

**CREATIVE THINKING, ACADEMIC SELF-ESTEEM AND SELF-
REGULATION AS CORRELATES OF ACADEMIC PERFORMANCE
AMONG SENIOR SECONDARY SCHOOL STUDENTS IN RINGIM
EDUCATIONAL ZONE JIGAWA STATE, NIGERIA**

BY

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DEDICATION

This research work is dedicated to my lovely grandmother in person of Umma Muhammad Abdullahi (Babaumma mai-gumama) and my mother Amina Umar for their indefatigable effort and contributions to the success of my education and also dedicated to all Muslims.

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ABSTRACT

This study examined creative thinking, academic self-esteem and self-regulation as Correlates of Academic Performance among Senior Secondary School Students in Ringim Educational Zone, Jigawa State. Using Ex-post facto design. Six objectives and six null hypotheses were formulated and tested. Using 346 sample subjects randomly selected from a population of 2917 students, and purposively selected 346 students in eight senior secondary schools across Ringim education zone, Jigawa State. Three instruments were adopted and used in this research :Students creative thinking inventory, (SCTI) Students Rosenberg academic self-esteem inventory (SASI) and self-regulation inventory (SSRI) all were adapted and used for the study. The reliability coefficient index of SCTI was 0.89, SRSEI was 0.85 and SSRI was 0.81 respectively. While Average scores of Students' end of term examination was used as students' academic performance (SAP). PPMC and T-Test were used for data analysis with the aid of SPSS 22 version. Finding revealed that significant positive relationship was found between creative and academic performance, significant relationship was found between student academic self-esteem and students' academic performance, there is significant relationship between self-regulation and students' academic performance, and there is no significance gender difference in student's creative thinking, in academic self-esteem and in self-regulation. The following were some of the recommendation; Government should organize workshop that will enlighten the teachers on significant of creative thinking, academic self-esteem and self-regulation on students' performance, and government should provide adequate funding to enhance education of the students especially those with special skills, Funding is the key to the development of any program. And also some of the conclusion are as follows; That there is significant positive correlation between student's creative thinking and academic performance of senior secondary schools students in Ringim Education zone, that there is significant is positive correlation between students' academic self-esteem' academic performance of senior secondary schools students in Ringim Educational zone.

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OPERATIONAL DEFINITION OF TERMS

For the purpose of this research, the following terms are defined as follows:-

- a. Creative thinking: refer Class two of senior secondary student's ability to initiate new ideas
- b. Academic Self- esteem: refers to how Class two of senior secondary students view and think about themselves
- c. Self- regulation: Refer to ability of theClass two of senior secondary students to control their thoughts and emotions in a classroom situation.
- d. Academic performance: refers to average scores of the of 2rd term examination results of Class two of senior secondary student in Ringim educational zone.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Education is a fundamental basis of economic, social, cultural and political development of a country, Its' role in improving the living condition of individual and communities is clearly for everyone, the society One of the essential tasks of education in every country is the transmission of the cultural heritage of community, to develop the talent of students and to prepare them for active participation in the community.

Teaching is a demanding job that requires in depth knowledge of the subject content, age, specific pedagogy and many varied skills such as patience, leadership and creativity, etc. Preparing students to be able to think critically is a goal of many professionals in higher education and also a quality sought by employers of university graduates.

Discussing with many teachers and personal experience through observation shows that students success depend on confidence and self-evaluation because that is why most our secondary school students fail in the examinations

Most our quailed teachers in our community have mastered their subject matter very well and they have new different method of teaching but unfortunately, most of the students lack of creativity, low self-esteem and lack self-regulation which eventually downgrade and affect the student's academic performance. However, not all teachers have thorough knowledge about Creative thinking, self-esteem and self-regulation and few are not conversant with the correlation of these three variables on academic performance.

The education system is founded on the basis of teaching students how to think critically (Richard, 1993). This foundation has fueled the curriculum for decades, and the students

are coming out of the system with the knowledge of how to form and analyze ideas critically. However, the students of this generation are not being taught how to creatively think in the schools, which is resulting in a fall of creative communication in the workplace (Gregory Dawes, 2002). Creative thinking contributes to the invention of new ideas, perspectives, concepts, principles, and products in our society. If creativity is to be exemplified later in life by adults, it must be fostered in children first. There are many different forms of creativity, such as creative thinking, creative writing, and creative arts (Richard, 1993). All of these need to be taught and encouraged in children for appropriate communication and expression of these ideas later on in life.

Anwar (2000), viewed Creative thinking is a way of generating ideas that can in some way be applied to the world. This often involves problem solving utilizing particular aspects of intelligence, for example linguistic, mathematical and interpersonal.

Creative thinking involves creating something new or original. It involves the skills of flexibility, originality, fluency, imagery, associative thinking, attribute listing, metaphorical thinking and forced relationships. The aim of creative thinking is to stimulate curiosity and promote divergence. Most importantly in today's information age, thinking skills are viewed as crucial for educated persons to cope with a rapidly changing world. Many educators believe that specific knowledge will not be as important to tomorrow's workers and citizens as the ability to learn and make sense of new information." Creative thinking is a novel way of seeing and doing things that is characterized by four components: (a) Fluency (generating ideas), (b) Flexibility (shifting perspectives easily), (c) Originality (consisting of something new), and (d) Elaboration (building on existing ideas). There have been numerous interesting studies made on Creativity including the impact that individual artistic techniques have on the

development of creativity. Different studies that searched for a correlation between intelligence and creativity indicated that all combinations were possible between intelligence and creativity

Creativity has many implications for success in daily life, academic performance plays an important role in human being progress. Underlying neuron-cognitive mechanisms of creative thinking are the subject of intense research efforts in behavioral and cognitive neuroscience. Many questions call for an answer: How does the brain generate creative ideas or solutions? Is there only one creative process or are there many? How we can measure creativity and what is the reliable test to measure it? Let us begin by asking what we mean by creativity and how creativity might be defined.

Creativity is arguably one of the faculties that have given the human species adaptive ability beyond any other organism. Many articles have been written about creativity, yet there is no consensus on its definition.

Creativity is an essential factor in thinking and learning which cuts across all disciplines. There is a general conviction that creativity should be supported and developed educational settings .However there remains little understanding of effective applications of creative teaching in classroom teachers. This may be due to the complex nature of creativity, and the lack of a consistent definition of “what creativity is” or “what it means” in teaching or educational research has also demonstrated that the most successful and creative people in any discipline often have avocations or artistic pursuits, which enhance their thinking within their professional discipline

(Jarvel& jarvenoja, 2011 self-esteem is how we value our selves; it is how we perceive our value to the world and how valuable we think we are to others. Self-regulation is essential to the learning. It can help students create better learning habits and strengthen

their study skills, because having self-regulation enable students to arrange school their activities

It has also been suggested that talented or innovative thinkers in a variety of disciplines employ similar kinds of creative thinking skills (Freedman, 2003). These broad minded creative skills are known as “trans-disciplinary” thinking skills. They are used by both artists and scientists, and tend to fall into a few specific cognitive categories. This qualitative study is an investigation of these issues among highly accomplished teachers. Specifically, in-depth interviews were conducted with individuals who have either received, or been a national finalist for the National Teacher of the Year award. These teachers have been noted as successful in the classroom, and the purpose of this study was to examine how these teachers define creativity, and how they function creatively in the classroom. This research also considers how artistic interests and avocations inspire creative ideas, and the ways that this connects to creative thinking skills (trans-disciplinary thinking skills). Findings of this study noted that while creativity has some generalizable elements, these are instantiated and evaluated according to context. In terms of how this creativity plays out in successful teaching practice, key themes included real-world teaching and learning, cross-curricular connections, and taking intellectual risks.

Self-regulation is a skill that individuals employ to change their thoughts, feelings, desires, and daily activities to attain higher goals. In fact, self-regulation includes strategies, which individuals use to regulate and control their cognition. Pintrich (2000), says self-regulation is an active and constructive process that learners verify, regulate, and motivate to control their cognition and behavior.

Students who are self-regulated have certain features distinguishing them from students who are not. These features include using cognitive strategies, controlling and trying to

arrange time, programming and controlling mind processes to reach personal goals, creating appropriate learning environments, and putting in adequate effort to control and regulate academic assignments and the class environment (Montalvo & Torres, 2004).

1.2 Statement of the Problem

This study investigated the relationship between creative thinking, academic self-esteem and self-regulation on academic performance among senior secondary school students in Ringim educational zone jigawa state. Academic performance has always been the interest of researchers and educators for a long time. Academic performance is the outcome of both teaching and learning experiences. The relationships between creative thinking, self-esteem, self-regulation and academic performance have been studied but, the relationships among these variables have not yielded consistent results. Therefore, inability of students to brainstorm and use of imagination thinking can affect their academic performance academically, students nowadays are confronting with academic challenges which need to be creative, self-confidence and self-control. Lacking any one of these variables can lead to the low academic performance of the students especially during examinations.

Lacking creative thinking ,academic self-esteem made students to became dependent as such waiting other students to make decision for them especially during examination and also to have poor cordial relationship between their teachers and colleague which negatively affect their academic goals, most our students does not apply self-regulated learning strategies for the accomplishment of their academic goals such as planning, self-motivation, attention control, flexible for using the strategies, self-monitoring and help-seeking, most our students are lacking self-regulation because they did not focus their attention on what is the most important but rather they focus their attention on what is less importance. Lack of creative thinking ,low academic self-esteem and lack of self-regulation has been shown to be correlated a number of negative outcomes such as

depression, failure and tend to be exaggerated events as being negative, low level interpersonal confidence, unmotivated, poor self-image, poor communication and underachieving.

1.3 Objectives of the Study

This study is design to achieve the following objectives:-

1. To determine the relationship between creative thinking and academic performance among senior secondary school students in Jigawa State.
2. To determine the relationship between academic self-esteem and academic performance among senior secondary school students in Jigawa State.
3. To determine the relationship between self-regulation and academic performance among senior secondary school students in Jigawa State.
4. To determine gender difference in creative thinking among senior secondary school students in Jigawa State.
5. To determine gender difference in self-esteem among senior secondary school students in Jigawa state.
6. To determine gender differences in self-regulation among senior secondary school students in Jigawa state.

1.4 Research Questions

The following questions will serve as guide towards achieving the stated objectives of the research:-

1. Is there any relationship between creative thinking and academic performance among senior secondary school students in Jigawa State?
2. Is there any relationship between academic self-esteem and academic performance among senior secondary school students in Jigawa State?

3. Is there determine the relationship between self-regulation and academic performance among senior secondary school students in Jigawa State?
4. Is there any gender difference in creative thinking among senior secondary school students in Jigawa State?
5. Is there any gender difference in self-esteem among senior secondary school students in Jigawa state?
6. Is there any gender difference in self-regulation among senior secondary school students in Jigawa state?

1.5 Research Hypotheses

The following hypotheses were postulated for testing in the study:-

1. There is no significant relationship between creative thinking and academic performance among senior secondary school students in Jigawa State.
2. There is no significant relationship between academic self-esteem and academic performance among senior secondary school students in Jigawa State.
3. There is no significant relationship between self-regulation and academic performance among senior secondary school students in Jigawa State.
4. There is no significant gender difference in creative thinking among senior secondary school students in Jigawa State.
5. There is no significant gender difference in self-esteem among senior secondary school students in Jigawa state.
6. There is no significant gender difference in self-regulation among senior secondary school students in Jigawa state.

1.6 Significance of the Study

The significance of the study has in the fact that attempt to find out the relationship between creative thinking, academic self- esteem and self-regulation on academic performance among senior secondary school students in Jigawa State Fundamentally, educations no doubt remain the most outstanding development priority area in the State. The core rational of education is undoubtedly human development and whatever Society hopes to archive canters around a meaningful educational system. More so. The findings of the study stand to benefit teachers, educational administrators, policy makers, students, Psychologist, and counselor in the following ways:-

The research will benefit the teachers to improve great deal in the teaching in order promote good performance from students.

The research will benefit educational administrators in developing a better understanding of the differences in academic achievement and social development among senior secondary school students.

The research will benefit the policy makers particularly the curriculum planners, and inspector's through helping the curriculum developers to know how to design topics in a way that will enable them to correct and enhance the performance of the students.

The research will also benefit the students to demonstrate increased levels of personal, academic and career achievement, accurately know oneself, feel valuable, and behave responsible as a person of worthy of dignity. Moreover the research will establish and maintain a variety of effective, strong and healthy relationship and work well with others in the society at large.

The research will also help the counselors in the management of those with low self-esteem and those with lack of self-regulation in order to improve their academic goals.

Conclusively the research will also be useful to the psychologist where difference in academic performance may found between genders and school location. This may lead to accurate understanding of the gap and further find out the possible remedies to fill the possible differential vacuum between the sexes and school location in academic performance.

1.7 Scope and Delimitation of the Study

The scope of this study covers relationship between creativethinking, academic self-esteem and self-regulation as correlate as correlate of academic performance among senior secondary school students of Ringim educational zone. Therefore, creative thinking, self-esteem and self-regulation are independent variables while academic performance is dependent variable.

This study intended to cover all senior secondary school students in Ringim Educational zone Jigawa, but due to certain factors the research is limited to only SSII students in Ringim educational zone. Junior secondary schools and higher institution students are delimited from the study.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

This chapter is concerned with the review of related literature, conceptual framework theoretical framework, reviews of empirical studies as well as summary and uniqueness of the study.

2.2 Conceptual Frame Work

2.2.1 Concept of Creative Thinking

Santrak (2004), believes Creativity an ability to think about things in new ways to achieve unusual and unique solutions in problems .Fazeli, (2008), assumes that four elements of creativity as a fluid structure, flexibility, originality and skills to incorporate. He has a fluid definition, the total number of ideas and related, and interpreting meaningful responses. High grade of fluid, representing total number of ideas associated with a particular stimulus. While flexible are directed with the number of different classes, different responses. A person who obtains a high grade of flexibility in dealing a problem, due to the different angles and offers a variety of classes .The originality is always statistically abnormal responses to stress responses are rare, representing exploration, constructive and original thinking, People that obtains in originality, it always obtains a high score stem from the creation of solutions and offering ways are not only fits successfully created, but the solution, the less people come to mind.

Creativity has many implications for success in daily life, academic performance, and Plays an important role in human being progress underlying neuron-cognitive mechanisms of Creative thinking is the subject of intense research efforts in behavioral and cognitive neuroscience. Many questions call for an answer: How does the brain generate creative ideas or solutions? Is there only one creative process or are there many? .How we can

measure creativity and what is the reliable test to measure it. Let us begin by asking what we mean by creativity and how creativity might be defined. Creativity is arguably one of the faculties that have given the human species adaptive ability beyond any other organism. Creative thinking is an elusive concept, yet it constitutes an important facet of daily life. Whilst procedures and resources are the foundations of successful task or project completion, outcomes can be enhanced by lateral or creative thinking that extends the nature of the project and leads to improved performance

However, modern creativity research is commonly said to begin with Joy Paul Guilford in 1950, when he pointed out the very important nature of creativity as a research topic, and in 1967, when he distinguished between creative and convergent types of creative problem solving. In our daily life, we are constantly faced with problems and situations that require the generation of creative and novel ideas, either by creative or convergent thinking. Imagine if there was a situation in which one was required to come up with as many solutions as possible to address that situation; for instance when being asked “how do you spend your time productively if you have a week off?”. Or in a situation where there are few or just one correct solution to solve the problem, for example, “Your car suddenly dies on its own while you are driving. Then you try to find what the problem is and how to solve it”. In such kinds of scenarios, one needs to use creative and critical thinking modes, respectively, to solve the problems.

According to Guilford (1967), creative and convergent thinking are two types of human response to a set problem. Guilford defined creative or “synthetic thinking” as the ability to draw on ideas from across disciplines and fields of inquiry to reach a deeper understanding of the world and one's place in it. Thus, associated creative thinking with creativity, appointing it with several characteristics:

- i. **Fluency:** The ability to produce a great number of ideas or problem solutions in a short period of time
- ii. **Flexibility:** The ability to simultaneously propose a variety of approaches to a specific problem
- iii. **Originality:** The ability to produce new, original ideas
- iv. **Elaboration** the ability to systematize and organize the details of an idea in a head that carries it out

The main objectives of creative thinking process is to think beyond existing boundaries', to awake curiosity, to break away from rational, conventional ideas and formalized procedures to reply on the imagination, creative, the random and to consider multiple solution and alternatives (Candy , Schlange&Juttner ,1997). Creative thinking is a way of generating ideas that can in some way be applied to the world, this often involves problem solving utilizing particular aspects of intelligence, for examples, linguistic, mathematical and interpersonal (Anwar, 2000).

Creative thinking ability is highly regarded as a valued trait in contemporary societies (Lewis, 2008). For most people, it is among the most coveted of psychological qualities (Sternberg &Lubart, 1999). It is considered to be so important, that there is undeniable conviction in education that it should be nurtured both inside and outside of classroom contexts (Williams, 2002).

Baker & Rudd (2001) proposed a modern of the creative thinking process for the purpose of serving as a cognitive map for the faculty as they seek to promote the creative potential of students. Florida (2002). Creatively becomes the focus when preparing current students and future citizens to deal with uncertainty and adapt to continuous change both personally and professionally: widely creative thinking defined as "Creative, tries to create something new and curried on by violating accepted principal (Barker, 2001). Or in

simplest understanding specifically on university level creative thinking was about how individual able to applied imagination to solve.

Creative thinking in general can be defined as the “interaction among aptitude, process, and environment by which an individual or group produces a perceptible product that is both novel and useful as designed within a social context” (Plucker, Beghetto, & Dow, 2004,). Creativity is important to students because it allows them to engage in divergent thinking in a subjective manner. Since it is a subjective form of thinking, it is important to couple critical thinking with creative thinking to prepare students for life as they go on to become independent individuals who contribute to society (Tarhan, Bacalni, Dombayci, & Demir, 2011).

2.2.2 Concept of Academic Self- Esteem

This review of the literature demonstrated that extensive research in the area of self-esteem does exist. The topic of self-esteem is surprisingly complex. Not all psychologists are even in agreement on what academic self-esteem is, let alone where it comes from or how to improve it. Many theorists have developed their own personal definitions of self-esteem. However, all theorists concur that self-esteem affects the entire person. Although there has been a general consensus that academic performance is an important determinant of global self-esteem, there have been numerous debates about the extent to which self-esteem is related to academic performance. It has been suggested that a reciprocal relationship exists between academic accomplishments and self-esteem. Some researchers reported that academic success fosters high self-esteem and in turn, high self-esteem facilitates academic success.

Academic self-esteem of an individual has been affected by a multitude of factors. Repeated negative evaluation makes children to be dumb, stupid, slow, fat and so on.

Severe or repeated criticism damages the self-worth and self-confidence. Criticism disguised in a joke or Negative humor, errors or failures can lower confidence and ultimately self-esteem. But none is more significant than the family. The greater the involvement of parents with their child, the higher will be the levels of self-esteem of child. Self Esteem has been found to be significantly associated with a number of important aspects of human behavior like general adjustment, anxiety, acceptance of other people and child rearing practices. This has implications for both parents and teachers.

Academic self-esteem and school performance have been found to primarily be related through the effect of school performance on self-esteem, rather than the other way around. Higher marks tend to have positive effects on an individual's self-image, but a good self-image is not necessarily associated with better school performance, according to WestlingAllodi (2010). It is however reasonable to expect self-esteem to influence marks as well. Crocker, Karpinski, Quinn and Chase (2003) found, when they based self-esteem on academic competence, that poor performance lead to worse self-esteem. Similar conclusions were made in the review by WestlingAllodi (2010). Low marks have moreover been found by Crocker et al. to have a greater effect on self-esteem compared to high marks. Blom (2011) found, although among adults, that contingent self-esteem that is built on performance and which compensates for an impoverished self-worth predicted burn-out syndrome, which in turn helped explain stress-related vulnerability and ill health. This is possible to link to the self-consistency/verification theory, which maintains that self-esteem needs to gain self-confirmatory feedback to strengthen self-worth; self-esteem is put forward as a potentially important mechanism between school performance and health. Academic self-esteem is operationally defined as the evaluative appraisal of the experience of being capable of meeting academic challenges and being

worthy of happiness. Academic self-esteem or academic self-concept can be broadly considered to be how a student views his or her academic ability when compared with other students (Schmidt and Padilla, 2003).

The relationship between self-esteem and academic achievement has been well documented in literature. Different studies have reached the conclusion that academic achievement and self-esteem are positively correlated (Devi and Prasanti 2002, Schmidt and Padilla, 2003). For example West, Fish and Steven (2001) cited a correlation ranging from 0.18 - 0.50 between general self-esteem and academic achievement. Another study conducted by Lockett and Harrell (2003) found self-esteem to be significant of reading awareness. Puckey (2001) found that self-esteem is related to some component of success, either academic or verbal, he contentious that there is interaction between self-esteem and academic achievement.

Researchers also suggest a reciprocal process whereby academic accomplishment foster self-esteem, in turn facilitates academic achievement (Purkey 2001) .Numerous studies exists that support the relationship high self-esteem and academic achievement in school aged children, but the question still exist whether academic achievement has significance to university students as it does for younger students. If it does, then individuals would be expected to evaluate themselves and others on the basis of academic achievement and an association between academic achievement and self-esteem would also be expected. A history of success in an educational setting was found by Rosenberg (1965) to be one of four major social antecedent of self-esteem.

Iroegbu (2013) reported that students who scored low on measure of self-concept saw themselves as less competent and also learn to read with a greater difficulty than other students. Irwin (1999) summarized his research findings by stating that positive self-concept is not only more important than studying but that is the central fact when

considering optimal academic performance. Brookover, Thomas, and Patherson (2000) demonstrated that a positive significant correlation between self-esteem and academic achievement existed, even when intelligence scores were controlled. A successful student sees himself in essentially positive ways. Also Multon, Brown, and Lent 2007 found out that self-concept beliefs are related to academic performance and account for approximately 14% of the variance in student academic performance.

Nonetheless, a positive self-esteem has been viewed as a desirable attribute for students, and therefore, studies investigating self-esteem measures often not the important influence is teacher dispositions (Helm 2007) and school climate (Scott 1999) in the development of a positive sense of self. In particular, studies in urban schools have revealed the significance of teacher support for middle school students' academic self-concept (Garcia-Reid, Reid and Peterson 2005). Likewise other research revealed that the most significant influence of students' attitude towards school is their peers and teachers (Booth and Gerard 2011). Moreover, the direct influence that self-esteem has on academic performance remains unclear, with further longitudinal research needed to assist with understanding the relationship.

Shobhna and Rekha (2009); studied the self-esteem and academic achievement of urban and rural adolescents, and examine the gender differences in self-esteem and academic achievement. The sample of study consist of 400 adolescents (200 urban and 200 rural) from Varanasi district. The male and female were equally distributed among the rural and urban sample. Self-esteem was measured by Rosenberg self-esteem questionnaire (Rosenberg 1965), and academic achievement by academic school records. The finding indicated that there were no significant differences with regard to academic achievement of rural and urban adolescents. Urban adolescents scored higher in academic achievement compared to rural adolescents. Male would score significant higher on self-esteem as

compared to girls. Significant gender differences were found in academic achievement. Girls were significantly higher on academic achievement as compared to boys.

Muhammad, Imran, & Khalid (2015); conducted a research to assess the self-esteem and academic performance among University students. A total number of 80 students (40 male, 40 female) students were selected through purposive sampling from G. C University Faisalabad. Rosenberg self-esteem scale (RS S) and academic performance rating scale was used to measure their self-esteem and academic performance P P M C and t - test were used for statistical significance of data. It was found that there was a significant relationship ($r = 0.89$, $p < .01$) between self-esteem and academic performance. Moreover, a significant difference was found between male and female students on self-esteem and academic performance scores, which indicate that female students have high score on academic performance as compared to male students and male students have high score on self-esteem as compared to female students.

Muhammad, (2010); highlight the relationship between self-esteem and academic achievement in the pre-university students. And the aim of investigation is to identify whether there are differences in academic achievement between boys and girls. The objectives of the study were achieved by using the Coppersmith questionnaire and the students' grade in their current and previous semesters. The random sampling was used for collecting the data and as a consequence 50 male and 50 female were chosen randomly. The questionnaires were distributed among 100 students in Qaemshahr schools. The result demonstrated that there was significant ($p < 0.01$) positive relationship between self-esteem and academic achievement. Moreover, there was significant relationship in academic achievement between boys and girls. However, no significant difference was found in self-esteem between males and females. The result suggests that

high self-esteem is important factor and strengthen the prediction of academic achievement of students.

2.2.3 Similarities between Self-Concept and Self-Esteem

Self-concept and academic self-esteem also have a lot in common though, mostly that they are reflective processes. They can be influenced not only by observing one's own self and behavior objectively, but also by observing the reactions that other people have to you and your behavior, or imagining what other people might think of you, or what you would think of yourself if you saw yourself from outside. In addition, self-concept and self-esteem can be developed through comparing oneself to those around you, and that is a big reason that self-esteem is raised or lowered. When you see that you are better at something than somebody else, then you will probably have higher self-esteem because you see and understand your own value.

2.2.4 Students Academic performance and academic self-esteem

Habibollah Naderi, Rohani Abdullah, Tengku Aizan, Jamaluddin Sharir & Kumar (2009) stated that in the relationship between self-esteem and academic achievement, high self-esteem was found to facilitate academic achievement. This research also showed a positive correlation between how people value themselves and the level of their academic attainments. This study assumed self-esteem as a possibility reason for high academic achievement where good academic grades enhance one's sense of worthiness and competence.

Baumeister, Campbell, Krueger & Vohs (2003) stated that the modest correlations between self-esteem and school performance do not specify that high self-esteem leads to good performance. Baumeister et al. (2003) stated that high self-esteem is partly the result of good school performance. According to Luhtanen & Cooper & O'Leary, adequate self-

esteem has been related to the capacity to cope with academic tasks by employing effective study methods and actively participating in the learning process, both of which are involved in achieving set goals (as cited in Pepi, Faria&Alesi, 2006).

2.2.5 Importance of Academic Self-esteem

Self-esteem construct is recognized today to be a major factor in learning outcomes (Lawrence, 2000). A recent research has consistently shown a positive correlation between how people value themselves and the level of their academic attainments (HabibollahNaderi, Rohani Abdullah, H. TengkuAizan, JamaluddinSharir&Kumar, 2009). Therefore, it has been seen that those who feel confident, generally achieve more, while those who lack confidence in themselves achieve less. Furthermore, self-esteem is seen to be a factor in job success, school achievement, interpersonal compatibility and general happiness. Hence, self-esteem construct has been recognized today as the major factor in learning outcomes. For the focus of this study, we will only emphasize on some of these factors on adolescence self-esteem which are parents, socioeconomic status.

2.2.6 Parents' Influence on Academic Self-esteem

Another major influence on a child's self-esteem is the overall sense of support the child feels from the important people around, particularly parents and peers (Tam & Fatimah Yusoooff, 2009). In fact, from a research done by Mandura and Murray (2000), they found that parental functioning has been shown to have a positive effect on self-esteem. Therefore, it would seem that individuals who perceived the presence of supportive family are more likely to feel a greater sense of self-esteem. Besides, parental support can come from either the father or mother, however if this child come from a singleparent family they might lack parental support from either one. As seen in Yongmin (2001).

2.2.7 Influence of socioeconomic status on academic self-esteem

Socioeconomic status has influence on self-esteem. Ersoy, Ozcan & Agargun (2008), found that the level of education and income were in positive correlation to self-esteem. In the study by Ho (2003), the SES composed of four variables which are occupation and education of mother and father. Therefore, parents of higher SES are also seen to more likely provide “expensive resources” such as encyclopedias, a computer, a car, overseas travel, and music classes (Ho, 2003). Upper-class parents also have a tendency to provide independent study rooms or desks for their children. They are also more likely to possess reading materials such as dictionaries, reference works, and fiction. Parents of higher socioeconomic status also tend to keep contact with the teachers, be volunteers in school activities, donate resources, and participate in a variety of school activities (Ho, 2003)

Academic self-esteem is the summary judgment of everything a person can assess about himself or herself such as who one is, what one does, what one has, the different levels in how one appears and to whom or what one is attached to, this self-esteem would affect the development of a person. Therefore, self-esteem in a person plays an important role in improving a person’s competency and proficiency which eventually can develop the person to his or her full human potential. Besides, self-esteem construct has been recognized today as the major factor in learning outcomes. This would be one of the factors which would determine a person’s success. For this study, the focus will be on students’ academic performance, family status, gender and parents’ education which would lead to the development of self-esteem.

Neff and Vonk (2008) examined self-compassion and self-esteem as they related to aspects of psychological functioning. They found that self-compassion mean treating people with respect and humanity, and it held a stronger negative association with social comparison and public self-consciousness. (Neff and Vonk, 2008). Results from their

study suggested that self-compassion may be a useful alternative to global self-esteem (Neff and Vonk, 2008) educator's parents.

The importance of self-esteem cannot be overlooked due to its' positive and negative influence on various outcomes such as academic performance (Arshad, 2015; Aryana, 2010) and the capabilities of meeting challenges in life (Reasoner, 2005; Joshi & Srivastava, 2009). Hence, it is a fundamental priority and concern for students, parents, teachers, and the society (Bahrami & Bhrami, 2015). Studies have found that low self-esteem is associated with apathy for high academic aspirations, resulting in poor academic performance (Arshad et al. 2015) whilst high self-esteem is an important attribute in academic pursuit (Booth & Gerard, 2011; Ferreira et al., 2016). The self enhancement model suggests that self-concept is a predictor of academic achievement (Liu, 2009). In that, self-esteem contributes to the academic performance of adolescent students and this enables them to achieve academic laurels (Wallace & Baumeister, 2002; Nworgu & Nworgu, 2013).

2.2.8 Concept of Self-Regulation

Self-regulated learning is a process that assists students in managing their thoughts, behaviors, and emotions in order to successfully navigate their learning experience. This process occurs when a student's purposeful actions and processes are directed towards the acquisition of information or skills. Self-regulation is the ability to develop, implement, and flexible maintain planned behavior in order to achieve one's goals.

Self-regulated learners' proactive qualities and self-motivating abilities help to distinguish them from their peers. Research shows that self-regulated students are more engaged in their learning. These learners commonly seat themselves toward the front of the classroom (Labuhn, Zimmerman, & Hasselhorn, 2010), voluntarily offer answers to

questions (Elstad&Turmo, 2010), and seek out additional resources when needed to master content (Clarebout, Horz, &Schnotz, 2010). Most importantly, self-regulated learners also manipulate their learning environments to meet their needs (Kolovelonis, Goudas, &Dermizaki, 2011). For example, researchers have found that self-regulated learners are more likely to seek out advice (Clarebout et al., 2010) and information (De Bruin, A.B., Thiede, K.W., & Camp, G. (2001) and pursue positive learning climates (Labuhn et al., 2010), than their peers who display less self-regulation in the classroom. Due to their resourcefulness and engagement, it is not then surprising that findings from recent studies suggest that self-regulated learners also perform better on academic tests and measures of student performance and achievement (Schunk& Zimmerman, 2007; Zimmerman, 2008). In a study of high school students, Labuhn et al. (2010) found that learners who were taught SRL skills through monitoring and imitation were more likely to elicit higher levels of academic self-efficacy (i.e., confidence) and perform higher on measures of academic achievement compared to students who did not receive SRL instruction. It seems as though SRL can make the difference between academic success and failure for many students (Graham & Harris, 2000; Kistner, Rakoczy, & Otto, 2010).

2.2.9 Self-Regulated Learning Strategies for Students

To promote SRL in classrooms, teachers must teach students the self-regulated processes that facilitate learning. These processes often include: goal setting (Winne&Hadwin, 1998; Wolters, 1998), planning (Zimmerman, 2004; Zimmerman &Risemberg, 1997), self-motivation (Corno, 1993; Wolters, 2003; Zimmerman, 2004), attention control (Harnishferger, 1995; Kuhl, 1985; Winne, 1995), flexible use of learning strategies (van de Broek, Lorch, Linderholm, & Gustafson, 2001; Winne, 1995), self-monitoring (Butler

&Winne, 1995; Carver &Scheier, 1990), appropriate help-seeking (Butler, 1998; Ryan, Pintrich, &Midgley, 2001), and self-evaluation (Schraw&Moshman, 1995).

Goal Setting

Goals can be thought of as the standards that regulate an individual's actions (Schunk, 2001). In the classroom, goals may be as simple as earning a good grade on an exam, or as detailed as gaining a broad understanding of a topic. Short-term attainable goals often are used to reach long-term aspirations. For example, if a student sets a long-term goal to do well on an exam, then he or she also may set attainable goals such as studying for a set amount of time and using specific study strategies to help ensure success on the exam. Research also suggests that encouraging students to set short-term goals for their learning can be an effective way to help students track their progress (Zimmerman, 2004).

Planning

Similar to goal setting, planning can help students self-regulate their learning prior to engaging in learning tasks. In fact, research indicates that planning and goal setting are complementary processes, as planning can help learners establish well thought out goals and strategies to be successful (Schunk, 2001). Planning occurs in three stages: setting a goal for a learning task, establishing strategies for achieving the goal, and determining how much time and resources will be needed to achieve the goal (Schunk, 2001). Teaching students to approach academic tasks with a plan is a viable method for promoting self-regulation and learning (Pressley &Woloshyn, 1995; Scheid, 1993).

Self-Motivation

Self-motivation occurs when a learner independently uses one or more strategies to keep themselves on-track toward a learning goal. It is important to the process of self-regulation because it requires learners to assume control over their learning (Corno, 1993). Furthermore, self-motivation occurs in the absence of external rewards or

incentives and can therefore be a strong indicator that a learner is becoming more autonomous (Zimmerman, 2004). By establishing their own learning goals and finding motivation from within to make progress toward those goals, students are more likely to persist through difficult learning tasks and often find the learning process more gratifying (Wolters, 2003).

Attention Control

In order to self-regulate, learners must be able to control their attention (Winne, 1995). Attention control is a cognitive process that requires significant self-monitoring (Harnishferger, 1995). Often this process entails clearing the mind of distracting thoughts, as well as seeking suitable environments that are conducive to learning (e.g., quiet areas without substantial noise) (Winne, 1995). Research indicates that students' academic outcomes increase with focused time spent on-task (Kuhl, 1985). Thus, teaching students to attend to learning tasks should be a priority. Teachers can help their students control their attention by removing stimuli that may cause distractions, and providing students with frequent breaks to help them build up their attention spans.

Flexible Use of Strategies

Successful learners are able to implement multiple learning strategies across tasks and adjust those strategies as needed to facilitate their progress towards their desired goals (Paris & Paris, 2001). However, it is important to note that most students, especially those in the primary grades, typically do not have a large repertoire of learning strategies at their disposal (van den Broek, P., Lorch, R., Linderholm, T., & Gustafson, M. (2001).). It takes time for students to learn and become comfortable with different learning strategies. By modeling how to use new strategies and providing appropriate amounts of scaffolding as students practice, teachers can help learners become independent strategy users.

Self-Monitoring

To become strategic learners, students must assume ownership for their learning and achievement outcomes (Kistner, S., Rakoczy, K., & Otto, B. (2010).). Self-regulated learners take on this responsibility by monitoring their progress towards learning goals. The process of self-monitoring encompasses all of the aforementioned strategies. In order for a learner to self-monitor their progress, they must set their own learning goals, plan ahead, independently motivate themselves to meet their goals, focus their attention on the task at hand, and use learning strategies to facilitate their understanding of material (Zimmerman, 2004). Teachers can encourage self-monitoring by having students keep a record of the number of times they worked on particular learning tasks, the strategies they used, and the amount of time they spent working. This practice allows students to visualize their progress and make changes as needed.

Help-Seeking

Contrary to popular belief, self-regulated learners do not try to accomplish every task on their own, but rather frequently seek help from others when necessary (Butler, 1998). What sets self-regulated learners apart from their peers is that these students not only seek

advice from others, but they do so with the goal of making themselves more autonomous (Ryan, A. M., Pintrich, P. R., & Midgley, C. (2001).). Teachers can promote positive help seeking behaviors by providing students with on-going progress feedback that they can easily understand and allowing students opportunities to resubmit assignments after making appropriate changes.

2.2.10 Characteristics of Self-regulated learners

- i. Use strategies
- ii. Monitor and evaluate their progress,
- iii. Complete tasks on time, and
- iv. Report high levels of motivation. (Kitsantas, 2002

2.2.11 Three phases Self-regulation

Forethought: This involves the beliefs students hold and the preparatory events that takes place before learning;

Performance or volitional control: This occurs during the academic task enabling the student to stick with it and succeed.

Self-reflection which occurs after the event (Zimmerman & Campillo, 2003).

2.2.12 Concept of Academic Performance

Performance is defined as the observable or measurable behavior of a person, an animal in a particular situation usually experimental situation (Simpson and Weiner, 1989). This means that performance measures the aspect of behavior that can be observed as a specific period. To determine performance, a performance test is conducted. Singer (1999) define performance test as the type of mental test in which the subject is asked to do

something rather than to say something. Performance test is the type of test which throws light on the ability to deal with things rather than symbols (Drever, 1981).

In relation to educational research, academic performance of a student can be regarded as a measurable behavior of students in a particular situation. For example, the academic performance of a student in social studies includes observable and measurable behavior of a student at any point in time during a course. In social studies student's academic performance consists of his scores at any particular time obtained from a teacher-made test. Therefore, we can equate academic performance with the observed behavior or expectation of achieving a specific statement of or statement of educational intention in a research. Academic performance of students consists of score obtained from teacher made test, first term examination, mid semester test and so on.

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2.3 Theoretical Frame Work

2.3.1 Creative Thinking Theory

Sternberg (2006), maintains that there are five commonalities in the research of creativity around the world. First, creativity “involves thinking that aims at producing ideas or products that are relatively novel and that are, in some respect, compelling” (Sternberg 2006). Second, creativity has some domain-specific and domain-general elements. That is to say, it needs some specific knowledge, but there are certain elements of creativity that cut across different domains. Third, creativity is Measureable, at least to some extent. Fourth, it can be developed and promoted. And fifth, “creativity is not highly rewarded in practice.

2.3.2 Academic Self-Esteem Theory

Many early theories suggested that self-esteem is a basic human need or motivation. American psychologist Abraham Maslow in his hierarchy of human needs describe the need for self-esteem, which is divided in to two aspects, the esteem for respect from others and the need for self-respect or inner self-esteem. Respect from others entails recognition, acceptance, success and admiration, and was believed to be more fragile and easily lost than the inner self-esteem. Self-respect on the other hand evolves from self-love, self-confidence skill or aptitude etc. According to Maslow (1987), the fulfillment of the self-esteem need, individual will be driven to seek it unless it is achieved the individual would be able to grow and obtain self-actualization.

According to Alfred (1968), an Australian physician, psychologist and founder of the individual's psychology, the idea of self-esteem is that everyone has an intrinsic "value" that they feel they are worth and as human beings we constantly strive to improve or increase that value. Is related to ego and those with low self-esteem are said to be suffering from some form of inferiority complex.

However, based on this the way students think about themselves may be closely related to their interaction with their environment (school) and their ability to learn and to achieve academically. Some students for instance have problem with their studies not necessarily of low intelligence or poor motivation but because they have learned to consider themselves as unable or inadequate. How students perform in school also depends not only on how capable they are but also how capable they feel are. (Salawu1991). All what we can drive from the theories is that students should value themselves in all circumstances and that would enable them to achieve all their set goals.

2.3.3Self-regulation Theory

Albert Bandura developed the Social Cognitive Theory of self-regulation based on the concept that learning is affected by cognitive, behavioral, and environmental factors (Bandura, 1991). In contrast to the traditional psychological theories that emphasized learning through direct experience, Bandura posited that virtually all learning phenomena can occur by observing other people's behavior and consequence of it (Bandura, 1986). Bandura posited that the process of observational learning was governed by four key aspects: attention, retention, reproduction, and motivation. Attention is a process in which people selectively observe and extract information from the ongoing modeled activities (Wood & Bandura, 1989). Retention involves a process of "transforming and restructuring information in the form of rules and conceptions" (p. 362) and store the information into memory.

Reproduction is the act of performing the actual behavior that was observed. The fourth aspect concerns motivation which propels the learner to attention, practice and retention.

Self-regulation refers to self-generated thoughts, feelings, and actions that are planned and cyclically adapted to the attainment of personal goals (Boekaerts, 2005). According to Bandura, self-regulation operates through a set of psychological Sub functions: self-monitoring sub function, judgmental sub function, and self-reactive influences (Bandura, 1991).

2.4 Review of Empirical Studies

Sharif (2014), Conducted a study on relationship between creative thinking on students' academic performance among secondary school students. One thousand five hundred were used as a population, simple random sampling was used to get the samples, Ex-post facto design was used, three hundred was used as a samples, the instrument used to collect a data was Torrance creative inventory the results indicated that there strongest relationship existed between creative thinking and students and students' academic performance.

Abdullahi and Kumar (2010) conducted a research title relationship between creativity and academic performance: A study of Gender differences the study used descriptive statistic. The sample of this study were one hundred and fifty three Iranian undergraduate students in Malaysian universities (31.4% female and 68.6% male) were serves as respondents in this study. Cumulative grade point average (CGPA) was used to select the participants. Creativity was measured using the Khatena – Torrance creativity perception inventory (2005), the result of this research indicated that there is no existed gender differences regarding specific aspect of creativity, in relation to academic performance.

Anwar, Naseer& Muhammad (2012) conducted a research on relationship of creative thinking with the Academic performance of secondary school students in Zamfara state. The

study was survey design method. The target populations for the study are 800 while the sample of this study were 256 which were randomly selected from secondary school students in Gujranwala city in Pakistan. The instrument used for data collection was Torrance tests of creative thinking developed by Torrance (1966), and it has been re-named four times 1974, 1984, 1990, and 1998. The researcher used Pearson correlation and ANOVA to verify the hypothesis. The findings show that the relationship between the different aspects of creative thinking and academic achievement. The results indicate that the strongest relationship exists between fluency and academic productivity ($r=0.063$, $P<0.01$) and there was also a significant correlation between the flexibility and academic productivity ($r=0.43$, $P<0.01$). Significant relationship was also found between originality and academic productivity ($r=0.49$, $P<0.01$) furthermore, there was less among remaining aspects but significant relationship also found between collaboration and academic achievement ($r=0.26$, $P<0.05$) therefore, every aspect of creative is predicting a relationship with academic productivity. Hence the first null hypothesis is rejected.

Chanhuan (2011), titled self-esteem among University Tunku Abdul-Rahman Psychology students in Malaysia. This study was conducted on 100 undergraduate Bachelor of Social Science Psychology students from Faculty of Arts and Social Science, this study is a quantitative research design where the aim of this research is to determine the relationships between self-esteem and the independent variables in this study which are academic performance, gender, family structure and parents' educational background. This research is conducted through the survey research from descriptive methods. To be more precise, cross-sectional design is used, which means one or more of the samples of the population were selected and information collected from the samples at one time. Convenience sampling method was used to select the participants and the main instrument is the questionnaire which is the Rosenberg Self Esteem Scale. The participants used were 100 undergraduate students

from Faculty of Arts and Social Science (FAS) in University Tunku Abdul Rahman; which were specifically from Bachelor of Social Science Psychology course. The students' ages ranged from 20 to 26. The 100 undergraduate students were divided equally between male and female which were 50 males and 50 females. They were selected using convenience sampling method which was based on their availability to participate. The research was conducted within University Tunku Abdul Rahman's compound. The Questionnaires were distributed and collected in the lecture hall to students. We assessed the student's level of self-esteem by using a 10 items scale developed by Rosenberg. The Rosenberg Self Esteem Scale is made up of 10 items that refer to self-respect and self-acceptance rated on a 4-point Likert-type scale. The Rosenberg Self Esteem Scale has a one-dimensional structure we reverse scored the five items that were negative in nature so that higher scores would indicate higher level of self-esteem. The self-esteem score calculated from the Rosenberg Self Esteem Scale where scores ranging from 0 to 30 where 0 is the lowest self-esteem and 30 is the highest self-esteem. The questionnaires were distributed in a lecture class of Bachelor of Social Science Psychology students. The class was given 100 set of questionnaires whereby 50 males and 50 females randomly selected to answer the questionnaires. Once they had completed the questionnaires, it was collected back by the researcher. The data's were analyzed using the Pearson correlation and T-test between. This study indicate that there any significant correlation between student's academic performance and their self-esteem. Through this research question, we can see how the changes in one variable affect the other. Therefore, Pearson correlation is applied.

Joshi (2009), Conducted a research title self-esteem and academic performance of adolescents a case study of Anambra state. The study was conducted on 200 urban adolescents while one hundred and thirty two were serves as sample. Rosenberg scale 1965 was used to collect a data Half of the items are positively worded and half of those were

negatively worded. The positive and negative items were presented in random order to reduce the effect of respondent set. The items were scored on a four point scale from strongly agree to strongly disagree. All items were only related to the self-acceptance aspect of self-esteem and not with any others. Rosenberg (1965). High score on the scale indicates high self-esteem, coefficient of test retest reliability was found to be 0.80. Validity was checked by correlating the test with Beck Depression Inventory and it was found to be 0.45.

From the above results we can conclude that no significant differences were found with regard to self-esteem of urban and rural adolescents; significant differences were found in academic performance between urban and rural adolescents such as urban adolescents significantly higher on academic performance than rural adolescents; significant differences were found with regard to self-esteem between male and female. Male adolescents scored significantly higher on self-esteem than female adolescents; and significant differences existed in academic performance between male and females. Females were found better than males.

In another study conducted by Harris. (2009), title the relationship between self-esteem and academic success among African and American students in the minority engineering program at a research extensive university in the southern portion of the United States. This study was designed as an exploratory co relational study. Two indicators of academic success were used as dependent variables: Cumulative Grade Point Average and Engineering Major Grade Point Average. The independent variable self-esteem was measured by Coppersmith Self-Esteem Inventory. The nature of the study required the use of descriptive, comparative, and co relational research methods.

The target population of this study was defined as African American students enrolled in a Minority Engineering Program at a research extensive university in the Southern portion of

the United States. The accessible population was the African American students at one selected research extensive university in the Southern portion of the United States. A census was conducted with all 260 students. The Coppersmith Self Esteem Inventory was developed by Stanley Coppersmith in 1967 to measure general self-esteem study was collected from the University's official records in the College of Engineering. The College of Engineering maintains a Minority Engineering Program database containing information on the following variables: engineering major, gender, race, cumulative Grade Point Average, engineering major Grade Point Average, enrollment status, year of classification, and age. Participation of subjects was on a voluntary basis. All African American students in a Minority Engineering Program received an email requesting their participation in the research study and a link to the online survey. This study was indicating that there is significant relationship exists between self-esteem and the academic success of African American students in the Minority Engineering Program at a research-extensive university in the Southern portion of the United States. A total of 121 subjects were surveyed at the conclusion of the spring 2009 semester

Findings and analysis of the Coppersmith Self Esteem Inventory

Farhan and Khan (2015) conducted a study on impact of stress, self-esteem and Gender factor on students' Academic performance in some selected private school in Pakistan. The study used cluster random sampling technique. Rosenberg self-esteem scale (1965) was used the target population for the study was 1500 while there were 300 students which were randomly selected from three private universities in Pakistan the internal consistency and reliability of the scale, suggested by Rosenberg (1965) ranged from 0.85 to 0.88 for the majority of samples. On the basis of samples used by Shin (1992) for evaluating responses of Korean respondents, the alpha coefficient for this scale ranges from 0.71 to 0.73 on the other hand, as reported by Supple, Plunkett, Peterson and Bush (2012) the alpha coefficient of the scale was found to be 0.88. These studies yielded standardized alpha coefficient 0.78 for the

Korean version and 0.88 for the English version. However, on the whole the alpha coefficient score for this scale was 0.87 for this global self-esteem scale. This study used these two instruments to ascertain the research objectives. Since the aim of the study was to explore the extent to which stress and self-esteem are influential for university student in Pakistan result reflecting upon the correlation between self-esteem scores and stress of student were analyzed in context of gender orientation and academic achievement. Apart from that, it also holistically highlights the relationship between self-esteem and stressful life events experienced by the students' community in the country. The results affirmed that no significant relationship between stress, self-esteem and academic achievement exists.

Moreover, genders of the students also show insignificant relationship with stress, self-esteem of the students. This study is conducted to assure that student will be benefit in achieving their academic goals. This is significant to draw attention towards the issues related to stress can be resolved by other cognitive factors like self-esteem which help in upgrading academic achievements of students

In another a research conducted by Hataman (2016), on relationship between self-esteem and academic performance in male and female, among university students in Ibadan ,the study used inferential and descriptive to analyze the data SPSS was employed, the statistical population consisted of all males and females students. The target population was 250 students studying science and mathematics. While sample are 80 students (40 males and 40 females) entered the study. Simple random sampling method was employed. They were collected using copper-smith self-esteem inventory (CSEI) which was a revision of Rogers scale (1945) in 1996. The questionnaire consists of 5 topics including educational assignment, social relationship, family, self, and future. This scale has 58 items.

This study, indicate that there is a significant and direct relationship is found between self-esteem and academic progress. Verdi (2004) showed that self-esteem is associated with some of the psychological phenomena. Higher self-esteem is associated with motivation to progress.

In the same vein Akin(2010), conducted a study title impact of self-regulation skills on students learning academic at the university of Ibadan /Nigeria .planning implication for effective study .the study utilized a descriptive ex post facto research design .the target population for the study consisted of all undergraduate distance learners. The target population for the study consisted of all undergraduate distance learners at the distance learning center of the university of Ibadan Nigeria .this was approximately. Purposive sampling technique was used to select the Distance Learning Center of the University of Ibadan, Nigeria, one of Nigerian Universities approved by the National Universities Commission to operate a distance learning program. One thousand and five hundred were the population (1500) participants were while 306 were serves as a sample, however selected through simple random sampling technique during year 2009 contact session. This was 20.41% of the total population.

The findings revealed that students' self-regulation skills and their learning are positively and significantly correlated. Reason for this finding may be due to the fact that most the subjective in this study are employed and self-sponsored and thus focused program success.

It also Walter (2012),conducted a research title The Impact of Gender on the Development of Self-Regulation Learning Strategies in Undergraduate Engineering Classrooms in the university of Yola. The researcher used One hundred seventy-six undergraduate engineering students and four engineering instructors from four United

States universities participated in study. Data was collected over a two year period. The instructors and students of the universities participating in the study came from a small, private, specialty engineering school with the number of male and female students being close to equal. Motivated Strategies for Learning Questionnaire proposed by (MSLQ, Pintrich, Smith, Garcia, & McKeachie, 1991) was used. Pearson product moment correlation and t-tests for independent sample was used to analyze data. The results indicates high self-regulation, coefficient of test retest reliability was found to be 0.70. Validity was checked by correlating the test with Beck Depression Inventory and it was found to be 0.45.

2.5 Summary and Uniqueness of the Study

Literature reviewed researches related to creative thinking, self-esteem and self-regulation and academic performance as concepts. For creative thinking, literature reviewed the concept of creative thinking, approaches to creative thinking, and characteristics of creative thinking. For Self-esteem, Literature reviewed concept academic self-esteem, brief history of self-esteem, Parents' influence on self-esteem, Influence of Socioeconomic status on self-esteem, Key Difference between Self-Concept and Self-Esteem, Similarities between Self-Concept and Self-Esteem, Students Academic performance and academic self-esteem, Causes of Low Self-esteem, some outward sign of positive self-esteem, some signs of low academic self-esteem, how can you raise low self-esteem. For self-regulation literature reviewed concept of self-regulation, Self-Regulated Learning Strategies for Students, Characteristics of Self-regulated learners, Three phases Self-regulation while for academic performance literature reviewed the concept of academic performance, Moreover, the theory of creative thinking by Sternberg, 2006 And theory of self-esteem by Burke & Tully (1977). Were theorized and align with the research topic.

The research study is unique in the sense that it focuses on only class two senior secondary school in Ringim Education Zone jigawa state, in addition to the uniqueness this study it focuses on creative thinking, academic self-esteem and self-regulation as correlates of academic. Performance among senior secondary school students.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter focuses on how the research was carried out. The chapter described the research design to be used, population of the study, sampling technique to be use The data collection instrument, validity and reliability of the instrument procedure for data collection as well as data analysis procedure.

3.2 Research Design

The researcher used “Ex-post facto design Gay (1996), asserted that “Ex-post facto or Causal Comparative research design attempt to explore cause and effect relationships where causes already exist and cannot be manipulated. It uses what already exist and looks backward to explain why.”

An ex-post facto research design is a design that seeks to find relationship and difference between independent variables such as creative thinking, self-esteem and self-regulation which cannot be manipulated by the researcher and dependent variable which is academic performance or event that has already occurred. The researcher goal is to determine whether the independent variables affected the outcome of dependent variable by comparing two or more groups of individuals.

The reason for selection Ex-post facto design for this study is that, as name implies after the facts already the phenomena is taken place among Students because the students already are creative, they have academic self-esteem and also they self-regulated but I am going to find out the relationship and difference that already occurred.

3.3 Population and Sample

3.3.1 Population

The population of this study constitutes SS II of some selected senior secondary school students in Ringim educational zone Jigawa state. Which consists both male and female, from different parental background, rural and urban areas However, and the study covered a population of 2917 SS II Students from eight senior secondary school in Ringim educational zone Jigawa state. (Planning and statistics Ringim educational zone, Jigawa State 2015/2016). Also the Ringim educational zone comprises four local government areas which include Babura, Garki, Ringim and Taura.

Table 3.1Summary Students' population distribution

S/N	L.G.A	Schools	Gender	population
1	Babura	GGASS	Female	161
2	Babura	GDSS	Male	153
3	Garki	GGSS	Female	711
4	Garki	GDSS	Mal	171
5	Ringim	GGDSSS	Female	1214
6	Ringim	GUSS	Male	130
7	Taura	GGSSS	Female	298
8	Taura	GDSS	Male	79
TOTAL				2917

Source: Planning and statistics Ringim educational zone, Jigawa State 2015/2016.

3.3.2 Sample size

Base on recommendationin Research advisor (2006) table for determination of sample size, the sample 346 students was therefore selected out of 2917.

Table 3.2: Summary of population and proportionate sample size

S/N	L.G.A	Schools	Gender	Population	Sample
1	Babura	GGASS	Female	161	20
2	Babura	GDSS	Male	153	18
3	Garki	GGSS	Female	711	84
4	Garki	GDSS	Male	171	20
5	Ringim	GGDSSS	Female	1214	144
6	Ringim	GUSS	Male	130	15
7	Taura	GGSSS	Female	298	35
8	Taura	GDSS	Male	79	10
TOTAL2917346					

3.3.3 Sampling technique

Cluster sampling technique is a technique in which every group in the population is evenly represented, two schools from each local government was therefore selected. Simple random sampling is applied in selection one male senior secondary and one female secondary school in each local government. The senior secondary school was used by researcher are government school, which have students from different educational background. In selecting the number of students from each school, the researcher is going to use proportionate sampling participants is determine by their number relative to the entire group. Systematic sampling was applied in selecting sample subject among students by using every kith name on the student register. Systematic is a sampling technique in which individuals are selected from the list by taken every “kth” name, depends on which “k” is. If “kth” is 4, selection involves taken every 4th name until the required number of sample subjects (students) are selected.

3.4 Data Collection Instruments

The researcher used three data collection instruments which include the following

- i. Students Creative thinking inventory (SCTI)
- ii. Students' Academic Self -esteem inventory (SASI)
- iii. Students Self -Regulation inventory (SSRI)

3.4.1 Creative thinking inventory

It's an adaptation from Kumar (1997), Creative thinking inventory (CTI). The researcher adapted 20 items from Creative thinking inventory (CTI) to form Students creative thinking inventory (SCTI). This instrument consists of two sections, section "A" respondent's information which includes name of school, number of students and gender, etc., while section "B" consists of 20 questions with a scoring scale of 5 Likert type. All the questions stimulate specific response from respondents based on five options scale provided.

3.4.2 Self-esteem inventory

It is an adaptation from Hudson (1982), self-esteem inventory (SSI). The researcher adapted 20 items from self-esteem inventory to form Students' Academic Self -esteem inventory (SASI). This instrument consists of two sections, section "A" respondent's information which includes name of school, number of students and gender, etc., while section "B" consists of 20 questions with a scoring scale of 5 Likert type. All the questions stimulate specific response from respondents based on five options scale provided.

3.4.3 Self- Regulation inventory

It's an adaptation from Kanfer (1970), Self-regulation questionnaire (SRQ). The researcher adapted 20 items from SRI to form Students' Self-regulation inventory (SSRI). This instrument consisted of two sections. Section "A" respondent's data which includes name

of the school, number of students in the class, age, gender etc., while section “B” consist of 20 items, five liker type, testing self-regulation of students’ and its scoring scale. All the questions elicit responses based on the four options scale provided.

3.4.5 Academic Performance score

Average scores for end of session examinations were used as academic performance.

Moreover, the students’ scores was transformed in to standard values through T and Z scores before taking the mean and used as measure of academic performance.

3.5 Validity of data collection instruments

3.5.1 Validity of instruments

Validity is concern with the meaningfulness of research components. That is the extent to which the research instruments measure what it is supposed to measure. The researcher was choose face validity for his instruments. Whereby the items or instruments was taken to an expert in the field of psychology and test and measurement to test the validity of the instruments.

3.6. Reliability of the Data Collection Instrument

Creative thinking, self-esteem and self-regulation inventories were used in this research, they are standard inventories and had been used in many researches, to determine their reliabilities pilot test was conducted outside the population, cronbach Alpha was used for creative thinking, and the results was: 0.89, self-esteem was 0.85 and self-regulation was 0.81 with reliability of internal consistency.

3.7 Procedure for Data Collection

The researcher solicited the permission of ministry of education science and technology jigawa state through the introductory letter from the department of education Bayero University, Kano on collecting and administration of the data collection instrument. The questionnaire was distributed, with the help of the research assistant. The students was gather

in the classroom for administration the questionnaire and collection was done immediately after they finished and researcher interpreted question which is difficult for easy clarification.

3.8 Procedure for Data analysis

The researcher analyzed the collected data using descriptive as well as inferential statistics for the entire hypothesis i.e. Pearson product moment correlation coefficient (PPMC) were used for testing the relationship (Ho 1,2 & 3) and t-test between two groups were used for testing the difference (Ho 4,5 & 6). The PPMC and t-test were utilized with the aid of statistical package of social science (SPSS) version 22.

CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

4.1 Introduction

This chapter provides details processes that are involved in summarizing and analyzing the data. The chapter elucidate the statistical procedures that was used in analyzing the data.

4.2 Summaryof Data

Table 4.1 Descriptive Statistics of Study Variables

Study Variables	<i>M</i>	<i>SD</i>
Creative thinking	51.60	16.35
Academic self-esteem	54.01	14.53
Self-regulation	53.01	15.43
Academic performance	55.88	16.46

Table 4.1 provides the descriptive statistics of the study variables. From the table, Creative thinking was having a descriptive statistics of (M= 51.60, SD= 16.35), Academic self-esteem was having a descriptive statistics of (M= 54.01, SD= 14.53), Self-regulation was having a descriptive statistics of (M= 53.01, SD= 15.43) while Students' academic performance was having a description of (M= 55.88, SD= 16.46).

4.3 Data Analysis

Test of Hypotheses

The null hypotheses were tested using an independent sample t-test. The hypotheses were tested as 0.05 level of significance.

Test of Hypothesis One

There is no significant relationship between creative thinking and academic performance among senior secondary school students in Ringim educational zone Jigawa State

Table 4.5 Relationship between creative thinking and academic Performance

Study Variables	<i>r</i>	<i>p</i>	<i>n</i>	<i>Decision</i>
Creative thinking	-.567	.000	346	Rejected
Academic Performance	62.33	17.598		

To test the stated null hypothesis that there is no significant relationship between students creative thinking and students 'academic performance among senior secondary school students in Ringim educational zone State, Pearson Product Moment Correlation was conducted. From table 4.5 the correlation value of $r = -.567$ represents relationship between Creative thinking and Academic Performance while the p-value of $p = .000$ represents the significance level. Based on the obtained correlation ($r = -.567$, $p = .000$, $p < .05$), it follows that a statistically significant inverse relationship exist between students Creative thinking and students' academic performance in Ringim education zone Jigawa State.

Thus, the stated null hypothesis there is no significant relationship between creative thinking and academic performance among senior secondary school students in Jigawa State was rejected. The findings shows creative thinking is associated with student's academic performance

Test of Hypothesis Two

There is no significant relationship between academic self-esteem and academic performance among senior secondary school students in Ringim educational zone Jigawa State.

Table 4.6 Relationship between academic self-esteem and academic performance.

Study Variables	<i>r</i>	<i>p</i>	<i>n</i>	<i>Decision</i>
Academic self-esteem	.304	.000	346	Rejected
Academic Performance	62.33	17.598		

To test the stated null hypothesis that there is no significant relationship between academic self-esteem and academic performance among senior secondary school students in Jigawa State, Pearson Product Moment Correlation was equally conducted. From table 4.6 the correlation value of $r = .304$ represents Relationship between academic self-esteem and academic performance while the p-value of $p = .000$ represents the significance level. Based on the obtained correlation ($r = .304, p = .000, p < .05$), it follows that a statistically significant positive relationship exist between academic self-esteem and academic performance

Thus, the stated null hypothesis that there is no significant relationship between academic self-esteem and academic performance among senior secondary school students in Ringim educational zone Jigawa State was rejected. The findings shows that that academic self-esteem is correlated with academic performance among senior secondary school students in Ringim educational zone Jigawa State

Test of Hypothesis Three

There is no significant relationship between self-regulation and academic performance among senior secondary school students in Jigawa State

Relationship between self-regulation and academic performance

Study Variables	<i>r</i>	<i>p</i>	<i>n</i>	Decision
Self-regulation	.305	.000	346	Rejected
Academic Performance	64.33	18.598		

To test the stated null hypothesis that there is no significant relationship between self-regulation and academic performance among senior secondary school students in Jigawa State, Pearson Product Moment Correlation was equally conducted. From table 4.6 the correlation value of $r = .305$ represents Relationship between self-regulation and academic performance while the p-value of $p = .000$ represents the significance level. Based on the obtained correlation ($r = .305, p = .000, p < .05$), it follows that a statistically significant positive relationship exist Thus, the stated null hypothesis that There is no significant relationship between self-regulation and academic performance among senior secondary school students in Jigawa State was rejected. The findings shows that that self-regulation is correlated with academic performance

Test of Hypothesis four

There is no significant gender difference in creative thinking among senior secondary school students in Jigawa State

Table 4.2 Differences in creative thinking between male and female

Academic Achievement	<i>N</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p-value</i>	Decision
Male	179	69.91	11.89	9.166	344	0.916	accepted
Female	167	65.54	14.19				

An independent sample t-test was conducted to examine whether a statistically significant difference exist in the academic performance of senior secondary school students in Ringim educational zone Jigawa state on the basis of their school environment. From table 4.2, the mean academic achievement for students from each group was $M = 69.91$ for students from male creative thinking and $M = 65.54$ for female students. The result shows that the mean academic performance for male senior secondary school students ($M = 69.91$, $SD = 11.89$) has no significant different from that of female senior secondary school students with ($M = 57.54$, $SD = 14.19$). The difference is significant at ($t = 9.166$, $p = .0916$, $p > .05$).

Test of Hypothesis five

7. There is no significant gender difference in academic self-esteem among senior secondary school students in Ringim educational zone Jigawa state.

Table 4.2 Differences in Academic self-esteem between male and female

Academic Achievement	<i>N</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p-value</i>	<i>Decision</i>
Male	179	52.71	11.89	9.166	344	.0872	Accepted
Female	167	57.84	14.19				

An independent sample t-test was conducted to examine whether a statistically significant difference exist in the academic achievement of senior secondary school students in Ringim educational zone Jigawa state between male and female. From table 4.2, the mean academic performance for male students was $M = 52.71$ and for female students was $M = 57.84$

. The result shows that the mean of male academic performance ($M = 52.71$, $SD = 11.89$) has no significant different from female mean ($M = 57.84$, $SD = 14.19$). The difference significant at ($t = 9.166$, $p = 0.872$, $p > .05$). Based on the obtained result, senior

secondary school students from schools with conducive learning environment were having higher academic achievement than their counterparts from schools with unconducive learning environment in Ringim educational zone Jigawa state. Thus, the stated null hypothesis was accepted

Test of Hypothesis six

1. There is no significant gender difference in self-regulation among senior secondary school students in Jigawa state.

Table 4.3 Differences in self-regulation

Academic Achievement	<i>N</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p-value</i>	<i>Decision</i>
Male	179	64.91	13.17	3.141	344	.0642	accepted
Female	167	59.89	16.74				

An independent sample t-test was conducted to examine whether a statistically significant difference exist in the academic achievement of senior secondary school students in Ringim educational zone Jigawa state on male and female. From table 4.3, the mean academic achievement for male s students was M= 64.91 for female students was M= 59.89.. The result shows that the mean male students academic performance (M= 64.91, SD= 13.17) has no any significant from female mean (M= 59.89, SD= 16.74).has no any significant difference (t= 3.141, p = .0642, p > .05).

4.4 Summary of the Findings

The result of the study is hereby summarized as follows

- a. That there is significant positive correlation between creative thinking and academic performance of senior secondary schools students in Ringim Education Zone.

- b. That there is significant correlation between students' academic self-esteem and academic performance of senior secondary schools students in Ringim Education Zone.
- c. That there is significant positive correlation between and self-regulation and academic performance of senior secondary schools students in Ringim Education zone.
- d. That there is no significant gender difference in creative thinking in senior secondary schools in Ringim education zone.
- e. That there is no significant gender difference in student's academic self-esteem in senior secondary schools students in Ringim Education zone.
- f. That there is no significant gender difference in student's self-regulation in senior secondary schools students in Ringim Education zone.

4.5 Discussion

This study however, investigated the creative thinking, academic self-esteem and self-regulation as correlates of academic performance among senior secondary schools students in Ringim Educational Zone, Jigawa State. Therefore, creative thinking is the ability to initiate new ideas, academic self-esteem is the summary judgment of everything a person can assess about himself or herself while self-regulation is the ability to control your thoughts and emotions in a classroom situation,

The first null hypothesis which stated that there is no significant relationship between creative thinking and academic performance of senior secondary schools students in Ringim education zone was rejected. Significant relationship was therefore found between creative thinking and academic performance of senior secondary schools students in Ringim education zone. This is in agreement with a research which

investigated on the relationship between of creative thinking and Academic performance of secondary school students by Anwar, Aness, Khizar, Naseer& Muhammad (2012). And the result of the study indicated that there is a positive between correlation creative thinking and students' academic achievement. It is also similar with the work of Maderic,Abdullahi,Tenhku,Aizan,Sharir&Kumar (2010),on relationship between impact of creative thinking and academic performance: A study of Gender differences. And also Sharifi, Sharifi&Tangestanic (2014),conducted a study title comparing the scores of a students in academic performance, self-efficacy, self-regulation and creative thinking in Roodehan Azad Iran significant relationship exist between self-efficacy and achievement ($r = 0.395$, at 0.01 level).

The second null hypothesis which stated that there is no significant relationship academic self-esteem and academic performance of senior secondary schools students in Ringim education zone was retained. Significant relationship was not found between academic self-esteem and student's academic performances of senior secondary schools students in Ringim educational zone. This is in entitles with a research which investigated on the impact of stress, self-esteem and Gender factor on students' Academic performance in some selected private secondary schools in Pakistan by Farhan and Khan (2015). The results affirmed that no significant relationship between, academic self-esteem and academic performance exists.

The third null hypothesis which stated that there is no significant relationship between self-regulation and academic performance of senior secondary schools students in Ringim education zone was rejected. Significant relationship was therefore found between self-regulation and academic performance of senior secondary schools students in Ringim education zone. This is in agreement with a research which investigated the relationship between self-regulations of secondary school academic motivation by Razi,

Vahidian&Hashimi (2015).This in line with work of Akinwale Oladejo (2010).in his research title revisiting self-regulation skills and distance learners academic performance at the university of Ibadan /Nigeria and founded that The findings revealed that students' self-regulation skills and academic performance are positively and significantly correlated ($R^2=0.16$; $P<0.5$).

The fourth hypothesis stated that there is no significant gender difference in creative thinking among senior secondary schools in Ringim educational zone was accepted. There is significant difference exists in creative thinking and academic among senior secondary schools in Ringim education zone.

The fifth hypothesis stated that there no significant gender difference in academic self-esteem among senior secondary schools in Ringim education zone the hypotheses was accepted. There is significant difference exists in academic self-esteem among senior secondary schools in Ringim education zone.

Sixth hypothesis stated that there no significant gender difference in self-regulation and academic performance among senior secondary schools in Ringim education zone the hypotheses was accepted. There is significant difference exists in self-regulation among senior secondary schools in Ringim education zone.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS OF THE FINDINGS

5.1 Introduction

This chapter summarizes this research and its procedure from where conclusions were made and inferences drawn, it also presented recommendations affecting secondary school students as well as the parent's authorities and counselors directly.

5.2 Summary

Think creatively when confronting with any difficulties having confidence, competent and self-control has many implications for success in daily life. Inability of students to brainstorm and use of imagination thinking can affect their academic performance academically, students nowadays are confronting with academic challenges which need to be creative, self-confidence and self-control. Lacking any one of these variables can lead to the low academic performance of the students especially during examinations. Lacking academic self-esteem made students to become dependent as such waiting other students to make decision for them especially during examination and also to have poor cordial relationship between their teachers and colleague which negatively affect their academic goals .most our students does not apply self-regulated learning strategies for the accomplishment of their academic goals such as planning, self-motivation, attention control, flexible for using the strategies, self-monitoring and help-seeking, most our students are lacking self-regulation because they did not focus their attention on what is the most important but rather they focus their attention on what is less importance.

The following are objectives for this research ; to determine the relationship between creative thinking and academic performance among senior secondary school students in Jigawa State, to determine the relationship between academic self-esteem and academic

performance among senior secondary school students in Jigawa State, to determine the relationship between self-regulation and academic performance among senior secondary school students in Jigawa State, to determine gender difference in creative thinking among senior secondary school students in Jigawa State, to determine gender difference in self-esteem among senior secondary school students in Jigawa state and to determine gender differences in self-regulation among senior secondary school students in Jigawa state.

This research benefit the students to demonstrate increased levels of personal, academic and career achievement, accurately know oneself, feel valuable, and behave responsible as a person of worthy of dignity. Moreover the research will establish and maintain a variety of effective, strong and healthy relationship and work well with others in the society at large. The research also be useful to the psychologist where difference in academic performance may found between genders and school location. This may lead to accurate understanding of the gap and further find out the possible remedies to fill the possible differential vacuum between the sexes and school location in academic performance. The research also help the counselors in the management those with low self- esteem and those with lack of self- regulation in order to improve their academic goals. This research was limited only to SSII senior secondary school students in Ringim educational Jigawa state but was delimited to junior secondary schoolsstudents and higher institutions

Concept of creative thinking, approaches to creative, thinking by (Corcoran, 2006; Runco, 2007) characteristic of creativity (1967). Concept of academic self- esteem, 5 key difference between self-concept and self-esteem, brief history of self-esteem, by Harper (1970) students' academic performance and self-esteem by Habibollah, Naderi,Rahoni Abdullahi, (2009) , importance of self-esteem, Lawrence (2000) parents' influence on

self-esteem by Tam, Fatimh, Yusoof (2009), influence of socioeconomic status on self-esteem, by Ho (2003) causes of low self-esteem, some outward signs of positive self-esteem, some signs of low self-esteem and also concept of self-regulation, self-regulated learning strategies for students, characteristics of self-regulated learners by Kitsantas (2002), three phases self-regulation by Zimmerman & Campillo, (2003). and therefore, theoretical framework, theory of creative thinking by Sternberg (2000) and Torrance (1997) were used to guide the study. And also theory of self-esteem by Burke & Tully (1977).

The literature also reviewed different journals and articles which are related to the research topics relationship between creativity and students' academic performance by Maderic, Abdullahi, Tenhku, Aizan, Sharir & Kumar (2010), relationship of creative thinking with the Academic performance of secondary school students by Anwar, Aness, Khizar, Naseer & Muhammad (2012), and also self-esteem among University Tunku Abdul-Rahman Psychology students in Malaysia by Chanhuan (2011), self-esteem and academic performance of adolescents by Joshi and Srivastava (2009), Relationship between self-esteem and academic success among African and American students in the minority engineering program at a research extensive university in the southern portion of the United States by Harris. (2009), impact of stress, self-esteem and Gender factor on students' Academic performance in some selected private school in Pakistan by Farhan and Khan (2015), relationship between self-esteem and academic performance in male and female by Hataman (2016), revisiting self-regulation skills and distance learners academic performance at the university of Ibadan /Nigeria by Akinwale Oladejo (2010), are all reviewed with different results.

Ex-post facto design was used for this study, the population of the study consists of 2917 within four local government areas in Ringim education zone. 346 students were used as

samples based on research adviser (2006), three data collection instruments were used for this research which are Student's creative thinking inventory (SCTI), Students Rosenberg academic self-esteem inventory (SRASEI), Students' Self-regulation inventory (SSRI).students' academic performance was transformed in to standard value through T and Z scores. Questionnaire was used for collection of the data with the help of the research assistant. PPMC and t-test also were used for data analysis with the aided of SPSS 22 version.

Hypotheses one, two and three was rejected this mean that, there is significance positive correlation between creative thinking, academic self-esteem and self-regulation on students' academic performance while Hypotheses four, five and six was accepted this mean that, there is no significance gender difference in creative thinking, academic self-esteem and self-regulation.

5.3 Conclusions

This study investigated that, creative thinking, academic self-esteem and self-regulation as Correlates of academic Performance among Senior Secondary School Students in Ringim Educational Zone, Jigawa State. Based on the result generated from the analysis of data, the research process draws the following conclusion.

- a. It concluded that, creative thinking was correlated with students' academic performance.
- b. Academic self-esteem was correlated with students' academic performance was found on this study
- c. Self-regulation are significantly correlated with students' academic performance this was found on this study.

- d. The level of creative thinking of male and female has no difference, this was found on this study
- e. Academic self-esteem of male and female has no difference,
- f. Self-regulation of male and female has no difference

5.4Recommendations

5.4.1 Recommendations from the study

Based on the findings of this study following recommendations are hereby submitted as follows:-

- i. There should be an organize workshop that will enlighten the teachers on the significant of creative thinking, academic self-esteem and self-regulation on students' performance
- ii. Government should provide essential facilities like blackboard, pieces of chalk, chairs, tables, writing papers and electricity supply should be made available to students. This will enhance their creative ability
- iii. Government should organize the seminar that will enlighten the teachers about significantrelationship between creative thinking, academic self-esteem and self-regulation on students' performance.
- iv. Guidance programs such as workshops, symposiums, and public lectures on creative thinking should be organized periodically for students so that they can be adequately equipped with needed skills to handle issues related to creativity.

5.4.2 Recommendations for Further Study

Based on the forgoing research, the research made the following recommendations for further study:

- i. Researchers should examine teaching skills, school learning environment and gender as correlates of academic performance among senior secondary school students in the same area.
- ii. Researchers should examine other student's personality such as self-concept self-efficacy and socioeconomic status as correlates of academic performance among senior secondary school students.
- iii. Researchers should examine gender and cognitive style as correlates of academicPerformance among senior secondary school students.

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APPENDIX I

Student's Creative Thinking inventory (SCTI)

INSTRUCTIONS: Below is a list of statements aimed to study the student's creative thinking. Please put a tick mark () on any one of the five boxes given on the right side of each statement. Please respond to every item. There is no time limit but you have to respond as quickly as possible. Your frank and sincere answer will be very much appreciated.

Section A: Bio data.

Name of School

Gender (Male/Female)

Registration No.....

Section B:

The purpose of this questionnaire is to see how people go about accomplishing the creative act. (The term creative is used in the sense of doing everyday thing in new ways. Solving the problems of daily living and the world of work, engaging in scientific or other research, writing, painting, developing music e.t.c. we want to know about your own style for creative work.

A number of statement are listed below which reflect different ways one goes about being creative in everyday life

Instruction

Following statements are set to elicit response on a five (5) scale inventory, kindly indicate the one that must likely applicable to you.

S/N	Questions	SA	AG	UN	DA	SD
1	I consider myself to be a creative person.					
2	I engaged in creative type work on regular basis.					
3	Creative ideas simply occur to me without even thinking about them.					
4	I typically wait for a flash of inspiration before I begin working.					
5	I would describe my style of creativity as erratic or nonsystematic.					
6	I have had insights, the sources of which I am unable to explain or understand.					
7	I believe in unconscious processes that facilitate my creative work.					
8	In my work there are often long gaps during which I have no motivation.					
9	I have been able to use many ideas for creative work that have occurred in my dreams.					
10	I must be emotionally moved in order to be creative.					
11	I have to be in right mood or feeling to do creative work					
12	When I get new idea, I get totally absorbed by it until I have pursued it completely					
13	I fell that new ideas possess me and guided me through to completion almost automatically.					
14	I believe that creativity comes from hard work and persistence.					
15	My creativity come from careful planning and forethought					
16	I practice to be creative					
17	My creativity comes from self-discipline.					
18	I attribute my creativity to divine inspiration					
19	I tend to lose my sense of time when I am engaged in creative					

	work				
20	I kept pen/notepad/ tape recorder handy to record new ideas as they occur				

Strongly Agree = 5 Agree = 4 Undecided = 3 Disagree = 2 strongly Disagree =1

APPENDIX II

Student's Academic self- esteem inventory (SASI)

INSTRUCTIONS: Below is a list of statements aimed to study the student's self-esteem. Please put a tick mark () on any one of the five boxes given on the right side of each statement. Please respond to every item. There is no time limit but you have to respond as quickly as possible. Your frank and sincere answer will be very much appreciated.

SECTION A: Bio data.

Name of School

Gender (Male/Female)

Registration No.....

SECTION B:

Instruction:

Following statements are set to elicit response on a five (5) scale inventory, kindly indicate the one that must likely applicable to you.

S/N	Questions	SA	AG	UN	DA	SD
1	I have a pleasant personality					
2	I can usually make up my mind and stick to it					
3	I feel that I have a number of Good qualities.					
4	I am able to do things as well as most other people.					
5	I feel I do not have much to be proud of.					
6	I certainly feel useless at times.					
7	I feel that I'm a person of worth, at least on an equal plane with others.					
8	I wish I could have more respect for myself.					
9	All in all, I am inclined to feel that I am a failure.					
10	I take a positive attitude toward myself.					
11	On the whole, I am satisfied with self.					

12	At times I think I am no good at all				
13	I am reliable person				
14	I fell emotionally mature				
15	I have a control over my own life				
16	I don't care what happen to me				
17	I can never seem to achieve anything worth while				
18	I can like myself even when other do not				
19	If I really try, I can overcome most of problem				
20.	I have a confidence and it show				

Strongly Agree = 5 Agree = 4 Undecided = 3 Disagree = 2 strongly Disagree =1

APPENDIX III

Student's Self- regulation inventory (SSRI)

Below are list of statements aimed to study the student's self-regulation Please put a tick mark () on any one of the five boxes given on the right side of each statement. Please

respond to every item. There is no time limit but you have to respond as quickly as possible. Your frank and sincere answer will be very much appreciated.

SECTION A: Bio data.

Name of School

Gender (Male/Female)

Registration No.....

SECTION B:

Instruction:

Following statements are set to elicit response on a five (5) scale inventory, kindly indicate the one that must likely applicable to you.

The response formal are as follows:-

S/N	Questions	SA	AG	UN	DA	SD
1	I usually keep track of my progress toward my goals.					
2	My behavior is not that different from other people.					
3	Others tell me that I keep on with things too long.					
4	I doubt I could change even if I wanted to.					
5	I have trouble making up my mind about things.					
6	I get easily distracted from my plans.					
7	I reward myself for progress toward my goals.					
8	I don't notice the effects of my actions until it's too late.					
9	My behavior is similar to that of my friends.					
10	It's hard for me to see anything helpful about changing my ways.					
11	I put off making decision					
12	I am able to accomplish goals I set for myself.					
13	I have so many plan that it's hard for me to focus on any one of them					
14	I am willing to consider other ways of doing things					
15	I think a lot about what other people think of me					
16	I am set in my ways					
17	I am able to resist temptation					
18	I try to be like people around me					
19	I have a lot of willing power					
20	I set goals for myself and kept track of my progress					

APPENDIX IV

Research Advisor

Required Sample Size [†]								
Population Size	Confidence = 95%				Confidence = 99%			
	Margin of Error				Margin of Error			
	5.0%	3.5%	2.5%	1.0%	5.0%	3.5%	2.5%	1.0%
10	10	10	10	10	10	10	10	10
20	19	20	20	20	19	20	20	20
30	28	29	29	30	29	29	30	30
50	44	47	48	50	47	48	49	50
75	63	69	72	74	67	71	73	75
100	80	89	94	99	87	93	96	99
150	108	126	137	148	122	135	142	149
200	132	160	177	196	154	174	186	198
250	152	190	215	244	182	211	229	246
300	169	217	251	291	207	246	270	295
400	196	265	318	384	250	309	348	391
500	217	306	377	475	285	365	421	485
600	234	340	432	565	315	416	490	579
700	248	370	481	653	341	462	554	672
800	260	396	526	739	363	503	615	763
1,000	278	440	606	906	399	575	727	943
1,200	291	474	674	1067	427	636	827	1119
1,500	306	515	759	1297	460	712	959	1376
2,000	322	563	869	1655	498	808	1141	1785
2,500	333	597	952	1984	524	879	1288	2173
3,500	346	641	1068	2565	558	977	1510	2890
5,000	357	678	1176	3288	586	1066	1734	3842
7,500	365	710	1275	4211	610	1147	1960	5165
10,000	370	727	1332	4899	622	1193	2098	6239
25,000	378	760	1448	6939	646	1285	2399	9972
50,000	381	772	1491	8056	655	1318	2520	12455
75,000	382	776	1506	8514	658	1330	2563	13583
100,000	383	778	1513	8762	659	1336	2585	14227
250,000	384	782	1527	9248	662	1347	2626	15555
500,000	384	783	1532	9423	663	1350	2640	16055
1,000,000	384	783	1534	9512	663	1352	2647	16317
2,500,000	384	784	1536	9567	663	1353	2651	16478
10,000,000	384	784	1536	9594	663	1354	2653	16560
100,000,000	384	784	1537	9603	663	1354	2654	16584
300,000,000	384	784	1537	9603	663	1354	2654	16586

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APPENDIX V

TESTED SCORES FOR HYPOTHESES ONE [1] TO SIX [6].

SCH	GND	LCT	SDV	SCTI	SASI	SSRI
1.00	1.00	2.00	1.00	47.00	80.00	88.00

1.00	1.00	2.00	1.00	43.00	50.00	80.00
1.00	1.00	1.00	1.00	55.00	80.00	70.00
1.00	1.00	2.00	1.00	50.00	70.00	70.00
1.00	1.00	1.00	1.00	66.00	70.00	45.00
1.00	1.00	2.00	1.00	76.00	45.00	50.00
1.00	1.00	2.00	1.00	58.00	50.00	35.00
1.00	1.00	2.00	1.00	60.00	35.00	45.00
1.00	1.00	1.00	1.00	67.00	45.00	30.00
1.00	1.00	2.00	1.00	62.00	30.00	35.00
1.00	1.00	1.00	2.00	68.00	35.00	40.00
1.00	1.00	2.00	2.00	70.00	40.00	44.00
1.00	1.00	2.00	2.00	40.00	50.00	60.00
1.00	1.00	2.00	2.00	70.00	60.00	45.00
1.00	1.00	1.00	1.00	80.00	75.00	30.00
1.00	1.00	1.00	1.00	35.00	30.00	44.00
1.00	1.00	1.00	1.00	78.00	44.00	45.00
1.00	1.00	2.00	2.00	30.00	45.00	60.00
1.00	1.00	1.00	1.00	70.00	60.00	38.00
1.00	1.00	2.00	1.00	80.00	38.00	54.00
1.00	1.00	2.00	1.00	43.00	54.00	72.00
1.00	1.00	1.00	1.00	40.00	72.00	76.00
1.00	1.00	1.00	1.00	67.00	42.00	40.00
1.00	1.00	2.00	1.00	48.00	40.00	35.00
1.00	1.00	2.00	1.00	34.00	35.00	70.00
1.00	1.00	1.00	1.00	79.00	40.00	45.00
1.00	1.00	1.00	1.00	35.00	45.00	50.00
1.00	1.00	2.00	2.00	20.00	50.00	55.00
1.00	1.00	2.00	2.00	40.00	55.00	60.00
1.00	1.00	2.00	1.00	55.00	60.00	71.00
1.00	1.00	1.00	1.00	71.00	50.00	25.00

1.00	1.00	1.00	2.00	66.00	25.00	30.00
2.00	1.00	2.00	2.00	56.00	30.00	35.00
2.00	1.00	2.00	2.00	77.00	35.00	50.00
2.00	1.00	2.00	2.00	50.00	50.00	70.00
2.00	1.00	2.00	1.00	70.00	40.00	62.00
2.00	1.00	2.00	1.00	67.00	62.00	50.00
2.00	1.00	2.00	1.00	88.00	50.00	45.00
2.00	1.00	2.00	1.00	54.00	45.00	41.00
2.00	1.00	1.00	2.00	67.00	41.00	50.00
2.00	1.00	1.00	2.00	80.00	50.00	44.00
2.00	1.00	2.00	2.00	59.00	44.00	35.00
2.00	1.00	2.00	1.00	45.00	35.00	70.00
2.00	1.00	1.00	1.00	44.00	33.00	80.00
2.00	1.00	1.00	1.00	80.00	43.00	55.00
2.00	1.00	1.00	1.00	72.00	55.00	44.00
2.00	1.00	2.00	2.00	56.00	44.00	56.00
2.00	1.00	1.00	2.00	70.00	56.00	70.00
2.00	1.00	1.00	2.00	77.00	70.00	50.00
2.00	1.00	2.00	2.00	75.00	50.00	40.00
2.00	1.00	2.00	1.00	77.00	40.00	50.00
2.00	1.00	1.00	1.00	34.00	50.00	70.00
2.00	1.00	1.00	1.00	78.00	70.00	77.00
2.00	1.00	2.00	2.00	76.00	52.00	40.00
2.00	1.00	2.00	2.00	80.00	40.00	61.00
2.00	1.00	1.00	2.00	44.00	61.00	80.00
2.00	1.00	1.00	2.00	36.00	80.00	61.00
2.00	1.00	1.00	2.00	60.00	61.00	80.00
2.00	1.00	2.00	1.00	59.00	80.00	35.00
2.00	1.00	2.00	1.00	66.00	35.00	45.00
2.00	1.00	2.00	1.00	65.00	45.00	50.00

2.00	1.00	2.00	1.00	39.00	50.00	70.00
2.00	1.00	2.00	1.00	45.00	70.00	80.00
2.00	1.00	1.00	1.00	69.00	55.00	35.00
2.00	1.00	1.00	1.00	77.00	35.00	50.00
2.00	1.00	1.00	1.00	70.00	50.00	34.00
2.00	1.00	1.00	1.00	40.00	75.00	88.00
2.00	1.00	1.00	1.00	69.00	60.00	50.00
2.00	1.00	1.00	1.00	44.00	50.00	88.00
2.00	1.00	1.00	1.00	45.00	70.00	86.00
2.00	1.00	1.00	2.00	55.00	58.00	70.00
2.00	1.00	1.00	2.00	34.00	70.00	78.00
2.00	1.00	2.00	2.00	30.00	78.00	50.00
2.00	1.00	2.00	2.00	78.00	50.00	48.00
2.00	1.00	2.00	2.00	55.00	48.00	71.00
2.00	1.00	2.00	2.00	62.00	71.00	40.00
2.00	1.00	2.00	1.00	64.00	40.00	28.00
2.00	1.00	2.00	1.00	70.00	28.00	35.00
2.00	1.00	2.00	1.00	55.00	66.00	87.00
2.00	1.00	2.00	1.00	88.00	71.00	35.00
2.00	1.00	2.00	1.00	78.00	35.00	40.00
2.00	1.00	2.00	1.00	77.00	40.00	50.00
2.00	1.00	1.00	1.00	43.00	50.00	88.00
2.00	1.00	1.00	1.00	60.00	44.00	35.00
2.00	1.00	1.00	2.00	70.00	35.00	50.00
2.00	1.00	1.00	2.00	35.00	50.00	78.00
2.00	1.00	1.00	2.00	60.00	71.00	35.00
2.00	1.00	2.00	1.00	40.00	35.00	50.00
2.00	1.00	1.00	1.00	80.00	50.00	57.00
2.00	1.00	2.00	1.00	70.00	57.00	80.00
2.00	1.00	1.00	1.00	50.00	80.00	71.00

2.00	1.00	2.00	1.00	81.00	55.00	35.00
2.00	1.00	2.00	2.00	35.00	35.00	50.00
2.00	1.00	1.00	2.00	20.00	50.00	57.00
2.00	1.00	1.00	1.00	50.00	57.00	80.00
3.00	1.00	2.00	1.00	40.00	80.00	71.00
3.00	1.00	2.00	1.00	71.00	44.00	45.00
3.00	1.00	2.00	2.00	34.00	66.00	75.00
3.00	1.00	2.00	2.00	40.00	75.00	50.00
3.00	1.00	2.00	1.00	35.00	50.00	70.00
3.00	1.00	2.00	1.00	44.00	70.00	80.00
3.00	1.00	1.00	1.00	33.00	44.00	78.00
3.00	1.00	1.00	1.00	45.00	25.00	77.00
3.00	1.00	2.00	1.00	44.00	35.00	66.00
3.00	1.00	2.00	1.00	44.00	48.00	88.00
3.00	1.00	2.00	1.00	43.00	75.00	77.00
3.00	1.00	2.00	1.00	35.00	50.00	77.00
3.00	1.00	1.00	1.00	25.00	56.00	77.00
3.00	1.00	1.00	1.00	42.00	66.00	80.00
3.00	1.00	1.00	1.00	61.00	44.00	35.00
3.00	1.00	1.00	1.00	28.00	35.00	80.00
3.00	1.00	1.00	1.00	41.00	80.00	72.00
3.00	1.00	2.00	1.00	44.00	46.00	88.00
3.00	1.00	2.00	1.00	60.00	66.00	80.00
3.00	1.00	2.00	2.00	70.00	55.00	45.00
3.00	1.00	2.00	2.00	34.00	45.00	60.00
3.00	1.00	2.00	2.00	34.00	60.00	75.00
3.00	1.00	2.00	1.00	26.00	75.00	78.00
3.00	1.00	1.00	1.00	44.00	50.00	69.00
3.00	1.00	1.00	1.00	43.00	50.00	87.00
3.00	1.00	1.00	1.00	33.00	59.00	88.00

3.00	1.00	1.00	1.00	33.00	40.00	89.00
3.00	1.00	2.00	1.00	33.00	49.00	77.00
3.00	1.00	2.00	1.00	43.00	50.00	77.00
3.00	1.00	1.00	1.00	50.00	70.00	77.00
3.00	1.00	1.00	2.00	34.00	60.00	70.00
3.00	1.00	1.00	1.00	33.00	70.00	78.00
3.00	1.00	2.00	2.00	44.00	60.00	71.00
3.00	1.00	2.00	1.00	68.00	71.00	28.00
3.00	1.00	1.00	1.00	40.00	50.00	80.00
3.00	1.00	1.00	1.00	42.00	80.00	70.00
3.00	1.00	1.00	1.00	36.00	70.00	55.00
3.00	1.00	2.00	2.00	44.00	55.00	77.00
3.00	1.00	2.00	1.00	37.00	50.00	70.00
3.00	1.00	2.00	2.00	40.00	70.00	55.00
3.00	1.00	2.00	1.00	44.00	55.00	77.00
3.00	1.00	1.00	1.00	43.00	50.00	70.00
3.00	1.00	1.00	1.00	34.00	70.00	80.00
3.00	1.00	1.00	1.00	43.00	80.00	61.00
3.00	1.00	2.00	2.00	33.00	61.00	68.00
3.00	1.00	2.00	2.00	77.00	68.00	40.00
3.00	1.00	1.00	1.00	50.00	40.00	70.00
3.00	1.00	1.00	1.00	44.00	70.00	88.00
3.00	1.00	1.00	2.00	35.00	77.00	80.00
3.00	1.00	2.00	1.00	33.00	80.00	72.00
3.00	1.00	2.00	1.00	34.00	72.00	77.00
3.00	1.00	2.00	2.00	70.00	40.00	44.00
3.00	1.00	1.00	1.00	44.00	44.00	77.00
3.00	1.00	1.00	2.00	78.00	50.00	50.00
3.00	1.00	1.00	2.00	40.00	50.00	58.00
3.00	1.00	2.00	1.00	58.00	58.00	70.00

3.00	1.00	2.00	1.00	77.00	70.00	45.00
3.00	1.00	2.00	1.00	42.00	55.00	77.00
3.00	1.00	2.00	2.00	50.00	50.00	71.00
3.00	1.00	2.00	2.00	48.00	71.00	80.00
3.00	1.00	1.00	1.00	40.00	80.00	78.00
3.00	1.00	2.00	1.00	35.00	78.00	50.00
3.00	1.00	1.00	2.00	25.00	66.00	70.00
3.00	1.00	1.00	1.00	50.00	70.00	72.00
3.00	1.00	2.00	1.00	33.00	72.00	78.00
3.00	1.00	2.00	2.00	81.00	43.00	40.00
3.00	1.00	2.00	2.00	45.00	40.00	58.00
3.00	1.00	2.00	1.00	33.00	58.00	78.00
3.00	1.00	1.00	1.00	45.00	44.00	77.00
3.00	1.00	1.00	2.00	67.00	42.00	50.00
3.00	1.00	1.00	2.00	45.00	66.00	77.00
3.00	1.00	2.00	2.00	70.00	48.00	40.00
3.00	1.00	2.00	2.00	33.00	65.00	67.00
3.00	1.00	2.00	1.00	35.00	66.00	87.00
3.00	1.00	1.00	1.00	34.00	45.00	77.00
3.00	1.00	1.00	2.00	45.00	50.00	71.00
3.00	1.00	1.00	2.00	28.00	71.00	81.00
3.00	1.00	2.00	1.00	68.00	44.00	45.00
3.00	1.00	2.00	1.00	45.00	45.00	70.00
3.00	1.00	2.00	2.00	35.00	70.00	80.00
3.00	1.00	2.00	2.00	80.00	80.00	55.00
3.00	1.00	2.00	2.00	45.00	55.00	66.00
3.00	1.00	2.00	2.00	55.00	45.00	70.00
3.00	1.00	1.00	1.00	33.00	44.00	77.00
3.00	1.00	1.00	1.00	45.00	40.00	88.00
3.00	1.00	1.00	1.00	44.00	35.00	67.00

3.00	1.00	1.00	1.00	38.00	50.00	66.00
3.00	1.00	1.00	1.00	54.00	50.00	80.00
3.00	1.00	1.00	1.00	72.00	80.00	68.00
3.00	1.00	2.00	1.00	42.00	68.00	87.00
3.00	1.00	2.00	1.00	40.00	65.00	71.00
3.00	1.00	2.00	1.00	35.00	71.00	80.00
3.00	1.00	1.00	1.00	44.00	44.00	66.00
3.00	1.00	1.00	2.00	45.00	45.00	55.00
3.00	1.00	1.00	1.00	44.00	55.00	87.00
3.00	1.00	1.00	1.00	55.00	58.00	70.00
3.00	1.00	1.00	1.00	40.00	70.00	87.00
3.00	1.00	1.00	2.00	30.00	60.00	77.00
3.00	1.00	2.00	1.00	71.00	38.00	54.00
3.00	1.00	2.00	1.00	80.00	54.00	33.00
3.00	1.00	1.00	2.00	35.00	72.00	67.00
3.00	1.00	1.00	1.00	34.00	42.00	78.00
3.00	1.00	1.00	1.00	44.00	40.00	77.00
3.00	1.00	2.00	1.00	45.00	35.00	70.00
3.00	1.00	2.00	2.00	71.00	43.00	45.00
4.00	1.00	2.00	1.00	45.00	45.00	75.00
4.00	1.00	1.00	1.00	77.00	75.00	55.00
4.00	1.00	1.00	1.00	33.00	55.00	66.00
4.00	1.00	1.00	2.00	59.00	40.00	30.00
4.00	1.00	1.00	2.00	40.00	65.00	71.00
4.00	1.00	2.00	1.00	55.00	71.00	80.00
4.00	1.00	2.00	1.00	49.00	44.00	35.00
4.00	1.00	2.00	1.00	60.00	35.00	44.00
4.00	1.00	2.00	2.00	83.00	44.00	44.00
4.00	1.00	1.00	2.00	30.00	60.00	61.00
4.00	1.00	1.00	1.00	45.00	61.00	71.00

4.00	1.00	1.00	1.00	35.00	71.00	80.00
4.00	1.00	1.00	1.00	50.00	80.00	77.00
4.00	1.00	1.00	1.00	56.00	77.00	71.00
4.00	1.00	2.00	2.00	33.00	71.00	59.00
4.00	1.00	2.00	1.00	50.00	59.00	40.00
4.00	1.00	2.00	1.00	44.00	40.00	55.00
4.00	1.00	2.00	2.00	40.00	55.00	49.00
4.00	1.00	1.00	1.00	40.00	49.00	77.00
4.00	1.00	1.00	1.00	58.00	60.00	83.00
4.00	1.00	1.00	2.00	70.00	37.00	30.00
4.00	1.00	1.00	1.00	33.00	30.00	88.00
4.00	1.00	2.00	1.00	43.00	44.00	78.00
4.00	1.00	2.00	1.00	33.00	35.00	78.00
4.00	1.00	2.00	1.00	33.00	50.00	77.00
4.00	1.00	2.00	2.00	56.00	56.00	71.00
4.00	1.00	2.00	2.00	49.00	71.00	69.00
4.00	1.00	1.00	2.00	70.00	69.00	80.00
4.00	1.00	1.00	2.00	30.00	80.00	80.00
4.00	1.00	1.00	1.00	35.00	80.00	75.00
4.00	1.00	1.00	1.00	56.00	75.00	80.00
4.00	1.00	1.00	1.00	33.00	80.00	88.00
4.00	1.00	1.00	1.00	35.00	57.00	71.00
4.00	1.00	1.00	2.00	56.00	71.00	68.00
4.00	1.00	2.00	2.00	70.00	68.00	60.00
4.00	1.00	2.00	2.00	35.00	60.00	60.00
4.00	1.00	2.00	1.00	20.00	60.00	70.00
4.00	1.00	2.00	1.00	40.00	70.00	77.00
4.00	1.00	2.00	1.00	45.00	65.00	50.00
4.00	1.00	1.00	2.00	50.00	50.00	35.00
4.00	1.00	1.00	1.00	60.00	35.00	48.00

4.00	1.00	1.00	1.00	60.00	48.00	72.00
4.00	1.00	1.00	1.00	80.00	72.00	45.00
4.00	1.00	2.00	1.00	75.00	66.00	74.00
4.00	1.00	2.00	2.00	25.00	43.00	35.00
4.00	1.00	2.00	1.00	30.00	73.00	74.00
4.00	1.00	2.00	1.00	40.00	74.00	35.00
4.00	1.00	1.00	1.00	70.00	35.00	40.00
4.00	1.00	1.00	1.00	51.00	40.00	88.00
5.00	1.00	1.00	1.00	58.00	65.00	75.00
5.00	1.00	1.00	2.00	80.00	75.00	50.00
5.00	1.00	1.00	1.00	70.00	50.00	35.00
5.00	1.00	1.00	2.00	66.00	35.00	50.00
5.00	1.00	2.00	2.00	35.00	50.00	56.00
5.00	1.00	2.00	1.00	40.00	56.00	77.00
5.00	1.00	2.00	1.00	70.00	66.00	70.00
5.00	1.00	2.00	1.00	39.00	70.00	77.00
5.00	1.00	2.00	2.00	43.00	60.00	71.00
6.00	1.00	2.00	2.00	40.00	71.00	66.00
6.00	1.00	2.00	2.00	44.00	66.00	77.00
6.00	1.00	2.00	1.00	66.00	50.00	35.00
6.00	1.00	1.00	1.00	35.00	35.00	69.00
6.00	1.00	1.00	1.00	66.00	44.00	30.00
6.00	1.00	1.00	2.00	34.00	55.00	66.00
6.00	1.00	1.00	2.00	40.00	50.00	66.00
6.00	1.00	1.00	2.00	50.00	40.00	67.00
6.00	1.00	1.00	1.00	81.00	39.00	35.00
6.00	1.00	1.00	1.00	50.00	35.00	30.00
6.00	1.00	1.00	1.00	40.00	63.00	79.00
6.00	1.00	2.00	1.00	60.00	35.00	20.00
6.00	1.00	2.00	2.00	44.00	77.00	80.00

6.00	1.00	2.00	2.00	45.00	80.00	60.00
6.00	1.00	2.00	2.00	70.00	60.00	54.00
6.00	1.00	1.00	1.00	69.00	59.00	50.00
6.00	1.00	1.00	1.00	80.00	50.00	44.00
6.00	1.00	1.00	1.00	80.00	44.00	40.00
6.00	1.00	1.00	1.00	75.00	40.00	40.00
6.00	1.00	1.00	2.00	80.00	40.00	58.00
6.00	1.00	2.00	2.00	44.00	58.00	70.00
6.00	1.00	2.00	2.00	33.00	70.00	60.00
7.00	1.00	2.00	1.00	68.00	60.00	70.00
7.00	1.00	2.00	1.00	60.00	42.00	44.00
7.00	1.00	1.00	1.00	60.00	57.00	80.00
7.00	1.00	1.00	2.00	70.00	80.00	56.00
7.00	1.00	1.00	2.00	65.00	56.00	49.00
8.00	1.00	1.00	1.00	50.00	66.00	70.00
8.00	1.00	2.00	1.00	35.00	70.00	77.00
8.00	1.00	2.00	2.00	48.00	30.00	78.00
8.00	1.00	2.00	1.00	72.00	35.00	38.00
8.00	1.00	2.00	1.00	45.00	56.00	70.00
9.00	1.00	2.00	2.00	74.00	44.00	35.00
9.00	1.00	1.00	1.00	35.00	54.00	56.00
9.00	1.00	1.00	2.00	74.00	56.00	35.00
9.00	1.00	1.00	1.00	35.00	70.00	77.00
9.00	1.00	1.00	1.00	40.00	35.00	20.00
9.00	1.00	2.00	1.00	65.00	39.00	40.00
10.00	1.00	2.00	2.00	75.00	40.00	45.00
10.00	1.00	2.00	1.00	50.00	45.00	50.00
10.00	1.00	1.00	1.00	35.00	50.00	60.00
10.00	1.00	1.00	2.00	50.00	60.00	60.00
10.00	1.00	1.00	1.00	56.00	60.00	80.00

10.00	1.00	2.00	2.00	40.00	80.00	75.00
10.00	1.00	2.00	1.00	70.00	29.00	25.00
10.00	1.00	2.00	1.00	60.00	25.00	30.00
10.00	1.00	1.00	2.00	71.00	30.00	40.00
10.00	1.00	1.00	1.00	40.00	40.00	77.00
10.00	1.00	1.00	2.00	50.00	70.00	77.00
10.00	1.00	2.00	1.00	35.00	51.00	78.00
10.00	1.00	2.00	2.00	69.00	58.00	80.00
10.00	1.00	2.00	1.00	30.00	80.00	89.00
10.00	1.00	1.00	1.00	50.00	70.00	88.00
11.00	1.00	1.00	1.00	40.00	35.00	35.00
11.00	2.00	1.00	2.00	39.00	35.00	40.00
11.00	2.00	1.00	1.00	33.00	40.00	77.00
11.00	2.00	2.00	1.00	44.00	30.00	88.00
11.00	2.00	2.00	1.00	35.00	39.00	80.00
11.00	2.00	2.00	1.00	43.00	41.00	77.00
11.00	2.00	1.00	2.00	80.00	40.00	55.00
11.00	2.00	1.00	1.00	44.00	55.00	87.00
11.00	2.00	1.00	1.00	36.00	45.00	88.00
11.00	2.00	2.00	1.00	44.00	35.00	66.00
11.00	2.00	2.00	1.00	44.00	40.00	80.00
11.00	2.00	2.00	2.00	40.00	80.00	40.00
12.00	2.00	2.00	1.00	40.00	40.00	77.00
12.00	2.00	1.00	1.00	66.00	50.00	81.00
12.00	2.00	1.00	1.00	65.00	44.00	50.00
12.00	2.00	1.00	1.00	44.00	45.00	88.00
12.00	2.00	2.00	1.00	44.00	34.00	77.00
12.00	2.00	2.00	1.00	65.00	34.00	75.00
12.00	2.00	1.00	1.00	65.00	44.00	45.00
12.00	2.00	1.00	1.00	66.00	34.00	70.00

12.00 2.00 1.00 1.00 33.00 43.00 79.00

12.00 2.00 1.00 1.00 44.00 33.00 83.0

APPENDIX VI

SPSS OUTPUT

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
SCTI	346	25.00	80.00	51.60	16.35
SASI	346	25.00	70.00	54.01	14.53
SSRI	346	20.00	89.00	53.01	16.46
Valid N (listwise)	346				

Correlations

		SCTI	SAP
SCTI	Pearson Correlation	1	-.567**
	Sig. (2-tailed)		.000
	N	346	346
SAP	Pearson Correlation	-.567**	1
	Sig. (2-tailed)	.000	
	N	346	346

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

Correlations

		SASI	SAP
SASI	Pearson Correlation	1	.304**
	Sig. (2-tailed)		.000
	N	346	346
SAP	Pearson Correlation	.304**	1
	Sig. (2-tailed)	.000	
	N	346	346

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

Correlations

		SSRI	SAP
SSRII	Pearson Correlation	1	.304**
	Sig. (2-tailed)		.000
	N	346	346
SAP	Pearson Correlation	.304**	1
	Sig. (2-tailed)	.000	
	N	346	346

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

T-Test

Group Statistics

	GENDER	N	Mean	Std. Deviation	Std. Error Mean
SCTI	MALE	179	69.91	11.89	.99389
	FEMALE	167	65.54	14.19	3.47342

Independent Samples Test

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
SAP Equal variances assumed	17.462	.463	2.963	344	.0916	5.96541	2.01338	2.00477	9.92605
Equal variances not assumed			3.210	280.128	.001	5.96541	1.85863	2.30675	9.62406

T-Test

Group Statistics

	GENDER	N	Mean	Std. Deviation	Std. Error Mean
SASI	MALE	179	52.71	11.89	.987654
	FEMALE	167	57.84	14.19	3.473432

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
SAP	Equal variances assumed	1.957	.474	-2.503	344	.0872	-9.85348	3.93642	-17.59704	-2.10992
	Equal variances not assumed			-2.727	23.399	.012	-9.85348	3.61282	-17.32011	-2.38685

Group Statistics

	STUDENTS_GENDER	N	Mean	Std. Deviation	Std. Error Mean
SSRI	MALE	179	64.91	13.17	.97701

Group Statistics

STUDENTS_GENDER		N	Mean	Std. Deviation	Std. Error Mean
SSRI	MALE	179	64.91	13.17	.97701
	FEMALE	167	59.89	16.74	1.11798

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
SA P	Equal variances assumed	4.268	.764	-1.692	344	.642	-2.60418	1.53938	-5.63098	.42262
	Equal variances not assumed			-1.754	323.204	.080	-2.60418	1.48473	-5.52514	.31679

APPENDIX VII

Department of Education

P.H.B. 3011

Kano State

Head Prof. Talatu M. Garba

Email: talatufm24@gmail.com

Date: 22-12-2015

B.U.K.

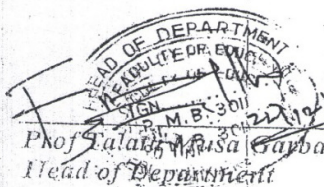
Bayero University, Kano

Dear Sir,

LETTER OF INTRODUCTION

This is to certify that: HASIBU LAWAN with Registration Number: SPS/14/MED/00093 is our student in the Department of Education, Bayero University, Kano.

Kindly render any assistance he/she may require from you.


Prof. Talatu M. Garba
Head of Department