materials in subsequent observations than children who were assigned to an unexpected reward condition. However, another study showed that third graders who were rewarded with a book showed more reading behaviour in the future, implying that some rewards do not undermine intrinsic motivation. While the provision of extrinsic might reduce the desirability of an activity, the use of extrinsic constraints, such as the threat of punishment, against performing an activity has actually been found to increase one's intrinsic interest in that activity. In one study, when children were given mild threats against playing with an attractive toy, it was found that the threat actually served to increase the child's interest in the toy, which was previously undesirable to the child in the absence of threat (Wilson & Lassiter, 1982)

# Abraham Maslow's "Need Hierarchy Theory"

Maslow's hierarchy of needs, represented as a pyramid with the more basic needs at the bottom. Maslow's hierarchy of needs is a theory in psychology proposed by Abraham Maslow in his 1943 paper "A Theory of Human Motivation" in Psychological Review. Maslow subsequently extended the idea to include his observations of humans' innate curiosity. His theories parallel many other theories of human developmental psychology, some of which focus on describing the stages of growth in humans. Maslow used the terms "physiological", "safety", "belongingness" and "love", "esteem", "self-actualization", and "self-transcendence" to describe the pattern that human motivations generally move through. Maslow studied what he called exemplary people such as Albert Einstein, Jane Addams, Eleanor Roosevelt, and Frederick Douglass rather than mentally ill or neurotic people, writing that "the study of crippled, stunted, immature, and unhealthy specimens can yield only a cripple psychology and a cripple philosophy. Maslow studied the healthiest 1% of the college student population. Maslow's theory was fully expressed in his 1954 book Motivation and Personality. The hierarchy remains a very popular framework in sociology research, management training and secondary and higher psychology instruction.



Source: Maslow 1954

# Hierarchy

Maslow's (1954) hierarchy of needs is often portrayed in the shape of a pyramid with the largest, most fundamental levels of needs at the bottom and the need for self-actualization at the top. While the pyramid has become the de facto way to represent the hierarchy. The most fundamental and basic four layers of the pyramid contain what Maslow called "deficiency needs" or "d-needs": esteem, friendship and love, security, and physical needs. If these "deficiency needs" are not met – with the exception of the most fundamental (physiological) need – there may not be a physical indication, but the individual will feel anxious and tense. Maslow's theory suggests that the most basic level of needs must be met before the individual will strongly desire or focus motivation upon the secondary or higher level needs. Maslow also coined the term "meta motivation" to describe the motivation of people who go beyond the scope of the basic needs and strive for constant betterment, (Goble, 1970). The human mind and brain are complex and have parallel processes running at the same time, thus many different motivations from various levels of Maslow's hierarchy can occur at the same time. Maslow spoke clearly about these levels and their satisfaction in terms such as "relative," "general," and "primarily." Instead of stating that the individual focuses on a certain need at any given time, Maslow stated that a certain need "dominates" the human organism (Maslow, 1954). Thus Maslow acknowledged the likelihood that the different levels of motivation could occur at any time in the human mind, but he focused on identifying the basic types of motivation and the order in which they should be met.

#### Physiological needs

Physiological needs are the physical requirements for human survival. If these requirements are not met, the human body cannot function properly and will ultimately fail. Physiological needs are thought to be the most important; they should be met first. Air, water, and food are metabolic requirements for survival in all animals, including humans. Clothing and shelter provide necessary protection from the elements. While maintaining an adequate birth rate shapes the intensity of the human sexual instinct, sexual competition may also shape said instinct (Maslow, 1954)

#### Safety needs

Once a person's physical safety needs are relatively satisfied, their safety needs take precedence and dominate behavior. In the absence of physical safety – due to war, natural disaster, family violence, childhood abuse and so on – people may re-experience post-traumatic stress disorder or trans generational trauma. In the absence of economic safety – due to economic crisis and lack of work opportunities – these safety needs manifest themselves in ways such as a preference for job security, grievance procedures for protecting the individual from unilateral authority, savings accounts, insurance policies, disability accommodations and so on. This level is more likely to be found in children as they generally have a greater need to feel safe. Safety and Security needs include; personal security, financial security, health and well-being, safety net against accidents/illness and their adverse impacts.

#### Love and belonging

After physiological and safety needs are fulfilled, the third level of human needs is interpersonal and involves feelings of belongingness. This need is especially strong in childhood and can override the need for safety as witnessed in children who cling to abusive parents. Deficiencies within this level of Maslow's hierarchy – due to hospitalism, neglect, shunning and ostracism can adversely affect the individual's ability to form and maintain emotionally significant relationships in general, such as: friendship, intimacy and family. According to Maslow, humans need to feel a sense of belonging and acceptance among their social groups, regardless whether these groups are large or small. For example, some large social groups may include clubs, co-workers, religious groups, professional organizations, sports teams, and gangs. Some examples of small social connections include family members, intimate partners, mentors, colleagues and confidants. Humans need to love and be loved – both sexually and non-sexually –

by others (Maslow, 1954). Many people become susceptible to loneliness, social anxiety and clinical depression in the absence of this love or belonging element. This need for belonging may overcome the physiological and security needs, depending on the strength of the peer pressure.

#### **Esteem**

All humans have a need to feel respected; this includes the need to have self-esteem and self-respect. Esteem presents the typical human desire to be accepted and valued by others. People often engage in a profession or hobby to gain recognition. These activities give the personal sense of contribution or value. Low self-esteem or an inferiority complex may result from imbalances during this level in the hierarchy. People with low self-esteem often need respect from others; they may feel the need to seek fame or glory. However, fame or glory will not help the person to build their self-esteem until they accept who they are internally. Psychological imbalances such as depression can hinder the person from obtaining a higher level of self-esteem or self-respect. Most people have a need for stable self-respect and self-esteem. Maslow noted two versions of esteem needs: a "lower" version and a "higher" version. The "lower" version of esteem is the need for respect from others. This may include a need for status, recognition, fame, prestige, and attention. The "higher" version manifests itself as the need for self-respect. For example, the person may have a need for strength, competence, mastery, selfconfidence, independence, and freedom. This "higher" version takes precedence over the "lower" version because it relies on an inner competence established through experience. Deprivation of these needs may lead to an inferiority complex, weakness, and helplessness. Maslow states that while he originally thought the needs of humans had strict guidelines, the "hierarchies are interrelated rather than sharply separated" (Maslow, 1954). This means that esteem and the subsequent levels are not strictly separated; instead, the levels are closely related.

#### **Self-actualization**

This level of need refers to what a person's full potential is and the realization of that potential. Maslow describes this level as the desire to accomplish everything that one can, to become the most that one can be. Individuals may perceive or focus on this need very specifically. For example, one individual may have the strong desire to become an ideal parent. In another, the desire may be expressed athletically. For others, it may be expressed in paintings, pictures, or inventions. Maslow believed that to understand this level of need, the person must

not only achieve the previous needs, but master them. Self-transcendence In his later years, Maslow explored a further dimension of needs, while criticizing his own vision on self-actualization. The self only finds its actualization in giving itself to some higher goal outside oneself, in altruism and spirituality (Maslow,1954).

#### Criticisms of Maslow's Hierarchy of needs

In their extensive review of research based on Maslow's theory, Wahba and Bridwell found little evidence for the ranking of needs that Maslow described or for the existence of a definite hierarchy at all, (Wahba & Bridwell,1976). The order in which the hierarchy is arranged, with self-actualization described as the highest need, has been criticized as being ethnocentric (Hofstede,1984). Maslow's hierarchy of needs fails to illustrate and expand upon the difference between the social and intellectual needs of those raised in individualistic societies and those raised in collectivist societies. The needs and drives of those in individualistic societies tend to be more self-centered than those in collectivist societies, focusing on improvement of the self, with self-actualization being the apex of self-improvement. In collectivist societies, the needs of acceptance and community will outweigh the needs for freedom and individuality, (Cianci & Gambrel, 2003).

On the ranking of sex. The position and value of sex on the pyramid has also been a source of criticism regarding Maslow's hierarchy. Maslow's hierarchy places sex in the physiological needs category along with food and breathing; it lists sex solely from an individualistic perspective. For example, sex is placed with other physiological needs which must be satisfied before a person considers "higher" levels of motivation. Some critics feel this placement of sex neglects the emotional, familial, and evolutionary implications of sex within the community, although others point out that this is true of all of the basic needs. (Kenrick, Griskevicius; Neuberg & Schaller, 2010). There are also people who do not want sex, such as some asexual. However, Bogaert and Anthony, (2006) were of the opinion that changes to the hierarchy is by circumstance The higher-order (self-esteem and self-actualization) and lower-order (physiological, safety, and love) needs classification of Maslow's hierarchy of needs is not universal and may vary across cultures due to individual differences and availability of resources in the region or geopolitical entity/country.

## 2.7 Theoretical Framework relevant to the study

A theoretical framework is an explanation of the relationships among variables or constructs involved in a study. The purpose of a theoretical framework is that, it forms the basis on which findings revolve while literature review puts the current study in proper dimension. Theories have been discussed in this study but the most appropriate and suitable theory for this study is Social Cognitive Theory. Social Cognitive Theory beliefs that proper learning can take place through interaction of the environment to promote certain competences, values and interests. Therefore, this chapter reviewed the Social Cognitive Theory which served as the theoretical framework for the study.

#### **Social Cognitive Theory**

Social cognitive theory (SCT) refers to a psychological model of behaviour that emerged primarily from the work of Albert Bandura (1977; 1986). Initially developed with an emphasis on the acquisition of social behaviours, SCT continues to emphasize that learning occurs in a social context and that much of what is learned is gained through observation. SCT rests on several basic assumptions about learning and behaviour. One assumption concerns triadic reciprocality, or the view that personal, behavioural, and environmental factors influence one another in a bidirectional, reciprocal fashion. That is, a person's on-going functioning is a product of a continuous interaction between cognitive, behavioural, and contextual factors. For instance, classroom learning is shaped by factors within the academic environment, especially the reinforcements experienced by oneself and by others. At the same time, learning is affected by students' own thoughts and self-beliefs and their interpretation of the classroom context.

A closely related assumption within SCT is that people have an agency or ability to influence their own behaviour and the environment in a purposeful, goal-directed fashion (Bandura, 2001). This belief conflicts with earlier forms of behaviourism that advocated a more rigorous form of environmental determinism. SCT does not deny the importance of the environment in determining behaviour, but it does argue that people can also, through forethought, self-reflection, and self-regulatory processes, exert substantial influence over their own outcomes and the environment more broadly.

A third assumption within SCT is that learning can occur without an immediate change in behaviour or more broadly that learning and the demonstration of what has been learned are distinct processes. One reason for this separation is that SCT also assumes that learning involves not just the acquisition of new behaviours, but also of knowledge, cognitive skills, concepts, abstract rules, values, and other cognitive constructs.

#### **Core concepts within SCT**

SCT integrates a large number of discrete ideas, concepts, and sub-processes into an overall framework for understanding human functioning. Five of the central concepts are as following:

Observational Learning/Modeling: From its inception one core premise within SCT has been that people learn through observation. This process is also described as vicarious learning or modeling because learning is a result of watching the behaviour and consequences of models in the environment. Although observational learning is dependent upon the availability of models, who or what can serve this role is defined broadly. Live demonstrations of a behaviour or skill by a teacher or classmate, of course, typify the notion of modeling. Verbal or written descriptions, video or audio recordings, and other less direct forms of performance are also considered forms of modeling.

There also distinctions among different types of models. Mastery models are proficient when demonstrating a skill, whereas coping models struggle, make mistakes, and only eventually show proficiency. Abstract modeling occurs when the skill or knowledge being learned is conveyed only indirectly, and cognitive modeling occurs when a model verbalizes her thoughts while demonstrating a cognitive process or skill.

According to SCT, observational learning of novel behaviours or skills is dependent on four inter-related processes involving attention, retention, production, and motivation. Attentional processes are critical because students must attend to a model and the relevant aspects of behaviour in order to learn. Retention refers to the processes necessary for reducing and transforming what is observed into a symbolic form that can be stored for later use. Production processes are necessary when students draw on their stored codes and make an effort to perform what they have observed. Finally, motivational processes are keys for understanding why students engage in the prior sub-processes, including whether they ever attempt to use or recreate the new skills they have observed. Each of these processes, furthermore, is affected by factors such as the developmental level of the learner and characteristics of the model and modeled behaviour.

Outcome Expectations: Outcome expectations reflect individuals' beliefs about what consequences are most likely to ensue if particular behaviours are performed. For instance, children may believe that if they get a hit during a baseball game the crowd will cheer, they will feel good and will be admired by their teammates. These beliefs are formed enactively through students' own past experiences and vicariously through the observation of others. Outcome expectations are important in SCT because they shape the decisions people make about what actions to take and which behaviours to suppress. The frequency of behaviour should increase when the outcomes expected are valued, whereas behaviours associated with unfavourable or irrelevant outcomes will be avoided.

**Perceived Self-efficacy**: Self-efficacy also has emerged as a prominent and influential concept within SCT. Self-efficacy reflects individuals' beliefs about whether they can achieve a given level of successful at a particular task, (Bandura, 1997). Students with greater self-efficacy are more confident in their abilities to be successful when compared to their peers with lower self-efficacy. Self-efficacy has proven useful for understanding students' motivation and achievement in academic contexts. Higher levels of perceived self-efficacy have been associated with greater choice, persistence, and with more effective strategy use (Pajares, 1996)

Consistent with the tenets of SCT, self-efficacy is viewed as a product of individuals' own past performances, the observation and verbal persuasion of others in the environment, and individuals' on-going physiological state (Bandura, 1997). Rather than directly affecting their self-efficacy, however, these sources of information are weighed and filtered through a process known as cognitive appraisal. For instance, a prior failure may not be detrimental to self-efficacy if students believe there was some no-longer relevant reason for the poor performance (e.g., prior sickness). Interventions based on SCT and designed to increase self-efficacy in school-aged children have proven effective (Pajares, 1996).

Goal Setting: Goal setting is another central process within SCT (Bandura, 1986; Schunk, 1990). Goals reflect cognitive representations of anticipated, desired, or preferred outcomes. Hence, goals exemplify the agency view within SCT that people not only learn, they use forethought to envision the future, identify desired outcomes, and generate plans of action. Goals are also closely related to other important processes within SCT. For instance, models can provide goals in the form of specific behavioural outcomes or more general standards for acceptable levels of performance.

Goals also are intricately related to students' outcome expectations and their perceived self-efficacy. Goals are a function of the outcomes students expect from engaging in particular behaviours and the confidence they have for completing those behaviours successfully. Finally, goals are an important prerequisite for self-regulation because they provide objectives that students are trying to achieve and benchmarks against which to judge progress.

Self-regulation: SCT models of self-regulation assume that self-regulation is dependent on goal setting, in that students are taught to manage their thoughts and actions in order to reach particular outcomes (Schunk, 2001; Zimmerman, 2000). SCT views of self-regulation initially emphasized three sub-processes (Bandura, 1986; 1991). Self-observation reflects students' ability to monitor or keep track of their own behaviours and outcomes. Self-judgment is the process through which students' evaluate whether their actions are effective and allow them to make progress toward their goals. Finally, self-reaction occurs when students' respond to the evaluations they have made by modifying their behaviour, rewarding it, or discontinuing it.

# **Empirical Review**

#### 2.8 Study Skills Training and Reading Habit

Shawana, Shaukat, Muhammad and Sobia (2010) carry out a study aimed at identifying various study skills used by the learners, to ascertain which study skill is more related to academic achievement and to compare the use of study skills between girls and boys. The sample consisted of 300 intermediate students (173 girls, 127 boys) taken from 10 colleges of Abbottabad, Pakistan. The findings indicated significant relationship of time-management skills, reading, and note-taking skills with academic achievement; there were no significant relationships for other study skills. Students with higher academic achievement use a wide range of study skills as compared to students with lower academic achievement. Analyses further revealed that the girls were better in using study skills as compared to boys.

Jean (2009) conducts a research to investigate the relationship of students' study habits and attitudes and their performance in licensure examinations. The participants were graduates in school year 2009-2010 from the different programs of the University which require licensure examination. The analysis revealed that study habits (work methods and time management) of the participants were correlated with their success in licensure examination while study attitudes (i.e. attitudes toward teachers and educational acceptance) were not significantly related to

success in licensure examination. This connotes that students who have favourable study habits will likely pass the licensure examination.

Noohi (2010) carries out a research of study habits and skills and academic achievement on students of Kerman University of Medical Sciences. 400 students participated in the programme and tested with questionnaire of study skills containing five parts including demographic question, 14 items on planning and time management, 20 on active reading,8 on concentration and 18 on note taking and 20 on study habits. The result showed that study skills had a significance correlation with educational achievement. However, Oluwatimilehin and Owoyele (2012), conducted a research to investigate the relationship between study habits and students' academic achievement in core subjects at the junior secondary school level in Ondo State. A sample of 300 JS2 students was drawn using simple random sampling technique. A major hypothesis was raised leading to the application of correlation and stepwise linear regression analysis. Findings revealed that of all the study habits' subscales, 'teacher consultation' was most influential while the 'time allocation' exercise, concentration, note taking, reading and assignments were regarded as less integral to students' academic performances

In a study conducted many years ago by Maccoby and Jacklin (1974), it was concluded that males have better math and visuo-spatial skills (the kinds of skills an architect needs to design a building's angle and dimensions) than females, whereas females have better verbal attitudes than males. Subsequently, Maccoby (1987) concluded that the verbal differences between females and males had virtually disappeared, but that the math and visuo-spatial differences persisted. Experts in the study of gender such as Hyde (1993, 2004; Hyde & Mezulis, 2001), believe that the cognitive differences between females and males have been exaggerated. For example, Hyde (2004) points out that there is considerable overlap in the distribution of females and males scores on math and visuo-spatial tasks.

Also, in a personal study by the U.S. Department of Education (2000), boys did slightly better than girls at mathematics and science. Overall, though, girls were far superior students, earning better grades and were significantly better than boys in reading. In another national study, females had higher reading achievement and better writing skills than male with the gap widening as students progressed through school (Coley, 2001). Females are more likely than male to be assigned to special/remedial education classes, females are more likely to be engaged

with academic materials, be attentive in class, put forth more academic effort, and participate more in class than boys (Desalt & Hull, 2001).

# 2.9 Multiple Intelligence Intervention and Reading Habit

Eisa (2010) conducts a research with middle-school Kuwaiti children to assess the effectiveness of student multiple intelligence styles in predicting students' improved reading skills through academic performance. A group of middle school students who had received first quarter grades and enrolled in an after-school tutoring program were studied, with half of the students in a traditional tutoring program and the other half in a Gardner multiple intelligence style-tutoring program. Results showed that the students in the experimental group, whose multiple intelligence was applied to learning, performed better overall for the academic year than the students in the control group (mean = 45.30) who studied using traditional teaching methodology.

However, Majid. Mohammed and Khairul (2006), carry out a study in an urban secondary school in Perak, Malaysia. This study was about the relationship between students' strengths in multiple intelligence and achievement in learning English. Multiple intelligence, proposed by Gardner (1983) was introduced on the participants. The researchers looked at the multiple cognitive capacities across human thinking. They included the verbal/linguistic, logical/mathematical, visual/spatial, bodily/kinesthetic, musical/rhythmic, interpersonal, intrapersonal and naturalistic intelligences. Findings from the study suggested that in a learning environment where multiple intelligence may not be actively used, there is a tendency to have weak and negative correlation between multiple intelligence and English language achievement.

Also, Omer (2010) carry out a research in Karatli Sehit Sahin Yilmaz Elementary School, Nigde, Turkey to investigate the effects of multiple intelligence supported project-based learning and traditional foreign language-teaching environment on students' achievement and their attitude towards English lesson. 50 students in two different classes in the 5th grade of the school participated in the study. The results of the research showed a significant difference between the attitude scores of the experiment group and the control group. It was also found out that the multiple intelligence approach activities were more effective in the positive development of the students' attitudes. At the end of the research, it was revealed that the students who were educated by multiple intelligence supported project-based learning method were more successful

and has a higher motivation level than the students who were educated by the traditional instructional methods.

#### 2.10 Gender and Reading Habit

Gender is one of the personal variables that have been related to differences found in motivational functioning and academic achievement. Different research had demonstrated the existence of different attribution patterns in boys and girls, such that while girls tend to give more emphasis to effort when explaining their performance (Lightbody, Siann, Stocks, & Walsh, 1996; Georgiou, 1999; Powers & Wagner, 1984), boys appeal more to ability and luck as causes of their academic achievement (Burgner & Hewstone, 1993).

In Nigeria, gender issues abound in all spheres of the society. The educational conditions of the girl-child vis-à-vis the boy-child constitute an important gender issue. In our cultural setting, the cultural and traditional responsibilities of men and women are different; hence the influences in the upbringing of the female child and male child. As Bisong (2006) observes "those who operate a curriculum meant to foster integration of courses for girls and boys are likely to unconsciously reflect the cultural bias". In addition to the cultural norms, girls and women are regarded as frail and needing protection because of their supposedly physical strength and the natural processes they are subjected to.

Gender involves the psychological and socio-cultural dimensions of being male or female. A gender role is a set of expectations that prescribes how females or males should think, act, and feel. The concept of gender-role classification involves a personality-trait-like categorization of a person (Santrock, 2005). However, it is important to think of personality in terms of traits and contexts rather than the personality traits alone. The importance of considering gender in context is nowhere more apparent than when examining what is culturally prescribed behaviour for females and males in different countries around the world (Gibbons, 2000).

The study carried out by Ann and Mare (2012), on gender differences in reading habits among boys and girls of basic school in Estonia. The results of the research showed that there are differences between boys and girls in many aspects of reading habits and preferences. Boys named themselves mostly as average or poor readers, they read less classical literature voluntarily, they spend less time with reading, they don't like to read long books and books with

small letters etc. In the same time, boys and girls seemed to be rather similar readers by computer.

On the other hand, Ross (2002) identifies females more heavy readers than males and younger rather than older .While Abram (2007), finds that more women are avid readers than men. Stenberg (2001), reports that women read more than men and highly educated people read more than less educated. Clark and Foster (2005), report that girls enjoy reading greater than boys and boys tend to hold more negative attitudes towards reading than girls. McKenna, Kearn and Ellsworth (1995), reveal that girls have more favourable attitudes than boys for both recreational and academic reading. Hassell and Rodge (2007), identify that females more likely read for pleasure than males. Moyes (2000), finds boys less reading than girls as they spend their leisure time doing things such as sports.

The findings of the study conducted by Hopper (2005) in England depict that more girls have read than boys. Kendrick (1999), reports that over half of the middle grade boys do not enjoy reading and 86% of them compliant that parents do not read with them. Blackwood (1991), indicates that both male and female students are reading about 2.5 hours each week for pleasure during academic session and slightly more during vacations.

Moyes (2000), Stenberg (2001), Ross (2002) and Abram (2007) report female as more heavy reader than male. Clark & Foster (2005), report that girls enjoy reading greater than boys and boys tend to hold more negative attitudes towards reading than girls. McKenna, Kearny & Ellsworth (1995) and Chassell & Ridge (2007) reveal that girls have more favourable attitudes than boys for both recreational and academic reading. Hopper (2005) depicts that (67%) of girls were reading compared with (54%) of boys.

Most studies show that, on average, girls do better in school than boys. Girls get higher grades and complete high school at a higher rate compared to boys (Jacobs, 2002). Standardized achievement tests also show that females are better at spelling and perform better on tests of literacy, writing, and general knowledge (National Center for Education Statistics, 2003). An international aptitude test administered to fourth graders in 35 countries, for example, showed that females outscored males on reading literacy in every country. Although there were no differences between boys and girls in fourth grade on mathematics, boys began to perform better than girls on science tests in fourth grade (International Association for the Evaluation of Education Achievement, 2005). Girls continue to exhibit higher verbal ability throughout high

school, but they begin to lose ground to boys after fourth grade on tests of both mathematical and science ability. These gender differences in math and science achievement have implications for girls' future careers and have been a source of concern for educators everywhere.

During the past decade, there has been a concerted effort to find out why there is a shortage of women in the science, math, engineering, and technical fields (AAUW, 1992). In 1995, 22% of America's scientists and engineers were women, compared to half of the social scientists. Women who do pursue careers in science, engineering, and mathematics most often choose fields in the biological sciences, where they represent 40% of the workforce, with smaller percentages found in mathematics or computer science (33%), the physical sciences (22%), and engineering (9%) (National Science Board, 1998).

Part of the explanation can be traced to gender differences in the cognitive abilities of middle-school students. In late elementary school, females outperform males on several verbal skills tasks: verbal reasoning, verbal fluency, comprehension, and understanding logical relations (Hedges & Nowell, 1995). Males, on the other hand, outperform females on spatial skills tasks such as mental rotation, spatial perception, and spatial visualization (Voyer, & Bryden, 1995). Males also perform better on mathematical achievement tests than females. However, gender differences do not apply to all aspects of mathematical skill. Males and females do equally well in basic math knowledge, and girls actually have better computational skills. Performance in mathematical reasoning and geometry shows the greatest difference (Fennema, Sowder, & Carpenter, 1999). Males also display greater confidence in their math skills, which is a strong predictor of math performance (Casey, Nuttall, & Pezaris, 2001).

The poorer mathematical reasoning skills exhibited by many female adolescents have several educational implications. Beginning at age 12, girls begin to like math and science less and to like language arts and social studies more than do boys (Kahle 1988; Sadker & Sadker, 1994). They also do not expect to do as well in these subjects and attribute their failures to lack of ability (Eccles, Barber, Jozefowicz, Malenchuk, & Vida, 1999). By high school, girls self-select out of higher-level, "academic-track" math and science courses, such as calculus and chemistry. One of the long-term consequences of these choices is that girls lack the prerequisite high school math and science courses necessary to pursue certain majors in college (for example, engineering, computer science). Consequently, the number of women who pursue advanced degrees in these fields is significantly reduced (Halpern, 2004).

# 2.11 Academic Self-Efficacy and Reading Habit

In a research conducted by Ahmed (2012) on self-efficacy in reading, age and meta comprehension among nonnative speakers of Arabs. The results indicated that the total estimation of academic self-efficacy in reading test was high and of meta cognition test was also high. Also Tella and Adika (2008) conducted a research on self-efficacy and locus of control as predictor of academic achievement among junior secondary school students in Osun state Unity Schools, The results indicated that a significant relationship exists between self-efficacy, locus of control and academic achievement. The study also revealed that self-efficacy and locus of control predict well students' academic achievement.

On the other hand, Mustafa and Sajad (2011) carried out a research on the relationship between self-efficacy and use of reading strategies; the case of Iranian Senior High School Students'. The result of the study indicated that the participants on average felt confident of their capabilities to perform reading tasks. They also demonstrated an acceptable level of using their different categories of reading strategies. It was also revealed that reading self-efficacy and overall reading strategies use and subcategories of reading strategies were significantly positively correlated.

Moreso, Yaser and Saeed (2010) carried out a research on influencing EFL learners' reading comprehension and self-efficacy beliefs. The effect of concept mapping strategy, the result showed that students in the concept mapping group showed greater achievement in reading comprehension and self-efficacy than students in the traditional method strategy group. Similarly Sarah (2009) carried out a study on student self-efficacy beliefs and their reading comprehension performance: A Nigerian perspective. The result of the findings revealed that students' self-efficacy beliefs did not significantly contribute to their reading comprehension performance.

#### 2.12 Conceptual Model for the Study

The conceptual model for this study was structured in a way that depicts the effects of the interventions in improving reading habit of Basic 8 secondary school students. As shown in the model, Study Skill Training (SST) and Multiple Intelligence Intervention (MII) were the treatment packages, which are also referred to as the independent variables that the researcher manipulated to see their effects on the dependent variable in improving reading habit among Basic 8 secondary school students while control had no treatment package but on sanitation

talks. The moderating variables which address the internal factors that might be inherent in the participants of the study are gender and academic self-efficacy.

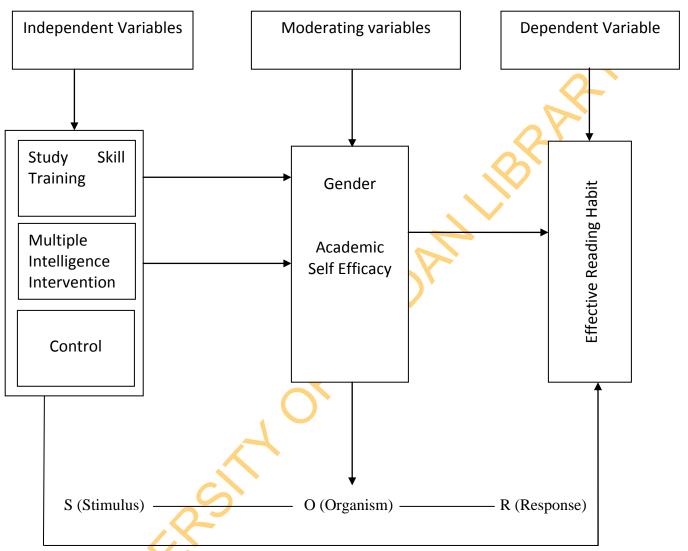


Figure 1: Conceptual Model for the Study

# 2.13 Hypotheses

The following null hypotheses were tested at 0.05 level of significance

- 1. There is no significant main effect of the treatment groups on reading habit of the participants
- 2. There is no significant main effect of gender on reading habit of the participants.
- 3. There is no significant main effect of academic self-efficacy on reading habit of the participants
- 4. There is no significant interactive effect of treatment and gender on reading habit of the participants.
- 5. There is no significant interactive effect of treatment and academic self-efficacy on reading habit of the participants.
- 6. There is no significant interactive effect of gender and academic self-efficacy on reading habit of the participants.
- 7. There is no significant interactive effect of treatment, gender and academic self-efficacy on reading habit of the participants.

# CHAPTER THREE METHODOLOGY

#### Introduction

This chapter explained in details the methodology and techniques that this study adopted to examine the efficacy of the two treatment packages; Study Skill Training (SST) and Multiple Intelligence Intervention (MII). These include research design, population, sample and sampling techniques, inclusion-exclusion criteria, instrumentation, procedures, method of data analysis and summary of the treatment packages.

### 3.1 Research Design

The researcher adopted pre-test, post-test, control group, quasi-experimental design, using a 3x2x3 factorial matrix.

Table 3.1: 3x2x3 factorial matrix for the improvement of reading habit of junior secondary school students.

		Gender					
Treatments		Male	B1	Female B2			
	Academic Self-Efficacy			Academic Self-Efficacy			
	Low	Moderate	High	Low	Moderate	High	
	C1	C2	C3	C1	C2	С3	
A1 SST	3	3	3	5	5	9	
A2 MII	2	10	3	5	7	3	
A3 CG	14	1	2	7	3	3	
Total	19	14	08	17	15	15	

A1 =Study Skill Training (SST)

A2=Multiple Intelligence Intervention (MII)

A3= Control Group (CG)

B1 = Male

B2 =Female

C1=Low Academic Self-efficacy

C2=Moderate Academic Self-efficacy

C3=High Academic Self-efficacy

The psychological treatments denoted by alphabet A, as thus: Study Skill Training (A1), Multiple Intelligence Intervention (A2) and the Control Group (A3) constituted the three rows of the treatment design. The participants were divided into three groups; the first two groups were the treatment groups (A1, A2) while the third group was the control group (A3). No treatments were given to the control group. Gender was made up the two columns (B1-Male, B2-Female) and academic self-efficacy were classified into three cells in each column with Low, Moderate and High based on their scores. The three groups were given pre-test scale to fill. However, the first and second experimental groups were subjected to treatment of Study Skill Training (SST) and Multiple Intelligence Intervention (MII). The Control Group was subjected to environmental sanitation talk.

### 3.2 Population

The population for this study consisted of all Basic 8 students of public secondary schools in Ibadan metropolis, Oyo State, Nigeria. Specifically, the study selected as participants students from Oba Akinbiyi High School 11 Oremeji, Ibadan City Academy, Olomi, Eleta and Adifase High School, Apata. The three schools are located in three different parts of local governments in Ibadan metropolis namely: Ibadan North, Ibadan South East and Ibadan South West.

# 3.3 Sample and Sampling Technique

The study adopted purposive random sampling technique to select the secondary schools from one hundred and eight (108) public secondary schools in three local governments out of five local governments in Ibadan metropolis that is, Ibadan North (42), Ibadan South East (36) & Ibadan South West (30). Three secondary schools were randomly selected. The schools were further randomized into two experimental groups (Oba Akinbiyi High School 11, Oremeji, Ibadan & Adifase High School, Apata, Ibadan) and one control group (Ibadan City Academy, Olomi, Eleta, Ibadan). Students for the study were selected through the screening test using cognitive style scale. The scale was administered to all Basic 8 students comprising (453) four hundred and fifty three students. 30 students were selected from each school in line with the identification of those students who have satisfied the screening requirement for participation by scoring below 30 marks. The participants were aged between 12 and 19 years. The percentage of participants below 15 years was 76.1 while the percentage of participants above 15 was 23.9.

Basic 8 students were purposely chosen as the participants because they were in intermediate class preparing for Basic Education Certificate Examination (BECE). Thus, to train them the prerequisite needs of study skill for the enhancement of their educational pursuits. In all, ninety students started the training programme but two fell sick two weeks before the expiration of the training programme and they were unable to partake in the post-test administration. Therefore, only eighty-eight students completed the training programme comprised 41 males and 47 females.

#### Pilot study

Prior to any attempt for data collection, a pilot study of the foreign based instruments were carried out on a sample of 30 students for the purpose of testing reliability, clarity and the comprehensiveness of the instruments. This was also targeted at making the outcome measures adaptable to the cultural setting of the research. The test-retest technique of determining reliability of the instruments were employed. The researcher administered the test twice to the 30 students outside of the area delimited for the study after a time lapse of two weeks. The two set of scores generated were then correlated using Pearson ( r) coefficient formular, to determine the index of relationship in the two set of scores generated from the test-retest. The index of relationship got after the pilot study had been adequately reported under each of the instruments.

#### 3.4 Instrumentations

The following scales were used for data collection

- i. Cognitive Style Scale (Ezema and Ekere, 20009)
- ii. The Reading Habit Scale (Henk and Melnick, 1995)
- iii. Academic Self-Efficacy Scale (Downs, 2005)

### **Cognitive Style Scale (CSS)**

One of the instruments used in this study is Cognitive Style Scale. The scale was developed by Ezema and Ekere (2009). The scale is a- 15 item structured in 4 likert format with options. In completing the scale, students are asked to read each item and rate how much they agreed or disagreed with the statement using a four-point likert system (1 = strongly disagree, 2 = disagree, 3 = agree, 4 = strongly agree. The scale has a Cronbach of .78. The maximum obtainable scores is 60. Participants that scored above 30 fell at the higher cognitive style while

those scored below 30 fell at lower cognitive style. Participants that scored below 30 marks in the screening instrument belonged to lower cognitive style and were used in the study.

#### **Reading Habit Scale (RHS)**

The Reading Habit Scale was adapted. The scale was developed by Henk and Melnick (1995). Henk and Melnick created the RHS to reflect the four basic factors students take into account when estimating their capabilities as readers. These four factors are embedded in Bandura's basic model of self-efficacy: (a) Progress "how one's perception of present reading performance compares with past performance." (b) Observational Comparison "deals with how a child perceives his or her reading performance to compare with the performance of classmates." (c) Social Feedback "includes direct or indirect input about reading from teachers, classmates, and people in the child's family." (d) Physiological States "refers to internal feelings that the child experiences during reading" In completing the scale, students are asked to read each item and rate how much they agreed or disagreed with the statement using a four-point likert system (1 = strongly disagree, 2 = disagree, 3 = agree, 4 = strongly agree). The scale contains 66 items. The authors reported an alpha coefficient of 0.85. Out of which 30 items were chosen. A reliability coefficient of 0.89 was recorded which indicated that the scale was very reliable and useful.

# **Academic Self-Efficacy Scale (ASES)**

The scale that was used as a measure of academic self efficacy was developed by Downs (2005). The scale is a- 15 item structured in likert format (1 = strongly disagree, 2 = disagree, 3 = agree, 4 = strongly agree). The items in the scale include 'I have the ability to do well in my school work; I am doing a good job in my class. The scale has a Cronbach of .91. The test-retest reliability coefficient of the scale was 0.75.

#### 3.5 Procedure

The researcher collected letter of introduction from the Head of Department of Guidance and Counselling, Faculty of Education, University of Ibadan and was tendered at the Oyo State Ministry of Education, Secretariat, Ibadan and at the three secondary schools selected for the study. This was to obtain permission prior to the selection and actual commencement of the training programme. In order to get the attention of the target participants, the researcher

solicited the assistance of the principals in the selected schools having tendered letter of introduction from the Head of Department of Guidance and Counselling

The students' were informed on the training programme and oral consent was also sought by the researcher before the study and after assuring them about the confidentiality of their information. Two master's degree holders of Educational Psychology from University of Ibadan chosen as research assistants were trained and assisted the researcher in the training programme. The participants were formally briefed on the objectives of the training programme and were sensitized to ask questions where necessary and advised to comport themselves in a peaceful manner suitable for the training process before the training commenced.

The experimental programme was packaged into weekly sessions, designed for eight weeks and each session lasted for the duration of 40 minutes apart from the first and the last sessions which lasted for 60 minutes being the general orientation/introductory aspect and the closing remarks respectively. Time and venue were agreed upon by the participants and the researcher for each of the assigned schools.

However, in order to ensure regularity, punctuality and consistency of the participants, some incentives such as big notes, pens and pencils were provided for the participants during the training programme for maximum concentration and reflection on the weekly training programme while the researcher strictly adhered to the slated time and day. Also, the participants were motivated with success stories of some Nigerian academia who had made resounding contributions towards the development of the nation.

#### 3.6 Inclusion- Exclusion criteria

#### Inclusion criteria

Participants who met the following criteria were enlisted for participation

- Those in Basic 8 students of public secondary schools of the selected schools
- Those who scored below 30 marks in the screening test
- Participants were those that obtained the consent of their parents
- Participants were those willing to be part of the training session from the beginning to the end of the training session.

#### 3.7 Control of Extraneous Variables.

Extraneous variables are those attributes that might affect the outcome of the experimental study apart from the intervention strategies employed. The researcher guided against effects of each variable through the following:

- The participants for the study were randomly scrutinized to guarantee that they satisfied the inclusion criteria for the study.
- The three selected secondary schools from the three local governments in Ibadan metropolis were randomly assigned into treatment conditions to avoid selection bias.
- The 3x2x3 factorial matrix was strictly adhered to.
- The researcher handled the administration of the treatment package to the participants alone in order to take care of the researcher variance/error.
- Other extraneous variables were also taken care of by means of statistical control, through the use of Analysis of Covariance (ANCOVA).
- The Scheffe Post-hoc analysis was used to determine the diversion of difference for significant results.

#### 3.8 Method of Data Analysis

The statistical analysis of data collected for this study to examine the effects of the independent variables that is Study Skill Training (SST) and Multiple Intelligence Intervention (MII) on the dependent variables (reading habit) were done using Analysis of Covariance (ANCOVA). The choice of ANCOVA Statistical Technique was based on the following: ANCOVA was used in analyzing the data collected so as to control for confounding variables by the removal of initial differences between the participants in the experimental groups and the control group and that ANCOVA took into account the correlation between the pre treatment and the post treatment scores of the participants.

Scheffe post-hoc was carried out to find the relationships between subgroups of the sampled populations that would otherwise remain undetected and undiscovered if statistical methods were relied upon.

# **Summary of Treatment Packages**

**Experimental Group One:** Study Skill Training. The training session's technique lasted for eight weeks which covered the following aspects:

#### **Pre-Treatment Test**

#### Session 1

Pre -training formalities, orientation and familiarization with the participants

Clarification of participants' data and proper documentation of records

Short introduction on the need to learn about Study Skill Training

**Session 11:** Methods of reading

**Session111:** identification of problems.

**Session1V:** Developing good study habits

**SessionV:** Developing good study habits (reading)

**SessionV1:** Developing good study habits (note-taking)

Session V11: Concentration while studying and technique for doing home work assignments

SessionV111: Review of activities and post-treatment procedure (Re-administration of Reading

Habit Scale)

# **Experimental Group Two: Multiple Intelligence Intervention**

#### **Session 1**

**Topic**: General orientation to the training programme

# **Objectives:**

i. to establish rapport and create a serene atmosphere for discussion.

ii. to introduce the training programme to the group.

iii. to administer pre test instruments.

**Session 11:** Methods of reading

**Session111:**. Multiple Intelligence in learning

**Session1V:** Living with modern communications

Session V: Government

**SessionV1:** Law and order

**Session V11:** The meaning of money

Session V111: Review of activities and post-treatment procedure (Re-administration of Reading

Habit Scale)

### **Control Group Three**

.Session 1: Administration of pre-test instruments.

**Session 2:** General introduction and establishment of rapport

**Session 3 :** Meaning of environmental sanitation.

**Session 4:** Types of sanitation.

**Session 5:** Effects of untidy environment.

**Session 6:** How to maintain good sanitation.

**Session 7:** Effects of good environmental sanitation.

**Session 8:** Revision of all activities in the previous sessions and post-test administration and conclusion

#### **CHAPTER FOUR**

### **RESULTS**

This chapter presents the results and summary of findings. The study investigated the effect of Study Skill Training (SST) and the Multiple Intelligence Intervention (MII) on reading habit of the junior secondary school students in Ibadan, Oyo State. Seven (7) null hypotheses were formulated and tested at 0.05 level of significance. The data were analyzed using simple percentage and Analysis of Covariance (ANCOVA) statistical method. The results are presented as follow:

# 4.1 Analysis of Demographic Characteristics of Respondents

Table 4.1: Distribution of Respondents based on Age						
		Frequency	Percent	Cumulative Percent		
	Below 15	67	76.1	76.1		
	Years					
	15-19 Years	21	23.9	100.0		
	Total	88	100.0			

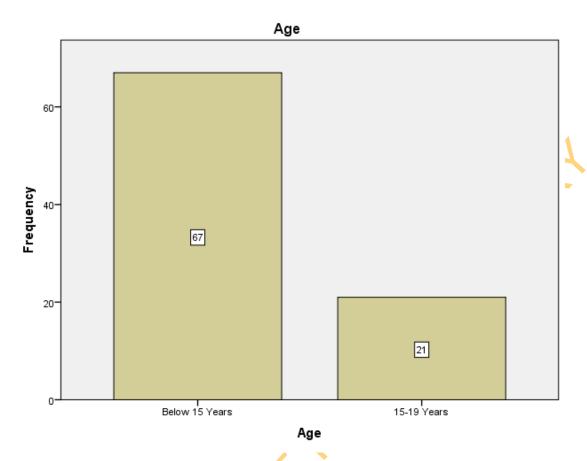


Figure 4.1: Distribution of Respondents based on Age

Table 4.1 and figure 4.1 showed that 76.1% of the respondents were below 15 years and 23.9% were between 15-19 years of age.

Table 4.2: Distribution of Respondents based on Gender							
		Frequency	Percent	Cumulative Percent			
	Male	41	46.6	46.6			
	Female	47	53.4	100.0			
	Total	88	100.0				

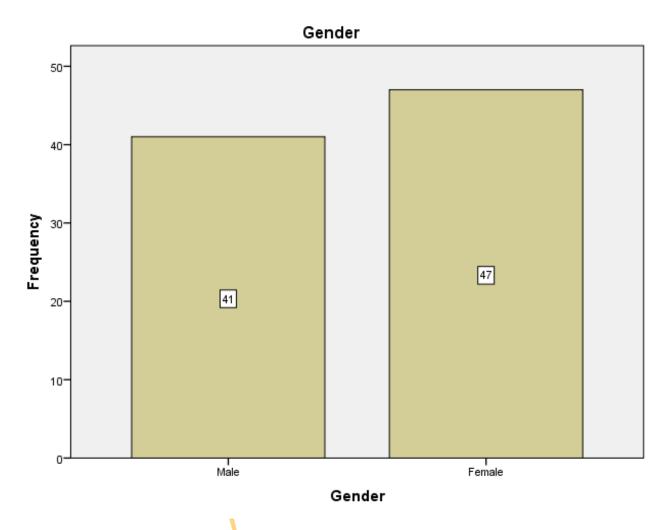


Figure 4.2: Distribution of Respondents based on Gender

Table 4.2 and figure 4.2 revealed that 46.6% of the respondents were Males while only 53.4% were Females.

Table 4.3: Distribution of Respondents based on Academic Self-Efficacy							
Frequency Percent Cumulative Percent							
	HSE	23	26.1	26.1			
	MSA	29	33.0	59.1			
	LSE	36	40.9	100.0			
	Total	88	100.0				

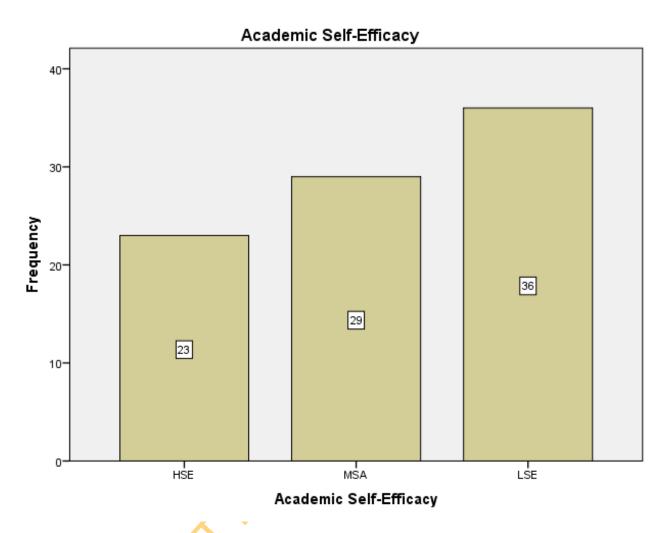


Table 4.3: Distribution of Respondents based on Academic Self-Efficacy

The table 4.3 and figure 4.3 revealed that 26.1% of the respondents have high self-efficacy, 33.0% have moderate and 40.9% have low self-efficacy.

Table 4.4: Distribution of Respondents based on Experiment/control							
	Frequency Percent Cumulative Percent						
	SST	28	31.8	31.8			
	MII	30	34.1	65.9			
	CTR	30	34.1	100.0			
	Total	88	100.0				

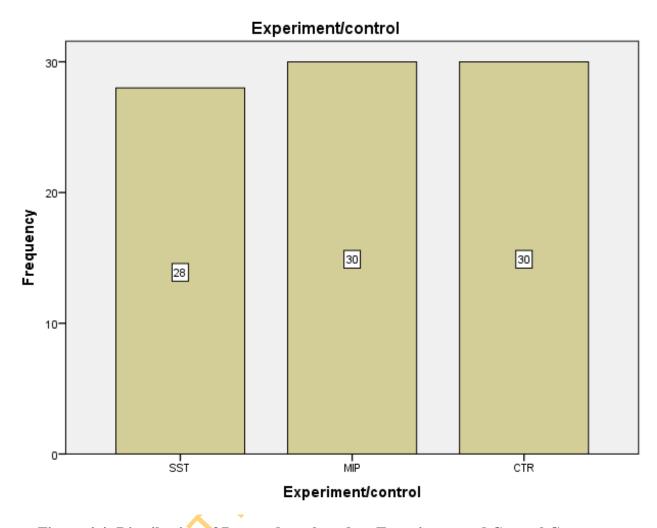


Figure 4.4: Distribution of Respondents based on Experiment and Control Group

Table 4.4 and figure 4.4 indicated that 31.8% of the respondents fall in the Experimental group of Study Skill Training (SST) at Oba Akinbiyi High School II, Mokola, 34.1% Experimental group of Multiple Intelligence Intervention (MII) at Adifase High School, Apata and 34.1% Control Group (CG) at Ibadan City Academy, Eleta.

# 4.2 Analysis of Hypotheses

 $Ho_1$  There will be no significant main effect of the treatment groups on reading habit of the participants

Table 4.5a: Summary of 3x2x3 Analysis of Covariance (ANCOVA) showing the significant main and interactive effect of Treatment Groups, Gender and Academic Self-efficacy among students

Source	Type III	df	Mean	F	Sig.	Partial Eta	Remark
	Sum of		Square			Squared	
	Squares						
Corrected Model	8727.561 <sup>a</sup>	16	545.473	13.697	.000	.755	
Intercept	6658.603	1	6658.603	167.205	.000	.702	
Pretest	38.515	1	38.515	.967	.329	.013	
Main Effect							
Treatment	4241.303	2	2120.652	53.252	.000	.600	S
Sefficacy	12.159	2	6.080	.153	.859	.004	NS
Gender	205.587	1	205.587	5.163	.026	.068	S
2-Way Interaction							
Sefficacy * Gender	197.427	2	98.713	2.479	.091	.065	NS
Treatment * Gender	54.774	2	27.387	.688	.506	.019	NS
Treatment * Sefficacy	269.450	4	67.362	1.692	.162	.087	NS
3-Way Interaction							
Treatment * Sefficacy	2.228	2	1.114	.028	.972	.001	NS
* Gender							
Error	2827.428	71	39.823				
Total	127265.000	88					
Corrected Total	11554.989	87					
a. R Squared = .755 (Ad	djusted R squa	are = .70	00)	<u> </u>	1	Ļ	

Table 4.5a showed that there was a significant main effect of treatments on students' reading habit (F  $_{(2, 71)} = 53.252$ , p < .05,  $\eta^2 \eta^2 = .600$ ). This implies that there is a significant impact of the treatment in the groups test scores on reading habit of students. Therefore, the null hypothesis which stated that there is no significant main effect of treatment on students' reading

habit was rejected; table 4.5a also shows the contributing effect size of 60.0%. For further clarification on the margin of differences between the treatment groups and the control group, a scheffe post-hoc pairwise analysis which shows the comparison of the adjusted mean was computed and the result is as shown in the table 4.5b.

Table 4.5b: Scheffe Post-hoc Analysis showing the significant differences among various Treatment Groups and the Control Group in Reading habit

Experiment/control	N	Subset f	For alpha = $0.05$
		1	2
Study Skill Training	28		41.1667
Multiple Intelligence Intervention	30		44.4286
Control Group	30	23.7333	
Sig.		1.000	.217

Findings from table 4.5b revealed that experimental group II (Multiple intelligence intervention) ( $\bar{x}$ = 44.43) has the highest mean score than the experimental group I (Study skill training) ( $\bar{x}$ = 41.17) and control group ( $\bar{x}$ = 23.73). By implication, multiple intelligence intervention is more potent in enhancing reading habit of the students than study skill training. The coefficient of determination (Adjusted R<sup>2</sup> = .700) overall indicates that the differences that exist in the group account for 70.0% in the variation of students' reading habit. In order to obtain further information on the performance of each group, a Multiple Classification Analysis (MCA) was computed and the result is presented in Table 4.5c.

Table 4.5c: Multiple Classification Analysis (MCA) showing the direction of the differences of the treatment Groups, Gender and Academic Self-efficacy in Reading habit of Students

Variable + Category		N	Predicted Mean		Deviation		Eta	Beta
Grand Mean = 36.26			Unadjuste	Adjusted	Unadjuste	Adjusted	ļ	
			d	for	d	for		
				Factors		Factors		
	Study skill	28	41.1667	41.4501	4.90530	5.18873	.795	.763
	training							
	Multiple	30	44.4286	43.6657	8.16721	7.40433		
Treatment	intelligence							
	intervention							
	Control Group	30	23.7333	24.1619	-12.52803	-12.09944		
Candan	Male	41	33.5122	35.0052	-2.74917	-1.25612	.224	.102
Gender	Female	47	38.6596	37.3571	2.39821	1.09577		
Academic self-	High	23	40.2609	37.4145	3.99951	1.15317		
efficacy	Moderate	29	39.3448	35.9550	3.08346	30636	.367	.060
	Low	36	31.2222	35.7714	-5.03914	48995		
Multiple R Squared .644			I	l	I	l		
Multiple R .802								

In table 4.5c, the mean scores of the different treatment and control groups are:

Multiple intelligence intervention (Grand Mean (36.26 + 8.17) = 44.43; Study skill training (Grand Mean (36.26 + 4.91) = 41.17 and Control (Grand Mean (36.26 - 12.53) = 23.73

respectively. Also, the mean scores of gender differences are: Male (Grand Mean (36.26 - 2.75) = 33.51 and Female (Grand Mean (36.26 + 2.40) = 38.66 respectively. And the mean scores of different academic self-efficacy category: High (Grand Mean (36.26 + 4.00) = 40.26, Moderate (36.26 + 3.08) = 39.34 and Low (Grand Mean (36.26 - 5.04) = 31.22 respectively.

From the arithmetic given, Multiple intelligence intervention ranked highest (Grand Mean = 44.43), followed by Study skill training (Grand Mean = 41.17) and the control group (Grand Mean = 23.73). This indicates that Multiple intelligence intervention is more effective in enhancing reading habit among students.

# Ho<sub>2</sub> There will be no significant main effect of gender on reading habit of the participants.

Table 4.5a showed that there was significant main effect of gender on students' reading habit (F  $_{(1,71)}$  = 5.163, p < .05 = .068). Hence, the null hypothesis was rejected. This denotes that there is significant difference in the reading habit of male and female students. Table 4.5c further revealed that the mean score of male students (estimated mean = 33.51) while that of female (estimated mean = 38.66). The female students have higher reading habit compared to their male counterpart.

# Ho<sub>3</sub> There will be no significant main effect of academic self-efficacy on reading habit of the participants

Table 4.5a demonstrated that there was no significant main effect of academic self-efficacy on students' reading habit (F  $_{(2,71)}$  = .153, p > .05 = .004). Therefore, the null hypothesis was accepted. The MCA on Table 4.5c further indicates that the mean score of students with high academic self-efficacy (estimated mean = 40.26), moderate academic self-efficacy (estimated mean = 39.34) and low academic self-efficacy (estimated mean = 31.22). This implies that students with high academic self-efficacy have high reading habit more than their counterpart with moderate and low academic self-efficacy. Also, students with moderate academic self-efficacy but their differences is not statistically significant.

# Ho<sub>4</sub> There will be no significant interactive effect of treatment and gender on reading habit of the participants.

Table 4.5a showed that there was no significant interaction effect of treatment and gender on students' reading habit (F  $_{(2, 71)} = .688$ , p > .05 = .019). Hence, the null hypothesis was accepted. This demonstrates that gender did not significantly moderate the efficiency of the treatment in enhancing students' reading habit.

# Ho<sub>5</sub> There will be no significant interactive effect of treatment and academic self-efficacy on reading habit of the participants.

The result in Table 4.5a indicated that there was no significant interaction effect of treatment and academic self-efficacy on students' reading habit (F  $_{(2,71)}$  = 1.692, p > .05 = .087). Therefore, the null hypothesis was accepted. This implies that academic self-efficacy did not influence the effectiveness of treatment in enhancing students' reading habit.

# Ho<sub>6</sub> There will be no significant interactive effect of gender and academic self-efficacy on reading habit of the participants.

The result in Table 4.5a revealed that there was no significant interaction effect of gender and academic self-efficacy on students' reading habit (F  $_{(4,71)} = 2.479$ , p > .05 = .065). Therefore, the null hypothesis was accepted. This means that gender and academic self-efficacy did not significantly enhance the reading habit of students.

# Ho<sub>7</sub> There will be no significant interactive effect of treatment, gender and academic self-efficacy on reading habit of the participants

Table 4.5a indicated that there was no significant interaction effect of treatment, gender and academic self-efficacy on students' reading habit (F  $_{(2, 71)} = .028$ , p > .05 = .001). By implication, the null hypothesis was accepted. This denotes that the impact of the treatment, gender and academic self-efficacy in enhancing students' reading habit was not significant.

# **Summary of Findings**

- There was significant main effect of treatment on students' reading habit. This implies that
  there is a significant impact of the treatment in the groups test scores on reading habit of
  students.
- There was significant main effect of gender on students' reading habit. Hence, the null hypothesis was rejected.
- There was no significant main effect of academic self-efficacy on students' reading habit.

  Therefore, the null hypothesis was accepted.
- There was no significant interaction effect of treatment and gender on students' reading habit. Hence, the null hypothesis was accepted.
- There was no significant interaction effect of treatment and academic self-efficacy on students' reading habit. Therefore, the null hypothesis was accepted.
- There was no significant interaction effect of gender and academic self-efficacy on students' reading habit. Therefore, the null hypothesis was accepted.
- There was no significant interaction effect of treatment, gender and academic self-efficacy on students' reading habit. By implication, the null hypothesis was accepted.

#### CHAPTER FIVE

### 5.0 DISCUSSION, CONCLUSION AND RECOMMENDATIONS

This chapter represents the discussion of the findings in line with the seven null hypotheses generated and tested in this study. This discussion was done within the context of the previous empirical findings. The chapter outlined the limitations of the study as well as suggestion for further study. Recommendations were made based on the findings and contributions to knowledge were highlighted.

# 5.1 Discussion of Finding

The study investigated the effects of the Study Skill Training and Multiple Intelligence Intervention on reading habit of junior secondary school students in Ibadan. To this effect, data collected were analyzed using analysis of covariance (ANCOVA). The results are discussed below hypothesis by hypothesis

Hypothesis One was rejected as the results in the Table 4.5a indicated that there was a significant main effect of treatments on reading habit of junior secondary school students in Ibadan. This implies that both the Study Skill Training and Multiple Intelligence Intervention were effective in improving reading habit of junior secondary school students in Ibadan. Although both interventions were effective, Table 4.5b clearly showed the marginal difference between the interventions. It was revealed that MII was more effective in improving reading habit of junior secondary school students than SST.

This finding is consistent with the findings of (Omer, 2010) that students who were educated by multiple intelligence supported project-based learning method were more successful and has a higher motivation level than the students who were educated by the traditional instructional methods. This implies that students who were exposed with a variety of instructional materials assimilate and comprehend the content of subject imparted on them without much ado. Similarly, this finding corroborated with Christison (1996), who observed that, if students are given more choices to learn and demonstrate their learning through the multiple intelligence based, which transfer control from teachers to learners. The students may maximize their learning to higher academic achievement and enhance their motivation when taking responsibility for their own learning. This finding is aligned with Mojid, Mohammed and

Khairul (2006), who suggested that in a learning environment where multiple intelligence may not be actively used, there is tendency to have weak and negative correlation between multiple intelligence and English Language achievement.

Furthermore, the result of this study affirms that in improving reading habit of junior secondary school students, study skill is effective. This finding substantiates the study of Shawana etal, (2010), they confirmed that there is a significant relationship of time management skill, reading and note taking skill with academic achievement while students with higher academic achievement use a wide range of study skill as compared to students with lower academic achievement Mace,(2002), pointed out that study is a systematic acquisition of knowledge and an understanding of fact and principles that calls for retention and application.

This finding aligns with Oluwatimehin and Owoyele (2002) who found that study skill habit is effective. From the finding above, the students should cultivate the study skill culture and fashion out permanent time-table for effective study in order to excel in their studies endeavours. Also, the finding of this study supported the assertion of Crow and Crow in Okorodudu, (2002), who explained that study is a programme of subject matter mastery. It involves hard work. This finding lends credence to Okorodudu, (1995), sought that study involves the total of all behavioural patterns (addition, verbal, psychomotor, emotional) determined purpose and enforced practices that the individual adapts in order to learn and achieve competence.

Hypothesis Two was rejected because the result in Table 4.5a showed that there was significant main effect of gender on students' reading habit. This denotes that there is significant difference in the reading habit of male and female students. Table 4.5c further revealed that female students have higher reading habit compared to their male counterpart. This result was in line with (Ann& More, 2012), who identified that there are differences between boys and girls in many aspects of reading and preferences. It has been found out that boys named themselves mostly as average or poor readers, they read less classical literature voluntarily, they spend less time with reading, they don't like to read long books with small letters unlike the girls who loved and found adequate time to read with great interest. Similarly, this finding also in support of (Ross, 2002), that females are more heavy readers than males. This implies that girls had been fascinated to read different types of books consistently due to their nature and have less interest in sporting activities most especially football.

This finding also corroborated with (Abram, 2007; Sternberg, 2001), who found that women are more avid readers than men. In line with this finding, Clark and Foster (2005), reported that girls enjoy reading greater than boys and boys tend to hold more negative attitudes towards reading than girls, while this finding is in affirmation of Mckenna, Kearn and Ellsworth, (1995), who revealed that girls have more favourable attitudes than boys for both recreational and academic reading. Also, this finding was in support of (Hassel & Rodge, 2007; Moye, 2002), who identified that females are more likely read for pleasure than males and boys were less reading than girls as they spend their leisure time doing things such as sports.

Hypothesis Three was accepted because the result in Table 4.5a showed that there was no significant main effect of academic self efficacy on students' reading habit. Also, Table 4.5c further indicated that students with high academic self efficacy have high reading habit more than their counterparts with moderate and low academic self efficacy and students with moderate academic self efficacy have high reading habit more than their counterpart with low academic self efficacy but their differences is not statistically significant. This finding was in line with (Sarah, 2009), who revealed that students' self efficacy beliefs did not significantly contribute to their reading comprehension performance. The researcher found out that students' capability towards reading slightly differ but the participants showed readiness to reading comprehension. In contrast to this finding, Ahmed (2002), found out that the total estimation of academic self efficacy in reading text was higher among students while Tella and Akande (2007), indicated that there was significant relationship between self efficacy, locus of control and academic achievement. In their submission, Mustafa and Sajjad (2011), revealed that reading self efficacy and overall reading strategies use and subcategories of reading strategies were significantly positive correlated.

Hypothesis Four was accepted as the result in Table 4.5a showed that there was no significant interaction effect of treatment and gender on reading habit of the participants. This denotes that the interaction of treatment (SST and MII) and gender (male and female) have no significant effect in improving reading habit of the participants. This finding confirmed that the females tend to be avid reader than their male counterpart; other researchers have proven the same (Moyes, 2000; Hopper, 2005; Hassell & Rodge, 2007). Most studies showed that on average, girls do better in school than boys that girls get higher grades and complete high school on higher rate compared to boys (Jacobs, 2002). This study however discovered no significant

effect of gender in moderating the effect of the treatment in improving reading habit of junior secondary school students. It showed that the reading habit depend on individual interest but not on the gender basis.

Hypothesis Five was accepted as the result in Table 4.5a indicated that there was no significant interaction effect of treatment and academic self-efficacy on reading habit of the participants. This denotes that the interaction of treatment (SST and MII) and academic self efficacy (high, moderate and low) have no significant effect in improving reading habit of the participants. This finding was in line with (Sarah, 2009) who sought that students' self-efficacy belief did not significantly contribute to their reading comprehension performance. Also, this finding contradicts Tella and Akande (2007), they indicated that a significant relationship exist between self efficacy, locus of control and academic achievement. This finding showed that students with high academic self-efficacy have higher reading habit more than their counterpart with moderate and low academic self-efficacy. Also, students with moderate academic-self efficacy have higher reading habit more than their counterpart with low academic self-efficacy and their differences is not statistically significant.

Hypothesis Six was accepted because the finding of this study revealed that there was no significant interactive effect of gender and academic self-efficacy on reading habit of the participants. This means that there was no significant interactive effect of gender and academic self-efficacy on reading habit of the participants. This finding contradicts with Ann and More (2002); Cark and Foster (2005) and Kendrick (1999) whose report showed that female students reported higher reading habit than their male counterpart. This was due to the fact that girls enjoy reading greater than boys and boys tend to hold more negative attitudes towards reading than girls. The result also proved that there was strong evidence that the perception of reading habit between gender was slightly different.

Hypothesis Seven was accepted because the result of this study indicated that there was no significant interactive effect of treatment, gender and academic self efficacy on reading habit of the participants. Therefore, the null hypothesis was accepted. In other words, the combination of treatment (that is, study skill training and multiple intelligence intervention), gender and academic self efficacy did not significantly improving reading habit capability among junior secondary school students. This means that the improvement in the post test reading habit scores of the participants is so high that the current study could not infer that gender, academic self

efficacy and treatments are more important than other in that combinatorial effects on reading habit of the participants. More specifically, the finding indicated that treatment (SST & MII), gender (male & female) and academic self efficacy (high, moderate and low) has no combined effect on the improved reading habit of the participants.

#### 5.2 Conclusion

The study investigated the effects of study skill training and multiple intelligence intervention on reading habit of junior secondary school students in Ibadan, Oyo State, Nigeria. Gender and academic self efficacy were moderating variables. In line with this, the participants were taken through the training programmes, relevant data collected and analyzed using appropriate statistical tools to bring out the results. Based on the findings of this study, the following conclusions were drawn.

Study Skill Training and Multiple Intelligence Intervention were effective in improving reading habit among junior secondary school students in Ibadan, Oyo State. By implication, if the principles were adequately applied and the gains of the training sustained, the application of these treatment packages would help in improving reading habit among secondary school students. This study also discovered that gender and academic self efficacy had no significant effect in the improvement of reading habit of students in junior secondary schools in Ibadan, Oyo State.

# 5.3 Implication of the Study

The findings of this study clearly showed that study skill training and multiple intelligence intervention were effective in improving reading habit of junior secondary school students. Therefore, this study has immense policy implications. For governments, stake holders and organizations and researchers who might discover gaps in carrying out further studies.

To the participants, this study has exposed the students to training programmes which have helped them acquire reading habit skill, thereby, making them fascinated and love for studies. This would go a long way in improving reading habit among the students. For them to excel in their academic pursuits. As evidenced from the findings of this study, the two treatment techniques were effective. On the basis of the present study therefore, expected behavioural attitudinal change and paradigm shift from negative reading habit to positive ones could be

enhanced if individual capabilities towards academic pursuits is tapped and utilized effectively in the classroom settings.

School counsellors could effectively and confidently use these interventions to improve reading habit among students. Studies had it that in junior secondary school situations, self efficacy is not sufficient in determining the level of reading habit of an individual but his or her level of self efficacy is an important determinant of success.

Study skill training and multiple intelligence intervention were effective in improving reading habit among secondary school students. By implication, a proper application of the principles underlining these psychological interventions should produce similar result. However, multiple intelligence intervention was more potent in improving reading habit of secondary school students. The effectiveness of study skill training and multiple intelligence intervention are discovered in improving reading habit and finding has become a leading light to other researchers to examine the effect of other psychological interventions for same or similar purpose.

Further implication of the study is that, it provides the basic information necessary for identifying on how to improve reading habit of secondary school students to teachers, school counsellors and educational psychologists also to equip practitioners as regards the knowledge of conceptualizing students' challenges and adequately improve the reading habit using study skill training and multiple intelligence intervention techniques.

#### **5.4 Recommendations**

The following recommendations were drawn from the findings of the study. Study Skill Training and Multiple Intelligence Intervention were effective in improving reading habit of secondary school students. It is therefore recommended that concerted effort should be provided by counselling psychologists, educational counsellors and other related professionals to adopt these two therapies when handling reading habit issues with the attendant challenges, taking into cognizance the poor performance and encourage students to study effectively.

The stakeholders should contribute their own quotas immensely by establishing educational resource centres in the communities where the students would have access to different types of books to borrow and read for their educational advancement.

The educational managers and policy makers should fashion-out the curriculum that would embrace all aspects of human intelligences in order to detect the unique potentialities inherent in each individual as early as possible for future productivity.

A special period should be set aside in the schools' time-table for reading purposes to enable students cultivate the habit of good reading right from the primary school level.

Parents should monitor and teleguide their children towards reading at home. They should set a place that would serve as a reading corner and stipulated time for reading must be strictly adhered to. They should also take a cognizance on subject areas where their children exhibit acumen and dexterity to avoid choosing a wrong career that would pose a problem for them.

There is need to organize workshops and symposia where teachers and students could learn from the experts about the importance of study skill and multiple intelligence in improving reading habit and enhance academic performance.

# **5.5** Contributions to Knowledge

This study contributed in no small measure both theoretically and methodologically to the conceptualization of study skill training and multiple intelligence intervention

This study was also unique in the sense that, psychological intervention was one major factor that could improve reading habit, hence the necessity and sensitization of academic programmes made available for parents, guardians, teachers and other educational stakeholders that highly needed to intervene in the handling of reading habit.

It showed that study skill training and multiple intelligence intervention techniques could be used to effectively improve reading habit of the secondary school students. Further, both therapies were potent constructs in improving reading habit among secondary school students, multiple intelligence intervention technique proved to be more effective in the study.

The outcome of this research depicts a clear understanding of the experience in reading habit among secondary school students especially junior secondary schools.

The extensive literature review of study skill and multiple intelligence, the relationship between the two independent variables, information regarding the psychological factors embedded with the presenting challenges of reading habit.

# 5.6 Limitations of the Study

Although, the current study provided some salient revelations as regards the efficacy of study skill training and multiple intelligence intervention in improving reading habit. There are some limitations that are worthy of mentioning. In the first instance, a limited number of eighty eight (88) students might not be enough to make generalizations on the population of the study. This limited number of participants was used due to administrative, logistics, time and financial constraints to achieve the objectives of the study; a larger number could have achieved a better result. However, this limitation has not affected the findings of this study in any way.

Also, this study covered only three local governments in Ibadan; the researcher was unable to cover other local governments in Ibadan which could have widened the scope of the study. Also, the time available for the study is limited. The study could have been carried out for more than eight weeks so as to make the treatments more effective and also for follow up of the participants in their reading habit abilities.

# 5.7 Suggestions for Further Study

Future research investigating the effectiveness of study skill training and multiple intelligence interventions should include objective dependent variable as opposed to reading habit scale exclusively as part of the testing procedure. It is suggested that future studies with samples from different schools, different geo-political zones of Nigeria, different categories of students and different domains should be conducted. This would also provide fruitful findings to better understanding of reading habit.

Also, it might be of interest of future researchers to use a measure of academic self efficacy that is domain specific to reveal accurate relationship between the variables. More research is needed to determine other variables that might mediate or moderate the relationship between treatment and reading habit. Study skill training and multiple intelligence intervention in improving reading habit among junior secondary school students in Ibadan, Oyo State, Nigeria could be replicated in other states.

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#### TREATMENT PACKAGES

The treatment packages were held in eight sessions and once on weekly basis for each of the treatment groups for duration of 40 minutes each per session. These groups were experimental group one (Study Skill Training), experimental group two (Multiple Intelligence Intervention) and the Control group. The groups comprised ninety Basic 8 students of public secondary schools with low reading habit in three local governments in Ibadan, Nigeria.

# **Experimental Group A- Study Skill Training (SST)**

The training programmes were in eight sessions. The activities were geared towards:

- i Appreciation of the importance of study
- ii Identification of study problem
- iii Appraisal of present way of studying and effective management of time.
- iv Developing good study habits of reading, writing, note taking, concentration during study and doing home work assignment.

#### Section 1

**Topic**: General orientation to the training programme

# **Objectives:**

- i To establish rapport and create a serene atmosphere for discussion.
- ii To introduce the training programme to the group.
- iii To administer pre test instruments.

#### **Activities:**

The first session is set aside to establish rapport and understanding with the participants in order to create an amiable atmosphere for discussion. Participants were told that the training programme would help them immensely to acquire techniques of effective study and how to improve on reading. They were informed that they should be free to express their honest opinions on all issues that would come up for discussion as neither their principal nor teachers would participate in the programme. They were given an assurance of confidentiality of whatever information they want to discuss. The researcher seeks for their full support and cooperation by coming to the agreed venue for the exercise punctually and regularly too. A record of attendance is given a priority in order to discourage truancy and lateness. Those who attend all the sessions were given additional gifts on the last day of the training programme.

The pre test instruments were administered to all the participants. After this, they were asked to write about the methods of reading with regards to their studies on the sheet of paper from home before the next session.

#### **Section 2**

**Topic**: methods of reading

# **Objectives:**

- i To define the term "reading"
- ii Mention some methods of reading.
- iii Explain each of the methods.

#### **Activities:**

During the second lesson, The researcher arrives at the stipulated venue as early as possible before the arrival of the participants in order to show the degree of seriousness of the programme to the participants. The researcher welcomes and praise the participants for their punctuality.

Thereafter, the session begins. The researcher requests for the list of methods of reading which the participants were told to prepare and to be collected from them for discussion. The researcher mentions some of methods of reading as follow:

- i. Subvocalized
- ii. Speed reading
- iii. Proofreading
- iv. Survey-question-read-recite-review (SQ3R)

The researcher introduces the topic by asking the students a leading question to the topic thus:

What is reading?

The researcher defines reading as a complex cognitive process of decoding symbols in order to construct or derive meaning (reading comprehension). It is a means of language acquisition, of communication, and of sharing information and ideas. Like all languages, it is a complex interaction between the text and the reader which is shaped by the reader's prior knowledge, experiences, attitude, and language community which is culturally and socially situated.

The researcher continues to explain each of the methods of reading thus:

i. Subvocalized reading combines sight reading with internal sounding of the words as if

spoken. Advocates of speed reading claim, it can be a bad habit that slows reading and

comprehension, but other studies indicate the reverse, particularly with difficult texts,( Rayner &

Keith, 1995).

Speed reading is a collection of methods for increasing reading speed without an ii.

unacceptable reduction in comprehension or retention. Methods include skimming or the

chunking of words in a body of text to increase the rate of reading. It is closely connected to

speed learning.

*Proofreading* is a kind of reading for the purpose of detecting typographical errors. One iii.

can learn to do it rapidly, and professional proofreaders typically acquire the ability to do so at

high rates, faster for some kinds of material than for others, while they may largely suspend

comprehension while doing so, except when needed to select among several possible words that

a suspected typographic error allows.

Survey-question-read-recite-review (SO3R) method, often taught in schools, which iv.

involves reading toward being able to teach what is read, and would be appropriate for

instructors preparing to teach material without having to refer to notes during the lecture.

The researcher asks the students to write any three study problems from home.

**Section 3** 

**Topic**: identification of study problems.

**Objectives:** 

To examine the term "study"

To identify various study habits among the participants.

**Activities:** 

During the second lesson, The researcher arrives at the stipulated venue as early as

possible before the arrival of the participants in order to show the degree of seriousness of the

programme to the participants. The researcher welcomes and praise the participants for their

punctuality.

Thereafter, the session begins. The researcher requests for the list of methods of reading

which the participants were told to prepare and to be collected from them for discussion. The

researcher mentions some study problems as follow:

1. Lack of teachers in some subjects

2. Lack of good study facilities both at school and at home.

3. Lack of instructional aids

4. Lack of textbooks

5. Financial problems and so on.

The researcher involves the participants in a group discussion on the meaning of study. They were told that study is a deliberate effort made by an individual to acquire knowledge. It is

an integral part of the formal learning process which many learners dread because it entails

hardwork (Akinboye 1999). Oyebamiji (1997) observed that the process of learning takes place

in three stages. The first stage is the acquisition stage whereby knowledge is acquired. The

knowledge so acquired is stored. This constitutes the second stage. The final stage is the

reproduction stage during which the stored information is recalled or reproduced. There are

several activities which are involved in the process of study. They include the following as

identified in Bakare's (1970) Study Habit Inventory (SHI).

- Time allocation

- Reading and note taking

- Concentration

- Home work and assignment

- Written work

- Examination

- Teacher consultation

Each of these aspects of study were discussed briefly and they were to be discussed in

greater detail, during subsequent sessions. The participants were requested to write a short report

of how they spend the 24 hours in a day stating the time allocated to each activity of the day.

**Section 4** 

**Topic**: Developing good study habits

**Objectives:** 

i. To identify how the participants use their time on each of the days of the week.

ii. To work out suitable weekly time table specifying study periods.

iii To identify suitable place for studying.

#### **Activities:**

The third session commences on schedule and to be devoted on the discussion of effective use of time and choice of place of study. The participants were informed that the effective management of time is essential for successful study. There is the need to formulate a personal study time- table and stick to it as much as possible. Each of the participants were given a personal weekly time table blank to complete. The number of hours devoted to private study during a one week period were determined. A total of 15 hours of weekly private study or 2 to 3 hours per day was considered adequate for an average secondary school student. A fresh weekly time- table blank were issued to each of the participants and they were instructed to first fix the official school time-table and allocate the remaining hours of the day to private study, games and relaxation and so on. The new weekly personal time- table were put to use as from the day they were prepared.

The discussion shifted to identification of suitable places of study. It was emphasized that every student needs a conducive study environment. The chosen place must be furnished with a chair and a desk. The habit of sitting or lying on the bed while studying should be avoided as this could induce sleep. Other distracters such as pictures, posters, magazines and newspapers must be removed from the study area. Participants were encouraged to take advantage of the school or public libraries where they are available. Good lighting and ventilation are essential requirements of suitable places of study. Participants were encouraged to put the personal study time- tables to use and report their observations during the next session.

#### Section 5

**Topic**: Developing good study habits (reading)

# **Objectives:**

- To identify the major causes of poor reading.
- ii To identify the purpose of various reading strategies.
- To discuss the SQ3R technique of reading.

#### **Activities:**

The fourth session is devoted to a very important aspect of study: reading. The participants were told that there are several reasons for poor reading but the major reason is the failure to recognize ones reading purpose. They were taken through brief descriptions of five reading strategies and the purpose of each of them as shown below:

# Purpose of various reading strategies

S	READING	BRIEF DESCRIPTION	PURPOSE
N	STRATEGY		
1	Skimming	Means finding out what a	General impression
		chapter or entire book is about	
2	Critical reading	Means trying to separate facts	Making up your mind
		from opinions	
3	Analytical reading	Means looking at the	Appreciation of style and
		mechanics of the writing and	structure
		studying the writer's skill	
4	Reading for information	Means looking for a specific	Fact finding
		detail by running the eyes	
		over the pages	
5	Detailed reading	Means reading the whole	Complete understanding
		passage carefully and	
		thoroughly and trying to	
		appreciate every point the	
		author is making	

The participants were carefully taken through the SQ3R method of studying written material which was developed by Robinson (1970).

#### The SQ3R Method:

The probably the most effective system for studying written material is known only by the letters of its five stages: SQRRR or SQ3R for short. The system which was developed by Francis P. Robinson (1941) involves five stages:

**Survey:** Before to even write to read, look quickly at the chapter outline, the headings and the chapter summary. This will give you an overview of what you will read and make it easier to organize and interrelate the materials in the chapter.

Question: Also before you even start to read, translate each heading in the chapter into questions about the text to follow. This helps you compare the new materials with what you

already known. It gets you actively involved in thinking about the topic. It also helps bring the

main points into sharp focus.

**Read:** Now, read the first section in the chapter. Look for the answers to the question that

you have posed. If you find major points not directly related to your questions, try either to

revise or refine your old questions to include the new materials or make up new questions

especially for this material.

**Recite:** when you have finished reading the section, close the book and recite from

memory the answer to your questions and any other major points that you can remember. It may

be helpful to jot down answers in outline form or even to recite them aloud to somebody. Then

open the book and check to be sure that you have covered all the major points in the section.

Repeat 2,3 and 4 for each section of the chapter.

**Review:** after you have completed the chapter, review your notes and then recite your

questions and answers from memory. Relate the material to other ideas. Try to think of

particularly good examples or illustrations. The SQ3R method forces you to act and have a

dialogue with the text. This interaction makes the materials more interesting and meaningful and

improves your chances of recalling it. It also organizes the material and relates it to what you

already know.

The participants were then asked the following questions to which to provide reasonable

answers

i. What is the major reason for poor reading?

Mention the various techniques of reading and their purposes. ii.

What is SQ3R techniques of reading?

The participants were then asked to practice reading a chapter of a textbook using the

SQ3R techniques before the next session.

**Section 6** 

**Topic**: Developing good study habits (note-taking)

**Objectives:** 

i. To identify the importance of notes

ii. To discuss specific techniques of note-taking

#### **Activities:**

This session is devoted to note-taking. The researcher explains that most students simply copy notes either dictated by their class teachers or written on the chalkboard or from the notebooks of other students. The importance of notes to a student cannot be underestimated. Notes serve the following functions among others:

- Notes help the students to understand better because the ideas have been put in his own words.
- Notes link new knowledge to what is already learned.

Copied or dictated notes are poor aids to understanding because a vital stage of interpreting the information has been missed. While taking notes during lectures or while reading a book, key words which will unlock the memory when the notes are read should be used. The use of abbreviations saves time and cuts down on surplus words. Efforts must be made to avoid writing too much or too little. The notes must be read over either immediately after reading the textbook or listening to the lecture to ensure that what one has are actually outline notes which will be easily understood during revision for examinations

The following questions were posed to the participants to respond to

- i. What are the functions of notes?.
- ii. Mention the various techniques of good note-taking

The participants were told to practice note-taking during their next classes.

#### **Section 7**

**Topic**: Concentration while studying and technique for doing home work assignments

#### **Objectives:**

- i. To identify factors which affect concentration while studying
- ii. To discuss how to deal with homework assignments.

#### **Activities:**

The researcher and the participants review the previous sessions homework assignment to internalize the gains of the session. Then follow a discussion on factors which affect concentration while studying. To ensure that the energy put into study period is adequately rewarded, the student must keep an aim in mind while studying and ensure that some factors which affect concentration do not cheap in. One of the factors is worry about money, personal relationships and so on. It is difficult to concentrate on study when the mind is disturbed. If a

student is bothered by anything, he/she should seek for help from a friend or counsellor. If the problem is one of which cannot be solved immediately, deliberate effort must be made to keep it out of mind while studying. The state of physical health is also important and this could be achieved by eating a balanced diet, having adequate sleep and effective preventive measures against communicable diseases.

The use of drugs such as alcohol, marijuana and pep pills should be avoided as they have harmful effects on the brain and consequently affect concentration during study. Stimulants such as coffee and kolanuts are better avoided also.

Homework assignment must be taken seriously. Putting off doing assignments until the last minutes is not good enough as the job gets done shoddily and the teacher may not be inclined to award good mark. It is advisable to get homework assignment done as early as possible before they begin to pile up and the student becomes disturbed. Prompt completion of assignments keeps the mind free from worry. Even when the assignment is difficult, it is advisable to devote more time and effort to it and get it completed to the best of one's ability.

The following questions were posed to the participants for them to provide the answers:

- i. What factors affect concentration during study and what should be done about them.
- ii. How should a student deal with homework?

The participants were told to ensure that while studying as from that day, they should take note of some factors which seem to affect their concentration. They were to deal with the problems as they arise and note them for discussion during the next class.

#### **Section 8**

**Topic**: Review of previous sessions, activities and discussion and administration of post-test instruments.

#### **Objectives:**

- i. To review salient points discussed during the sessions.
- ii. To administer post-test instruments.
- iii. To thank the participants for their cooperation during the programme.

# Administration of post-test instruments.

The post-test instruments were administered to the participants.

# **Closing Remarks**

The participants were thanked for their cooperation in attending the sessions regularly and punctually. They were urged to continue to utilize the skills and knowledge they have acquired during the training sessions.

#### EXPERIMENTAL GROUP B-MULTIPLE INTELLIGENCE INTERVENTION (MII)

The training programmes were in eight sessions. The activities were geared towards:

- i. Identification of different types of intelligence
- ii. Appreciation of the importance of multiple intelligence
- iii. Identify students' intelligence uniqueness

#### **Section 1**

**Topic**: General orientation to the training programme

# **Objectives:**

- i. To establish rapport and create a serene atmosphere for discussion.
- ii. To introduce the training programme to the group.
- iii. To administer pre test instruments.

#### **Activities:**

The first session is set aside to establish rapport and understanding with the participants in order to create an amiable atmosphere for discussion. Participants were to be told that the training programme would help them immensely to acquire techniques of effective study and how to improve on reading. They were informed that they should be free to express their honest opinions on all issues that would come up for discussion as neither their principal nor teachers would participate in the programme. They were given an assurance of confidentiality of whatever information they want to discuss. The researcher seeks for their full support and cooperation by coming to the agreed venue for the exercise punctually and regularly too. A record of attendance is given a priority in order to discourage truancy and lateness. Those who attend all the sessions were given additional gifts on the last day of the training programme.

The pre test instruments were administered to all the participants. After this, they were asked to write about the methods of reading with regards to their studies on the sheet of paper from home before the next session.

#### **Section 2**

**Topic**: methods of reading

# **Objectives:**

i. To define the term "reading"

ii. To mention some methods of reading.

iii. To explain each of the methods.

#### **Activities:**

During the second lesson, The researcher arrives at the stipulated venue as early as possible before the arrival of the participants in order to show the degree of seriousness of the programme to the participants. The researcher welcomes and praise the participants for their punctuality.

Thereafter, the session begins. The researcher requests for the list of methods of reading which the participants were told to prepare and to be collected from them for discussion. The researcher mentions some of methods of reading as follow:

i. Subvocalized

ii. Speed reading

iii. Proofreading

iv. Survey-question-read-recite-review (SQ3R)

The researcher introduces the topic by asking the students a leading question to the topic thus:

What is reading?

The researcher defines reading as a complex cognitive process of decoding symbols in order to construct or derive meaning (reading comprehension). It is a means of language acquisition, of communication, and of sharing information and ideas. Like all languages, it is a complex interaction between the text and the reader which is shaped by the reader's prior knowledge, experiences, attitude, and language community which is culturally and socially situated.

The researcher continues to explain each of the methods of reading thus:

*i.* Subvocalized reading combines sight reading with internal sounding of the words as if spoken. Advocates of speed reading claim, it can be a bad habit that slows reading and

comprehension, but other studies indicate the reverse, particularly with difficult texts,( Rayner &

Keith, 1995).

ii. Speed reading is a collection of methods for increasing reading speed without an

unacceptable reduction in comprehension or retention. Methods include skimming or the

chunking of words in a body of text to increase the rate of reading. It is closely connected to

speed learning.

iii. Proofreading is a kind of reading for the purpose of detecting typographical errors. One

can learn to do it rapidly, and professional proofreaders typically acquire the ability to do so at

high rates, faster for some kinds of material than for others, while they may largely suspend

comprehension while doing so, except when needed to select among several possible words that

a suspected typographic error allows.

iv. Survey-question-read-recite-review (SQ3R) method, often taught in public schools, which

involves reading toward being able to teach what is read, and would be appropriate for

instructors preparing to teach material without having to refer to notes during the lecture.

The researcher asks the students to write any three types of intelligence from home.

**Section 3** 

**Topic: Multiple Intelligence in learning** 

**Objectives:** 

At the end of this lesson, students are expected to:

(i) Define multiple intelligence

(ii) Mention various types of multiple intelligence

(iii) Itemize the importance of multiple intelligence

**Instructional materials**: chalkboard, radio, television, pictures, real objects

**Activity1:** 

Researcher introduces the topic by asking the students a leading question, such as:

What is intelligence?

Researcher defines multiple intelligence according to Gardner (2004), as an approach to

teaching, that focuses on his belief that the learners' intelligence is not a single structure like

intelligent quotient but a conglomerate of different types of "intelligences" such as

verbal/linguistics, logical/mathematical, visual/spatial, bodily/kinesthetic, naturalistic, musical,

interpersonal and intrapersonal intelligences.

# **Activity2:**

He (researcher) continues mentioning types of multiple intelligence with a brief explanation, thus:

**Verbal/Linguistic intelligence** refers to an individual's ability to understand and manipulate words and languages. Everyone is thought to possess this intelligence at some level. This includes reading, writing, speaking, and other forms of verbal and written communication. Instructional materials are: books, tape recorders, computers, books on tape.

**Logical/mathematical intelligence** includes the ability to use inductive and deductive reasoning, solve abstract problems, and understand the complex relationships of interrelated concepts, ideas, and things. Instructional materials are: calculators, maths manipulatives, science equipments, maths games.

Visual/Spatial intelligence refers to the ability to form and manipulate a mental model. Individuals with strength in this area depend on visual thinking and are very imaginative. People with this kind of intelligence tend to learn most readily from visual presentations such as movies, pictures, videos, and demonstrations using models and props. They like to draw, paint, or sculpt their ideas and often express their feelings and moods through art. Instructional materials are: graphs, maps, video, art materials, cameras, picture library.

**Bodily/Kinesthetic intelligence** refers to people who process information through the sensations they feel in their bodies. These people like to move around, touch the people they are talking to and act things out. They are good at small and large muscle skills; they enjoy all types of sports and physical activities. They often express themselves through dance. Instructional materials are: building tools, sports equipments, manipulatives, tactile learning resources.

**Naturalistic intelligence** This is the intelligence of students who learn best through nature. For these students, most learning needs to take place in outdoor settings. These students enjoy doing nature projects, such as bird watching, butterfly or insect collecting, tree study, or raising animals. Instructional materials are: plants, animals, gardening tools.

**Musical intelligence** refers to the ability to understand, create, and interpret musical pitches, timbre, rhythm, and tones and the capability to compose music. As students develop their musical awareness, they develop the fundamentals of this intelligence. Instructional materials are: tape recorder, music collection, musical instruments.

**Interpersonal intelligence** This is the ability to quickly grasp and evaluate the moods, intentions, motivations, and feelings of other people. This can include sensitivity to facial expressions, voice and gestures; the capacity for discriminating among many different kinds of interpersonal cues; and the ability to respond effectively to those cues in some pragmatic way. Instructional materials are: board games, part supplies, props for role plays.

**Intrapersonal intelligence** This intelligence includes having an accurate picture of oneself (one's strengths and limitations); awareness of inner moods, intentions, motivations, temperament, and desires; and the capacity for self-discipline, self-understanding, and self-esteem (Armstrong, 2000). An individual of this type of intelligence thrives on time to think, to reflect, and to complete self-assessments. Instructional materials are : self-checking materials, journals, materials for projects.

Researcher calls the students one after the other to tell the whole class the easiest ways for them to read and assimilate what they are reading in order to identify their uniqueness potentialities. He asks them the question to explain verbal and interpersonal intelligence.

# **Activity3:**

Researcher explains the benefits of Multiple Intelligence in the classroom thus:

- (a) As a teacher and learner, it is to realize that there are many ways to be "smart"
- (b) All forms of intelligence are equally celebrated.
- (c) By having students create work that is displayed to parents and other members of the community, the school could see more parent and community involvement.
- (d) A sense of increased self-worth may be seen as students build on their strengths and work towards becoming an expert in certain areas
- (e) Students may develop strong problem solving skills that they can use real life situations
- (f) More opportunities for developing children's strengths and achieving mastery
- (g) More time for connecting the content areas
- (h) More provision for improving assessment

**Assignment:** researcher gives an assignment to students to do at home thus:

Mention any four types of multiple intelligence and explain one of them

#### **Section 4**

**Topic: Living with modern communications** 

# **Objectives**:

At the end of this lesson, students are expected to:

- (a) Extract the main idea of a text through pictures and title reading.
- (b) Read a text to get specific answers to identify types of modern communications and names of countries..
- (c) Read contextual and pictorial clues to guess meaning of words.

**Instructional materials:** textbook--- chalkboard – pictures – mobile – carton-made boat – colouring pencils

**Warming up:** Researcher starts the lesson with a riddle. "I speak but I cannot hear. I am colourful. I am made of plastic and glass." *Answer: TV*.

#### **Activity1:**

Books closed. Researcher informs students about the title of the text as he writes it on the board. students are requested to guess what the main idea is. Then students open their books and look at the pictures, and in groups, relating them to the title in order to guess what the main idea is. After that and on the board, researcher writes down the main ideas suggested by students.

Possible Answers: importance of modern communications, the best use of modern communications...etc. Or, researcher may write the main idea of each paragraph separately. Then silently, students read the text to choose the most appropriate main idea from the suggested list. Next, they read the text quickly to check their answers.

#### **Activity 2:**

Students, quickly, read the text to identify the types of modern communications mentioned in it. Then, students either choose to draw or act out these types. *Answer: TV, internet, phones, mobile and Satellite.* 

After that, students are requested to talk about the mobile model they like best.

# Different answers are acceptable

**Activity 3:** 

Researcher asks students to read paragraph 1, individually, to draw it, reflecting its

content using the colouring pencils. Then he collects sample pictures and hangs them on the

board so as each student talks about his/her picture. Then, students vote for the best they like.

Different answers are possible

**Activity 4:** 

Students are requested to read paragraph 3, individually, then they close their eyes to

visualize similar situations that took place at their homes. Then, they talk about this situation.

Researcher gives key words, such as cartoons, sports, newscaster, consumers so that students

use them to write two sentences about this situation.

Different answers are possible

**Assignment:** Researcher asks the students to write on the problems of bad television and to

suggest solutions to the problems as their homework.

**Section 5** 

**Topic: Government** 

**Objectives:** 

At the end of the lesson, students are expected to:

Read a text about government to extract the main idea of the text. (a)

(b) Read a text about government to name the head of government of a country.

(c) Read a text about government to mention the different departments of government.

(d) Read a text about government to highlight the specific functions of each department.

**Instructional materials:** textbook, chalkboard, calendars, pictures, cardboard, newspapers

Warming up: The researcher starts the lesson with a leading question to arouse the interest of

students on the topic, such as:

Who is the governor of Oyo State?

**Answer**: Governor Isiaq Abiola Ajimobi

**Activity 1:** 

Books closed. Researcher informs students about the title of the text and writes the word

'government', as shown in the diagram on the board. Then, he asks: What do you expect to find

in the text?

Books open. Students are asked to read the text quickly and silently to check their answers to the previous task. Before they say out their answers, they discuss them with each other.

# **Activity 2:**

Students are requested to read paragraph 3 silently to name the ministries inside the paragraph. Then they speak about the functions of the ministries from the text.

# **Activity 3:**

Individually, students read paragraph 4 to identify various kinds of taxes collected by the government

# **Activity 4:**

Researcher divides the class into groups of 5. Each group reads paragraph 2 in order to mention some of the ministries of government.

# **Activity 5:**

Students work together to answer the following questions.

- (a) Who usually decides who is to be the minister of foreign affairs of a country?
- (b) Name two forms of tax.
- (c) Which ministry is probably the more important ----- The ministry of education or the ministry of finance? Why? Give reasons

**Answer :** (i) ministry of finance (ii) it responsible for collecting the government revenue and preparation of budget.

**Assignment:** researcher gives a take home work such as:

Highlight the functions of president of a country.

#### Section 6

**Topic:** Law and order

#### **Objectives:**

At the end of the lesson, students are expected to:

- Explain law and order
- Mention the agency that promulgate the law of the land
- Name the agency that maintain effective law and order
- Mention the arm of government that execute the law

**Instructional materials:** textbook, chalkboard, calendars, pictures, cardboard

**Warming up:** Researcher asks the students this question to catch the interest of students on the topic.

**Answer:** A law is the system of rules which a particular country or community recognizes as regulating the actions of the members and which it may enforce by the imposition of penalties

# **Activity 1:**

Books closed. Researcher informs students about the title of the text and writes the word 'law and order', as shown in the diagram on the board. Then, he asks: What do you expect to find in the text?

Books open. Students look at the diagram to guess what the text will be about. Researcher informs students that they are going to talk about 'law and order'.

# **Activity 2:**

Individually, students read the passage to answer the following questions:

- (i) Which agency is responsible for maintenance of law and order in the society?
- (ii) Who is a judge?

Then researcher divides the class into two groups. The first reads paragraphs 1& 2 and the second reads paragraphs 3&4 in order to read the passage in front of the class by nominating a student who will represent their group to read the passage

#### **Activity 3:**

Students quickly read the text to identify the major characters in the passage. such as: police, judge, thief, Mr Akpan, client, counsel

#### **Activity 4:**

Students are requested to read paragraphs 2 individually, then they close their eyes to visualize what happened to Mr Akpan's office. Then, they talk about this situation. Researcher gives key words such as: *police ,judge, handcuffed ,magistrate's court,* so that students will use them to write two sentences on them.

#### Activity 5:

Researcher asks the students to answer the question of the passage and marks their exercise books.

**Assignment :** Researcher gives an assignment to students to answer from home, thus: Write a short notes on 'My house'.

Section: 7

**Topic:** The meaning of money

**Objectives:** 

At the end of the lesson, students are expected to:

(a) Read a text about money to extract the main idea.

(b) Read a text about money to identify types of metals and dates mentioned in the text.

(c) Give the meaning of words using contextual clues.

(d) Read a text about money to put sentences in a logical order reflecting understanding of the text.

**Instructional materials :** textbook-- chalkboard – pictures – dramatization – money – playing cards.

Warming up: Researcher with a good students' role- a sketch of a salesperson and a customer.

Researcher: May I have a bottle of coke, please?

Student: Yes. Here you are.

Researcher. Thanks. Here is hundred naira

Student. Thanks sir. Here is the change. Different students do the same.

**Activity 1:** 

Books open. Researcher writes the title on the board. Students read the title loudly and look at the pictures provided in their books to compare and extract the main idea. Researcher may give guiding questions such as: which picture is modern and which is an ancient one? What are the people in the pictures doing?

Answer: Importance of money.

Students look at the first picture and read out the word 'bartering' written on the picture.

Researcher: 'what does it mean?' Before Students answer, researcher gets a good student to act out a short sketch (role play), using the yam and 'garri,' in which the teacher is a customer and the student is a salesperson. The researcher wants to buy 'garri' but he does not have money; rather, he has two tuber of yams. So he offers the salesperson the yams in order to get 'garri'. Researcher elicits from the students what this is, when such a thing happened, and whether this thing happens nowadays.

Answer: bartering, but a possible answer is exchanging goods for goods

Then, several pairs of students do the same or manipulate the situation.

#### **Activity 2:**

In the beginning, researcher directs students' attentions to the first type of money used in the ancient days. Researcher elicits answers such as (silver, gold, copper, cowries etc)

Individually, students read paragraphs 1, 2 and 3 to list the types of metals mentioned in them. *Answer: cowries, gold, silver and copper*.

#### **Activity 3:**

Researcher gets the playing cards and writes money values on them and start acting out with a student as if he is buying some goods with these cards. Researcher explains why he used these cards. After this sketch, students read to find out the paragraph that has been acted out. Students are given the chance to act out.

#### **Activity 5:**

Individually, students put the sentences in the correct order. Researcher directs students where to find their answer. Researcher makes groups of five students so as each student reads a sentence.

**Assignment :** Researcher asks students to write importance of money from home.

#### **Section 8**

**Topic**: Review of previous sessions, activities and discussion and administration of post-test instruments.

#### **Objectives:**

- i. To review salient points discussed during the sessions.
- ii To administer post-test instruments.
- iii To thank the participants for their cooperation during the programme.

#### **Administration of post-test instruments**

The post-test instruments were administered to the participants.

#### **Closing Remarks**

The participants were thanked for their cooperation in attending the sessions regularly and punctually. They were urged to continue to utilize the skills and knowledge they have acquired during the training sessions.

**Control Group** 

Session 1

**Topic:** Administration of pre-test instruments to the participants.

Step 1:

The researcher interacted with the members of the group. The researcher also explained

to the participants that the programme was majorly for research purpose only and their

unflinching support and cooperation is highly essential. The pre-test instrument was administered

on the participants.

**Step 2 :** Closing remarks

• The researcher commended the participants for their time and efforts.

• The participants were reminded of the time and venue of the next session.

**Session 2-7:** Talks on importance of sanitation exercise.

Session 8

**Topic:** Administration of post-test instrument

**Objective:** 

Step 1:

The post-test instrument was administered after which the researcher had given some

counselling talks on importance of sanitation exercise.

**Step 2:** Closing remarks

The researcher commended the participants for their time and efforts.

#### APPENDIX I

# Department of Counselling and Human Development Studies Faculty of Ibadan, University of Ibadan

The questionnaire is set out to determine the rate of reading habit and among the students. Therefore, your sincere and accurate responses are required in order to achieve the stated objectives of this study. Every piece of information given here is regarded as highly confidential, so do not hesitate to report to each item as it truly applies to you. Also, the record will be useful to all people in the helping professions in their effort to give youths the necessary support required for the improvement of reading habit.

Thank you for your cooperation.

	SECTION A	
School	Class	
Name	Sex	
Nationality	State	
Local Government		

#### Cognitive Style Scale (CSS)

This questionnaire is designed to assess the way you prefer or enjoy to learn best as a students and it will be solely used for the purpose of research. You are therefore implored to be sincere and respond objectively.

Thank you for your cooperation.

Please tick ( $\sqrt{}$ ) the option that most applies to you. **SA** means Strongly Agree, **A** means Agrees, **D** means Disagree and **SD** represents Strongly Disagree.

S/N	Items	SA	A	D	SD
1.	I try to feel or see a problem before I attempt a solution.				
2.	I analyse a situation to determine whether or not the facts add up.				
3.	I create pictures, diagrams or visual images in my mind while problem solving.				
4.	I usually break a problem down into parts before I attempt to solve it.				
5.	I solve a problem by first focusing on the difficult aspects.				
6.	I solve a problem by first considering all the angles or scopes to it.				
7.	I attack a problem in step-by-step, sequential, and orderly fashion.				
8.	I attack a problem by examining it in its entirety before I look at its parts.				
9.	The most effective way to deal with a problem is logically and rationally.				
10.	The most effective way to deal with a problem is to follow one's mind.				
11.	I carefully solve a problem by ordering, combining, or building its parts in order				
	to generate a solution to the whole problem.				
12.	I carefully consider a problem by examining it in its entirety, in relationship to				
	its parts, before I proceed to solve it.				
13.	All problems have pre-determined, "best or right" answer in a given set of				
	circumstances.				
14.	All problems are open-ended by nature, allowing for many possible answers or				
	solution.				<u> </u>
15.	Before solving a problem, I look for a plan or method to solve it.	_			

# Department of Counselling and Human Development Studies Faculty of Ibadan, University of Ibadan

The questionnaire is set out to determine the rate of reading habit and among the students. Therefore, your sincere and accurate responses are required in order to achieve the stated objectives of this study. Every piece of information given here is regarded as highly confidential, so do not hesitate to report to each item as it truly applies to you. Also, the record will be useful to all people in the helping professions in their effort to give youths the necessary support required for the improvement of reading habit.

Thank you for your cooperation.

#### **SECTION B**

School	Class
Name	Sex
Nationality	
Local Government	

# **Reading Habit Scale**

Listed below are statements about reading. Please follow along carefully as I read each statement. Then circle the letters that show how much you agree or disagree with the statement. Use the following:

SA = Strongly Agree

A = Agree

D = Disagree

SD = Strongly Disagree

S/N	Items	SA	A	D	SD
1.	I am getting better at reading.				
2.	I can tell that my teacher likes to listen to my reading.				
3.	I read faster than other students.				
4.	I can recall what I read.				
5.	When I read, I don't have to try as hard as I used to.				
6.	I seem to know more words and other students when I read.				
7.	I understand what I read as well as other students do.				
8.	I can confidently read to pass any examination.				
9.	I feel calm when I read.				

10. I usually confused when I read.  11. When I read, I recognize more words than I used to.  12. I easily forget what I read.  13. I can't concentrate when I read.  14. People in my family like to listen to me read.  15. When I read, I need less help than I used to.  16. I easily lose interest when I read.  17. I can tell that my teacher likes to listen to me read.  18. My classmates like to listen to me read.  19. I feel good inside when I read.  20. My classmates think that I read pretty well.  21. I think reading is a difficult task.  22. When I read, I need less help than I used to.  23. Reading makes me feel happy inside.  24. I 'm absent mindedness when I read for any examination.  25. I read better than other students in my class.  26. I think reading is relaxing.  27. I read better now that I could before.  28. My teacher thinks I am a good reader.  29. Reading is easier for me than it used to be.  30. When I read, I can figure out words better than other students.						
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	4					

# Department of Counselling and Human Development Studies Faculty of Ibadan, University of Ibadan

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Thank you for your cooperation.

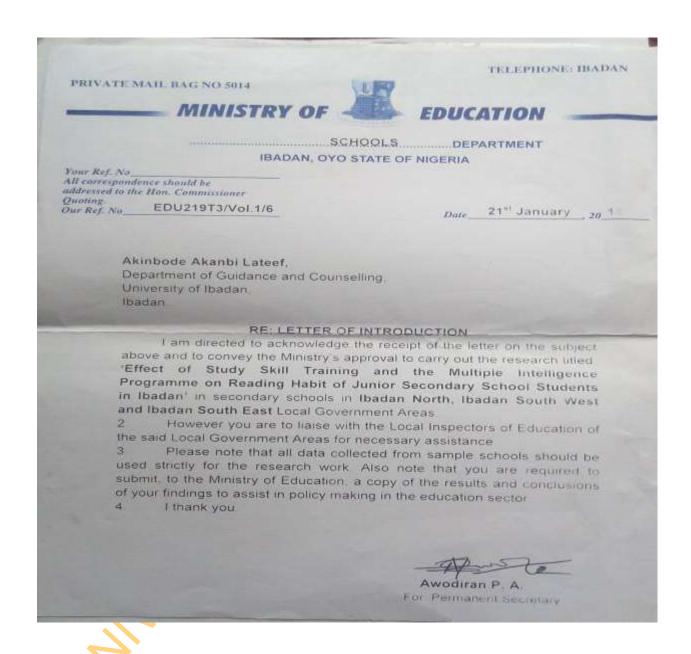
# **SECTION C**

School	Class
Name	Sex
Nationality	State
Local Government	

## Academic Self-Efficacy Scale

S/N	Items	SA	A	D	SD
1.	I have the ability to do well in my school work.				
2.	I put forth my best effort in all of my classes.				
3.	I know how to study for each of my classes.				
4.	I am a good student.				
5.	I expect to gain a great deal from my school experience.				
6.	I am as capable of succeeding as most students.				
7.	I have the skills I need to do well in school.				
8.	I am doing a good job in my classes.				
9.	I expect that school will be rewarding to me.				
10.	I am confident I will do well If I take tests.				
11.	I am confident that I will succeed in school.				
12.	I expect that I will graduate from school.				
13.	I am confident that I will reach my academic goals.				
14.	I am the type of person who likes to go to school.				
15.	School is a good experience for me.				

#### APPENDIX II



# OBA AKINBIYI HIGH SCHOOL II (SNR)

U. L.P. O. BOX 19590, MOKOLA, IBADAN,

Motto: "STRIVE FOR THE BEST"



Tel: 02-8102933

The Head of Department, Counselling and Human Development Studies, University of Ibadan. Ibadan.

Dear Sir.

#### TO WHOM IT MAY CONCERN

This is to inform you that Akinbode Akanbi Lateef (Mr) a PhD student from Department of Counselling and Human Development Studies, studying Educational Psychology with Matric No. 112466 has successfully completed his field work research programme with us.

Yours faithfully,

Mrs. F. O. Adeyemo Principal



# ADIFASE HIGH SCHOOL APATA

G.P.O. BOX 4863, IBADAN.

Our Ref.

Your Ref:

Dote 11th March 2016.

The Head of Department, Counselling and Human Development Studies, University of Ibadan. Ibadan.

Dear Sir,

#### TO WHOM IT MAY CONCERN

This is to inform you that Akinbode Akanbi Lateef (Mr) a PhD student from Department of Counselling and Human Development Studies, studying Educational Psychology with Matric No. 112466 has successfully completed his field work research with us.

Yours faithfully,

Lasgur A

Mrs. H. M. Olawoyin

Principal

# **IBADAN CITY ACADEMY**

JUNIOR SCHOOL TO

(FOUNDED 20 )

Telegrams: "ACADEMY, IBADAN".

Our Ref:

P.M.B. 5013, IBADAN.

Your Ref:

Date: 9-3-2016

The Head of Department, Counselling and Human Development Studies, University of Ibadan. Ibadan.

Dear Sir,

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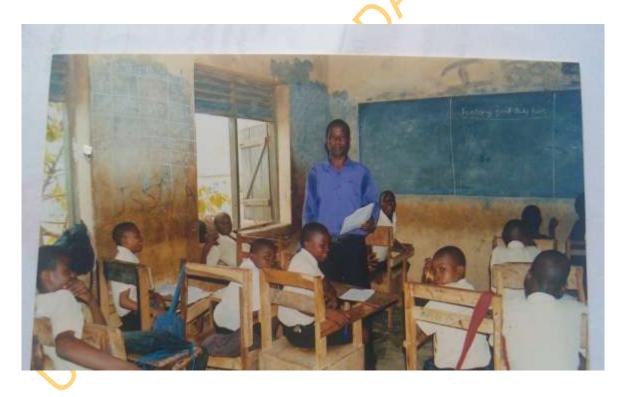
Yours faithfully,

- clani

Mr. O. A. Salami
Principal



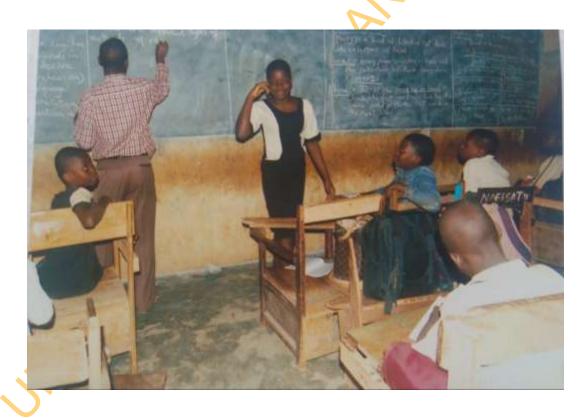
The participants filing the pre-test questionnaires assisted the researcher by two trained research assistants



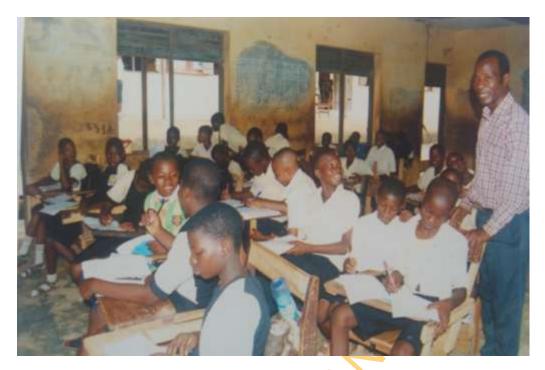
The researcher explaining the importance of multiple intelligence to the participants



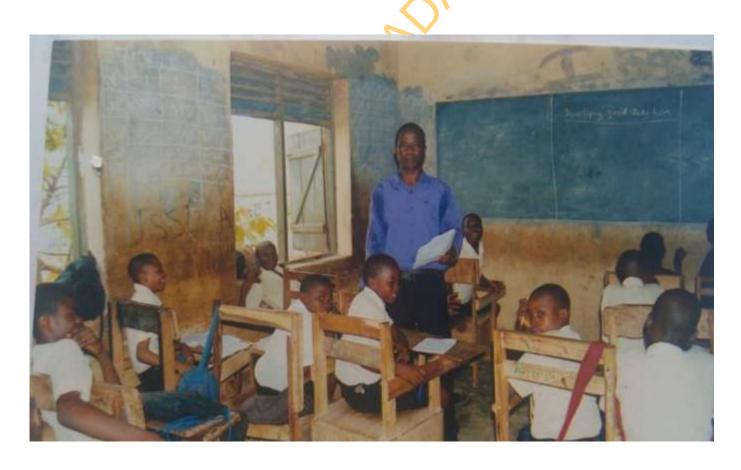
The researcher giving talks on environmental sanitation



The researcher writing notes on the chalkboard for the participants to copy inside their notebooks



The participants doing the class work during the training session



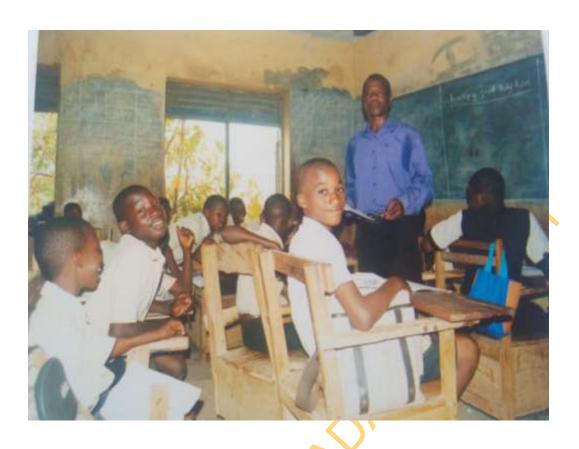
Researcher explaining some points to the participants on methods of reading



A female participant reading during a training session



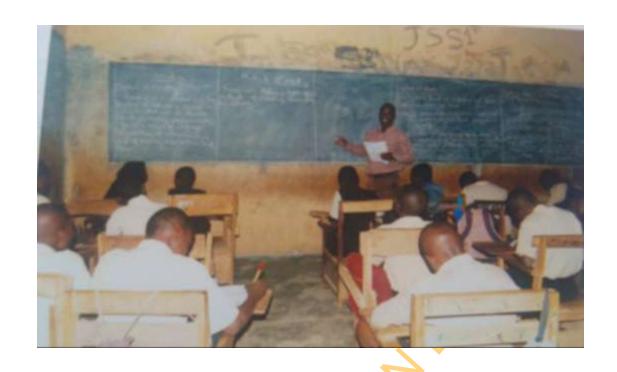
A male participant reading during a training session



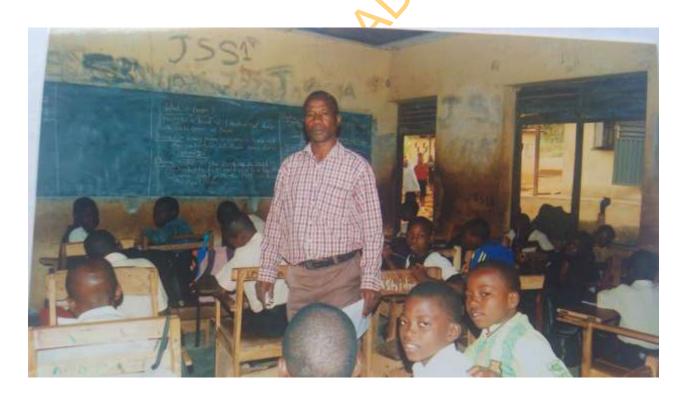
Researcher explaining some points on reading habits to the participants



A female participant answering questions during the training session.



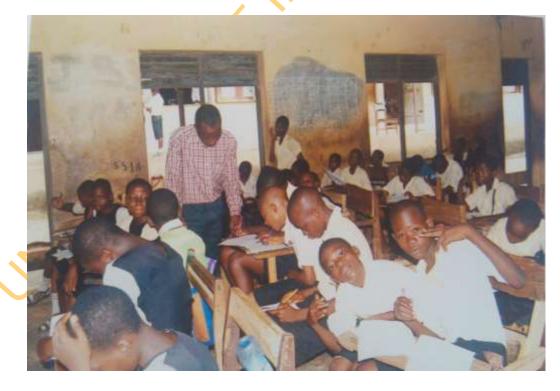
The researcher highlights some points on importance of study skills



The participants doing the corrections of their homework assignments



Participants filling the post-test questionnaires on multiple intelligence during the multiple intelligence intervention training



Participants filling the post-test questionnaires during the study skill training session