

# COLLEGE OF GRADUATE STUDIES FACULTY OF EDUCATION

TRAITS AND FACTORS AFFECTING ACADEMIC ACHIEVEMENT OF THE FOREIGN UNDERGRADUATE STUDENTS IN SUDANESE UNIVERSITIES (A CASE STUDY OF STUDENTS FROM SELECTED COUNTRIES OF EASTERN AFRICA)

السمات والعوامل المؤثرة في التحصيل الأكاديمي للطلاب الأجانب في الجامعات السودانية (در اسة حالة مختارة من بلدان شرق أفريقيا)

# A THESIS SUBMITTED IN FULFILMEMT OF REQUIRMENT OF THE DEGREE OF PHD IN EDUCATION

(CURRICULUM AND INSTRUCTION)

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# In the name of Allah the most merciful

# The most compassionate

"وقل رب زدني علما "

السورة: الآية: سورة طه، الأية : 114

# AND SAY, OH MY LORD INCREASE MY KNOWLEDGE

# DEDICATION

This academic work is dedicated to my beloved mother Sareeya Sheikh Ibrahim and to my all dear family. It is also in memory of my dear father Abdi Adenlaag Yogol who passed away while writing this thesis.

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# ABSTRACT

This study aimed to investigate the traits and factors affecting academic achievement of the foreign undergraduate students in Sudanese universities. The study targeted specifically the foreign students and the population was the undergraduate students of the academic year 2018-2019 from the selected countries of eastern Africa namely; Kenya, Somalia and Ethiopia. The study selected total of 336 foreign students from these three countries in two universities which are Africa International University and Ahfad University of Women to examine traits and factors impacting academic achievement. The instrument used to collect the data was a questionnaire that was tested its reliability and result revealed overall Cronbach's alpha of .81. Furthermore, the study employed descriptive and inferential statistical analyses to arrive at conclusions for the research questions raised by the researcher. Findings of the study revealed that some of demographic variables such as; gender, residence, field of study, previous language of instruction are not statistically significant in relation to academic achievement of students. However, analysis indicated statistical significance of two demographic variables these are; age and year of study. Moreover, the study concluded insignificance of parental involvement, institutional factors and instructional factors in relation to academic achievement of the students. Conversely, the study ascertained to the significance of study habit which indicates the decisive effect of the student's effort on academic achievement. The findings of this study have important implications for higher education institutions in Sudan in general and for the lecturers and instructors whom they are entrusted to enhance the academic performance of the students. Thus, the researcher has recommended at the end of the study some measures that can be taken into consideration in order to enhance the academic achievement of the undergraduate students and foreign students in particular.

# مستخلص البحث

تهدف هذه الدراسة إلى البحث عن السمات والعوامل المؤثرة على التحصيل الدراسي على الطلاب الجامعيين الأجانب في الجامعات السودانية. واستهدفت الدراسة بشكل خاص الطلاب الأجانب من ثلاث دول وهي الصومال وإثيوبيا وكينيا حيث اختارت الطلاب من هذه الدول في العام الدراسي 2018-2019 م كمجتمع للدراسة. كما تم اختيار 336 طالبا وطالبة كعينة للدراسة من طلاب الدول الثلاثة الذين يدرسون في جامعة أفريقيا العالمية وجامعة الأحفاد للبنات من أجل كشف السمات والعوامل المؤثرة على التحصيل الدراسي. واعتمد الباحث في جمع المعلومات على أداة الاستبيان الذي تم اختبار مدى ثباته وأسفر عن 0.81 على مقياس كرونباخ الفا كما استخدم الباحث المنهج الوصفي والاحصاء التحليلي لتحليل البيانات واستخلاص النتائج منها وللإجابة على أسئلة البحث. وقد أظهرت نتائج الدراسة ان بعض المتغيرات مثل الجنس والسكن ومجال الدراسة ولغة الدراسة السابقة لم تكن ذات دلالة إحصائية بالنسبة للتحصيل الأكاديمي للطلاب على عكس متغيرين آخرين هما العمر وسنة الدراسة حيث اظهرت الدراسة دلالتهما الإحصائية بالنسبة لتأثيرها على التحصيل الدراسي للطلاب. أما بالنسبة للمتغيرات الأخرى محل البحث مثل دور الوالدين ودور المؤسسة وطرق التدريس فإن نتائج الدراسة أظهرت عدم دلالتهما الإحصائية بالنسبة للتحصيل الدراسي غير أن نتائج الدراسة أظهرت الدلالة الإحصائية لمتغير أخر وهو عادات التعلم للطالب مما اثبت الأثر الحاسم للجهد المبذول من قبل الطالب على التحصيل الدراسي . وتعتبر نتائج هذه الدراسة هامة لمؤسسات التعليم العالي في السودان بشكل عام وكذلك للأساتذة الجامعيين بشكل خاص، لذلك قدم الباحث في ختام الدراسة بعض التوصيات من أجل رفع مستوي التحصيل الدراسي للطلاب الجامعيين وللطلاب الأجانب على الأخص.

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#### CHAPTER ONE

## **GENERAL FRAMEWORK OF THE STUDY**

## **1.1. Introduction**

Measuring of academic performance of students has been the centre of focus in the last decades due to the complexity of the factors contributing into the success of the teaching learning process. Students' academic success plays a vital role in the economic prosperity and social development of any society, and also reflects the quality of the education system that produces high skilled, knowledgeable and experienced graduates who will become effective leaders and hardworking manpower.

## 1. 2. Background of the study

There is a plenty of empirical researches and scientific investigations that suggested students' academic performance depends on different socio-economic, psychological and institutional factors which are viewed by some researchers as inputs that produce the outcome which is the academic achievement in accordance to the educational productivity theory pioneered by Walberg (1984). It is obvious then, the importance of studying and probing the determinants that render students to excel in their academic discourse.

In this context, Sudan has become attractive study destination for students looking for higher education from different countries particularly from Africa and Asia. Furthermore, Sudanese higher education institutions have offers scholarships to many students from Africa including students from eastern Africa countries namely: Somalia, Kenya and Ethiopia whom are the focus of this research due to observed performance amongst undergraduate students from these three countries that has prompted the researcher to explore the causes of the observed low performance and subsequently resulted in to undertake this study that aims greatly to take part remedy the performance that has been perceived amongst undergraduate cohort of the universities from the selected countries.

Having in mind, the multiple factors that causes failure or success in the academic arena and its deep impact on the various fields of the social, economic and culture of the community, the researcher have assumed that the better the academic performance of the students the greater positive affect will have on their societies in their respective countries.

In this course, there are many factors that affect the academic performance of students which are but not limited to; student's motivation and individual characteristics, socioeconomic background, academic factors related to the institution such as; learning facilities and materials in addition to the instructors' characteristics, qualifications and teaching styles. Consequently, the diagnostic measures to ameliorate the situation will start with raising the main question of; what are the factors affecting the academic achievement of the students from the selected countries of east Africa?

The discovery of the causal factors of the high performance or the low performance of the students will contribute into the proper solutions enhancing the high achievement of the students and similarly fostering wide range of corrective procedures and efficient policies and vivid strategies into assuring the quality of the education and delivering high calibre of academic services.

# **1.3. Justification of the study**

The level of achievement of the students from eastern Africa countries (Kenya, Somalia and Ethiopia) in their undergraduate study has drawn the attention of the researcher after observing the low grades obtained and repetition of some courses. Therefore, the main focus of this study is to determine the underlying factors of the students' achievement. There are many research studies conducted in the world to examine the various factors influencing the academic achievement of the students but their findings and conclusions are not - in many cases- consistent with one another despite the same factors under study.

The disagreement among the researches is due to the different specific contexts in which the study has been carried out. As result, this study is being carried out in peculiar context in terms of location and participants from particular countries in eastern Africa. Understanding the factors influencing the academic achievement of the students will put forward the possible solutions to improve the academic performance of the students.

### 1. 4. Statement of the problem

The postsecondary education is a new experience to the students who are their first time enrolled into university which comprises students of different cultural backgrounds and diverse norms and values. Therefore, the students in the university have experienced the challenges to integrate academically and socially into the university. However, the level of the integration may differ from student to another due to certain factors that influence their academic integration and subsequently the level of academic performance.

Therefore, the high education institutions have to contain these differences among the students in educational setting that correspond to their learning styles, previous school background and socioeconomic status, particularly to the foreign students who face difference between home country and their new learning environment in the host country. Hence, foreign students need to accustom to learning approaches

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and teaching methods which are different from their prior academic background. In most cases of foreign students, proficiency in the language of the instruction is a fundamental factor that enhances their academic achievement.

The performance of the students in their beginning of study has relationship with some factors such as; instructional methods and teaching techniques, student characteristics and prior academic background as well as social and familial aspects.

The impact of the success or failure of students in their earlier years of university has far-reaching on their motivation and self-confidence to pursue their study with persistence and perseverance. Thus, the students' experience in their undergraduate study as a crossing point to seniority will raise high probability of graduation and their future career success. In this regard, the main question of this study to answer is; what are the factors influencing academic achievement of selected foreign students in Sudanese universities? And details of this main question is addressed in research questions section.

# 1.5. Objectives of the study

The major aim of the study is to find out factors influence the academic performance of university students from selected countries of East Africa and the Specific objectives are:

- 1. To determine the institutional factors on academic achievement of undergraduate students from the selected countries of East Africa.
- 2. To investigate the impact of parent involvement on academic achievement of undergraduate students from selected East African countries.
- 3. To identify the influence of the instructional methods on academic achievement of undergraduate students from selected East African countries.

- 4. To investigate the effect of demographic factors (age, gender, residence, educational background, year of study and field of study) on academic achievement of university students from Eastern Africa.
- To determine the effect of study habit of students on academic achievement of university students from Eastern Africa.

# **1.6.** Significance of the study

Firstly, this study is expected to contribute to the body of knowledge in educational research pertaining to understanding the various factors that determine the students' academic performance which in its turn will help us to figure out the effects of the factors that influence students in their academic discourse.

Secondly, the study is expected to assist students, parents and community to understand the factors that impact student's academic performance in order to act properly and take necessary actions.

Thirdly, the study is expected to contribute in the efforts of educational authorities and academic institutions strive towards developing policies and strategies that can be employed to improve academic performance in institutions of higher learning.

Finally, the study will have suggestions for future research direction.

### **1.7.** Research questions

Throughout the study, the researcher will seek earnestly to answer the main question of the study which is; what are the factors influencing academic achievement of selected foreign students in Sudanese universities? In which has the following sub-set research questions: 1- What is the influence of the Institutional factors on undergraduate students from the selected countries of Eastern Africa on their academic achievement?

2- To what extent of parent involvement influence on academic achievement of university students from Eastern Africa.

*3-* What is the impact of the instructional methods on undergraduate students from the selected countries of Eastern Africa on their academic achievement?

4- What are the effect of demographic factors (age, gender, residence, and educational background, year of study and field of study) and academic achievement of undergraduate students from the selected countries of Eastern Africa?

5- To what extent do study habit have effect on academic achievement of undergraduate students from the selected countries of Eastern Africa?

# **1.8.** Hypotheses of the study

Based on the aforementioned research questions, the researcher has formulated the following null hypotheses that are supported or rejected upon the completion of this study.

**H01**- There is no significant influence of the institutional factors on academic achievement of undergraduate students from the selected countries of Eastern Africa.

**H02**- There is no significant impact of parent involvement influence on academic achievement of university students from Eastern Africa.

**H03**- There is no significant influence of the instructional methods on academic achievement of undergraduate students from the selected countries of Eastern Africa.

**H04**- There is no significant effect of demographic factors (age, gender, residence, and educational background, year of study and field of study) on academic achievement of undergraduate students from the selected countries of Eastern Africa.

**H05**- There is no significant effect of study habit on academic achievement of undergraduate students from the selected countries of Eastern Africa.

# **1.9.** Limitation of the study

This study has limitation in terms of location whereby it is limited to students from Kenya, Ethiopia and Somali who are studying in two Sudanese universities which are: International Africa University and Ahfad University. It is also limited to the targeted group under study who are undergraduate students of the academic year of 2018 -2019. Hence it is limited to the population under study and it will not be generalised to another population.

# **1.10.** Operational Definitions

In order to make the abstract constructs comprehensible concepts, the researcher operationally defined the following terms in the course of the research.

**Factors:** determinants of the academic achievement, in some literature they use predictors and factors interchangeably.

Academic achievement: cumulative grade point average (CGPA) of the students.

Undergraduate: in this research it indicates the student in university.

**Foreign students:** students travelled to study in abroad countries, in some literature they use term of international students or overseas students.

**Eastern African countries:** it is a geographical area comprising numerous countries located in East Africa; nevertheless, in this research it is confined to three countries that are; Ethiopia, Kenya and Somalia.

#### **CHAPTER TWO**

### LITERATURE REVIEW AND RELEVANT PREVIOUS STUDIES

### 2.1. Introduction

This chapter is about setting ground for the review of the related literature and previous studies that substantiate the research discourse and build on previous theoretical and empirical studies. There are myriad of factors with multifaceted influences on the academic performance of the students that entails the complexity and the challenging nature to include in one study. Therefore, in this study, we assumed some factors affecting the academic achievement of the students and they are grouped under four major components. These are social factors, demographic characteristics factors, Instructional factors and student study skills factors in which are thoroughly elaborated throughout this chapter.

### 2.2 **Review of literature**

# 2.2.1. Theoretical models of academic achievement

Besides theories of learning styles, some educational scholars developed theoretical models of academic performance of the students in order to establish the direct and indirect determinants of academic success or factors that can be transformed into intervention to improve students' academic achievement. In this context, several theoretical models emerged in relation to the students' academic achievement in higher education institutions such as: Walberg's theory of educational productivity (1984), Astin's theory of student involvement (1999) and Tinto's theory of academic integration (1993).

#### **2.2.1.1.** Walberg's theory of educational productivity

In mid-seventies and early eighties of last century Walberg (1981) tried to develop a comprehensive framework for the analysis of productivity and test it out in a variety of classroom studies in the U.S. and other countries. As a result, Walberg (1984) developed psychological theory of educational productivity to identify factors that contribute students' academic achievement.

According to Kuterbach (2013:14) Walberg's theoretical model includes nine factors hypothesized to affect the learner's cognitive, as well as affective, outcomes. These nine factors include (a) ability or prior achievement, (b) age, (c) motivation or self-concept, (d) quantity of instruction, (e) quality of the instructional experience, (f) the home environment, (g) the classroom or school environment, (h) the peer group environment, and (i) the mass media. Walberg's model extends beyond earlier models of academic learning by examining out-of-school influences and social-psychological variable.

Walberg (1984; quoted by Kuterbach, 2013:14) further elaborated that these factors fall into three groups; firstly, individual student characteristics such as, ability, prior academic achievement, age or stage of maturation, motivation or self-concept. Secondly, the instructional factors that include study habit which is the amount of time student engage in learning and quality of instructional methods and teaching styles.

And thirdly, the environmental factors that includes institutional factors such as learning facilities and social factors at home and peer groups as well as the use of out-of school time for educationally and developmentally constructive activities time. It is worthy note, however, that these factors influence one another. According to Farooq (2011:4) theory of Educational Productivity by Walberg (1981) determined three groups of nine factors based on affective, cognitive and behavioural skills for optimization of learning that affect the quality of academic performance: Aptitude (ability, development and motivation); instruction (amount and quality); environment (home, classroom, peers and television).

## 2.2.1.2. Tinto's theory of academic integration.

Vincent Tinto' (1993) theory of academic and social integration of the students postulates that students who are integrated academically and socially into their institution are more likely to be successful in their study and perform better than those who are not integrated. Tinto's theory comprises two dimensions which are academic and social and both of them interact and enhance one another.

Academic integration happens when students participate actively in the academic life of the institution by fulfilling academic tasks, regular attendance and contact with lecturers and faculty members. Similarly the social integration occurs when students create relationships and connections outside of the classroom. Tinto notes that there are both formal and informal systems within institutions that can encourage students' academic and social integration that lead to student's persistence at high rates (Karp, et al, 2008: 3). Tinto's theory model was a landmark when first published in 1975 as it was the result of longitudinal study designed to shed light on aspects and processes that influenced students decision to leave university in other words to drop out which he grouped into different types under the term of student departure that include academic failure, voluntary withdrawal, permanent dropout and temporary dropout (McCubbin, 2003:1).

In addition, Pascarella and Terenzini (2005 cited in Egdorf, 2013:20) reported that Tinto's (1975, 1987, 1993) theory is probably the most widely used framework that

examines the interconnections between students and their college experience. Tinto (1975) posited that students enter college with various individual characteristics and attributes (e.g., gender, race, academic ability). The student's background includes precollege experiences (e.g., high school achievement) and family background (i.e., socioeconomic background, parental educational level, and parental expectations).

According to Severiens et al., (2009:59) Tinto describes as central to the college experience two concepts: (1) institutional experiences, involving the educational system, and (2) academic and social integration. Tinto's model assumes that institutional experiences impact on persistence directly as well as indirectly via social and academic integration. Similarly Tinto identifies three major sources of student departure: academic difficulties, the inability of individuals to resolve their educational and occupational goals, and their failure to become or remain incorporated in the intellectual and social life of the institution. Tinto's "Model of Institutional Departure" states that, to persist, students need integration into formal (academic performance) and informal (faculty/staff interactions) academic systems and formal (extracurricular activities) and informal (peer-group interactions) social systems.

Even though Tinto's model of student integration has been dominant in educational research arena, there are questions raised about its adequacy and generalisability, for instance, the integration theory focused on students living in the campus or accommodated in the institutions' premises. It is further explained by McCubbin (2003:4) that, one of the most consistent criticisms made of Tinto's model is that it is applicable solely to a traditional residential type of students. Basically, it has been proposed that the Tinto model is not generalizable beyond students who are resident on, or near, campus and who enter university or college directly after leaving school. In response to the scholarly criticism on his theory and to maintain reputation and dominance of his theory gained within academician and educational practitioners, Tinto (1993) made several changes as he updated and expanded material, and added to his theory. This included new research and theoretical material on students of colour, non-traditional students, and community colleges. In addition, he added material on the importance of the classroom (as learning communities) for persistence. Tinto (1993) also focused on the importance of the classroom for engagement in his later writings especially for part-time commuter students (Egdorf, 2013:26).

Figure 2:1 Student integration model based on Tinto's (1993) student integration theory



Figure 2.1: Student integration model

**Source:** Adapted with modification from Chrysikos et al., 2017. Analysis of Tinto's student integration theory in first-year undergraduate computing students of a UK higher education institution.

## 2.2.1.3. Astin's theory of student involvement.

Unlike the Tinto's theory of integration which put bulk share of responsibility on institutions' role of helping students' integration, Alexander w. Astin's theory of involvement stresses the importance of students playing an active role, through the investment of time and energy, in their own learning. Theory Student Involvement is defined by Astin (1999:518) as the following:

"Student involvement refers to the amount of physical and psychological energy that the student devotes to the academic experience. Thus, a highly involved student is one who, for example, devotes considerable energy to studying, spends much time on campus, participates actively in student organizations, and interacts frequently with faculty members and other students. Conversely, a typical uninvolved student neglects studies, spends little time on campus, abstains from extracurricular activities, and has infrequent contact with faculty members or other students" Astin (1999:518).

Astin (1999:519) further explained that the involvement theory has five basic postulates: (1) students Involvement refers to the investment of physical and psychological energy in various objects. (2) Involvement occurs along a continuum; that is, different students manifest different degrees of involvement in a given object, and the same student manifests different degrees of involvement in different objects at different times. (3) Involvement has both quantitative and qualitative features. The extent of a student's involvement in academic work, for instance, can be measured quantitatively (how many hours the student spends studying) and qualitatively (whether the student reviews and comprehends reading assignments or simply stares at the textbook and daydreams). (4) The amount of student learning and personal development associated with any educational program is directly proportional to the quality and quantity of student involvement in that program. (5) The effectiveness of any educational policy or practice is directly related to the capacity of that policy or practice to increase student involvement (Astin, 1999).

It is further explained by Astin (1999) that first three postulates focus on "student involvement," whereas his last two postulates are directed toward "institutional involvement" by designing educational programs for students. His fourth postulate is foundational for student engagement whereas student learning is directly proportional to the quality of student involvement (engagement).

According to Elizabeth & Michael (2013:57) researchers and practitioners use Astin's involvement theory as a theoretical framework for student involvement, including classroom, out-of-classroom, and curricular activities as well as to develop programs, modify curriculums, make administrative decisions, and conduct research.

It is noteworthy that both Astin and Tinto made significant contributions to the field in the same year: 1975. And Astin also faced similar criticism of that much of Astin's involvement theory focused on full-time, traditional-age, residential students at 4-year institutions. Nevertheless, it could be argued that the work of Tinto and Astin are two of the most significant contributions to student engagement (Egdorf, 2013).

Furthermore, Astin is well known of his Input-Environment-output model of student involvement theory based on his research in higher education as an appropriate analysis framework. Inputs are personal qualities students bring initially to an educational program, while environment refers to students' actual experiences during an educational program, and outcome is talent that lecturers are trying to develop in their educational programs (Astin, 1993 cited in Yanto et al., 2011:3).



Figure 2:2 Astin Model of Input-Environment-Output

Figure 2.2: Astin Model of Input-Environment-Output applied in study variables

**Source:** Adapted with modification from Yanto, H. et al., 2011. Developing student's accounting competencies using Astin's IEO.

#### **2.2.1.4.** Synthesis of theoretical models

The theoretical perspectives of this study is guided by the three models of Welberg's Educational productivity theory, Tinto's Integration Theory and Astin's Involvement theory. All of these three models are relevant theoretical and conceptual frameworks to conduct research related to the determinants or factors influencing academic success and performance of the students. While both theories of Tinto and Astin are specifically developed discover the causes of the student attrition in higher education institutions, the Welberg's theory is more comprehensive and it is generally formulated to portray the generic factors affecting the educational attainment of the students. In other words, all the three theories posits in different ways factors influencing students' academic endeavour.

The researcher of this study does not claim theories in the course of this study are limited into these three, but they are selected as most relevant contemporary theories and also to narrow the scope of the abundant theoretical perspectives and educational views in the subject matter of the study.





Source: developed for the purpose of the study.

#### 2.2.2. Concept of academic achievement

The measurement of academic performance as a symbol of school success can be traced way back from the Victorian period (Bell, 2013 quoted by Luke and Mavis, 2014:113). Since then, academic performance has been used to grade schools and most importantly to determine ones career paths. The 'good schools' are acclaimed to be those that are able groom the students well enough to achieve the set standards. This is measured by use of students' academic performance both at school level and nationally.

The variables "academic achievement" and "academic performance" are often used interchangeably. In most studies academic achievement or academic performance refers to how well a student is accomplishing his or her tasks and studies. In the context of this study, academic achievement refers to the extent to which students have achieved mastery of the courses they are exposed to in university.

According to Okorie (2014:33) academic achievement can be measured in several ways for most of educational institutions use grading system an indicator of students' academic achievement. Therefore, grades are certainly the most well-known indicator of academic achievement and thus grades are the student's "score" for their classes and overall tenure. Even so, grading systems vary greatly by country and school; common scales include a percentage form 1-100, lettering systems from A-F, and grade point averages (GPA) from 0-4.0.

In this mainstream of academic performance assessment Kyoshaba (2010:14) examined the factors affecting student performance and measured the undergraduates' achievement in terms of performance in tests, in course work and periodical examinations.

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To ascertain the quantitative nature of measuring student's achievement, Mutua (2015:31) elaborated that the most highly valued method of determining whether a successful completion has taken place for a learner is quantitative in nature. In other words, numbers (in the context of grading and testing) are used to indicate whether a student has been successful or unsuccessful in mastering academic content and skill.

A student who takes a standardized test in writing and scores at a 99th percentile is regarded as an achiever, while a student who scores at a 13th percentile is seen as a non-achiever. In most cases, according to Bruce and Neville (1979 quoted by Mutua, 2015:32) "accomplishment" is sometimes used in place of "achievement". The bottom line in academic achievement discourse is based on grades and test scores. Students may not be permitted to graduate from high school, for example, if they are unable to maintain a specific grade point average or percentage score or pass a high stakes graduation test.

Some researchers like Steve (2000) as quoted by Mutua (2015:32) raised semantic arguments and contended that academic achievement is distinctive from academic performance in a sense that academic performance is defined as the observable or measurable behaviour of a person in a particular situation usually experimental situation. This means that performance measures the aspect of behaviour that can be observed at a specific period. But the academic achievement is cumulative and progressive.

What this indicates is that academic performance culminates and influences academic achievement. For instance, academic performance of students consists of scores obtained from teacher-made test, first term examination, mid-term test, and so on, while the academic achievement is long-term accumulative result.

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However, this dispute over distinguishing between academic performance and academic achievement is contentious issue amongst educational researchers and practitioners whether academic achievement is directly related to the grades scored or calculated in the general outcome of learning in different ways of outcome in terms of intellectual, social, emotional and so on because low achievement may not necessarily reflect inadequacy in learning.

It is possible to learn a subject or academic course and yet perform poorly in it in respect to quantitative scores in tests and exams. Other factors, other than the learning process, have potential of influencing academic achievement on certain courses and subjects (Zenebe, 2015:8). In sum, the success of any educational institution is measured by the performance of its students in both academic and nonacademic tests. This is combining both formative and summative assessments of student's achievement not only in terms of test results and exam scores but overall performance of the students.

# 2.2.3 Foreign students and academic achievement

Most of studies related to academic success of foreign students or international student as used by many researchers are conducted in western world because most of foreign students travel to western countries for training and learning purposes and therefore a voluminous body of researches have been conducted and produced.

However, many studies in the western educational institutions are largely inclined to issues related to acculturation and social adjustment of foreign students whereas some studies from Africa and Asia reviewed for this study covered wider scope of the factors affecting academic achievement of foreign students. This difference in focus reflects the cultural and social contexts in which many studies are conducted. Apart from acculturation and adjustment some studies compared foreign and national or domestic students with regard to their academic achievement like the study of Abel (2002) that cited in Nadia and Soko (2015:75) which indicated that academic success for international students is dependent on their proficiency of language of instruction, learning strategies, classroom dynamics, and social and educational assistance provided by the institutions.

Furthermore, several studies have shown that academic performance differs across nationality like the study done by Hagedorn and Mi-Chung (2005 cited in Nadia and Soko, 2015) found that foreign students in community colleges perform slightly better academically than American students. In similar quote Westwood and Barker's (1990) results indicated that overall achievement rates were higher and drop-out rates were lower for international students who participated in a peer-pairing program.

Conversely, a study by Bart Rienties et al. (2012:685) showed that non-Western students scored significantly lower on Grade Point Average compared to Western students. However, S. Valli et al, (2014:753) reported that foreign students in Singapore experienced substantial levels of stress, which are often a result of homesickness, cultural shocks, or perceived discrimination. This, in turn, may have a negative influence on their participation in activities that contribute to important learning and personal development. One common coping mechanism used by foreign students is to focus more on academic achievement.

#### 2.2.4. Factors Affecting Academic Achievement of undergraduate students.

This study sought to examine factors affecting academic achievement of students and specific attention is given factors relevant to foreign students although most of factors are commonly shared between foreign and national students. And for the
purpose of this research these factors are being grouped into four domains, these are; institutional factors, Social and Demographic factors, Instructional factors and Student's study skills and every domain has its own subdivisions throughout this section.

In educational setting, excellent performance and high achievement of the students remains top priority of any school and learning institution therefore exploring factors contributing effectively into high quality of student performance have been enthusiastically investigated by educational researchers and learning practitioners.

However, as explained by Mohammad Manjur et al. (2014:144), most studies have tended to focus on investigating academic performance in general. Others examined factors impacting performance in individual courses such as; mathematics, English and sciences. Nevertheless, extant literature highlights a number of factors that affect students' characteristics and their environment, teacher characteristics and background, teaching style and materials.

In addition, these variables are inside and outside school that affect students' quality of academic achievement. These factors may be termed as student factors, family factors, school factors and peer factors (Farooq et al, 2011:2).

# 2.2.4.1. Institutional factors affecting academic achievement

# 2.2.4.1.1. Learning resources and facilities

The availability of learning resources and facility in the university have major impact on the student's academic performance. The first impression of the student in general and foreign student in particular is the university environment both physically and academically in terms of resources available and facilities and services in place. Therefore students who lived in environment that is conducive to learning and provided ample study space and opportunities for growth and interaction tend to have an easier time adjusting than students who live in other environment.

There are two main activities which form students' satisfaction on campus. These include academic and non-academic. The academic factors include students' satisfaction with learning activities, environment, facilities, methods etc, while the nonacademic factors include co-curricular activities such as sporting, student clubs or social gathering, and religious and spiritual activities.

There are also independent factors that can affect student satisfaction based on services offered by universities. These include quality of teaching, student research facilities, library book collections and services, campus infrastructure, canteen facilities, space for group discussions, sport programmes, ICT (PC and Internet) facilities etc (Adeniyi, W. and Adeniyi, A., 2017:224).

In similar manner, Ogbogu (2014:172) posited that institutional resources and facilities have significant impact on students' performance. This study cited that Darling-Hammond and Synder (2001, cited in Ogbogu, 2014) claimed that a reduction in class-size could enhance learning, while availability of adequate research equipment and teaching materials could significantly improve students' performance. They also maintained that student-teacher ratio, physical resources, equipment and teaching aids have significant effect on academic achievements. In the same way, Devadoss and Foltz (1996, cited in Ogbogu,2014) opined that a physical environment with improved facilities provide comfort, security, better understanding of courses and can be dramatic in terms of increased learning and performance.

Additionally, Benware and Deci (1984 cited in Ogbogu (2014:173) suggested the need for Universities to provide some of the following physical facilities within its

environment to enhance performance: conducive hostel facilities with inbuilt study rooms, special facilities for the physically challenged who encounter greater academic challenges, career centre designed to provide career counselling activities, equipped libraries and provision of computer and internet facilities. All of these combine to promote students' educational growth.

In spite of prevailing notion of institutional facilities have a great impact on students, a study conducted by Ogbogu (2014:176) have generally revealed that the institutional variables considered (such as unfavourable learning conditions, interrupted water supply, poorly equipped library etc) did not have any significant impact on students' performance. The study therefore concluded that students' academic performance could be influenced by some other factors which should be investigated in different approach and context.

# 2.2.4.1.2. Student adjustment programs

Transitioning from high school to post-secondary learning places significant and novel demands on young people (Tinto, 1993). These adjustment challenges can be stressful for new students. The demand for higher levels of independence, initiative, and self-regulation can be especially difficult for those students when beginning their journey into university life (Stelnicki & Nordstokke, 2015:215). This is further elaborated by Mohd Aderi, et al, (2013:174) that students experience an adjustment period after their entrance into the institution of higher education. University adjustment is usually concerned with the issues of maladjustment in areas such as academic performance, psychological distress, persistence to degree completion retention, and interaction with others

It is commonly considered that students face challenges when they first join university with regard to adjusting appropriately and timely to their new study environment as they have to suit themselves to live student's lives, learn academic tasks effectively, and how to develop learning habits for their new academic setting. Most universities and colleges provide orientation for new students, including foreign students. This is a welcoming program offered at the beginning of the every academic year in order to make students familiar with the university environment and resources available.

According to Baker and Syrik (1999) quoted in Mohd Aderi, et al, (2013) the ability of a student to successfully adjust to college is related to a positive college experience, whereas unsuccessful adjustment is related to negative college experience. Important factors relating to transition adjustment includes academic, social support, social adjustment, emotional adjustment, and university services provided to students in their transition as well as student's characteristics.

Some researches like the study conducted by Mohd Aderi, et al, (2013:177) revealed that university students have a generally moderate adjustment level despite the indication that students have some difficulties in their social and academic factors. Moreover, the results show that demographic characteristics are related to university adjustment, although no significant differences are found between male and female students' adjustment level. In this respect, it is worthy to mention that adjustment of foreign students studying abroad is more investigated than the domestic students due to stressors associated with living and studying in a foreign country. However, it is beyond the scope of this study to deliberate on psychological aspects of adjustment such as counselling on depression, stress and homesickness in spite of its importance.

## 2.2.4.1.3. Foreign students' adjustment

The movement of students across cultures and geographic boundaries in pursuits of international education, credential and exposure has been intensified because of the globalization and internationalisation trends. Students who are looking for postsecondary education are no longer constrained by national boundaries. By the 1990s, many higher education institutions in host countries like Australia, Canada, New Zealand, the UK and US have become more market focused by adopting professional marketing strategies to recruit international students (Mazzarol et al., 2001:39).

According to Rienties et al. (2012:685) in 2007 about 3 million international students were studying abroad as the destinations also widened whereas the core study destinations are not now confined in United States, Canada, United Kingdom, France, Germany and Australia. But recently some other countries in Asia have emerged as the major destinations for international students to study abroad, with the top five countries for enrolment in higher education being China, India, and Malaysia, Hong Kong, Singapore (Prem and Massimiliano, 2009:182).

As explained by Mohd Aderi et al., (2013:172) there are tremendous studies revealed that students experience an adjustment period after their entrance into the institution of higher education. Student adjustment includes academic, social and personal-emotional adjustment which relates to experiences such as developing and maintaining goals, expectation, identities, roles, and social networks, as well as student attrition. It is also stated in a study carried out by Rienties et al. (2012:685) that foreign students are insufficiently adjusted to higher education in their host country, both academically and socially. Henceforth, foreign students experience adjustment strains

within their host environment that are unique to them, such as cultural differences, language constraints, and social behaviours.

According to Trifonovitch (1977 cited in Mesidor and Sly, 2016:264) there are four stages associated with adjustment that are applicable to foreign students: (1) Honeymoon stage, this stage is characterized by feelings of excitement because students feel good about themselves and are ready to start their new adventure. They may feel a sense of accomplishment because they are studying in a foreign land (2) Hostility stage, in this stage students may experience culture shock which is expressed by feelings of frustration, anger, sadness, confusion, anxiety, and depression. Students in this stage are more likely to attribute their problems to external factors. (3) Humor stage, this stage is characterized by the students' ability to engage in more relaxing activities such as laughing and socializing. Students reflect on the process issues that they faced during the hostility stage. They interact more with others because they have made friends and they have begun to enjoy their academic activities (4) Home stage, this stage is characterized by the students feeling settled in the new environment or culture because they feel accepted. The students learn the norms and standards of the new culture and they integrate elements of their home culture into the new one. In other words, cultural adjustment is a continuum process that happens over time that often follows a U-shaped curve. Therefore, different stages may be experienced more than once, with the process rarely being linear.

In accordance with the study of Gebhard (2012) qouted in Mesidor and Sly, 2016:263) multiple factors contribute to the academic, social, cultural, and psychological adjustment of foreign students. He further explained that foreign students encountered problems in adjustment in three primary areas, academic, social interaction, and emotional reaction to their novel environment. Language barriers, unfamiliarity

with available resources and how to access those resources, lack of an established social support system and/or social network compound the problems associated with living and studying in a foreign country.

Limitation of proficiency in the medium of instruction remain primary adjustment obstacle and academic challenge among foreign students because most of them might not familiar with the language of instruction, as well as institutions' instructional practices that differ greatly from what are used to in their native countries (Rienties et al., 2012). This is also supported by study conducted by Kuo (2011) which concluded that foreign students faced language challenges in the area of listening comprehension and oral proficiency. Students were not able to understand the lectures presented in class. Academic, personal emotion and environmental factors were also significantly related to cross cultural adjustment.

However, Foreign students are best equipped to reach the stage of adjustment (also referred to as the stage of autonomy) when their host university offers programs that provide social and academic support. These programs are most successful when they also include meaningful opportunities for domestic students, faculty, and staff to learn about foreign students' home cultures and to interact with diverse students, including foreign students, outside of the classroom.

In conclusion, despite of adjustment being integral part of foreign student's retention and persistence but does not denote any form of cultural substitution or personal meltdown. It simply means assimilating and absorbing into harmony with student's existing cultural values and traditional norms. In other words, adopting of the shared norms and values of host community. And thus, this is what is being meant by

adjustment programs implemented by any educational institution with regard to foreign students.

## 2.2.4.1.4. Student academic integration.

Academic success of the students especially in postsecondary education is much related to the institution's policy and practice of academic integration undertaken by the institution because academic integration is the most referred to in the area of student retention according to Tinto (1975) who asserts that dropout occurs because students are insufficiently integrated into different aspects of the university.

According to Severiens et al. (2009:59) there are formal and informal integration, each of which is important for successful integration. For formal academic integration it includes the academic consultations related to studying and the contacts with faculty members. On the other hand, informal academic integration involves contacts between teachers and students outside the direct context of the learning environment, i.e. whether students and teachers consider themselves to be at more or less the same level socially, and whether they discuss personal matters with each other. Similarly, at the level of social integration, formal integration mainly involves contacts between peers on matters of learning.

As expounded by Jama, et al, (2015:996) Tinto further contends that dropout could occur through lack of integration in either the academic or the social systems of the university. Tinto revised the theory in 1987 by including the three stages of moving from one community to the other. The first stage, separation, refers to the student's parting with one group to join another one. During the second stage, which is transition, students deal with the stresses of coping in a new, unfamiliar environment. In the last stage of incorporation students become competent in being members of the new environment According to Detwiler (2011:27) Tinto (1975) proposed that the more committed a student is to degree completion, the higher the chance the student will persist and graduate. A student's commitment to the university, in turn, directly influences a student's engagement with faculty, student organizations and other facets of the collegiate social system, which, as Astin has shown in his student involvement theory (1999), positively impacts a student's grades and persistence.

Later research testing Tinto's model confirmed that the extent and quality of faculty interactions is directly associated with "educational aspirations, attitudes toward college, academic achievement, intellectual development, and retention" (Girves & Wemmereus, 1988, p. 164 cited in Detwiler, 2011:27).

Tinto (1975, 1998) considers that students have a variety of educational experiences, competences and skills, values as well as family and community backgrounds before they enter into higher education. As a result, both individual and social attributes will influence the student's integration into higher education. According to Tinto (1975, 1998), students not only need to persist in their study in order to graduate (i.e. academic integration), but they also need to participate in the student culture, both within and outside the immediate context of the learning environment (i.e. social integration) (Rienties et al., 2011:687).

Moreover, considerable number of research on college student development shows that the time and energy students devote to educationally purposeful activities is the single best predictor of their learning and personal development. Perhaps the best known set of engagement indicators is the "seven principles for good practices in undergraduate education". These principles include student-faculty contact, cooperation

among students, active learning prompt feedback, time on task, high expectation, and respect for diverse talents and ways of learning (Chickering and Gamson, 1987:2).

All these factors and conditions are related to student satisfaction, learning and development on a variety of dimensions and persistence. Thus, educationally effective colleges and universities channel students energies toward appropriate activities and engage them at a high level in these activities. However, research carried out by Harvey et al. (2006) suggests that students need help in adapting to university life and becoming autonomous learners and that feeling positive and having a friendship group greatly aids social and emotional adjustment to higher education. It is also noted that students shift emphasis from one source of support to another as they progress through the academic progress.

Students adjust quicker if they learn the institutional 'discourse' and feel they fit in. Integration, through supportive interaction with teachers, greatly enhances adjustment, as does access to learning resources and facilities. Some research has explored how different types of student adapt as Males and females adjust differently. Moreover, the difference between those who think about leaving but persist and those who leave appear to be motivational factors such as goal orientation and self-efficacy.

In sum, student engagement has two key components that contribute to student success. The first is the amount of time and effort students put into their studies and other activities that lead to the experiences and outcomes that constitute student success. The second is the ways the institution allocates resources and organizes learning opportunities and services to induce students to participate in and benefit from such activities (Kuh, et al., 2005).

#### 2.2.4.1.5. Student retention strategies

Retention refers to the completion rate of cohorts joined the university at certain time and graduated within specific timeframe like two or three years for diploma or four and above for bachelor degrees. High retention rate of students indicates less dropouts or leavers in the middle of the academic journey and it is the reason behind that tertiary institutions pay much attention to the graduation rate by putting more emphasis on to enhance the academic retention and students engagement in the university. And as a result, some high institution have implemented foundational courses that are taken by large numbers of first and second year students. These courses are intended to develop in students the skills and attitudes they will need to be successful in university (Bovill et al., 2016:195).

Many educators in western countries identify first-year seminars or preuniversity courses such as language courses and study skills training as premier vehicles for students' development, including intellectual and cognitive domains. Indeed, intentional first-year experience programming, including first-year seminars and prerequisite subjects is a vehicle for the educationally purposeful activities highlighted in the Defining Effective Educational Practices project by the National Survey of Student Engagement (NSSE) in the United states (Kuh, et al., 2005) and documented as a means of fostering in- and out-of-classroom engagement for university student learning.

First-year seminars have gained as part of innovation in postsecondary education, a strong foothold in American higher education over the past three decades and are now a commonly-used tool to enhance the transition and learning experience of new college students. National data indicated that 94% of accredited four-year colleges and universities in the United States offer a first-year seminar to at least some students, and more than half offer a first-year seminar to 90% or more of their first-year students (Padgett et al., 2013).

Some researchers (Stelnicki & Nordstokke, 2015:222) explained that factors such as having a future orientation, persistence, and strong executive functioning skills were listed as the most important for undergraduate students to reach their goals while attending university. Students who set goals for their undergraduate experience also have a higher probability of maintaining a full course load, subsequently leading to a higher likelihood of graduating with a degree.

In general, student retention and academic integration are reciprocally connected that contribute into student success or achieving the desired degree or educational credential. And as result, this success has an immediate influence on a student's academic self-esteem, persistence in elected majors, and perseverance in higher education because success in early semesters at college also ultimately impacts students' post college experiences, such as career choice, personal income and level of success, and degree and nature of participation in community life (Benford and Gess-Newsome, 2006:5).

In sum, Tinto (1999:5-6) pointed out four institutional conditions stand out as supportive of retention which are:

- 1- Students are more likely to persist and graduate in settings that provide clear and consistent information about institutional requirements.
- 2- Institutions that provide academic, social, and personal support encourage persistence. Support that is readily available and connected to other parts of student collegiate experience leads to retention.

- 3- Students are more likely to stay in schools that involve them as valued members of the institution. The frequency and quality of contact with faculty, staff, and other students have repeatedly been shown to be independent predictors of student persistence. This is true for large and small, rural and urban, public and private colleges and universities. Simply put, involvement matters, and at no point does it matter more than during the first year of college when student attachments are so tenuous and the pull of the institution still so weak.
- 4- Clearly the most important condition that fosters student retention is learning. Students who learn are students who stay. Institutions that are successful in building settings that educate their students are institutions that are successful in retaining their students.

#### 2.2.4.1.6. Extracurricular activities and academic achievement

Students' academic success can be measured in different ways; among them are academic achievement, involvement in activities out of the classroom and performance after graduation from college (Marie Correa et al, 2015:165). This originates from that education has broader concept of developing the students' mental capacities as well as physical ability in order to help both mind and body to be in better condition. Henceforth, extracurricular activities are essential component of any academic curriculum of any educational institution.

According to Saleem R. (2008:213) extracurricular activities, as the name implies, are those, not directly related with the prescribed curriculum and include; sports, athletics, scouting, various hobbies, summer trips, literary societies, dramatics, debates, student organisations etc. Whereas, it is believed that unless balancing both the

curricular and extracurricular activities is done the very purpose of education would be left unrealized.

It is further argued by Bartkus et al. (2012, pg. 698 quoted in SEOW et al, 2014:3) that extracurricular activities as academic or non-academic activities are conducted under the auspices of the school but occur outside of normal classroom time and are not part of the curriculum." Therefore, extracurricular activities do not involve a grade or academic credit and participation is optional on the part of the student. But, this is not undisputable argument for not grading extracurricular activities for it depends on the academic policy of the institution whereas some universities might include co-curricular activities like community services or volunteerism as part and parcel of the academic credit and basic requirement for graduation and degree award. Accordingly, educational institutions implement extracurricular activities on faculties and in university campuses; for the purpose of developing the students' emotional, intellectual, social, and inter-personal development. This is further postulated by Bakoban and Aljarallah (2015:2737) that engagement in extracurricular activities helps students mature socially by providing a setting for student interaction, relationship formation and discussion.

Working outside of the classroom with diverse groups of individuals allows students to gain more self-confidence, autonomy, and appreciation for others' differences and similarities. In similar manner, Marie Correa et al, (2015:169) further expounded that participation in extracurricular activities is part of college experience and strengthens the ties between students and their institutions. These studies have linked student involvement in extracurricular activities with positive academic performance while others suggest that low academic performance does not result from extracurricular activities.

Marsh and Kleitman (2002, cited in Bashir et al, 2012:53) tested whether participation in co-curricular activities influences academic outcomes even when the effects of a student's ability, school, personal and family characteristics, and numerous other factors are controlled. They found that joining more co-curricular activities and spending more time participating in them is associated with higher grades, more difficult courses selected, more time spent on homework, more colleges applied to, a higher likelihood of starting and finishing college, and a higher final degree earned, even when other factors are controlled.

Extracurricular activities have a significant effect on the academic achievement as revealed by the study of Bashir et al. (2012:55) which is also supported by the study of Ahmad M et al., (2015:41) who stated that students participating in extracurricular activities generally benefit from having better examination results, higher self-concept, higher standardized test scores and educational attainment. Students often learned skills such as teamwork and leadership from college club activities while decreasing the likelihood of different problem behaviours.

Moreover, Ahmad M et al., (2015:42) stated that "There is a positive correlation between student involvement in extracurricular activities and success in non-academic pursuits following high school and college". It is evident that students who participate well in these activities have greater success in academic institutions, as well as, later in life. This finding is consistent with the study of Bakoban and Aljarallah (2015:2742) which concluded that there are significant differences in the grade point average (GPA) of the students who participated in Extra Curricular Activities (ECA) and other nonparticipants; the median of the GPA of those who participated in ECA is higher than those of the nonparticipants. According to Reeves (2008 cited in Nikki Wilson, 2009:14) students who took part in three or four extracurricular activities during the academic year had dramatically better grades than those who participated in no extracurricular activities at all. However, Reeves himself disputed aforementioned findings as he has noted possible negative consequences of extracurricular activities. One of those raised counter-argument is that parents and teachers might fear students may lose their focus on academics when they become too busy with out-of-school activities. The study further contended that attending too many rehearsals, practices, and meetings may cut into homework time and as students get overscheduled, they might be spreading themselves too thin, which may lead to spending less time studying and preparing for class.

Trying to convince with counter-argument the researcher explained that extracurricular activities that are too time-consuming can be perceived as an interference with academic success, and because pressures from parents and the students themselves, this can be used as an excuse to avoid extracurricular activities.

But this counter-argument lacks solid ground because most of literature reviewed for this research supported the benefits of the extracurricular activities for the students' academic success and some studies emphasized that involvement in extracurricular activities strengthens the ties of students to the school they are enrolled in. Therefore, and according to Baker (2008, quoted in Marie Correa et al, 2015:166) it is important that academic institutions enhance such activities for retention purposes, when students are engaged and feel some type of connection with the school; they are more likely stay in the same institution.

In the meantime, extracurricular activities counts more importantly in the context of foreign students given their unique situation of homesickness and other

foreignness related stressors. Therefore, engagement in extracurricular activities by them might curb or reduce these stressors and contribute positively into their social adjustment and academic integration and consequently being successful leaners accomplish their mission of study in abroad.

## 2.2.5. Social and demographic factors affecting academic achievement

## 2.2.5.1. Socioeconomic status of student

Social aspects and demographic information of participants of any research especially in social and humanity science are considered very vital in the course of investigation. But due to enormous variables under the socio demographic category in educational research, studies have become widely disperse across myriad of variables include but not conclusive; age, gender, geographical belongingness, race, ethnicity, marital status, socioeconomic status (SES), parents' education level, parental profession, language, income and religious affiliations (Farooq et al., 2011:2). However, the socioeconomic status is of most researched and debated factor among educational professionals as significant factor contribute towards the academic performance of students. As argued by Adams (1996) cited in Farooq et al., (2011) socioeconomic status of learners affects the quality of their academic performance. Most of the experts posit that the low socioeconomic status has negative effect on the academic performance of students because the basic needs of students remain unfulfilled and hence they do not perform better academically.

It is further elaborated by Beaumont-Walters and Soyibo (2001:6) that several past studies have reported inconclusive findings on the links among many independent variables such as gender, grade level, school location, school-type, student-type and socioeconomic background (SEB)) and differences in high school students' performance

on specific science subjects. For example, regarding gender differences in science, many studies have reported that males generally outperformed females in science and mathematics. That student performance is very much dependent on (socio economic back ground) as per their statement, "High school students' level of performance is with statistically significant differences, linked to their gender, grade level, school location, school type, student type and socio-economic background .

Considine and Zappala (2002:105) conducted empirical research on 3000 students from financially disadvantaged backgrounds to estimate the extent of socioeconomic, family, individual and contextual factors on school educational performance, the results obtained using binomial logistic regression techniques indicated that gender, unexplained absences, parental educational attainment, housing type, ethnicity and student age are all statistically significant variables and predictors of academic performance (Considine and Zappala, 2002:100).

In contrast, family structure, the main source of family income and geographical location do not significantly predict outcomes in school performance once other factors are controlled for. This is corroborated with findings of the study done by Syed Tahir et a.l, (2006:9) and in addition quoted that some of the researchers (Goldman, N., Haney, W., and Koffler, S., 1988, Pallas, A., Natriello, G., McDill, E., 1989, Levin, H., 1986) have tried to explain the link between student's achievements, economic circumstances and the risk of becoming a drop-out that proved to be positive.

Socioeconomic status is primarily meant income status in terms of salary and other material capability or financial leverage. However, in this study socioeconomic status of the research participants was not included in the variables searched because almost all students participated in this study were admitted into their respective universities through scholarship programs offered by Sudanese high education institutions. And accordingly, the researcher assumed their uniform status in general. Even so, a statement of financial support from family to be rated by the participants is included in the parental component of the questionnaire in order to maintain the importance of the socioeconomic status of the participants.

## 2.2.5.2. Influence of parent's education on student academic achievement

Family is the first circle of the community which has much influence on students as children as well as grown up. However, in this study the social factor is specifically meant the educational level of the parents and their involvement in following up and monitoring of their children's performance even in postsecondary level.

The significance of the parents' education effect on students' overall academic achievement is reported in the study done by Farooq et al, (2011:10). This study involved 600 students in Lahore, Pakistan (300 male and 300 female). The study investigated a series of factors including among others the parents' education and its effect has on students' academic performance. The research concluded that parents' education level have significant impact on students' academic achievement. Interestingly, they have accentuated that parents' education means more than their occupation in relation to their children's performance at school.

Similarly, Mazharul Islam (2014:396) stated that familial factors such as parental education and occupational level, family background and environment, parental support and aspiration, and socio-economic status of family are the important group of factors determining the academic performance of students. It is also substantiated by the study of Krashen (2005) which concluded that students whose parents are educated score higher on standardized tests than those whose parents were not educated. Educated parents can better communicate with their children regarding the school work, activities and the information being taught at school because they can better assist their children in their work and participate at school.

Some researchers examined separately the educational level of either father or mother to investigate parents' educations among the factors influence on the students' academic achievement. This is done by M Mazharul Islam (2014) in a study titled "factors influencing the academic performance of undergraduate students in Sultan Qaboos University in Oman". The result of the study concluded that father's education (at least secondary level showed significant and positive association with achieving higher CGPA. That is, students whose fathers have at least secondary or higher level of education tend to have higher academic achievement. This finding is consistent with many other studies on the effects of family socioeconomic status (SES) on educational outcomes of children.

Moreover, Amativa et al., (2010:39) investigated the effects of the parent's education on elementary and secondary school students who are more attached to their parent's guidance and overseeing. Their study has revealed that parent's education have significant impact on student's academic achievement. An educated parent can take better care for their child and guide to choose the better field of studies.

In similar study conducted by Hijazi and Naqfi (2006:9), they further elaborated that mothers age and education and its effect on students' academic achievement. They have concluded that mother's education is significantly correlated with academic achievement of the students. The study also revealed that mother's age is important factor as young mothers can easily handle their children compared to aged mothers.

However, the above mentioned studies that concluded the significance influence of the parent education on student academic achievement are confronted with other studies that reported opposite result like the study conducted by Ogunshola and Adewale (2012:230) on impact of parental status on academic performance of the students in selected schools in Nigeria, they have concluded that Parental socioeconomic statuses and parental educational background did not have significance effect on the academic performance of the students. This might be attributed into the context they have conducted the research. However, it has raised the query of studying more different variables influence the academic achievement of the respective students.

But, in a research paper done by Diaz (2003:) on students of four secondary schools in Almeria City in Spain, to investigate the influence of the parental academic level on the student's academic performance, he demonstrated conflicting result as students whose fathers have high level of education are those with high achievement, while mothers level of study did not show any significant correlation with academic success of the students. Diaz (2003:27) further explained that the influence of the family educational climate is defined by the amount and the form of assistance that children obtain from the family; this is determined by some familial characteristics like the vibrant communication, effective relationships, values and attitudes within the family.

# 2.2.5.3. Impact of parental involvement on academic achievement

The influence of parent involvement on academic success has not only been noted among researchers, but also among policy makers who have integrated efforts aimed at increasing parent involvement into broader educational policy initiatives. Parental involvement is defined in various ways in the literature and according to Epstein's (1990, 1995, cited in Chowa et al., 2013:4) typology of parental involvement includes six categories: basic parenting, facilitating learning at home, communicating with the school, volunteering at the school, participating in school decision making, and collaborating with the community.

Numerous studies, mostly from developed countries, have shown that parents are more likely to be involved with their children's education at home than in school. Research also has demonstrated that a positive relationship exists between at-home parental involvement and a range of school-related outcomes, including academic achievement, school engagement, and socio emotional adjustment (Chowa et al., 2013:5).

As reported in the study of Mazharul Islam, (2014:401) students with high level of parental involvement with their education were found to have 2 times higher odds than the students with low level of involvement. This is in line with the result of study conducted by of Chowa et al., (2013:6) that revealed parental involvement at-home and in-school is statistically significant predictors of youth academic performance. But the effect of in-school parental involvement on students' academic performance differs based on the parent's gender (Nyarko, 2011 cited in Chowa et al., and 2013:6). A mother's in-school involvement has a significant and positive influence on academic performance, but a father's in-school involvement does not have a statistically significant impact on academic performance. This is also supported by Zenebe (2015:65) who concluded that there is strong association between the academic achievement of student and parent involvement.

Parent involvement is more explicit in child's early education as revealed by the David R. et al., (2010:1) that parent involvement during early stage of child learning is consistently found to be positively associated with a child's academic performance.

Specifically, children whose parents are more involved in their education have higher levels of academic performance than children whose parents are involved to a lesser degree.

Additionally, this study have revealed that increased parent involvement, defined as the teacher's perception of the positive attitude parents have toward their child's education, teacher, and school, was significantly related to increased academic performance, measured by both a standardized achievement test and teacher ratings of the child's classroom academic performance.

Findings from the study of David R. et al., (2010:7) indicated that increased parent involvement is significantly related to a child's increased perception of cognitive competence. This is supported by Luke and Mavis (2014) who elaborates further by saying that lack of parental involvement, is one of the factors contributing to student's low performance.

According to Chowa et al. (2013:18), social capital theory posits that a family's potential to develop human capital can benefit from relationships with other members of the community, particularly when members of the family's social network have access to special knowledge or resources. From this point of view, regular interactions with teachers and other members of the community may enable parents to gather crucial information that may affect their child's academic success (e.g., how well the student needs to perform to graduate to the next grade, how the child is currently performing, and to which high schools the child can apply given their current performance). In a developing country, this type of interaction might be the only way for parents to gather information.

Parental involvement level varies among parents with respect to the characteristics of the parent such as; mother of young children, educated or uneducated parents, father's involvement, their economic status, family background, and social environment. It is also crucial to consider the age of the children whereby parental involvement with children from early age has been found to equate with better outcomes specially in building their personalities parents are primary guides to them, children try to copy them, and considered them that they are always role model so parents can shape their life as they can. (Zenebe, 2015:18).

It is also of great importance to mention that, in this study the most of undergraduate students studying abroad have reached mature age to take care of themselves. Nevertheless, the role of the parent is still indispensable in terms of support and they should be well informed about what happens in their study, and receive regular reports about how well their children perform against clear standards that are shared by all educational institutions. Parents intervene that if something is not happening as it should in the school, they are obliged to take steps to deal with the problems (Rekai Zenda, 2016:56).

## 2.2.5.4. Gender factor and academic achievement

The relationship between gender and the academic achievement of students has been an issue of discussion among the educational practitioners and researchers. According to Eshetu (2015:50) gender difference in attitudes and behaviours as well as differential course taking and biological differences between the sexes may all be instrumental in giving rise to gender differences in achievement.

It is, therefore, important to understand the factors underlying this gender gap in academic achievement. Even though, various studies investigated the influence of

gender have on academic achievement but the findings are not conclusive. However, Some studies (Farooq et al, 2011) have found a gap between the achievement of boys and girls, with girls showing better performance than boys in the subjects of mathematics and English as well as cumulatively. It is also identified by Mazharul Islam (2014:402) that gender of student is a significant determinant of academic performance.

Furthermore, some researchers argue that girls receive higher grades than boys because they exert more effort, work harder, and their academic culture is more study oriented than boys. Woodfield and Earl-Novell (2006 cited in Jayanthi, et al., 2014:753) observed after analysing more than a million graduating students that female students did better than male students. They attributed this partly to female students being more academically responsible and thus less likely to be absent from lessons.

The findings show that girls had better average achievement scores than boys is consistent with the literature (Chambers and Schreiber 2004; Sammons 1995; Van Houtte 2004; OECD 2004 cited in Farooq et al, 2011:13). The result of the study conducted by Mohammad Manjur Alam et al. (2014:153) also reveals that age, gender, past academic track, medium of education and absence in the classes have also influenced the academic performances of a student.

On the other hand, Raychaudhuri, et al (2010:40) in their study have inversely showed that boys are performing better than girls, and by this result disproved the prevalent assumption that girls perform better than the boys. This is also supported by the result of study conducted by Eshetu (2015:53) that showed male students performed better than females and the results were statistically significant.

However, another study conducted by Akessa and Dhufera (2015:61) demonstrated that there is no association between student's achievement and sex of students. This is consistent with Mlambo (2011:91) who concluded in his study that gender, age, learning preferences, and entry qualifications did not cause any significant variation in the academic performance of students.

As quoted by Jayanthi, et al. (2014:753) Research done by Borde (1998) showed that gender did not play a role in academic performance. Another study by Meece and Jones (1996) also revealed that gender differences did not influence students' standardized science test scores. However, Haist et al., (2000, also quoted by Jayanthi, et al., 2014) showed that men performed better than women in certain settings while women outperformed men in other settings. A study by Hedges and Newell (1999) showed male students outperformed female students in science, but in reading and writing female students did much better. However, educational statistics have indicated that female students are outperforming their male counterparts at all levels of the education system and attaining higher qualifications.

In sum, most studies reviewed accentuated the difference between male and female students in academic performance while they have the same exposure to learning experience with equal potential of gaining knowledge. By contrast, the prevalence of gender disparity in the developing world in many aspects of life have made girls more vulnerable to be deprived of having basic education equal to that of boys. Therefore, in many countries the basic question is whether girls get their basic rights of education rather than bridging the gap and attaining parity level.

## 2.2.5.5. Age factor and Academic achievement

Human being passes through age stages in the life circle and each stage has its unique experiences even though education is lifelong learning process. In this regard, many researchers carried out a variety of studies inquiring factors influencing students' academic achievement, and age has become a conspicuous demographic factor affects the academic gain of the students.

According to Mlambo (2011:84) the issue of student age and recent changes in educational policies around the world have led to an increase in the number of matureage admissions in educational institutions. While a large proportion of undergraduate students are still 19-year olds, the ages of students in classes are now more variable than 10 to 15 years ago.

According to the findings of Shoukat et al. (2013:287) that age, father/guardian social economic status and daily study hours significantly contribute the academic performance of graduate students. This result is also confirmed by study of Diaz (2003:54) that age as an important factor in explaining the academic accomplishment of the students. Diaz further elaborated that as student get older the scores observed for academic environment, academic motivation and social support perceived by the student decreased.

Some researchers (Trueman & Hartley, 1996; Richardson, 1994 cited in Mlambo, 2011:84) have differentiated the performance between students of younger age and mature age but the definition of a mature student varies by country with 21, 22 and 25-year old students being classified as mature students in the United Kingdom, United States of America and Australia, respectively. Mature students are thought to lack basic skills required for effective study or to be impaired by age-related intellectual deficits.

However, when compared to the younger students, the academic performance of mature students is as good, if not better.

According to Lake and Boyd (2015:54) there is an age relationship for both a declining propensity for surface learning and an increasing propensity towards deep learning in the context of Australian post-secondary students. It was argued that older students are more likely to learn concepts at university at a deeper level than their younger counterparts. Similarly, Gow and Kember (1990, cited in Lake and Boyd, 2015:54) highlighted that older students are less likely to adopt a surface approach to learning and more likely to implement a deep approach compared to younger students. Such studies thus supported the idea that age is an important factor in determining what approach a student will take towards their learning.

However, the findings of Lake and Boyd (2015:58) revealed that younger students and older students groups exhibit similar patterns in the change in learning approach, namely that the surface learning approach score declines through time, and that the deep learning approach score increases through time. Likewise, Mlambo (2011:89) obtained results shows that the academic performance of mature students did not differ from that of younger students.

This is in line with the findings of Richardson (1994 cited in Mlambo (2011:89) who reported that the academic performance of mature students is as good, if not better than younger students in most settings. As long as the mature students are admitted into study programmes for which they possess the basic competencies, then their performance will not be worse than that of their younger peers. Indeed, Richardson (1994) concludes that mature students seek a deeper meaning towards their academic

work and were less likely to adopt a surface approach or reproducing orientation like the younger students.

# 2.2.5.6. Student's place of residence and academic achievement

Availability of accommodation facilities and residential hostels for students are deemed essential demand for foreign students even though some students might prefer staying off campus but because of academic benefits to living on campus that many colleges and universities require their students to live on campus during part and sometimes their entire time of college or university study. Most often, colleges and universities require traditional degree seeking students to live on campus during their freshman year (De Araujo and Murray, 2010:57).

According to Nelson, et al. (2016:38) a variety of factors influence a student's ability to succeed in college and complete a degree program. Students, who live oncampus, at least during their freshman year, have been shown to be more likely to complete their degrees than are students who live off-campus. Living off campus allows for a student's time to be directed towards other obligations which may hinder the opportunity for a student to "develop a sense of place". In similar manner, De Araujo and Murray (2010:58) postulated that students living on-campus take advantage of experiencing a variety of activities and services to create an environment that causes students to develop close relationships with each other and which encourages students to study and socialize together.

Moreover, students living in university hostels have greater chance of social interactions and exposed to the influence of peers and friends and on top of that spend more time studying in their residences than student that live off campus, which is likely an indication that dormitory facilities foster an environment conducive to learning, providing a channel for improved student performance. The residence life programs may have positively impacted student's adjustment to college in their first year. And as result, campus housing may have better connected students to their academic programs and have helped them adjust to college life, therefore yielding a higher retention rate for on campus students.

Some studies like Zhang & Dunkel (2017) revealed that students who lived in campus housing had a higher first year to second year retention rate in three years among four year cohorts and a higher fall to spring retention rate for two cohorts. Campus housing was positively related to a higher retention rate. However, Shehry and Youssif (2017:10) disputed with those findings and conversely reported a highly significant relationship between long distance between home and the campus which affects the educational attainment of the students. They further elaborated that arriving home late, difficulty in getting ready for exams, tiredness, inability to do homework and exercises, inability to concentrate in classes, repeated absences during lectures etc are also important factors.

This is also supported by the study of Nelson et al. (2016:42) that revealed residing far from campus and travelling distance is positively related to students' grade point average. It may be that students who have to drive significant distance for classes are aware of the sacrifice they are making and want to make that sacrifice count by doing well academically. The study also found that Students who live only a moderate distance from the university demonstrates lower cumulative grade point averages. These lower grade point averages may indicate less commitment to or involvement in academic life.

Interestingly, some researchers (Ali, et al., 2013:289) took neutral position with regard to the impact of residence factor and in their study they have concluded that living place have no significant impact on student's performance.

# 2.2.5.7. Former school background and academic achievement

The students' previous educational background has got also a great deal of attention in educational research and it is generally assumed that the students who showed better or higher performance in the starting classes of their studies also performed better in future academic years at degree level (Ali, et al., 2013:283).

High school grades and scholastic measures are recognized by many researchers as the most reliable predictors of academic achievement and college persistence. A report on higher education performance, which was produced by the University of Minnesota in 2007, stated that the most reliable predictor of student success in college is the academic preparation of students in high school.

In specific of Brazilian experience, Alam, et al., (2014:144) referred to a paper in Education Economics in 2011 published by Guimar and Sampaio on family background and students' achievement on a university entrance examination. This paper describes Brazilian experience and considers personal characteristics such as age, gender, race, religion, family income, parents' education and family size, school attended, tutoring classes, among others

Some researchers like Stewart S. et al., (2015:18) have found high school grades to be stronger predictors of college academic achievement than any other factors. This study cited Astin, 1997 who analysed data on 52,898 students attending 365 baccalaureate institutions using average high school grades to generate a regression formula to estimate institutional expected retention rates. Findings from this national longitudinal retention study revealed that high school grades are viable predictors of college persistence.

Moreover, Kyoshaba (2009:15) conceptualized former school background, as location of the former school (urban or rural); ownership of former school (public or private) academic status of the former school and financial status of the former school is linked to academic performance of students. That is the type of school a student attends is likely to contribute to their academic performance of the student in future. Students from high-class schools are likely to perform well due to the fact that they attended those schools.

In this regard, Mlambo (2011:83) described that learning is a cumulative process, thus a student recruited with higher entry requirements will be well prepared for the course material compared to a student admitted based on the bare minimum qualifications. It is important for educators to have an idea of how well- or ill prepared admitted students are based on their qualifications. As a result, it is important to identify students who might need extra attention based on level of prior competencies upon admission.

In accordance with Staffolani and Bratti, (2002) cited in Ali et al., 2013:283) observed that "the measurement of students previous educational outcomes are the most important indicators of students future achievement, this refers that as the higher previous appearance, better the student's academic performance in future endeavours. Moreover Staffolani and Bratti, (2002) elaborated more on students' previous educational outcomes as the most important indicators of student's future achievement; this refers that the higher the previous appearance, the better will the student academic performance in future endeavours.

This is concurred with Mazharul Islam (2014:402) who reported in his study findings that high school GPA score strongly linked to university Grade Point Average and thereby students who entered in the university with better scores in their high school exams (securing 90% or above marks in 12th grade) were found to be more than 4 times likely to achieve a higher grade in undergraduate level.

In similar manner, Alam, et al., (2014:153) concluded that age, gender, past academic track, medium of education, school/college location and absence/presence in the classes have influenced the academic performances of a student. Among these variables most important variable for all the faculties turned out to be past academic result variable. This indicates that students with good past academic result are doing better in this university.

This is also corroborated with study of Mehari and Ayalew (2016:94) which reported that university entrance exam result has positive effect on student's academic, which is a student with better university entrance exam result more successful than student with low university entrance exam result. A result confirmed by Anderson, Benjamin and Fuss (1994 cited in Mehari and Ayalew, 2016) who found that students who performed well in high school also performed better in college.

These findings are solid enough due to the fact that students who had previously performed well continue to do so because they have a strong potential to easily catch up with university work and they are motivated to do so. This implies that university admission point is important variable in determining student's college performance and it is significantly and positively related to academic performance of student's Cumulative Grade Point Average (Yigermal, 2017: 164). However, it is also observed that many of the researchers contested these findings like Reddy and Talcott (2006; cited in Ali et al., 2013:283) who disagree with these conclusions that future academic gains are resolute by preceding performance. In their research on the relationship between previous academic performance and subsequent achievement at university level, they found that students learning or studying at graduate level and the score secured did not predict any academic achievement at university level.

It is also supported by result of the study of Oregon State University (2003; cited in Ali et al., 2013:284) on graduate admissions that normal measures of educational potential and academic performance such as high school GPA (Grade Point Average) scores showed only 30% of the deviation in initial or starting (first) year at college. This finding is in line with Mlambo (2011:90) who concluded that there was no significant differences in academic performance between students due to differences in their admission criteria based on their previous academic performance.

Similar conclusion is being made by a study done by Mapuranga et al., (2015:4) none of the participating students mentioned entry academic qualifications / points as one of the determinants of their academic performance and completion of their degree programmes at Great Zimbabwe University. Rather, they felt that university systems, the general macro-economic environment, student disposition and funding were the major determinants of performance and completion of programmes at Great Zimbabwe University. This does not mean that academic entry standards have no bearing on performance. Their impact is very minimal when compared to these other factors. They further stated that a follow-up discussion with some of the respondents revealed that students with high grades at entry point are not the ones who graduate with first class at the end of the programme. A multitude of other related factors have more impact on

university students' academic performance and completion of programmes than their high school results or past performance.

The aforementioned result is consistent with Remali et al. (2013:1947) who found that gender and prior academic knowledge shown that there was not significant relationship toward the first year accounting students' performance where there did not affected the student's CGPA.

In order to narrow down the influence of the previous background, some studies have examined the impact of individual subject like Mathematics, English and Science has on student academic achievement in some specific courses like Engineering and accounting. For instance, a study conducted by Asirifi et al., (2015:124) concluded that the students' educational background of mathematics has effect on their performance in Engineering Mathematics, and also on the class of award obtained.

It is important to note that these conflicting findings on the impact of student's background on academic achievement reflect the need of more research employing both quantitative and qualitative approaches. However, it is quite hard in social science including education to reach consensus on certain issues but by doing more research contributes to narrow existing gaps and much closer to certainty within still dominant relativity.

## 2.2.6. Instructional factors affecting academic achievement

The factors impacting the academic achievement of the students are categorised as academic factors and non-academic factors. Among the academic related factors found are academic factors which included instructional methods and materials, the effectiveness of the instructors based on their qualifications and experiences, academic advising and contacts between instructor and student outside the lecture hall.

#### 2.2.6.1. Instructor's role

Instructors and lecturers have an important influence on students' academic achievement and they also play a crucial role in educational attainment because the instructors is ultimately responsible for translating policy into action and principles based on practice during interaction with the students.

Both teaching and learning depends on teachers: no wonder an effective teacher has been conceptualised as one who produces desired results in the course of his duty as a teacher (Agharuwhe and Nkechi, 2009:107). As explained by Dayad, 2000 (cited in Alos et al., 2015:61) mentioned that good teachers are constantly on the alert for methods and instructional materials that will make learning meaningful. With the wise selection and use of a variety of instructional materials or audio-visual materials, experiences may be provided to develop understanding.

In similar fashion, Akpo and Jita (2013:476) investigated the extent to which instructors' inputs (teaching experience, academic qualification, subject specialization and gender) influence students' academic achievement. The findings from the correlation analysis confirmed that teachers' experience, academic qualification, and subject specialisation had a moderate positive and significant relationship with students' academic achievement.

Additionally, Anastasia (2015:24) pointed out that teachers with long experience use better classroom management approaches and adequate teaching methods that encourage student's autonomy and reduce custodial control. Thus taking responsibility for student learning needs, managing classroom problems and keeping students on task. Students always have high expectations of their instructors. As such it is critical that instructors are able to show students they are approachable, enthusiastic, positive,
knowledgeable (about content and technology), organized, consistent, friendly, quick to respond, and strong teaching skills. (Beth & Rosalie, 2016:24).

## 2.2.6.2. Academic Advising

Academic advising or counselling is an essential component of the academic support for students that should be done at tertiary institutions as it prepares the students for the future career and professional development. Hence, and according to Kanos and Isaac (2016:31) academic advising should be done at institutions of higher learning to reduce cases of student dropouts and to maintain a good pass rate but it has to be done properly. Throughout their study programme students need to be advised, supported, guided, supervised and counselled where necessary. Accordingly, academic advising is viewed as the process of assisting students to realize the maximum educational benefits to them, by helping them to better understand themselves and to learn to use the resources of the institution to meet their special educational needs and aspirations.

In this regard, according to Sayyid Ahmed and Rawi (1995 cited in Banat, 2015:98) academic advising is defined as, " a process which aims to help students discover their capabilities and potentials in order to help them make decisions related to their study program, selection of major study courses, and to assist them in overcoming difficulties which might obstruct the students' academic or study progress" Based on this definition, academic advising plays a fundamental role in the student's university life beginning from the moment he is admitted to the university until the time he has graduated.

Moreover, as explained by Muola and Migosi (2012:973) who carried out a survey study on 920 undergraduate students in Nigeria, academic advising is a dynamic relationship between a student and an advisor with a shared responsibility for a coherent education plan that incorporates personal, social, academic and career considerations. It focuses on helping students identify life goals, acquire skills and attitudes that promote intellectual growth, and become academically successful. It is also stressed by Sindabi (2007) that main purpose of academic advising programme according to is to assist students in the development of meaningful educational and career goals. Therefore, academic advisors who are instructors and lecturers themselves assist students in developing educational plans consistent with their life goals. They provide information about academic progress and degree requirements and carefully review students' academic and educational needs, performance, and challenges.

Given this significance, higher learning institutions have been assigning academic advisors to students all over the world especially to foreign students who are in dire need of career advice and academic consultation as part of academic integration executed by the university. More importantly most of higher education institutions made academic advising a mandatory to first years students because when students enrol for a degree at an institution, they need a mentor who can take them through their years of study at the institution, the mentor acts like a parent to the student and advises the student on the best possible options the student can take.

As elaborated by Kanos and Isaac (2016:31) first year students need proper mentoring for them to be familiar with the educational institution they are enrolled with and the expected academic achievements as compared to senior students. However, academic advising should be a continuous process when students enrol for their first year until they complete their studies.

Additionally, quality academic advising can promote student engagement by initially and continuously serving as this point of connection as well as engaging with

students, advisors can also encourage student involvement with powerful learning opportunities both in and out of the classroom. The advising process can help students to identify personal strengths and interests related to their educational and career goals (Adena D. et al., 2013:9).

In general, Academic advisors play crucial role to help students fill out study plan, follow student's academic performance, help student to select courses, provide accurate information about teaching options and available services, and solve student's problems especially academic ones in addition to other tasks (Banat, 2015:99). Therefore, Academic advisors can interpret institutional expectations and convey them to students in practical terms that illuminate paths to degree completion, thereby meeting student and institutional goals.

Adena D. et al. (2013:12) argue that academic advising impacts multiple factors that contribute to student success and identified specific areas for targeted interventions. In similar study of Muola and Migosi (2012:979) concluded that majority of students have pressing academic needs that need to be attended to through a comprehensive and effective academic advising programme. This study also revealed that academic advising needs for male and female students are not varied; more females tend to seek advising services. It also reported that there is need of academic advising on time management, study skills, finance, academic ability, personality types and anxiety/depression. Other areas include: academic and school related problems, overcoming fear about taking examinations.

In another citation Muola and Migosi (2012:975) mentioned a study conducted in Spain by Arco, Fernandez, Heilborn & Lopez's (2005) revealed that students rated academic needs such as getting easily distracted, need to improve their study skills,

problem of time management and problem of test taking anxiety as the areas desiring significant attention.

However, according to Azra and Mehrnoosh (2012:17-18) most universities and colleges, the task of academic advising is performed by the faculty members who are not specifically trained to academically advice students, but they are heavily engaged in the teaching and research in their own specific fields. Paying less attention to the quality of the academic advising process, due to busy schedule and a lack of specific skills of academic advising, may undermined the quality of the academic advising and reduce student satisfaction of the process of education. Even so, academic advising programs and approaches can vary from university to university, from faculty to faculty or even from one advisor to another. Likewise, students at different years of study experience different and unique problems and therefore are likely to perceive the need for help differently. The differences can be manifested in the areas they think need to be prioritized in the academic advising programme. (Muola and Migosi, 2012:975).

This argument over quality delivery of academic advising is substantiated by the findings of Patrick (2015:81) who stated that challenges students encountered in higher education when seeking for advisory services included the unavailability of academic advisors for advisory services, students' lack of knowledge on academic advising, ability and readiness of academic advisors to the advisory roles, and psychosocial related issues. Thus, a quality academic advising programme is indispensable to increase students' academic achievements in higher education.

In sum, despite the invaluable contribution of academic advisors have to students' academic achievement in higher education, but according to Patrick (2015:77) there are a number of questions that remain unanswered with regard to this. First, are

academic advisors available and accessible for the delivery of such a service, and if available and accessible, are they ready for consultation? Second, if they are ready, are they trained or do they possess enough interpersonal and communication skills to effectively advise their clients? And these questions are hanging on placard to guide high education institutions for their endeavour to implement effective academic advisory services that realize optimal level of student academic achievement.

#### 2.2.6.3. Language of instruction

Academic success of students depends on various variables including a good command of language of instruction. Many studies have established that students who are more proficient in the instruction language are on average more successful.

Students whose language proficiency levels are not adequate have difficulty in grasping the subject matters (Civan and Coşkun, 2016:1999). This is because according to Sotco and Stephen (2015:154) students who had the exposure to language of instruction were more likely to understand better the materials they interacted with during the teaching and learning process than those whose background in the language of instruction was poor. And consequently, students who had an exposure to language of instruction in their secondary school prior to joining university were better placed to perform well at tertiary level than those who had not.

The relationship between language proficiency and academic success is well documented and good number of researches has been conducted in this field. For instance, Sotco and Stephen (2015:155) investigated the influence of students' backgrounds in the language of instruction on secondary school academic performance. Their findings were as follows: First, students whose medium of instruction at primary school level was English performed better in form one annual examination than their counterparts who had used Swahili and the difference was statistically significant. Secondly, students who had used English as the medium of instruction at primary school level, performed better in form two national examinations than those who had used Swahili and the difference was also statistically significant, in a two-tailed test. It was thus, concluded that the language of instruction used by students at primary school level influenced significantly students' academic performance at secondary school level.

Language barrier according to Luke and Mavis (2014:117) greatly affects students' academic performance in schools for many students enter the classroom not fluent in the languages of instruction which are used for testing students' mastery of subject content and used in the examinations and therefore student fail to express it in the language of the instruction even though the student might understand the concepts in their mother tongue and eventually the student is rated a low achiever because of the language constraint.

In similar way, Ballantine and Rivera (2014 cited in Civan and Coşkun, 2016:1986) examined the performance of International Baccalaureate Diploma Programme (IBDP) candidates who took examinations in a language other than their native one. They found that students who took the exams in a non-native language (the majority for whom the school courses were also conducted in a non-native language) were more successful than others. In comparative study Civan and Coşkun, (2016:1999) investigated the influence of medium of instruction language (Turkish and English) on the academic success of the students. Their result suggests that instruction in English significantly and negatively affects the academic success of the majority of students. This is in line with the previous studies in the literature which have shown different

negative aspects of instruction in students' non-native languages. This effect is highest in the freshman year but it reduces over time, although never disappears.

Similarly but with broad based study, Nara M. et al., (2015:62) reviewed several studies investigated the relationship between language proficiency and academic performance among different groups of international students especially those from non-English speaking backgrounds in English speaking institutions by utilizing standardized test scores such as TOEFL (Test of English as a Foreign Language) and IELTS (International English Language Testing System).

Additionally, a positive correlation between language proficiency and academic achievement of foreign students was reported by Light et al. (1987 cited in Nara M. et al., 2015:62) in a study they conducted at the State University of New York at Albany. In this study they determined a statistically significant positive correlation between TOEFL (test of English as foreign language) scores and grade point averages (GPAs) among 376 international graduate students. This is corroborated by similar results reported by Johnson (1988), who conducted a confirmatory study at the University of Wisconsin - Green Bay among 196 international undergraduate students.

However, there are some other studies (Krausz et al., 2005; Xu, 1991) cited by Nara M. et al., (2015:62) indicated that TOEFL scores might not be a good predictor for foreign students' academic success. Other researchers also indicated other contributing factors such as inadequate background knowledge, poor study skills, and difficulty of course work differences in language demands for different courses, motivation, maturity, and previous experiences.

Meanwhile, in the context of this study, many foreign students in Sudanese universities are admitted into their respective undergraduate programs at tertiary

institutions while their proficiency in the medium of the instruction -the Arabic- might be in low level or non-existence. Therefore, universities have included in their academic program some language course as core course which is taken by foreign students as preuniversity course or within the semester workload. This shows that proficiency in medium of instruction as effecting variable in academic achievement has been taken duly into consideration. This was explicitly observed in the course of this research where many participants of this study expressed that they took language courses which have made easy for them to grasp the lectures and fulfil their academic obligations throughout their study.

## 2.2.6.4. Teaching methods

The selection of appropriate Instructional methods or teaching styles for the learners with different backgrounds has substantial impact on their academic achievement. According to Jarvis (2006) instructional methods are about techniques and approaches of imparting of knowledge, transmission of information, ideas and delivery of skills. Some literature uses models of teaching or teaching styles and defined it as teaching strategies to accomplish particular instructional goals. Models differ from general instructional methods in that models are designed to achieve specific objectives (Eggen and Kauchak, 2001).

It is further elaborated by Henson (1996) that, today's educationists recognize the existence of multiple instructional methods such as; lecture method, inquiry-based learning, and problem-based learning, cooperative learning and so forth. The advancement of theories of learning led to the introduction of a variety of teaching methods to accommodate the diversified needs of the learners (McNeil and Wiles, 1990).

Moreover, teaching is applied to purposeful activities of teachers that are occurred in learners through the interaction between the teacher and the learner. Indeed, learning is the purpose of teaching that is the means of achieving this purpose. In other words, deliberate and thoughtful control of learners' experiences to influence their learning means teaching. Therefore, teaching requires utilization of strategies designed to direct learners to achieve educational expectations (Soltani and Motamedi 2014:60).

It is further emphasised by Dosch and Zidon (2014:343) that high percentage of students repeating an academic course indicates a mismatch between college instruction and students' academic needs. In addition the current educational system works hard to keep the traditional ideals and "one-size-fits-all" methods in place rather than employing more learner-centred approaches. However, any given instructional method is the result of different combination of teaching strategies. Thus, some instructional methods are primarily based on instructor-centred approach and some are based on learner-centred approach.

## 2.2.6.4.1. Instructor-centred approach

In the instructor-centred method, most of the time, the instructor or lecturer is the centre of attention and focus of instructional activities by employing the lecture method. In this approach the students listen to the lectures presented by the instructor, observe the demonstration and follow directions given by the instructor, answer inquiries asked by the instructor and practice the drills laid out by the lecturer (Lang et al., 1995).

Under this method, students simply obtain information from the teacher without building their engagement level with the subject being taught. The method is least practical, more theoretical and memorizing. It does not apply activity based learning to encourage students to learn real life problems based on applied knowledge (Ganyaupfu, 2013:30).

Traditional lecture style as explained in hereafter is considered one of the best known method of instructor-centred approach whereby learners deemed mere receivers of experience and knowledge imparted by the instructor that consequently lead to dependency on memorization rather than constructed knowledge combined instructor's experiences and learner's efforts.

#### 2.2.6.4.1.1. Traditional lecture style

Traditional lecture method symbolizes the instructor-centred approach which is one of the oldest and by far the most popular methods of teaching. However, in some contemporary studies lecturing is portrayed as ineffective instructional method. This argument is based that lecturing creates passive, non-thinking learners who are exposed to information but are not given the opportunity of organizing information, uncovering problems and creating solutions to them (Johnson and Mighten, 2005:320).

Lecture method is always characterised as one-way communication and there is little participation and involvement from the side of the students and focused on the lowest level of cognition (Henson, 1996). Nevertheless, the lecture as a method of instruction has a number of advantages; first, it covers a large amount of material in a short time. Second, it is suitable for almost any group size. Third, lecture method can be used with both beginners and the advanced learners (Davies, 1981).

Finally, lecture method is effective when the subject matter is factual and there is little room for differences of opinion. Finally, lecture method is useful when the time is limited and it can be later reinforced by another technique such as discussion or group work (Lang and Evans, 2006).

A good lecture can be efficient instructional method of communicating basic facts, concepts, principals, generalisations, points of view and arguments about a particular area of knowledge. Lecture can also be usefully combined with other techniques, such as discussion, visual, demonstrations or question-and –answer sessions (Lang et al., 1995).

Moreover, according to Ganyaupfu (2013:33) a typical learning environment with a presentation from the course teacher accompanied by a lecture neither promotes learners' participation nor build the required level of reasoning among students. Students build a better understanding of the main concepts more effectively when they are engaged to solve problems during class activities. But this is inconsistent with study of some researchers (Schwerdt and Wuppermann, 2008:12) who concluded that spending more time in class on lecture style presentation than on problem solving is found to be related to higher student achievement and higher quality teachers. However, lecture style is still dominant in the scene as instructional method of teaching especially for undergraduates who are in regular manner packed in spacious lecture halls to listen lectures and presentations that are delivered by the instructors.

This traditional way of teaching remains vigorously applied in teaching-learning process despite of emerging alternative method of student-centred that put more emphasis on learner's role in knowledge attainment.

## 2.2.6.4.2. Student-centred approach

In student-centred method, also called learner-centred, the students interact with each other as a learning process. Students are encouraged to enquire, discover and cooperate in their learning. It is outlined by Lang et al, (1995) that, this approach is based on the premise that, as learners mature, they need to take increasing responsibility for seeking and discovering knowledge for themselves, and to draw conclusions from their learning experience.

This teaching method is regarded more effective since it does not centralize the flow of knowledge from the lecturer to the student. It is also motivates goal-orientated behaviour among students; hence most teachers today apply the student-centred teaching method to promote interest, analytical research, critical thinking and enjoyment among students. This indicate that student-centred method is very effective in improving student achievement (Ganyaupfu, 2013:30).

Moreover, Yap W. et al., (2016:267) opined that learner-centred education entails teaching-learning process take place in many forms so that students have the opportunity to optimum level of learning, and it is through doing tailoring programs to meet these needs that learning and motivation are enhanced. When students are allowed to have their own control on the learning materials and learning pace at the same times, the students are experiencing a change in the learning process.

Based on discussion related to effectiveness of any given method, some studies opted to integrated approach like the study conducted by Ganyaupfu (2013:32) that concluded combining both teacher-centred and student-centred teaching methods in teaching learners is the most effective approach that produces best student results. This is also supported by the finding of Wiggins (1987, cited in Ganyaupfu, 2013:32) who reported that interaction between the teacher and students during the teaching and learning process encourages the students to search for knowledge rather than the lecturer monopolizing the transmission of information to the learners.

However, it is difficult in one study to be all-inclusive of instructional methods and simultaneously arrive at conclusive finding. Therefore, most of researchers resort to

experimental or longitudinal design in order to determine comparatively the effect of one or two teaching method. As such, studies compare traditional methods like lecture style with non-traditional method.

## 2.2.6.4.3. Comparative analysis of teaching approaches

The main aim of teaching-learning process is to bring about desirable changes in learners so as to achieve the desired outcome. However, the effective teacher has to apply most relevant teaching methods that lead to best results at any educational level.

In the conventional way of teaching, many teaching practitioners widely applied teacher-centred methods to impart knowledge to learners comparative to student-centred methods. Until today, questions about the effectiveness of teaching methods on student learning have consistently raised considerable interest in the thematic field of educational research. Moreover, research on teaching and learning constantly endeavour to examine the extent to which different teaching methods enhance growth in student learning. (Ganyaupfu, 2013).

In this regard, findings of empirical study carried out by Eze T.I. et al., (2016:637) on effects of problem-based teaching methods on student's academic performance revealed that students taught financial accounting using Problem Based Teaching Method performed better with higher post-test scores than those taught using lecture teaching method. The participants in the study were assigned within sections to two treatment groups. One group was problem-based instructional group receiving the problem-based instructional strategy, and the other group was lecture-based instructional group receiving the instructor-led direct instruction. The findings revealed that problem-based group reported a significantly higher level of academic achievement than the traditional lecture based group.

According to Duch (1995 cited in Nafees et al., 2012:162) defined problembased instructional strategy that challenges students to "learn to learn", working cooperatively in groups to seek solutions to real world problems. These problems are used to engage student's curiosity and initiate learning the subject matter. Problembased instructional strategy prepares students to think critically and analytically, and to find and use appropriate learning resources. Moreover, Nafees et al., (2012:166) concluded that the results of the study are encouraging, and suggest that it is possible for students in a problem-based instructional strategy to perform better than the students in a conventional, lecture-based instructional strategy on academic achievement.

In similar design of comparison, Oviawe (2010:161) investigated the effects of the cooperative learning. It is concluded that cooperative learning methods are better instructional methods/techniques than the conventional teaching method for teaching Building Technology in Polytechnics of which learners accomplish understanding through the social interaction which occurs in the classroom.

This findings concurred with Khazaei A. et al. (2015:161) examined the effects of cooperative teaching method on students' academic achievement in two school subject courses, namely Geography, and History & Civic Education. The research method undertaken here was of the experimental design with pre-test and post-test procedures. The results showed that, compared with traditional approach, Cooperative Learning method increased students' academic achievement in both Geography, and History & Civic Education subject's courses.

Moreover, the research of Kristak Ľ. et al., (2014:63) reported on results of nontraditional teaching of basic courses of Physicis in the first year of study. They used interactive methods which is modern approach which was developed at the Institute of Physics at the University of Dortmund. This study revealed that traditional method regardless the lecturer leads only to a limited increase in students' knowledge (the highest achieved normalised gain was 14%). This fact was proven with partial, overall evaluation of the didactic tests (aimed at remembering, understanding, specific and non-specific transfer) as well as with evaluation of conceptual test.

Similarly, Kibet K. et al., (2016:946) conducted a study to find out if there was difference on student achievement in fluid flow physics when taught using Composite Instructional Method and Conventional instructional method. Results indicated that students taught by composite instructional method outperformed their counterparts taught conventionally. Therefore composite instructional method is superior to conventional method. It improves performance in fluid flow physics.

In an extensive study, Haas (2002:65) replicating Marcucci's (1980) methodology for meta-analysis, he carried out a study focuses on research with methods for teaching secondary level algebra from 1980 to 2001. From a sample of 34 studies with 62 effect sizes, six categories for teaching methods and corresponding effect sizes were derived for "good" studies: direct instruction scored the highest, followed by problem-based learning, technology aided instruction, cooperative learning, manipulatives, models, and multiple representations, and communication and study skills. Meta- and regression analysis results suggest that Algebra I teachers should emphasize direct instruction, technology aided instruction, and problem-based learning. These three teaching method categories ranked highest in both analyses.

Also in comparative study Omwirhiren and Ibrahim (2016:6) investigated the effect of two instructional methods which are Demonstration and Lecture on senior secondary school students' learning outcomes in chemistry. The result of this study has

added yet empirical evidence to the library of data on the efficacy of the demonstration instructional strategy in the teaching and learning of chemistry. The experimental group produced higher mean achievement scores than the control group taught chemistry bonding using the traditional methods.

Overall, these comparative studies emphasized the effect of non-traditional method on academic achievement of students compared to traditional method of teaching. However, the interaction between the lecturer and students, whereas students are actively involved into individual stages of the teaching and learning process and actively participate in solving of the dealt problems what gives an immediate feedback to the lecturer and he/she can immediately respond to incorrectly understood concepts, or misconceptions. Henceforth, with the use of interactive methods it is possible to achieve significantly better results considering students' knowledge, increases demonstration of the curriculum, increases students' attentions, and it forces them to work and think independently and it helps to reduce misconceptions gained during previous study.

## 2.2.7. Effect of student traits on academic achievement

Learning skills and student traits refer to how students deal with their studies and manage their course workloads in order to accomplish different tasks required for academic program. Thus, application of effective study skills and use of learning strategies is associated with academic success of the students.

However, some students lack fundamental practices of good study habit as they do not attend classes, do not take down notes, and do not do their assignments, do not read their books or make use of the library. These attitudes may negatively affect their academic performances (Abisola and Kudirat, 2017:284). By definition and according to Suresh (2015:138) study habits is the systematic and regular activities such as; efficient use of time and preparedness skills applied by the learner to improve learning experience. It is further explained by Bhat and Khandai (2016:20) that meaning of habit in general is just a behaviour that is repeated until it is automatic accustomed by the person. It becomes something that is done on a scheduled, regular and planned basis that is not relegated to a second place or optional place in one`s life. It is simply done, no reservations, no excuses, and no exceptions. Therefore, study habits are the ways that we study regularly and repeatedly that is formed during schools years.

Additionally, study habits can be beneficial and good to help student to attain high grades – or habit might be destructive and bad enough that put down the students performances and make get poor grades. It further mentioned by Bhat and Khandai (2016:20) that good study habits include being organized, keeping good notes and reading textbook, listening in class, and working every day. Bad study habits include skipping class, not doing work, watching too much TV or playing video games instead of studying, and losing work. Without good study habits, a student cannot succeed.

According to Khurshid et al., (2012:34) study habits is very vital to student's life because it plays a critical role in their academic success. For studying, students should utilize various techniques in order to ensure good results. As everybody knows that every student has unique learning characteristics and study habits as some students can cope with noisy and crowdie place but son contrary, some are inclined to silent environment for studies.

Although it is good to study in a peaceful environment but some time students cannot get that environment. In this manner student should have to adjust themselves in

that environment like, in hostels some students study in silence but some do not. If they have good study habits, they can adjust easily in the hostel. Some students do not have the ability to cope up with the non-suitable environment. In this regard, siahi and Maiyo (2015:138) concluded that the academic achievements of the students having good and poor study habits differ significantly and the students having good study habits achieve higher than the students having poor study habits.

It is obvious then, good study skills and habits are essential for students' successful academic performance for high achieving college students have better study skills than low achieving students in areas of time management, study techniques, and attitudes toward learning. Accordingly, training in study skills significantly influence retention of at risk college students.

#### 2.2.7.1. Efficient use of time

In general time is the essence for all walks of life but specifically skilful management of time by the learners would be strongly predictive of success in university. It seems obvious that students who waste their time and always delay their academic tasks tend to have lower performance and consequently susceptible to be struggling or dropout.

According to Nonis & Hudson (2010:229) college students lead busy and variant lives and therefore, spend too little time studying. They devote less time for studies and more time for other activities. While studying may not simply be a quantity issue, adding qualitative techniques such as good study habits can make study time effective for students. This researchers refer to developed world where college students have to juggle their study and part-time job. However, it is observable in the advent of technology that there are massive distractors which cause students to be less focus on study and develop poor time management which ultimately leads to weak performance.

Indeed, lack of efficient use of time means not completing academic projects and assignments on time as wells as haphazard study plan in addition to disequilibrium state of sleep.

In this regard and looking at importance of time and effort, Nonis & Hudson (2010:229) elaborated that meaning o study is to buy out the time and dedicate self to the application and the task of study is to become engrossed in a process of learning, practice, enlightenment education of one's self. Therefore the study habits can be derived from the above as buying out a dedicated scheduled and uninterrupted time to apply one's self to the task of leaning. In a related study Mazharul Islam (2014:400) reported that time spent in study, particularly time spent more than 14 hours per week, showed significant positive effect on achieving very good to outstanding results.

Some researchers like Miguel and Ksenia (2015:45) researchers found that high performing students don't put all subjects in one study session but they study at consistent times of the day/week and have specific goals for study sessions as they never procrastinate a study session but start with the most difficult subject first, they review notes before starting an assignment, avoid being disturb during study sessions, use study groups effectively (to study), review notes, schoolwork and other materials over the weekend and don't cheat in exams. Additionally, according to Stelnicki and Nordstokke (2015:222) poor academic skills (e.g., not attending class and procrastinating), and distraction were the most salient factors that kept undergraduate students from reaching their goals, with general stress noted by the majority of the participants

Similarly, Ali et al., (2013:287) described that study time is one of the most important factors affecting the student scores. The correlation strength among test score and study hour is positive and greater than the age and income factor. It is further stated by Khan et al., (2013:83) that student effort is determinant in student's expectation of success and failure. Active study, setting appropriate goals, a good study environment, and effective time management are considered important for academic success. Academic failure is attributed primarily to lack of study, poor time management, and inadequate goal setting.

Moreover, it is stated by (Miguel & Ksenia 2015:45) when considering the relationship between study time and performance, it is not only how much time a student spends studying but also how effectively this time is spent that influences academic performance. However, the aforementioned results of impact of study time factor is inconsistent with the study of Nonis & Hudson (2010:236) which did not demonstrate a significant direct relationship between the amount of study time and academic performance as measured by CGPA

#### 2.2.7.2. Regular attendance and preparedness

On study skills and habits, the results from different studies vary depending on which specific study habits were measured. However, disruptive attendance and unpreparedness of the students impact negatively on academic achievement. As result, positive indications were found when some combination of study behaviours such as attendance, homework turned in, and use of study guide, prior preparation for the class, participating in class, and coming to class on time were used.

According to Miguel & Ksenia (2015:45) the habit of low performing students is that they are quite and inactive in the whole semester as they don't initiate asking unless they are asked questions by the instructor, they also don't participate in class discussion as they don't refer to reading materials. Besides, poor performers don't attend class regularly and miss more classes per semester or quarter, and even when they attend they are always late comers as they seat at the back of the classroom and don't take notes in class and never contact the lecturer after class-time for academic advice or assignment consultation. During presentations they are not well prepared and roughly read from the presentation material rather than internalising and explaining the concepts they present.

Similarly, Nuthana & Yenagi,(2009 cited in Ayodele and Adebiyi, 2013.) have examined the causes of poor academic performance among university undergraduates. Some of these factors identified are intellectual ability, poor study habit, achievement motivation, lack of vocational goals, low self-concept, low socio-economic status of the family, poor family structure and so on. This is consistent with Alam et al., (2014:153) who reported that age, gender, past academic track, medium of education and absence in the classes have also influenced the academic performances of a student.

It is also reported by Tesfaw and Derebew (2014:48) who indicated that absent from school and department preference had negative impact on academic achievement of students. This is in line with Mazharul Islam (2014:400) who stated that student's level of attendance in class also showed significant positive association with better results. The odds of very good to outstanding performance of students with 90 and above attendance were nearly 2 times higher than the students with less than 90% attendance. On the other hand, Schuman, Walsh, Olson and Etheridge (1985 cited in Miguel & Ksenia, 2015:45) examined group studying, cramming, degree of note-taking, review of past exams, and going over readings twice, but they concluded that none of these variables have been found to have a direct effect on grades. Research suggests that specific interventions aimed at setting personal academic goals and exam preparation and study skills can help to remediate academic behaviour and contribute to higher GPAs. Thus, student's motivation or effort has been considered to be the element that initiates student's own involvement in learning and scholastic activities. When a student is strongly motivated, all his efforts and personality are directed toward the achievement of a specific goal, thus bringing to bear all his or her resources (Diaz, 2003:45).

In sum, study habits differ from person to person. However, some researchers offered practical tips and activities to aid students in college which are including: attending classes regularly, taking down notes during teaching, participating in class discussions and activities, talking to the instructor after class, completing and check all work and submitting assignments on time, having proper rest periods, progress monitoring and following a time table, having a special time for study each day, learning to use the library and test-taking strategies.

#### 2.3. Synopsis of relevant previous studies

In addition to the elaborated literature review presented in the preceding pages of this Chapter 2, the researcher attempted to lay out in the following part a summarised outline of findings of most relevant studies reviewed.

#### 1- Karimi, Florah K. (2008)

Factors Contributing to Academic Performance of Students in a Private Universityin Kenya. (Unpublished Doctoral Thesis, University of South Africa).

This study aimed at identifying the factors that significantly influenced academic performance among students in the groupings of gender, international students' status, campus of study, year of study and type of course major. The study employed descriptive research method and used questionnaire as a survey instrument for data collection. The study concluded that:

- a- There are significant direct positive effects of medium of instruction proficiency on the academic performance of the undergraduate students.
- b- The contribution of medium of instruction proficiency to academic performance among the female students was observed to be much greater than that among the male students.
- c- The study observes the final high school grade as having significant direct positive effects on the academic performance of all undergraduate students in the university.
- d- No significant direct effects are observed between a student's age and academic performance in the university.

#### 2- Rekai Zenda (2016)

Factors affecting the academic achievement of learners in Physical Sciences in selected Limpopo rural secondary schools. (Unpublished PhD thesis in the subject curriculum studies at the University of South Africa)

This study aimed to examine factors that affect learner academic achievement in Physical Sciences in Limpopo rural secondary schools in South Africa. The sample of the study consisted of Physical Sciences teachers, principals of schools offering Physical Sciences, learners doing Physical Sciences, parents of learners doing Physical Sciences and Physical Sciences curriculum advisors. A descriptive research design was used in this study. The results of this study according to the perceptions of Physical Sciences teachers, Physical Sciences learners, principals, curriculum advisors and parents showed that the main issues of high failure rate are lack of adequate resources, teacher effectiveness, lack of motivation, high teacher-learner ratio, workload, discipline of learners, supervision of teachers, parental involvement, management and leadership skills, and appropriate teaching methods.

## 3- Detwiler, R. R. (2011)

Assessing Factors Influencing Student Academic Success in Law School. (Unpublished PhD thesis, University of Toledo, USA).

The purpose of this study was to examine if selected inputs, between college characteristics, involvement variables, and intermediate educational outcomes had any impact on cumulative Grade Point Average among third-year, full-time law school students in the United States. The study employed descriptive research design and data of interest in this research was gathered through a web-delivered survey. The major Findings of this study summarised in the following:

a- Students with greater involvement in academic-based student organizations such as a law journal or moot court and their engagement with classroom discussion and frequent revisions of their academic work are associated with higher cumulative law school GPA.

b- Students that came to class prepared for instruction by reading their assignments or texts beforehand were more likely to have a higher GPA than their counterparts that came to class unprepared.

c- Student-student involvement proved in two areas to be a significant positive predictor: the number of hours spent per week relaxing and socializing, and the number of hours spent per week participating in law school sponsored activities.

4- Zenebe lemessa (2015)

Factors that affect students' academic achievement in government secondary schools of Asella town, Oromia national regional state. (A Master Thesis Submitted to the School of Education and Behavioral Sciences, Haramaya University, Ethiopia)

This study aimed to assess the factors that affect student academic achievement in Government secondary schools. The study investigated the correlation between students' academic achievement and parental involvement, homework, class-size, teacher's competency and training, and teachers' experience. The study used descriptive survey method.

The key finding of this study indicated that physical environment and the school facilities, instruction facilities and materials, teacher qualification and training, teacher experience, teachers' attitude towards their job, parent involvement and homework were found to be a contributing factor for these patterns as well as low achievement levels in secondary schools in the study area.

The conclusions to be drawn from this study are that gender, age, learning preferences, and entry qualifications did not cause any significant variation in the academic performance of students.

#### 5- Kyoshaba Martha (2009)

Factors affecting academic performance of undergraduate students at Uganda Christian University (Masters Thesis submitted to graduate school in educational management of Makerere University, Uganda).

The objective of this study was to investigate the factors affecting academic performance of undergraduate students. Emphasis was put on trying to establish the relationship between admission points, parents' social economic status, former school background and academic performance of undergraduate students at Uganda Christian University. The study took the descriptive research design.

The findings revealed the existence of a significant relationship between students' A' level and Diploma admission points and academic performance, but there was no relationship between mature age points and academic performance. The findings also revealed that there was a significant relationship between parents' social economic status and academic performance and a significant relationship between former school background and academic performance.

#### 6- Mutua meshack nzesei (2015)

## A correlation study between learning styles and academic achievement among secondary school students in Kenya (Master's thesis Submitted to the University of Nairobi, Kenya).

The purpose of this study was to determine the relationship between learning style and academic achievement among secondary school students in Kenya. The study used a descriptive research design and the sampling applied was purposive. The instrument was used to identify the learning style preference among the students based on Visual (V), Auditory (A) and Kinesthetic (K) modalities.

The findings indicate that majority of the students are trimodal learners, followed by bimodal (VA) learners and thirdly by unimodal (V) learners. The least preferred learning style is the single kinaesthetic modality. The study also revealed that there is no significant difference in learning style preference among male and female students and among high and low academic achievement groups.

#### 7- Geremew Muleta Akessa and Abdissa Gurmesa Dhufera (2015)

**Factors that Influences Students Academic Performance: A Case of Rift Valley University, Jimma, Ethiopia** (Journal of Education and Practice Vol.6, No.22, 2015 ISSN 2222-1735 (Paper) ISSN 2222-288X. <u>www.iiste.org</u>).

This study aimed to find out factors those influence the academic performance of university students. A descriptive research design was employed and Self-administered questionnaires were used to collect data from students. The findings of the study indicated that:

a. Instructors have a great role in fostering positive or negative attitude to achievements of students.

b. There is no association between student's achievement (GPA) and Sex of students.

c. There is strong association between the academic performance (achievement) of students' GPA and fathers and mothers education level.

d. There is strong association between the academic achievement (GPA) of students' students and Economic status of families.

e. Institutional facilities (lack of resources) like: reference materials, well organized laboratory equipment's and computer laboratory, and lack of interest to subject matter, were the prior problem that has been seen at university students.

## 8- Dejen Tesfaw, and Muluken Derebew (2014)

Multilevel Analysis on Determinants of Academic Achievement of Second Year Regular Students: The Case of Addis Ababa University School of Commerce. (IOSR Journal of Research & Method in Education (IOSR-JRME) e-ISSN: 2320– 7388,p-ISSN: 2320–737X Volume 4, Issue 6 Ver. IV (Nov - Dec. 2014), PP 42-49). The aim of this study was to identify factors affecting academic achievement of second year regular students. The study employed descriptive research design. A crosssectional survey was used to obtain data of the study.

The findings from this study indicated the factors: study hours, mothers' educational level, teachers' commitment, standard of lectures and presentations, assessment and marking criteria, and course interest have positive effects on the achievement of students. On the other hand, department preference and absent from school have negative effects on academic achievement of students. There was a high degree of variation of academic achievement of students among departments while there was similarity within departments.

## 9- Sibanda, C. G. Iwu and O. H. Benedict (2015)

**Factors Influencing Academic Performance of University Students** (Demography and Social Economy, 2015, № 2 (24), ISSN 2072-9480).

The objective of this study was to statistically determine what students perceive as the highly influential academic success and or failure factors. This study was quantitative in nature by employing descriptive research design and utilizing a questionnaire with a list of factors (success and failure).

The study has found a number of factors responsible for success and failure respectively. Among the highly influential factors for success are regular study, regular attendance and assignment completion, which are regarded as products of hard work, commitment and dedication. With regard to failure, factors such as lack of effort, lack of dedication and commitment, not finishing or doing assignments ranked highly.

#### 10- Mazharul Islam (2014)

**Factors Influencing the Academic Performance of Undergraduate Students in Sultan Qaboos University in Oman** (Journal of Emerging Trends in Educational Research and Policy Studies (JETERAPS) 5(4): 396-404 (ISSN: 2141-6990), 2014). The main objective of this study was to examine the influence of some selected socioeconomic, demographic, familial, individual students' scholastic and institutional factors on the academic achievement of undergraduate students.

A descriptive method was conducted by using a self-administered questionnaire for data gathering. The study participants consisted of 585 graduating students of 2008-2010 cohorts from six different colleges of SQU.

Many factors including: pre-admission qualification, level of attendance, probation status, time spend in study, father's education, parental support and involvement, major subjects of study, and gender of the students have been identified as significant determinants of academic success of students. Father's educational level of secondary and above has been found to be more significant than economic factors in explaining student's educational attainment. Girls are outperforming boys mainly because girls' culture is more study oriented than the boys'.

## 11- Mohammad Manjur Alam, Md. Arif Billah, Sarwar Alam.(2014)

Factors Affecting Academic Performance of Undergraduate Students at International Islamic University Chittagong (IIUC), Bangladesh (Journal of

Education and Practice <u>www.iiste.org</u> ISSN 2222-1735 (Paper) ISSN 2222-288X (Online), Vol.5, No.39, 2014).

The main objective of this study was to examine different factors influencing socioeconomic background and the academic performance of undergraduate students. The study employed descriptive research design and used questionnaire for data collection. The result of this study showed that results of academic performance of students have varied from faculty to faculty. The result also reveals that age, gender, past academic track, medium of education and absence in the classes have also influenced the academic performances of a student.

## 12- Amel Al shehry and Sulima Mohamed Awad (2017)

**Factors Affecting Academic Performance of Undergraduate students at Najran preparatory year for girls- Najran University 2015-2016** (International Journal of Asian Social Science, 2017, 7(1): 1-18 *ISSN(e): 2224-4441/ISSN(p): 2226-5139* 

The purpose of the study was to investigate factors that affect academic performance of undergraduate female students. The factors examined were the effect of students' admission points, previous school background, residence outside Najran city, transportation problems, educational factors, change of instructional language from Arabic to English, academic qualifications, and Faculty members' skills on academic performance.

The study used descriptive method and designed a questionnaire as a tool data collection to gather the required data. The study obtained the following results:

a. Students suffered from shift of instructional language from Arabic to English.

b. There was a highly significant relationship between GPA and the student percentage when they admit in the university.

c. There was an insignificant relationship between GPA and education of either father or of both the parents.

d. A highly significant relationship between the different teaching methods in the secondary school and in preparatory year affected the academic level of students.

d. There was a highly significant relationship between long distance between home and the campus which affects their educational standards.

#### 13- M.S. Farooq, A.H. Chaudhry, and M. Shafiq and G. Berhanu (2011)

**Factors Affecting Students'Quality of academic Performance: A Case of Secondary School Level.** (Journal of Quality and Technology Management, Volume VII, Issue II, December, 2011, Page 01 - 14).

The main objective of this study was to investigate the effect of socio-economic status, parental education and occupation on quality of students' academic performance. This descriptive study was conducted by using a survey instrument for information gathering about different factors relating to academic performance of students.

The results of the study revealed that socioeconomic status (SES) and parents' education have a significant effect on students' overall academic achievement as well as achievement in the subjects of Mathematics and English. The high and average socio-economic level affects the performance more than the lower level. It is very interesting that parents' education means more than their occupation in relation to their children's academic performance at school. It was also found that girls perform better than the male students.

# 14- S. Valli Jayanthi, Santhi Balakrishnan, Angela Lim Siok Ching, Noor Aaqilah Abdul Latiff, and A.M.A. Nasirudeen,(2014)

**Factors Contributing to Academic Performance of Students in a Tertiary Institution in Singapore.** (American Journal of Educational Research, vol. 2, no. 9 (2014): 752-758. doi: 10.12691/education- 2-9-8). The purpose of this study was to determine if factors such as gender, age, nationality of student, part-time employment, extracurricular activities and interest in pursuing higher studies affected academic success. The study also examined the learning methods used by students and how these affected their academic scores. A descriptive research design was used and the main method of data collection was a semi-structured questionnaire administered to 144 students.

The results showed that factors such as gender, nationality of student, cocurricular activities and an interest in pursuing higher degrees affected students' academic scores. The use of past year examination papers as a learning method improved students' academic scores compared to other methods.

## 15- Syed Tahir Hijazi and S.M.M. Raza Naqvi (2006)

**Factors affecting students' performance a case of private colleges.** (Bangladesh e-Journal of Sociology. Volume 3. Number 1. January 2006.

The main objective of this research was to investigate student performance in intermediate examination is associated with students' profile consisted of his attitude towards attendance in classes, time allocation for studies, parents' level of income, mother's age and mother's education. The research used a descriptive research design and data collected through survey from students of a group of private colleges.

The results of this study showed that mothers' age to be important factor as young mothers can easily handle their children as compared to aged mothers. It also revealed the significance of Student attitude towards attendance that contributes in student's performance. Furthermore, the study indicated the insignificance of family income with regard to the academic performance of the students investigated. Finally, the study could not prove the relationship between academic performance and student attitude towards time allocation for study per day.

#### 16- Ali Shoukat, Zubair Haider, Hamid Khan and Awais Ahmed (2013)

Factors Contributing to the Students' Academic Performance: A Case Study of Islamia University SubCampus. (American Journal of Educational Research 1, no. 8 (2013): 283-289. doi: 10.12691/education-1-8-3).

This study aimed to investigate the factors affecting academic performance of undergraduate students. The study utilised descriptive research method and data were collected through structured questionnaire from different departments of the university.

The findings revealed that age, father/guardian social economic status and daily study hours significantly contribute the academic performance of graduate students.

## 17- Azrinawati Mohd Remali, Mohamad Afiq Ghazali, Mohammad Khairi Kamaruddin and Tan Yong Kee (2013)

Understanding academic performance based on demographic factors, motivation factors and learning styles. (International Journal of Asian Social Science, 2013, 3(9):1938-1951)

This study aimed to identify factors that influence academic performance of undergraduate students at Universiti Tenaga Nasional in Malaysia. The study employed descriptive method and questionnaire was used a tool of data collection. The Results in this study showed that there is a significant relationship between motivation factors such as intrinsic motivation, extrinsic motivation as well as self-efficacy towards the students' academic performance. This study also found that associated students' academic achievement is directly influenced by learning styles. However, the results also indicated that there is no significant related between gender and students' prior academic knowledge/background.

## 18- Amogne Asfaw Eshetu (2015)

Gender disparity analysis in academic achievement at higher education preparatory schools: Case of South Walo, Ethiopia. The purpose of the study was to investigate the impact of gender on academic performance of preparatory secondary school students. The study employed descriptive research design. Result of Grade 12 Ethiopian Higher Education Entrance Certificate Examination in year 2014 academic year has been used as source of data throughout the study.

The result of the study showed that male students have outpaced female students. The findings of the study also revealed the existence of gender gap in the result of Higher Education Entrance Certificate Examination. It is further indicated that students who have scored better in their total result also scored better in Mathematics, English and Aptitude subjects. This implies that the three subjects are good indicators of students overall academic achievement in Higher Education Entrance Examination. In addition, the study concluded that the proportion of female students in the upper achieving group was found statistically lower that male students. With regard to the age, younger students have scored significantly better result than older ones.

## 19- Femi Ogunshola And A.M. Adewale (2012)

The Effects of Parental Socio-Economic Status on Academic Performance of Students in Selected Schools in Edu Lga of Kwara State Nigeria. (International Journal of Academic Research in Business and Social Sciences, July 2012, Vol. 2, No. 7 ISSN: 2222-6990.

This study aimed to investigate the relationship between home-based environment factors and the academic performance of students in selected secondary schools. Descriptive research design was employed and questionnaires were used to gather the required data from the participants. The four factors that were examined and statistically analyses were: parental socio-economic background, parental educational background, parental educational qualification and students' health statuses. The findings of the study showed that parental socio-economic statuses and parental educational background did not have significance effect on the academic performance of the students. However, the parental educational qualification and health statuses of the students were identified to have statistical significant effect on the academic performance of the students.

#### 20- Considine, G. and G. Zappala (2002)

**Factors Influencing the Educational Performance of Students from Disadvantaged Backgrounds.** (Refereed Proceedings of the National Social Policy Conference 2001, SPRC Report 1/02, Social Policy Research Centre, University of New South Wales, Sydney, 91-107.

The main objective of this study was to determine the relationship between family socio-economic status (SES) and the academic performance of children. This study presented new data on over 3000 students from financially disadvantaged backgrounds to estimate the extent of socio-economic, family, individual and contextual factors on school educational performance.

The results from this study indicated that sex, unexplained absences, ethnicity, parental educational attainment, housing type and student age as reflected by school level were all statistically significant variables and predictors of academic performance. In contrast, family structure, the main source of family income and geographical location did not significantly predict variation in school performance once other factors were controlled for. A key finding of this study is that even within a group with considerable financial disadvantage, socio-economic status as reflected by the level of parental education, was a key predictor of student academic achievement.

#### 21- Gina A. N. Chowa, Rainier D. Masa, and Jenna Tucker (2013)

Parental Involvement's Effects on Academic Performance Evidence from the YouthSave Ghana Experiment. (Children and Youth Services Review, 35(12), 2020-2030. doi:10.1016/j.childyouth.2013.09.009)

The objective of this study was to examine the relationship between parental involvement and youth academic performance and the mediating effects of parental involvement in the relationship between Social Economic Status and academic performance. It also investigated the relationship between at-home and in-school parental involvement and academic performance. This study uses baseline data from the YouthSave Ghana Experiment. YouthSave is a five-year, longitudinal study investigating the use of savings accounts as tools for youth development and financial inclusion in four developing countries.

Findings of this study showed that parents whose children perform well academically appear to be more involved at home with their children's school work, whereas parents whose children do not perform well academically appear to be more involved at school. However, results of the study do not support a mediating effect of parental involvement in the relationship between SES and academic performance. According to the findings, at-home parental involvement is associated positively with academic performance, while in-school parental involvement is associated negatively.

22- K. suresh. (2015)

**Study on study habits, achievement motivation and academic achievement of high school students.** (International journal of economics and business review, Vol-3, issue-10, October 2015).

The objective of this study was to find out the significant influence of study habits, achievement motivation on academic achievement. The study belongs to descriptive research design and survey instrument was used to collect the data. Study habits, achievement motivation are considered to be independent variable and academic achievement is considered to be dependent variable. The result indicated that the study habits, achievement motivation influences the academic achievement significantly.
#### 23- Ogbogu Christiana Osaikhiuwu (2014)

**Institutional Factors Affecting the Academic Performance of Public Administration Students in a Nigerian University.** (Public Administration Research; Vol. 3, No. 2; 2014 ISSN 1927-517x E-ISSN 1927-5188 Published by Canadian centre of science and education).

This study aimed to investigate the institutional factors which affect the performance of Public Administration students in a Nigerian University. The study adopted descriptive research design. The results of this study revealed that the institutional variables considered (such as unfavourable learning conditions, interrupted water supply, poorly equipped library etc) did not have any significant impact on students' performance. The study therefore concluded that students' academic performance could be influenced by some other factors which should be investigated in future research.

#### 24- Patrick Severine Kavenuke (2015)

Academic Advising and Students' Academic Achievement in Higher Education: Experiences from Dar es Salaam University, College of Education in Tanzania. (Journal of Education, Humanities and Sciences, Volume 4 No. 2, 2015: 76–86).

This study aimed to explore the contribution of academic advisors in enhancing students' academic achievement in higher learning institutions. The study employed descriptive research design. The data collection methods were questionnaires, focused group discussions and unstructured interviews.

Findings of this study indicated that academic advisors had not contributed at all to their achievement. The findings also indicated that among the challenges that students encountered when seeking for advisory services included the unavailability of academic advisors for advisory services, students' lack of knowledge on academic advising, ability and readiness of academic advisors to the advisory roles, and psychosocial related issues.

#### 25- Victor, Mlambo (2011)

An analysis of some factors affecting student academic performance in an introductory biochemistry course at the University of the West Indies. (Caribbean Teaching Scholar Vol. 1, No. 2, November 2011, 79–92).

This study aimed to identify some determinants of academic performance of the students. A descriptive research method was used and survey instrument was administered to the participants. The results of this study showed that there were significant associations between entry qualifications and both gender and age. In addition, none of the investigated factors significantly affected academic performance. This observation could be a consequence of an impressive performance in the coursework exams by a large proportion of students resulting in less variation in the recorded grades. Learning preferences were found to be independent of both the age and gender of students.

#### 26- Miguel A. Cerna & Ksenia Pavliushchenko (2015)

Influence of Study Habits on Academic Performance of International College Students in Shanghai. (Higher Education Studies; Vol. 5, No. 4; 2015 ISSN 1925-4741 E-ISSN 1925-475X Published by Canadian Center of Science and Education).

The purpose of this study was to estimates the global validity of existing constructs and serves as the basis for the development of the Self-Reported Study Habits for International Students (SR-SHI) used to identify at-risk students in international programs. One-year classroom observations, recollection of study habits though interviews with high performing students show that they are mainly from low-context and individualistic countries while most low performing students come from high-context and collectivistic countries. This is the first study regarding the effect of study habits on academic performance conducted with international students in Shanghai.

Findings of this study revealed that, high performing students give opinions based on reading material and class content, use the expression "I think", ask questions

in class, are on time, ask for feedback regarding assignments, take notes in class and while studying, look for the professor after class, seat at the front of the classroom and attend every class, study in silence and alone at regular times along the whole semester, read the material about two weeks before the exam, review notes before the exam, talk about the content with other students.

#### 27- Yousaf Ali Khan, Zahoor Ahamad & Sadia Kousar (2013)

**Factors influencing academic failure of university students.** (. International Journal of Educational Administration and Policy Studies, Vol. 5(5), pp. 79-84, September 2013).

This study aimed to present the result of a recent investigation at the University of Gujrat that attempted to identify the post enrolment factors that students perceived as having important influences on students failures in their university studies. Descriptive research method was employed and data was collected by using questionnaire.

Finding indicates that male and female groups were significantly different in their perception of causes of academic failure, but perception of students from different programs Bachelors in science, Master in Arts and Science (BS, M.A/M.Sc) was not significantly different. In the estimated model class participation and lack of family support was directly affected on students drop out from university, but wrong choice of subject and change of system which was basically link with class participation and indirectly effect on students drop out. The study further concluded that student effort is prominent in student's expectation of success and failure. Active study, setting appropriate goals, a good study environment, and effective time management are considered important for academic success. Academic failure is attributed primarily to lack of study, poor time management, and inadequate goal setting.

#### 28- Beth A. Trammell & Rosalie S. Aldrich (2016)

**Undergraduate Students' Perspectives of Essential Instructor Qualities.** (Journal of the Scholarship of Teaching and Learning, Vol. 16, No. 1, February 2016, pp. 15-30.doi: 10.14434/josotl.v16i1.19178).

This research paper aimed to explore how specific student characteristics such as firstgeneration status, age, class level, and format impact students' perception of what makes a good instructor. A descriptive research design was used and the participants were instructed to visit a web address where they completed the online survey on their own. The results of the study revealed that students have high expectations for instructors to have many positive personality traits, as well as strong teaching skills and content knowledge. Students from this sample reported strong agreement with wanting an instructor who was approachable, enthusiastic, positive, and knowledgeable (about content and technology), organized, consistent, friendly, quick to respond, and strong teaching skills. Together, this may suggest that students have unrealistically high expectations for instructors.

#### 29- Younis Illahi Bhat & Hemant Khandai (2016)

Academic Achivements and Study Habits of College Students of District Pulwam. (Journal of Education and Practice, Vol.7, No.10, 2016, ISSN 2222-1735).

The objective of this study was to investigate the relationship between the academic achievement and study habits of male and female college students of district Pulwama (J and k). This study employed descriptive method of research and survey instrument was used for gathering the required data. The results of the study revealed that: female college students in comparison to male college students have been found to have better academic achievement. It is also indicated that urban college students have high academic achievement as compared to rural college students. It has been found that

there exists no significant difference in the study habits of college male and female students.

#### 30- Kassu Mehari Beyene & Jemal Ayalew Yimam (2016)

**Multilevel Analysis for Identifying Factors Influencing Academic Achievement of Students in Higher Education Institution: The Case of Wollo University.** (Journal of Education and Practice, Vol.7, No.13, 2016, ISSN 2222-1735, (Paper) ISSN 2222-288X).

The objective of this study was to determine the key factors influencing students' academic achievements. A descriptive research method was employed and the data for the study were obtained through questionnaire instrument.

Major findings of the study:

a. The results of this study indicated that the variation in academic achievement among university students.

b. Sex of the student had a great effect on academic achievement of university students where female students performed lower than those of male students.

c. Mothers and fathers educational level have positively and strongly associated with student's academic achievement.

d. Number of assessment in a given semester will have effect on academic achievement.e. University entrance exam result has positive effect on student's academic, which is a student with better university entrance exam result more successful than student with

low university entrance exam result.

## 31- Hazza M. Abu Rabia (2017)

**Undergraduate Arab International Students' Adjustment to U.S. Universities**. (International Journal of Higher Education Vol. 6, No. 1; 2017).

The main objective of this study was to identify those factors that Arab international students report as facilitating or obstructing their academic success and promoting or limiting their socialization within the context of their postsecondary institution, their host community, and their host nation. The study used descriptive research design and in-depth interviews were employed to document and analyze the experiences and challenges of the students.

The results of this study revealed that multiple factors obstructed Arab international students' academic success and limited their socialization within the context of their postsecondary institution, their host community, and their host nation. These are included culture shock, language barrier, cultural differences, and isolation.

#### 32- Abdulkadir Civan & Ali Coşkun (2016)

The Effect of the Medium of Instruction Language on the Academic Success of University Students. (Educational Sciences: Theory & Practice, December 2016, 16(6), 1981–2004 DOI 10.12738/estp.2016.6.0052).

The aim of this study was to investigate the effects of medium of instruction in students' non-native language on the academic success of university students. The study utilized descriptive research method and survey instrument was employed to collect the data from a Turkish university with many departments. The findings indicated that instruction in the non-native language affects negatively the academic success of students. This negative influence was higher in the first year but still existed by the fourth year. However, the study found the opposite effect for the students with merit-based scholarships, who are arguably brighter and self-motivated.

#### 33- Moges Endalamaw Yigermal (2017)

**Determinant of Academic Performance of Under Graduate Students: In the Cause of Arba Minch University Chamo Campus.** (Journal of Education and Practice, Vol.8, No.10, 2017).

The main purpose of this study was to investigate the determinant factors affecting academic performance of regular undergraduate students. The study employed descriptive research design and data were collected through survey instrument.

The findings of this study revealed the existence of a significant relationship between gender difference, university entrance exam and studying hours and academic performance (CGPA). The findings also revealed that there was a significant relationship between students former academic back ground, studying hours, and student's behaviour on taking of alcoholic drug and qat on academic performance of students.

#### 34- Nelson, D., Misr, K., Sype, G E.and Mackie, W. (2016)

An Analysis of the Relationship between Distance from Campus and GPA of Commuter Students. (Journal of International Education Research – First Quarter 2016 Volume 12, Number 1).

The main objective of this study was to investigate whether the *distance* that a student commutes affects his or her likelihood of completing a college degree. The study employed descriptive research method and used ex post facto design by collecting students' records from Saginaw Valley State University which is a small-to mid-sized university located in east-central Michigan of USA.

The major findings of the study:

a. Study indicated that married students are better academic performers than unmarried students in college.

b. Age showed a highly significant positive relationship with a student's GPA. This study shows that older students are more likely to be better performers than younger students.

c. Students' cognitive abilities or high school GPA seems to have a strong positive and significant impact on students' academic performance.

d. The CGPA is likely to increase for commuter students who have to travel a significant distance every day in order to attend classes.

#### 35- De Araujo, and Murray (2010)

**Channels for Improved Performance from Living on Campus.** (American Journal of Business Education – December 2010 Volume 3, Number 12).

The purpose of this study was to examine two broad channels for which living on campus may lead to better academic performance: The study employed descriptive research method and the survey collected self-reported data on a variety of issues, including students' living situations, study behaviours, social behaviours, their use of university resources, and background characteristics.

Major findings of the study:

a. Students that live on campus spend more time than others studying in their residence.

b. Students that live on campus are more likely to engage in extra-curricular activities.

c. The study did not find significant evidence for channels relating to students' social behaviours that lead to long-run academic benefits of living on campus.

#### 36- Elvis Munyaradzi (2013)

**Teaching Methods and Students' Academic Performance.** (International Journal of Humanities and Social Science Invention, Volume 2 Issue 9, September. 2013, PP.29-35).

The objective of this study was to investigate whether there are significant differences between the effectiveness of different teaching methods on students' academic

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performance. The research design for this investigation was an experimental study. The findings of the study indicated that based on the teaching method applied, the estimated marginal mean estimates reveal that teacher-student interactive approach produced the high mean score, followed by the student-centered approach and the lowest mean score was recorded for the teacher-centered approach. The results revealed that combining both teacher-centered and student-centered teaching methods in teaching learners is the most effective approach that produces best student results.

#### 37- Civan, A., & Coşkun, A. (2016)

The effect of the medium of instruction language on the academic success of university students. (Educational Sciences: Theory & Practice, 16, 1981–2004).

The aim of this study was to investigate the effects of instruction in students' non-native language on the academic success of university students. The study utilised descriptive research design and used survey instrument to collect the data.

Major findings of the study:

a. Students in English degree programs are negatively influenced by instruction in a non-native tongue.

b. Students who achieved higher scores in exams before coming to university had higher grades during university education as well.

c. Moreover, the study found that inherent skill level and good study attitudes help students to succeed at university. However, the positive effects of those are also smaller in higher level courses.

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## CHAPTER THREE RESEARCH METHODOLOGY

#### **3.1. Introduction**

This chapter outlines the methodological tools employed in conducting this study and discusses the research procedures utilized to reveal some results about factors affecting academic achievement of the students. This third chapter of the study focuses on research design which delineate the research approach used in the study and it is followed by section dealing with the target population of the study and pertinent sample size and sampling method. It also describes instrumentation, validity and reliability of the instrument. Lastly, the chapter presents the data collection and data analysis procedure.

### 3.2. Research design

The research design is the approach used to obtain the required answers for the raised questions in a detailed methods of how is data collected, analyzed and interpreted. The purpose of the research determines the method and design of the research. As stated by Creswell (2009:3), research designs are plans and the procedures for research that span the decisions from broad assumptions to detailed methods of data collection and analysis.

It is further explained by Kotheri (2004:31) that, research design is the conceptual structure within which research is conducted; it constitutes the blueprint for the collection, measurement and analysis of data. As such the design includes an outline of what the researcher has done from writing the hypothesis and its operational implications to the final analysis of data.

There are two broad categories of research methods which are quantitative research method and Qualitative research method and some scholars included mixed method as third category whereby the researcher combined both quantitative and qualitative methods in a single study. Under this broad categories, there are different research designs which are described as; (1) research design in case of exploratory research studies; (2) research design in case of descriptive and diagnostic research studies, and (3) research design in case of experimental or hypothesis-testing research studies (Kotheri, 2004:35).

In this study, the researcher used descriptive research design that explores the ideas and views of the survey respondents. Descriptive research studies are those studies which are concerned with describing the characteristics of a particular individual, or of a group, whereas diagnostic research studies determine the frequency with which something occurs or its association with something else.

Furthermore, the research design of this study incorporated survey which provides a quantitative or numeric description of trends, attitudes, or opinions of a population by studying a sample of that population. It includes studies using questionnaires for data collection, with the intent of generalizing from a sample to a population (Creswell, 2009:12). Therefore, this research utilized descriptive research design to identify factors associated with foreign undergraduates' academic achievement.

#### **3.3. Description of the variables**

A variable refers to a characteristic or attribute of an individual or an organization that can be measured or observed and that varies among the people or organization being studied. A variable typically will vary in two or more categories or

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on a continuum of scores, and it can be measured or assessed on a scale. Psychologists prefer to use the term construct (rather than variable), which carries the connotation more of an abstract idea than a specifically defined term. However, social scientists typically use the term variable, and it employed in this study. (Creswell, 2009:50).

According to Johnson and Christensen (2014:92-93) a variable can be classified as; (1) dependent variable which is the outcome or the result of the influence of the independent variables, (2) independent variable which is responsible for bringing about change in a phenomenon, situation or circumstance, (3) mediating variable which is a variable mediates the effects of the independent variable on the dependent variable, (4) moderating variable is a variable that changes (i.e., moderates) the relationship between other variables. It's a variable that delineates how a relationship changes under different conditions or contexts or for different kinds of people.

In this study, the researcher selected the relevant variables for the research in order to analyse for their relationship and determine their reciprocal effects. Thus, the dependent variable of this research is academic achievement, whereas independent variables are institutional factors, parent involvement, instructional methods and learning strategies.

#### **3.4. Research population**

Selecting the research population is a crucial part of the designing stage of the study. By identifying the target population the researcher a further took step of choosing the sample from the population. According to Creswell (2009) there are essential aspects of the population and sample to describe in a research plan:

1- Identify the population in the study. Also state the size of this population.

- 2- Identify whether the sampling design for this population is single stage or multistage (called clustering). Cluster sampling is ideal when it is impossible or impractical to compile a list of the elements composing the population.
- 3- Identify whether the study will involve stratification of the population before selecting the sample. Stratification means that specific characteristics of individuals (e.g., both females and males) are represented in the sample and the sample reflects the true proportion in the population of individuals with certain characteristics. (Creswell, 2009:148)

The population in this study is the foreign undergraduate students of the academic year 2018-2019 from the selected countries of Eastern Africa namely; Kenya, Somalia and Ethiopia. The study selected two universities which are; International Africa University and Ahfad University of Women, both are located in Khartoum, the capital city of Sudan. These two universities host bulk number of foreign students in Sudan, especially the International University of Africa.

According to statistics provided by the Admission and Records Office of the two universities, the total number of students from Somalia, Kenya and Ethiopia are; 1745 and they comprised of students in International Africa University (n=1537 or 88.1 %), and in Ahfad University of Women (n=208 or 11.9 %). With regard to their respective countries, they are; from Somalia (n=1137 or 65.1 %), from Kenya (n=527 or 30.2 %) and from Ethiopia (n=81 or 4.7 %). Within this population of this research, male students constitute 60% and the remaining 40% are female students. Therefore, the population of this study was restricted to only students from Somalia, Kenya and Ethiopia.

#### 3.5. Sample size and sampling technique

The purpose of sampling is to narrow the unit of the analysis which is the population into a subgroup mostly smaller in number to access the potential respondents and draw the inferences about the larger group of population. Sampling, therefore, is the process of selecting a few from a bigger group to become the basis for estimating or predicting the prevalence of unknown piece of information, situation or outcome regarding the bigger group (Ranjit, 2011:177). Accordingly, Considerable importance is placed on sample and sampling techniques applied in the course of selecting the suitable sample size of the research.

According to Cohen et al, (2000:92) researchers must take sampling decisions early in the overall planning of a piece of research. Factors such as expense, time and accessibility frequently prevent researchers from gaining information from the whole population. Therefore they often need to be able to obtain data from a smaller group or subset of the total population in such a way that the knowledge gained is representative of the total population (however defined) under study. This smaller group or subset is the sample.

In research setting, there are two sampling techniques which are; random sampling- also called probability sampling- and non-random sampling -also called nonprobability sampling and research related circumstances would impose to choose the suitable sampling technique. Although a random sample is rarely perfectly representative, random samples are almost always more representative than non-random samples.

The sampling technique utilized in this study was quota sampling which is one type of non-random sampling (nonprobability). In quota sampling, the researcher identifies the major groups or subgroups of interest, determines the number of people to be included in each of these groups, and then selects a convenience sample of people for each group. Quota sampling is so named because once the researcher decides how many of certain types of people to include in the sample, he or she then tries to "meet the

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quotas"; that is, the researcher tries to get the right number of people (Johnson & Christensen, 2014:363).

The researcher resorted to quota sampling technique due to the statistics provided by the Admission and Records office of the two universities (Ahfad University for Women and International Africa University) were only a total number of the undergraduate students from Somalia, Kenya and Ethiopia. Despite the number of male and female and their faculties were included but their names were not provided that constrained the researcher from random sampling and opted to non-random sampling specifically to quota sampling due to different groups targeted in this research.

The researcher strived to attain in quota sampling that the selected sample of the participants are representative of the population. After obtaining from the two universities the general statistics of the students of the three countries, a thorough process followed to identify different aspects of the participants in terms of country, age, gender, university, faculty, year of study, residence and grade point average. With the assistance of student associations of the countries selected, the researcher was able to select the quota sampled participants of the study. The sample size is very crucial in statistical analysis, more specifically in quantitative research because it is the selected subjects in which one obtains information about the population under investigation. As a result, to have a representative sample the researcher has chosen 350 students which represented 20 % from the total 1745 who were the population from the three countries.

On the basis of proportionate selection of the sample of the study, the majority of the participants were recruited from International University of Africa (n= 288 or 85.7%) whereby the remaining number is recruited from Ahfad University of Women (n= 48 or 14.3%). The sample of this study were scattered to a variety of faculties of the

two universities. Hence, it was inevitable for the purpose of this research that faculties were grouped into three, these are Social Science (SS), Science (SC) and Medicine (MED). Firstly, faculties such as; Management, Education, law, Arts, Political science, and linguistics are grouped as Social Sciences (SS). Secondly, faculties such as; Engineering, Computer science, Petroleum, Geology and Applied science are grouped as Science (SC). And finally, faculties such as; Medicine, Pharmacy, Dentistry, Nursing and Laboratories are grouped as Medical (MED).

This grouping strategy has made easier to contain the variety and diversity of the population under study because the research was intended to be more inclusive as much as possible. The summaries of the participants with respect to the country, gender and faculty are depicted in the following table 3.1.

#### Table 3.1

No.	Country	Total Sample	Male	Female	Faculty
					SS SC MED
		n %	n %	n %	n % n % n %
1	Somalia	169 50.3	104 61.5	65 38.5	56 33.1 60 35.5 53 31.4
2	Kenya	127 37.8	76 59.8	51 40.2	60 47.2 29 22.8 38 29.9
3	Ethiopia	40 11.9	21 52.5	19 47.5	17 42.5 12 30.0 11 27.5
	Total	336 100%	201 59.8%	135 40.2%	133 39.6% 101 30.1% 102 30.4%

#### **Frequencies and percentages of respondents**

n= number within the sample

#### **3.6. Instrumentation**

Developing a research instrument of collecting data is an essential step of a research project because ultimately the findings and conclusions of the research is based upon the sort of information acquired from the respondents through research tool such as; questionnaires, interview schedules and guides, tests, role playing and observation forms. Most methods of data collection can be used in both quantitative and qualitative research. The distinction is mainly due to the restrictions imposed on flexibility, structure, depth and freedom that a researcher has in their use during the research process (Ranjit, 2011:131).

For this study the researcher developed an instrument which is a questionnaire based on the reviewed literature. A questionnaire is a self-report data-collection instrument that each research participant fills out as part of a research study. Researchers use questionnaires so that they can obtain information about the thoughts, feelings, attitudes, beliefs, values, perceptions, personality, and behavioural intentions of research participants (Johnson and Christensen, 2014:316). For this study, the students' questionnaire has two sections including the biographic information. These are explained in the following;

#### 3.6.1. Section A: Biographic information of the students

This section of the students' questionnaire included 9 items that provided the personal information of each participant that related to gender, age, and language of instruction in high school, Nationality, University, year of study, residence and CGPA (cumulative grade point average).

# **3.6.2.** Section B: Items of questionnaire on factors affecting the academic achievement of the students

This section of the students' questionnaire comprised 38 items which are about four components of factors affecting academic achievement of foreign undergraduate from the selected three countries. These components are; Institutional Factors, Parent Involvement, Instructional Methods and study habit. This section of the questionnaire is designed using a 5 point Likert scale which are coded and scored as follows: 1= Strongly Disagree 2=Disagree 3= Undecided 4= Agree 5= Strongly Agree. A Likert scale a very popular type of scale in the social sciences in which participants indicate their degree of agreement with a stated attitude or judgment.

#### 3.6.3. Validity and reliability of the instrument

Reliability and validity are the two most important psychometric properties to consider in using a test or assessment procedure. Reliability refers to the consistency or stability of the test scores, and validity refers to the accuracy of the inferences or interpretations you make from the test scores (Johnson and Christensen, 2014:239).

In social sciences, Cronbach's alpha is widely used, partly because it provides a measure of reliability that can be obtained from one testing session or one administration of a questionnaire. Cronbach's alpha is the most common way to assess the reliability of self - report items. Cronbach's alpha measures the degree to which the items in an instrument are related. It has a maximum value of 1.0. Values closer to 1.0 reflect a stronger relationship between the test items. As such, a popular rule of thumb is that the size of coefficient alpha should generally be, at a minimum, greater than or equal to .70 for research purposes and somewhat greater than that value (e.g.,  $\geq$  .90) for clinical testing purposes (i.e., for assessing single individuals).

However, the size that is considered adequate will depend on the context and many other considerations (Johnson and Christensen, 2014:246). However, Cohen et al (2000:135) stated that the statistical significance of the correlation coefficient can be found and should be 0.05 or higher if reliability is to be guaranteed. This form of reliability over a sample is particularly useful in piloting tests and questionnaires.

In similar manner, Cohen et al (2000:146) stressed that there is a need to pilot questionnaires and refine their contents, wording, length, etc. as appropriate for the sample being targeted. Therefore, a pilot test provides an opportunity to resolve anything that is confusing about the instructions, questions, or statements. Accordingly, the researcher tried to check and ensure the reliability and validity of the instruments (i.e. questionnaires of the students) through the pilot study.

#### 3.6.4. Pilot study

As a validation of the instrument, the items of the questionnaire were peerreviewed and checked thoroughly for relevance and clarity as well as the extent to which statements or questions represent the issue they are supposed to measure. Using the relevant comments and suggestions obtained from these reviewers, some corrections were made. Hence, based on the suggestions obtained, from the questionnaire 2 items were removed from first component (institutional factors) and 2 items were removed from the third component (instructional factors) and 1 item from the fourth component.

After the refinement of the questionnaire, a pilot study was conducted prior to the actual study. A sample of 50 students from the two universities whom were not part of the main respondents participated and all the pilot test questionnaire were filled and returned completely. The result of reliability analysis conducted, revealed overall Cronbach's alpha of .81. This is shown in Table 3.2. and indicates a high internal consistency between individual items. Furthermore, this yielded that the items in questionnaire were reliable and hence suitable for the study.

Table 3.2

Relial	bility Statistics
Cronbach's Alpha	N of Items
.811	38

#### **3.7. Data collection procedure**

The researcher carried out data collection after he obtained letters of introduction from the graduate college of the Sudan University of Science and Technology. These letters were addressed to the administration of the selected two universities (Ahfad and Africa) so they could render whatever assistance that might be required to carry out the research. As a result, the researcher applied to Admissions and Records Division (A&R) of the two universities in order to get the statistics of the population of undergraduate students from Somalia, Kenya and Ethiopia. The researcher hoped to obtain from A&R Division full information of the students including the list of names along with their respective faculties and the programs they are undertaking.

However, the Records Division of the two universities did not provide the list of students' names citing confidentiality, instead they provided a general information related to their nationalities, gender and faculties they are studying. Although, this was valuable information for the research, it was in short of completely required information with regard to random sampling procedure. For this reason, the researcher picked out non-random sampling as an alternative technique despite its shortcomings.

The available statistics provided by the A&R Division of the two universities have guided the researcher on how to distribute the questionnaires to a sample representing the study population in terms of country, gender and faculty they are studying. The bulk number of the students population were from Somalia with total of 1137, while the second largest number was from Kenya with total of 527, and the least number was from Ethiopia with total of 81. After all these procedures, the researcher distributed 350 questionnaires to the students union of the three selected countries (Somalia, Kenya and Somalia), in which each union has received portion of questionnaires congruent with their student population in the two respective universities. The students union administered the questionnaires to the respondents in their free time and they were asked to fill out the questionnaire immediately or to take the questionnaires home and return them in the next days.

The front page of the questionnaire was a cover letter that explained to them the purpose of the study and its implications for encouraging them to give the required data as sincerely as possible. In addition, the respondents were assured their basic rights and research ethics were adhered to by promising the protection of their privacy and confidentiality of their information. However, the filled and returned questionnaires were 336 out of 350 distributed that indicated a high return rate of 96%. Thus, the response rates were sufficient and up to the bar required in survey research within social sciences.

#### 3.8. Data analysis and result presentation

Data analysis is essential process for a scientific study and for ensuring that the researcher has all relevant data for making contemplated comparisons and analysis.

Technically speaking, processing implies editing, coding, classification and tabulation of collected data so that they are amenable to analysis.

The term analysis refers to the computation of certain measures along with searching for patterns of relationship that exist among data-groups. Thus, in the process of analysis, relationships or differences supporting or conflicting with original or new hypotheses should be subjected to statistical tests of significance to determine with what validity data can be said to indicate any conclusions (Kotheri, 2004:18). According to Leavy (2017:111), data analysis procedures allow the researcher to determine your findings. Has the hypothesis been supported or refuted? What are the answers to the research questions? In quantitative research, the analysis process leads to a statistical rendering of the data generally represented in a set of tables or charts along with a discussion. For this study, all data collected were sorted, coded and keyed in and analyzed by using data analysis software known as Statistical Package for Social Sciences (SPSS Version 20). The collected data also were analyzed accordingly to provide answers for the research questions, and descriptive statistical analysis was employed to come up with the findings of the study. After the analysis, the findings and the implications of the study were reported.

#### **CHAPTER FOUR**

#### DATA ANALYSIS PRESENTATION AND FINDINGS DISCUSSION

#### 4.1. Introduction

This chapter aimed at analysing the collected data and presenting of findings based on research objectives to answer research questions of the study on factors affecting the academic achievement of the foreign undergraduate. Both descriptive and inferential statistics were employed to analyse the data and frequencies and percentages were performed to present demographic information of the respondents.

#### **4.2. Demographic information of the participants**

The demographic section of the questionnaire requested information about respondents such as; gender, age, language of instruction in high school, country, university, and faculty, year of study, residence and cumulative grade point average (CGPA).

#### **4.3.** Distribution of participants according to University and country

The first demographic information to be portrayed is the distribution of the students with regard to their respective countries and the university they are enrolled. Accordingly, the majority of the study respondents (n= 169 or 50.3%) were from Somalia whereby the remaining (n= 127 or 37.8%) and (n=40 or 11.9%) were students from Kenya and Ethiopia respectively.





By looking at inter-university distribution, the data showed that overwhelming majority of the students participated were enrolled at International Africa University (n= 288 or 85.7%) and the remaining (n= 48 or 14.3%) were enrolled at Ahfad University of Women. Moreover, within country dispersion, Somali students are yet the prevalent number in International University of Africa as they represent (n= 143 or 49.7%) while students from Kenya constitute (n= 114 or 39.6) and students from Ethiopia formed least number (n=31 or 10.8%). Similarly, participants from Ahfad University of Women were dominated by Somali students (n= 26 or 54.2%) followed by Kenya students (n= 13 or 27.1%) and Ethiopia students (n= 9 or 18.8%). Within country dispersion, the majority of the students are enrolled at International University of Africa whereby the Somali students represent 84.6% (n=143), Kenyan students represent 89.8% (n=114) and Ethiopian students represent 77.5% (n=31). The remaining is enrolled at Ahfad University as Somalis represent 15.4% (n=26), Kenyans represent 10.2% (n=13) and

Ethiopians represent 22.5% (n=9). Table 4.1 summarizes the frequencies and percentages of students according to their country and university.

## Table 4.1

## Respondents' Country and University Crosstabulation

			University		Total
			International University of Africa	Ahfad University	
		Count	143	26	169
		% within Country	84.6%	15.4%	100.0%
	Somalia	% within University	49.7%	54.2%	50.3%
		% of Total	42.6%	7.7%	50.3%
		Count	114	13	127
	Kenya	% within Country	89.8%	10.2%	100.0%
Country		% within University	39.6%	27.1%	37.8%
		% of Total	33.9%	3.9%	37.8%
	Ethiopia	Count	31	9	40
		% within Country	77.5%	22.5%	100.0%
		% within University	10.8%	18.8%	11.9%
		% of Total	9.2%	2.7%	11.9%
Total		Count	288	48	336
		% within Country	85.7%	14.3%	100.0%
		% within University	100.0%	100.0%	100.0%
		% of Total	85.7%	14.3%	100.0%

n= 336 no missing data

#### 4.4. Gender distribution of the respondents

Gender as an independent variable was included in this study to determine whether sex of the student could have any influence over academic performance. The collected data indicated that majority of respondents of this study were males. Table 4.2 indicates the distribution of the respondents by gender.

#### Table 4.2

Frequencies and percentages of respondents' gender

Gender	Frequency	%	Valid %	Cumulative %	
Male	197	58.6	58.6	58.6	
Female	139	41.4	41.4	100.0	
Total	336	100.0	100.0		

N=336, no missing data

Table 4.2 shows that the majority of the participants who completed the questionnaire were males (n= 197 0r 58.6%) compared to female students whom composed (n=139 0r 41.4%). This high percentage of the male students reflects that the majority of the students from the three countries selected (Somalia, Kenya and Ethiopia) are male students although the female students were in very remarkable number.

With regard to their respective countries within male students, the majority of the male students came from Somalia (n= 100 or 50.8%) followed by Kenya (n= 76 or 38.6%) and Ethiopia (n=21 or 10.7%). Somalis also count the majority within female students as they represent 49.6% (n=69) followed by Kenyan students with representation of 36.7% (n=51) and Ethiopia students represented with 13.7% (n= 19).

Table 4.3 illustrates more on the gender distribution according to their respective countries.

#### Table 4.3

#### Respondents' Gender and Country Crosstabulation

				Country		Total
			Somalia	Kenya	Ethiopia	
		Count	100	76	21	197
		% within Gender	50.8%	38.6%	10.7%	100.0%
	Male	% within Country	59.2%	59.8%	52.5%	58.6%
Gender		% of Total	29.8%	22.6%	6.2%	58.6%
Gender		Count	69	51	19	139
	Female	% within Gender	49.6%	36.7%	13.7%	100.0%
		% within Country	40.8%	40.2%	47.5%	41.4%
		% of Total	20.5%	15.2%	5.7%	41.4%
		Count	169	127	40	336
		% within Gender	50.3%	37.8%	11.9%	100.0%
Total		% within Country	100.0%	100.0%	100.0%	100.0%
		% of Total	50.3%	37.8%	11.9%	100.0%

n=336, no missing data

## 4.5. Age distribution of the respondents

In terms of the age of the participants, for both male and female students, the majority of them are in the age range of 22-24 years (n= 165 or 49.1%), this followed by age range of 25-27 years (n=79 or 23.5%) which slightly above the traditional university age range of 19-21 years (n= 74 or 20.0%). The remaining age range of 28

years and above represents the lowest number under this category (n= 18 or 5.4%). The below table 4.3 illustrates distribution of students according to their age ranges with gender cross-tabulated.

#### Table 4.4

				Ag	e range		Total
			19-21	22-24	25-27	28 and above	
		Count	37	101	47	12	197
		% within Gender	18.8%	51.3%	23.9%	6.1%	100.0%
	Male	% within Age range	50.0%	61.2%	59.5%	66.7%	58.6%
Gender		% of Total	11.0%	30.1%	14.0%	3.6%	58.6%
Gender	Female	Count	37	64	32	6	139
		% within Gender	26.6%	46.0%	23.0%	4.3%	100.0%
		% within Age range	50.0%	38.8%	40.5%	33.3%	41.4%
		% of Total	11.0%	19.0%	9.5%	1.8%	41.4%
		Count	74	165	79	18	336
		% within Gender	22.0%	49.1%	23.5%	5.4%	100.0%
Total		% within Age range	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	22.0%	49.1%	23.5%	5.4%	100.0%

#### Respondents' Gender and Age range Crosstabulation

n= 336 no missing data

Table 4.4 shows that most of the students came under the category of 22-24 years that constitute 51.3% with male majority of 101 students that represent 61.2%, while the female students are 64 students that represent 46.0%. The male dominance is

also prevailing in the second category of the age range 25-27 years whereby the male students are 47 students that represents 59.5% and female students are 32 students that represents 40.5%. Ironically, the age range 19-21 years which the common age of university students came under the third position with number of 37 male students that represents 50.0% and female students are same of 37 that represents 50.0%. The last category with least number of students is the age range of 28 years and above with male of 12 students that represents 66.7% and 6 female students which represents 33.3%.

In sum, 244 students of both male and female which represent 73% of the total sample (n=336) are within two age ranges of 22-24 years and 25-27 years. In other words they are between 22 and 27 years which is quite above the traditional age of colleges and universities and this reveals that majority of the students are late-goers of school in their countries and this had impact on their joining to tertiary education.



Figure 4.2: Age distribution across gender graph

#### 4.6. Residence distribution of the respondents

The residence of the student whether he/she lives on campus or out of campus, as a variable included in this study because of the population of the study are foreign undergraduates and subsequently they are supposed to be accommodated by their respective universities. It is also considered as factor affecting the academic achievement of the students which will be confirmed or refuted in the later discussion of the findings.

Table 4.5 indicates the distribution of the participants according to the residence (on campus versus off campus).

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Frequencies and percentages of respondents' residence

Residence	Frequency	%	Valid %	Cumulative %	
On campus	205	61.0	61.0	61.0	
Off campus	131	39.0	39.0	100.0	
Total	336	100.0	100.0		

n=336, no missing data

Table 4.5, projects that the majority of the respondents are living on campus (n= 205 or 61%) while the students who are living out of the campus represents 39% (n= 131). With regard to the university, the below table 4.6 indicates the distribution as per university.

## Table 4.6

			Resid	lence	Total
			On Campus	Off Campus	
		Count	174	114	288
	International	% within University	60.4%	39.6%	100.0%
	University of Africa	% within Residence	84.9%	87.0%	85.7%
		% of Total	51.8%	33.9%	85.7%
University	Ahfad University of Women	Count	31	17	48
		% within University	64.6%	35.4%	100.0%
		% within Residence	15.1%	13.0%	14.3%
		% of Total	9.2%	5.1%	14.3%
		Count	205	131	336
Total		% within University	61.0%	39.0%	100.0%
10141		% within Residence	100.0%	100.0%	100.0%
		% of Total	61.0%	39.0%	100.0%

## Respondents' University and Residence Crosstabulation

n= 336 no missing data.

As shown in Table 4.6 the majority of the students (n=205 or 84.9%) are living on campus and the most of them are hosted by International University of Africa (n=174 or 60.4%) while the AUW hosts the remaining 15.1% (n=31).

#### 4.7. Distribution of respondents according to field of study

Table 4.7 indicates that the highest percentage of participants came from the field of Social Sciences with total number of 133 that represents 39.6%, while the other two fields namely; Sciences (n=101 or 30.%) and Medicine (n=102 or 30.4%) are approximately in the same frequencies and percentages.

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Frequencies and percentages of respondents' field of study

Field of Study	Frequency	%	Valid %	Cumulative %
SS	133	39.6	39.6	39.6
SC	101	30.1	30.1	69.6
MED	102	30.4	30.4	100.0
Total	336	100.0	100.0	

n=336, no missing data. SS= Social Sciences, SC= Sciences, MED= Medicine

To elaborate more on gender across field study, it is hereafter depicted in Table 4.8. and figure 4.3



Figure 4.3: Distribution of respondents according to gender across field of study

## Table 4.8

			F	Total		
			SS	SC	MED	
		Count	98	72	27	197
		% within Gender	49.7%	36.5%	13.7%	100.0%
	Male	% within Field of Study	73.7%	71.3%	26.5%	58.6%
Gender		% of Total	29.2%	21.4%	8.0%	58.6%
Gender	Female	Count	35	29	75	139
		% within Gender	25.2%	20.9%	54.0%	100.0%
		% within Field of Study	26.3%	28.7%	73.5%	41.4%
		% of Total	10.4%	8.6%	22.3%	41.4%
		Count	133	101	102	336
		% within Gender	39.6%	30.1%	30.4%	100.0%
Total		% within Field of Study	100.0%	100.0%	100.0%	100.0%
		% of Total	39.6%	30.1%	30.4%	100.0%

## Respondents' Gender and Field of Study Crosstabulation

n= 336, no missing data. SS= Social Sciences, SC= Sciences, MED= Medicine

Table 4.8 depicts that most of respondents were male students from Social sciences (n=98 or 49.7%) while the female students are the majority of the respondents in Medical field (n= 75 or 54.0%). In science field the male students composed 72 students representing 36.5% of total male students. Furthermore, Female students composed 35 (25.2%) students in the Social and 29 (20.9%) of science fields.

#### **4.8.** Distribution of respondents according to year of study

For the purpose of this study, the year of study consisted of students from second year up to fourth year and above. First year students were not included in this descriptive survey study because of freshness and inexperience of the junior students in their first year in which they might not be able to assess thoroughly different factors affecting academic performance of the undergraduate students. Table 4.9 indicates the distribution of the respondents according to their year of study.

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Year of study	Frequency	%	Valid %	Cumulative %				
2 <sup>nd</sup> Year	134	39.9	39.9	39.9				
3 <sup>rd</sup> Year	88	26.2	26.2	66.1				
4 <sup>th</sup> Year and above	114	33.9	33.9	100.0				
Total	336	100.0	100.0					

Table 4.9
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Frequencies and percentages of respondents' year of study

n=336, no missing data

Table 4.9 indicates that the highest percentage of the respondents were in the second year (n=134 or 39.9%) followed by the fourth year and above (n=114 or 33.9%). The least percentage of respondents (n=88 or 26.2%) were from the third year students. To expound more on year of study in relation to age of the students, Table 4.10 shows the cross-tabulated details.

Table 4.10

Respondents' Age range and Year of study Crosstabulation								
				Total				
			2nd Year	3rd Year	4th and above			
Age range	19-21	Count	70	4	0	74		
		% within Age range	94.6%	5.4%	0.0%	100.0%		
		% within Year of study	52.2%	4.5%	0.0%	22.0%		
		% of Total	20.8%	1.2%	0.0%	22.0%		
	22-24	Count	48	57	60	165		
		% within Age range	29.1%	34.5%	36.4%	100.0%		
		% within Year of study	35.8%	64.8%	52.6%	49.1%		
		% of Total	14.3%	17.0%	17.9%	49.1%		
	25-27	Count	13	21	45	79		
		% within Age range	16.5%	26.6%	57.0%	100.0%		
		% within Year of study	9.7%	23.9%	39.5%	23.5%		
		% of Total	3.9%	6.2%	13.4%	23.5%		
	28 and above	Count	3	6	9	18		
		% within Age range	16.7%	33.3%	50.0%	100.0%		
		% within Year of study	2.2%	6.8%	7.9%	5.4%		
		% of Total	0.9%	1.8%	2.7%	5.4%		
Total		Count	134	88	114	336		
		% within Age range	39.9%	26.2%	33.9%	100.0%		
		% within Year of study	100.0%	100.0%	100.0%	100.0%		
		% of Total	39.9%	26.2%	33.9%	100.0%		

n= 336, no missing data

Table 4.10 and Figure 4.4 indicate that the highest percentage of the respondents were in the age range of 22-24 (n= 165 or 49.1%) most of them (n=60 or 17.9%) are in the fourth year and above, followed by third year students (n=57 or 17.0%) and second year students (n=48 or 14.3%). The second largest proportion of the respondents were in the age range of 25-27 years (n=79 or 23.5%) most of them in fourth year and above (n= 45 or 39.5) followed by third year students (n= 23 or 6.2%) and fourth year and above (n= 13 or 3.9%). The least percentage of respondents came under the age range of 28 and above (n=18 or 5.4%) most of them in fourth year and above (n=3 or 0.9%).



Figure 4.4: Age distribution of respondents graph according to year of study
# **4.9.** Distribution of respondents according to Cumulative Grade Point Average (CGPA)

The data collected from the students indicates that about 39.6% (n=133) obtained CGPA of 3.5-3.99 followed by 31.5% (n=106) of 3-3.49. The highest CGPA 4-5 were obtained by 15.5% (n=52) while the least average points obtained by 13.4% (n=45). Table 4.11 illustrates the frequencies and percentages of the respondents with accordance to CGPA.

Frequencies and percentages of respondents' CGPA

_						
	CGPA	Frequency	%	Valid %	Cumulative %	
	2.50-2.99	45	13.4	13.4	13.4	
	3.00-3.49	106	31.5	31.5	44.9	
	3.50-3.99	133	39.6	39.6	84.5	
	4.00-5.00	52	15.5	15.5	100.0	
	Total	336	100.0	100.0		

n=336, no missing data. CGPA= Cumulative Grade Point Average

To compare the level of achievement within CGPA accrued according to student gender, the below cross tabulated Table 4.12 shows more details of how they are distributed.

Table	4.12
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Respondents' Grade Points and Gender Crosstabulation								
		Gen	ıder	Total				
			Male	Female				
		Count	22	23	45			
	2.50-2.99	% within Grade Points	48.9%	51.1%	100.0%			
		% within Gender	11.2%	16.5%	13.4%			
		% of Total	6.5%	6.8%	13.4%			
		Count	65	41	106			
	3.00-3.49	% within Grade Points	61.3%	38.7%	100.0%			
		% within Gender	33.0%	29.5%	31.5%			
Grade		% of Total	19.3%	12.2%	31.5%			
Points		Count	71	62	133			
	3.50-3.99	% within Grade Points	53.4%	46.6%	100.0%			
		% within Gender	36.0%	44.6%	39.6%			
		% of Total	21.1%	18.5%	39.6%			
		Count	39	13	52			
	4.00-5.00	% within Grade Points	75.0%	25.0%	100.0%			
		% within Gender	19.8%	9.4%	15.5%			
		% of Total	11.6%	3.9%	15.5%			
		Count	197	139	336			
Total		% within Grade Points	58.6%	41.4%	100.0%			
		% within Gender	100.0%	100.0%	100.0%			
		% of Total	58.6%	41.4%	100.0%			

n= 336, no missing data.

From Table 4.11and Figure 4.5 it can be observed that male students were high achievers of 4-5 grade points (n=39 or 11.6%) while the female students represent 3.9% (n=13). However, the biggest number of respondents achieved 3.5-3.99 grade points with male representation of 21.1% (n=71) along with female representation of 18.5% (n=62). A significant number of students were achievers of 3-3.49 grade points with total male students of 65 (19.3%) and female students of 41 (12.2%). The lowest achievers obtained 2.5-2.99 grade points with almost similar number of male (n=22 or 6.5%) and female (n=23 or 6.8%).



Figure 4.5: Distribution of respondents according to Cumulative Grade Point Average

# **4.10.** Distribution of respondents according to medium of instruction (MI) in high school

The variable of medium of instruction in high school included in this study as an inherent component of previous academic background of the diverse students from various countries. Many foreign students subjected to attend language courses before continuing their programs at their respective universities because of medium of instruction incompetency. Table 4.13 indicates the respondents' distribution according to language of instruction in high school.

Table 4.13

Frequencies and percentages of respondents' Previous MI

MI	Frequency	%	Valid %	Cumulative %
Arabic	138	41.1	41.1	41.1
English	170	50.6	50.6	91.7
Other	28	8.3	8.3	100.0
Total	336	100.0	100.0	

n=336 no missing data. Previous MI= Medium of Instruction in high school

Further analysis on the responses of the students with regard to high school medium of instruction according to their respective countries was cross tabulated in Table 4.14.

#### Table 4.14

Previous	medium	of	instruction	and	Country	Crosstabulation.
					~	

			Total			
			Somalia	Kenya	Ethiopia	
		Count	88	38	12	138
	Arabic	% within Previous MI	63.8%	27.5%	8.7%	100.0%
	Alabic	% within Country	52.1%	29.9%	30.0%	41.1%
		% of Total	26.2%	11.3%	3.6%	41.1%
		Count	64	84	22	170
Previous MI	English	% within Previous MI	37.6%	49.4%	12.9%	100.0%
		% within Country	37.9%	66.1%	55.0%	50.6%
		% of Total	19.0%	25.0%	6.5%	50.6%
	Other	Count	17	5	6	28
		% within Previous MI	60.7%	17.9%	21.4%	100.0%
		% within Country	10.1%	3.9%	15.0%	8.3%
		% of Total	5.1%	1.5%	1.8%	8.3%
Total		Count	169	127	40	336
		% within Previous MI	50.3%	37.8%	11.9%	100.0%
		% within Country	100.0%	100.0%	100.0%	100.0%
		% of Total	50.3%	37.8%	11.9%	100.0%

n= 336, no missing data. MI= Medium of Instruction

Table 4.14 indicates that English was the medium of the instruction in high school for the majority of students from Kenya (n= 84 or 25.0%) and a significant number of Somali students were also taught with English (n=64 or 19.0%) in their high school and less number from Ethiopia (n=22 or 6.5%). The table also shows that Arabic is prevalent as medium of instruction in high school amongst Somali students (n=88 or

26.2%) followed by Kenya (n=38 or 11.3%) and least percentage from Ethiopia (n= 12 or 3.6%). Majority of students with neither Arabic nor English came from Somalia (n= 17 or 5.1%) followed by almost equal number of students (n=5 or 1.5%) and (n= 6 or 1.6%) from Kenya and Ethiopia respectively.

### 4.11. Discussing analysis of hypothesis 1

The null hypothesis 1 stated that: "There is no significant influence of demographic factors (gender, age, residence, and year of study, field of study and language of instruction in high school) of students on academic achievement of undergraduate students from the selected countries of east Africa."

Under this broadly formulated hypothesis there are sub-hypotheses that stated:

- 1- There is no significant influence of gender on student academic achievement.
- 2- There is no significant influence of residence on student academic achievement.
- 3- There is no significant influence of age on student academic achievement.
- 4- There is no significant influence of year of study on student academic achievement.
- 5- There is no significant influence of field of study on student academic achievement.
- 6- There is no significant influence of language of instruction on student academic achievement.

To test this hypotheses, multiple analysis were utilized to measure statistical difference of means between groups and within groups. The demographic characteristics were not exhaustive but include; gender, age, residence, year of study, field of study and language of instruction in high school to be deemed as factors affecting the academic performance of the students. Thus to determine the significance of these variable an Independent Samples T-test Analysis of Variance (ANOVA) were conducted as shown in the following tables.

#### 4.11.1. Variations of academic achievement within gender

As shown in Table 4.15 male students have scored high mean score compared to female students in which we infer the male students have attained grade point average relatively higher than female students.

#### Table 4.15

Descriptive sudstes grude point average within gender								
	Ν	Mean	Std. Deviation	Std. Error				
Male	197	2.64	.923	.066				
Female	139	2.47	.879	.075				
Total	336	2.57	.908	.050				

Descriptive statistics grade point average within gender

Additional t-test analysis was performed to further investigate any significant gender difference in academic achievement. Table 4.16 illustrates that, the t-value is 1.765 with significance level of .078 which is greater than p value =0.05. Hence, the t-test result indicates that there is no significant difference in the academic achievement between female and male.

#### Table 4. 16

Summary of independent samples T-test analysis of gender difference in academic achievement.

Gender		t-test for Equality of Means							
		Т	Df	Sig. (2- tailed)	Mean Difference	Std. Error Difference	95% C Interv	onfidence val of the	
							Difference		
							Lower	Upper	
Academic Achievement	Equal variances assumed	1.765	334	.078	.177	.100	020	.374	

The result of t-test yielded that, the t value is 1.765 with significance level of .078 which is greater than p-value =0.05. Which indicates there is no significant difference in the academic achievement between female and male. Therefore, we failed to reject the null hypothesis and consequently accept the null hypothesis which stated; "There is no significant influence of gender of student on academic achievement of undergraduate students from the selected countries of east Africa." This conclusion shows that gender as factor has no impact on academic achievement of the students.

The result of this study with regard to insignificance of gender on academic achievement is consistent with the previous studies such as; **Akesse and Dhufera** (2015) who conducted to examine different factors influencing the academic performance of students in higher institution case of Rift valley university Jimma campus Ethiopia. This study reported that there is no association between student's academic achievement in terms of Grade Points Average and Sex of students. Similarly, the findings is in line with the study of **Cyril (2015)** on time management and academic achievement of higher secondary students which revealed that there is no significant difference between male and female higher secondary students in their academic achievement.

It is also in agreement with **Remali et al** (2013) who investigated the main factors that influence academic performance of first year accounting students at Universiti Tenaga Nasional in Malaysia. Demographic factors were investigated as factors contributing to the differences in students' academic performance. Results in this study showed that there is no significant related between gender and students' prior academic knowledge/background. However, there are other studies that resulted otherwise and confirmed the significance of the sex of the student on academic achievement, like the study of **Mazharul Islam et al (2014)** who examined the influence of some selected socioeconomic, demographic, familial, individual students' scholastic and institutional factors on the academic achievement of undergraduate students of Sultan Qaboos University (SQU) in Oman. This study identified gender of students as a significant determinant of academic performance. Similar result is reported by **Mehari and Ayalew (2016)** who carried out a research titled; "Multilevel Analysis for Identifying Factors Influencing Academic Achievement of Students in Higher Education Institution: The Case of Wollo University". This study was about to determine the key factors influencing students' academic achievements measured by CGPA of students. The study reported some factors inter alia sex to be determinant of academic achievement in the total sample of the students.

Moreover, the same finding revealed by **Alam et al** (**2014**) who conducted study to examine different factors influencing socio-economic background and the academic performance of undergraduate students enrolled at International Islamic University Chittagong (IIUC) with a view to assessing their individual performances and improvements. This study has found that gender with other investigated variables influenced the academic performance of a student.

The disagreement of the literature on the significance of the gender as influential factor on academic performance might be attributed to the contextual aspects of the study as well as relativity of the research. As result, it entails continuity of research efforts and investigative works that contribute into the body of the knowledge.

#### 4.11.2. Variations of academic achievement according to residence

Table	4.	17
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Descriptive statistics of grade point average according to residence

	Ν	Mean	Std. Deviation	Std. Error
On Campus	205	2.53	.942	.066
Off Campus	131	2.64	.851	.074
Total	336	2.57	.908	.050

Table 4.17 displays slight difference between students on campus and those who are living outside campus whereas the off campus students have high mean score which indicate they achieve higher grade point average compared to students accommodated in campus.

#### Table 4. 18

# Summary of independent samples T-test analysis of students' difference in academic achievement according to residence.

Residence		t-test for Equality of Means						
		Т	Df	Sig. (2-	Mean	Std. Error	95% Co	onfidence
				tailed)	Difference	Difference	Interva	al of the
							Diffe	erence
							Lower	Upper
Academic Achievement	Equal variances assumed	-1.127	334	.261	114	.102	314	.085

The analysis of independent samples T-test summarised in Table 4.18 shows that there is no difference in academic achievement with regard to the residence of the respondents. This is proved by t-value of -.127 with significance level of .261 which is greater than p-value=0.05. This result indicates that there is no significant difference in academic achievement between who live on campus and those who live outside of campus.

As indicated in the result of Independent samples t-test there is no difference in academic achievement with regard to the residence of the respondents. This is proved by t value of -.127 with significance of .261 which is greater than p-value=0.05.

This result indicates that there is no statistically significant difference in academic achievement between who live on campus and those who live outside of campus. Therefore, we accept the null hypothesis that stated; "There is no significant influence of demographic characteristics (the residence) on academic achievement of student". This result of this study is consistent with other reviewed studies such as; **Shehry and Youssif (2017)** who investigated "factors affecting academic performance of undergraduate students at Najran preparatory year for girls- Najran University 2015-2016". This study reported that there was an insignificant relationship between GPA and the area that students live in. it added that, this is obvious because the majority of students live in Najran and do not have residency and transportation problems.

In the same way, Ali et al (2013) who conducted study on "Factors Contributing to the Students' Academic Performance: A Case Study of Islamia University Sub-Campus". This study included residential area as one of the factors affecting academic performance of the student and concluded at statistically the performance of student do not vary with accommodation either they are living in hostel or living at their homes. The study added that hostel life might be beneficial that it provide environment or peer study group but in results its effect is not significant on student's performance. However, there are some studies that reported residing far from campus and travelling distance is positively related to students' academic achievement like the study of **Nelson et al. (2016)** which was about "An Analysis of the relationship between distance from campus and GPA of commuter students". This study reported that the distance squared variable is significant which means grade point average is likely to increase for commuter students who have to travel a significant distance every day in order to attend classes. It may be that students who have to drive significant distance for classes are aware of the sacrifice they are making and want to make that sacrifice count by doing well academically. The inconsistency among the researchers upon the impact of the place where student lives resident or non-resident on educational attainment measured with the grade points average reflects the intricacy of the variable which is quantitatively examined while the permeating personal traits and social norms might have latent effect.

#### 4.11.3. Variations of academic achievement within age groups

The study employed Analysis of Variance (ANOVA) in order to explore the academic achievement variations within age groups of the respondents.

Table	4.	19
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Mean	Scores	of a	academic	achievement	within	age	groups

Age group	Ν	Mean	Std. Deviation
19-21	74	2.26	.966
22-24	165	2.63	.821
25-27	79	2.84	.953
28 and above	18	2.17	.786
Total	336	2.57	.908

As shown in Table 4.19 age group of 25-27 scored the highest score of grade points with mean of 2.84 followed by age group 22-24 with mean of 2.63, the remaining each groups of 19-21 and 28 and above scored the less with means of 2.26 and 2.17 respectively.

#### Table 4. 20

Age groups	Sum of	Df	Mean	F	Sig.
	Squares		Square		
Between Groups	16.355	3	5.452	6.963	.000
Within Groups	259.931	332	.783		
Total	276.286	335			

Summary of one-way ANOVA of Students' difference in academic achievement according to age groups

The researcher used this analysis (ANOVA) to detect, if there is a significant difference in academic achievement according to age groups. The results in Table 4.0 shows that, there is significant difference in academic achievement within age groups of respondents whereas F-value is 6.963 with t-value of .000 which is less than p-value = 0.05. As result, there is significant difference of academic achievement within age groups which implies the impact of age factor on academic achievement.

In this study age is considered one of the variables to be examined its impact on academic success of the students. This variable is searched under the hypothesis H01that stated; "There is no significant influence of demographic characteristics (the age) on academic achievement of student".

For the purpose of the study, students were grouped in age groups and to determine the significance of the age on academic achievement, the study utilized Analysis of Variance (ANOVA). The output of the analysis shows that there is significant difference in academic achievement within age groups of respondents with f value of 6.963 and t-value of .000 which is less than p-value = 0.05. As a result, there is significant difference of academic achievement within age groups which implies the relationship between age and academic achievement. Therefore, we reject the null hypothesis of "There is no significant influence of demographic factor (the age) on academic achievement of student". And we consequently accept the alternative

hypothesis which is; "There is significant impact of age on academic achievement of student". The outcome of the significant impact of the age on academic achievement is aligned with the reviewed literature such as; Ali et al. (2013) who concluded that the correlation analysis shows the age, income and hour have significant role in improving the student performance of graduate student. The authors added "we compute the strength of association between dependent and independent variables (age, income and hour)". Similarly, the significance of age factor reported by Alam et al (2014) who concluded in the result of study that age, gender, past academic track, medium of education and absence in the classes have also influenced the academic performances of a student. Age significance is also reported by the findings of Nyikahadzoi et al (2013) in their study about "Determinants of Students' Academic Performance in Four Selected Accounting Courses at University of Zimbabwe". In this study age was found to be an influential variable with older students needing more time and effort. It is observed that students who are younger perform significantly better than older students. The researchers added that it is interesting to note that the University of Zimbabwe has 'mature entry' where it is assumed that with age that is 25 years and older people are wiser and mature and upon passing a University entrance test can enter into university degree programmes.

Moreover, Nelson et al (2016) reported that age factor showed a highly significant positive relationship with a student's GPA. This study shows that older students are more likely to be better performers than younger students. There are a number of reasons why older students perform better than younger students. For example: increased self-efficacy perceptions, more focused cognitive abilities, and increased self-discipline. Therefore, these results indicate that in this sample, students' academic performance increases with age.

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On the other hand, there are some studies reported that age has no influence on academic achievement like the study conducted by Kyoshaba (2009) who conducted a study on "Factors affecting academic performance of undergraduate students at Uganda Christian University". The findings of this study revealed the existence of a significant relationship between students' A' level and Diploma admission points and academic performance, but there was no relationship between mature age points and academic performance. The study further suggested mature age students could be given supplementary year or probation year to test their competency in addition to the entrance exam. In similar manner, the study of Lake and Boyd (2015) which is asked this question; is the university system in Australia producing deep thinkers? They concluded that their study suggests that the trend is more related to other factors rather than to age per se. importantly, the school leaver cohort (under 25-year-olds) does not exhibit a significantly weaker trend towards deep learning approaches than the mature-age cohort. Indeed both cohorts appear to behave in similar ways, despite their likely difference prior educational history, life experience and expectations of higher education. This is also in line with Mlambo (2011) in a research titled; "an analysis of some factors affecting student academic performance in an introductory biochemistry course at the University of the West Indies". The results obtained in this study show that the academic performance of mature students did not differ. In this regard, some reviewed studies did not clearly emphasized the effect of age variable as they reported both difference and similarity in some aspects which implies the crucial facets of age factor with regard to old versus young, traditional versus non-traditional. However, the result revealed by this study validated the effect of the age variable on academic achievement of the student based on significant difference within age groups.

# **4.11.4.** Variation of academic achievement according to field of study (Social, Science and Medicine)

4.21

Mean Scores of academic achievement according to field of study

Field of study	Ν	Mean	Std. Deviation
Social	133	2.56	.908
Science	101	2.51	.986
Medical	102	2.65	.828
Total	336	2.57	.908

As indicated in the descriptive table 4.21 there is no significant variance among the respondents according to field of study. The highest mean score of grade points is obtained by the respondents in the field of medical studies with mean score of 2.65 and they are followed by respondents of social studies with mean score of 2.56 and the least mean score of 2.51 is scored by the respondents from the field of science.

#### Table 4. 22

Summary of one-way ANOVA of Students' difference in academic achievement according to field of study

Field of study	Sum of	Df	Moon	Б	Sig
Tield of Study	Sulli Ol	DI	Mean	I,	Sig.
	Squares		Square		
Between Groups	.937	2	.468	.566	.568
Within Groups	275.349	333	.827		
Total	276.286	335			

The table 4.22 indicates that there is no significant difference in academic achievement within the respondents according to the field of study. This is confirmed by F-value of .566 with t-value of .568 which is greater than p-value = 0.05. As result, there is no significant difference of academic achievement with respect to the field of study whether is social, medical or science.

The respondents of the study comprised wide range of faculties that required for the purpose of this study to be classified into three major fields of study which are; Medical (faculties of medicine, dental, applied health, laboratory), Science (faculties of engineering, computer, geology, agriculture) and Social sciences ( economics, management, education, sharia and law). The analysis of variance resulted that there are slight difference in the mean scores of three fields with highest grade points obtained by the respondents in the field of medical field followed by respondents of social studies while the least grade points is scored by the respondents from the field of science. However, the test result has not yielded any difference that is statically significant. This is confirmed by f value of .566 with t value of .568 which is greater than p-value = 0.05. As result, there is no significant difference of academic achievement with respect to the field of study whether is social, medical or science. And accordingly, we accept the null hypothesis that stated; "There is no significant impact of demographic characteristics (the field of study) on academic achievement of student".

#### 4.11.5. Variation of academic achievement according to year of study

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Mean Scores of academic achievement according to year of study

Year of study	Ν	Mean	Std. Deviation
2nd Year	134	2.23	.925
3rd Year	88	2.68	.838
4th and above	114	2.89	.807
Total	336	2.57	.908

As indicated in the descriptive Table 4. 23 there is significant differences of mean scores among the respondents according to the year of study. The senior respondents of fourth year and above has scores the highest mean of 2.89. This followed

by the third year students with mean score of 2.68. The least score of mean obtained by the second year students.

#### Table 4. 24

Summary of one-way ANOVA of Students' difference in academic achievement according to year of study

Year of study	Sum of Squares	Df	Mean	F	Sig.
	_		Square		_
Between Groups	27.849	2	13.924	18.664	.000
Within Groups	248.437	333	.746		
Total	276.286	335			

The above table 4.24 projects that there is significant difference in academic achievement within year study of the respondents whereas f value is 18.664 with t value of .000 which is less than p value = 0.05. As result, there is significant difference of academic achievement within year study of the students. This implies the impact of seniority of the students on academic achievement.

The analysis of variance shows significant differences of mean scores among the respondents according to the year of study. The senior respondents of fourth year and above has scores the highest mean of 2.89. This followed by the third year students with mean score of 2.68. The least score of mean obtained by the second year students. In addition, there is statistical significance with f value = 18.664 and t -value of .000 which is less than p-value = 0.05. Therefore, we reject the null hypothesis that stated; "There is no significant influence of demographic characteristics (the year of study) on academic achievement of student" and accordingly accept the alternative hypothesis which is; "There is significant impact of demographic characteristics (the year of study) on academic achievement of student". This finding implies the accumulated experiences of senior students might contribute scoring high grades compared to the freshmen – new students- who are in need of pre-request course and academic programs.

# **4.11.6.** Variation of academic achievement according to previous language of instruction

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Mean Scores of academic achievement according to previous language of instruction

Previous LI	Ν	Mean	Std.
			Deviation
Arabic	138	2.48	.914
English	170	2.64	.907
Other	28	2.61	.875
Total	336	2.57	.908

LI= language of instruction

As shown in table 4.25 there is no significant difference among the respondents with regard to their previous language of instruction in high school before joining the university. However, it notable that students with English language background have scored the highest mean of 2.64. This is followed by the students with neither English nor Arabic background with mean score of 2.61. And the least mean score obtained by the students with Arabic language instruction background.

#### Table 4. 26

Summary of one-way ANOVA of Students' difference in academic achievement according to previous language of instruction

Previous LI	Sum of	Df	Mean Square	F	Sig.
	Squares		_		_
Between Groups	2.061	2	1.030	1.251	.288
Within Groups	274.225	333	.823		
Total	276.286	335			

LI= language of instruction

The Table 4.26 indicates that there is no significant difference in academic achievement among the respondents according to the previous language of instruction. This is proved by f value of 1.251 with t value of .288 which is greater than p value =

0.05. As result, there is no significant difference of academic achievement with respect to the previous language of instruction in the high school whether it was Arabic, English or other. The analysis of variance has not showed any significant difference with respect to the former language of instruction at high school. This is proved by f value of 1.251 with t value of .288 which is greater than p-value = 0.05. As result, we failed to reject the null hypothesis that stated; "There is no significant impact of demographic characteristics (previous language of instruction). And as result, we accept the null hypothesis of insignificance of the previous language of instruction.

This finding is consistent with other study conducted by Nara et al. (2015). That reported insignificance of previous academic background like language of instruction as they indicated other factors contributing such as inadequate background knowledge, poor study skills, and difficulty of course work differences in language demands for different courses. It is also in line with result of the study done by **Remali et al (2013)** who concluded that the results also indicated that there is no significant related between gender and students' prior academic knowledge/background. In contrast, the finding of this study with regard to the insignificance of previous language of instruction is inconsistent with result of study carried out by Sotco and Stephen (2015) who investigated the influence of students' backgrounds in the language of instruction on secondary school academic performance, that concluded students whose medium of instruction at primary school level was English performed better than their counterparts who had used Swahili and the difference was statistically significant. Similarly, the findings Kyoshaba (2009) also revealed a significant relationship between former school background and academic performance. In similar pattern, Yigermal (2017) investigated the determinant factors affecting academic performance of regular undergraduate students. The findings of this study revealed that there was a significant

relationship between students former academic back ground, studying hours, and student's behaviour on taking of alcoholic drug and Qat on academic performance of students. However, most of literature reviewed (Civan and Coşkun, 2016; Alsahafi and Shin, 2019; Jama et al, 2014; Karimi, 2008) investigated the effect of student's proficiency of the language of instruction regardless of whether it is acquired before joining the university or it is mastered during language courses provided by the university. And they concluded the overarching impact of language proficiency on academic achievement as students who are more proficient in the instruction language are on average more successful. In contrast, this study tried to examine the student's background with regard to the language of instruction and its significant relationship with academic performance which revealed insignificant difference among the respondents according to the previous medium of instruction being it Arabic, English or other.

#### 4.12. Multiple linear regression analysis of factors

In order to determine the impact of institutional, parental, instructional and habitual factors on academic achievement of student, the study used multiple regression analysis in which items of each component has been computed and transformed into one variable to measure its effect on students' academic attainment in terms of grade point average.

Descriptive Statistics of questionnaire components								
	Std. Deviation	Ν						
Grade Points	2.57	.908	336					
INSTITUTION	3.1617	.66138	336					
PARENT INVOLVEMENT	3.1969	.77620	336					
INSTRUCTION	3.2665	.43504	336					
LEARNING HABIT	3.5860	.64536	336					

Table 4. 27

As shown in Table 4.27 shows that overall mean of students' achievement with regard to their grade points is 2.57 and standard deviation is .908. This indicates moderate achievement. However, learning habit scored the highest mean of 3.5860 and standard deviation of .64536 which shows as the most influencing factor on academic achievement of the student. It is followed by the Instructional methods with mean score of 3.2665 and standard deviation of .43504. The least mean scores are institutional factors and parental involvement with mean of 3.1969 and 3.1617 and standard deviation of .77620 and .66138 respectively.

### Table 4. 28

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the				
				Estimate				
1	.157 <sup>a</sup>	.025	.013	.902				

a. Predictors: (Constant), Study Habits, Institutional Factors, Parental Involvement, Instructional Method

The Model summary Table 4.28 shows value of R-Square is .025 which indicates that 25% variation of students achievement is due to the impact of the independent variables which are; Institutional factors, Parental involvement, Instructional methods and Learning habit of the student. This implies that the remaining percentage might be attributed to other variable which are not investigated in this study.

Table 4. 29

**ANOVA**<sup>a</sup>

Model		Sum of	Df	Mean	F	Sig.		
		squares		Square				
	Regression	6.823	4	1.706	2.095	.081 <sup>b</sup>		
1	Residual	269.462	331	.814		t		
	Total	276.286	335					

a. Dependent Variable: Academic Achievement

b. Predictors: (Constant), Study Habits, Institutional Factors, Parental Involvement, Instructional Method As shown in Table 4.29 F-test or ANOVA was carried out to assess the overall strength of the relationship between each of the independent variables. The value of F-test 2.095 indicates insignificance which shows that there is no leaner relationship between the variables in our model.

#### Table 4. 30

Model		Unstand Coeff	dardized icients	Standardized Coefficients	t	Sig.					
		В	Std.	Beta							
			Error								
	(Constant)	2.410	.390		6.183	.000					
	Institutional Factors	.011	.084	.008	.133	.895					
1	Parental Involvement	.046	.073	.040	.633	.527					
	Instructional Method	271	.144	130	-1.877	.061					
	Study Habits	.241	.100	.171	2.407	.017					

**Coefficients (significance of variables)** 

a. Dependent Variable: Academic Achievement

Table 4.30 showed Beta coefficients that resulted from multiple leaner regression analysis to determine the effect of the independent variables (institution, Parent, instruction and study habit) to the dependent variable (academic achievement). Institutional factors has the least Beta weight of B=.011 with p value =.895 that is greater than p=.05 which indicates statistically insignificant level. So we accept the HO1 which states that: "There is no significant influence of the institutional factors on academic achievement of undergraduate students".

The parent involvement factors has Beta weight of B=.046 with p value=.527 that is greater than p=.05 which also indicates statically insignificant level and

consequently accepting the HO2 that states; There is no influence of parent involvement on academic achievement. Similarly, but in negative direction, the instructional methods has Beta weight of B= -.271 with p- value of p=.061 that is greater than p=.05 which indicates statistically insignificant level so that to accept the H03 that states; "There is no significant influence of the instructional methods on academic achievement".

The study habit is the independent variable that has the highest beta weight of B=.241 with p value of .017 that is less than p=.05 which is statistically significant level that implies to reject the HO5 that states; "There is no significant effect of learning strategies on academic achievement of undergraduate students".

#### 4.12.1. Analysis of responses on institutional factors.

The questionnaire consisted of items related to institutional factors (items from 1-9) to measure students perspective on institutional factors that might have impact on their academic achievement. Table 4.31 illustrates scored results on the statements and a discussion follows.

#### Table 4.31

#### Frequencies and percentages of response on Institutional Factors

No.	Items		SD					D			U	D		Α	S	A
		М		F		N	Л	F		М	I	F	м	F	М	F
		n	%	n	%	n	%	n	%	n %	%	n %	n %	n %	n %	n %
1	I could have chosen another faculty	47	14.0	48	14.3	30	8.9	11	3.3	26	7.7	15 4.5	54 16.	1 29 8.6	40 11.9	36 10.7
2	Orientation program helped my integration	24	7.1	18	5.4	20	6.0	22	6.5	40	11.9	33 9.8	79 23.5	49 14.6	34 10.1	17 5.1
3	Language courses contribute into adjustment	27	8.0	29	8.6	27	8.0	57	17.0	44	13.1	19 5.7	56 16.	7 44 13.1	43 12.8	60 17.9
4	Comfortable with equipment and teaching materials	23	6.8	22	6.5	38	11.3	35	7.4	51	15.2	32 9.5	55 16.4	4 38 11.3	30 8.9	52 15.5
5	Facilities available in the library helped me	16	4.8	22	6.5	21	6.2	23	6.8	33	9.8	16 4.8	85 25.	3 51 15.2	42 12.5	27 8.0
6	Participation in extracurricular	32	9.5	19	5.7	34	10.1	33	9.8	44	13.1	33 9.8	63 18.8	33 9.8	24 7.1	45 13.4
7	Services and facilities in the hostel helped me	48	14.3	42	12.5	39	11.6	32	9.5	40	11.9	23 6.8	43 12.	8 24 7.1	27 8.0	18 5.4
8	Support from faculty members and other staff	32	9.5	35	10.4	43	12.8	26	7.7	36	10.7	26 7.7	65 19.	3 40 11.9	21 6.2	12 3.6
9	Satisfied with studying at university	19	5.7	13	3.9	11	3.3	12	3.6	27 8	8.0	26 7.7	80 23.	8 48 14.3	60 17.9	40 11.9

n= Number, M= Male, F= Female, SD= Strongly Disagree, D= Disagree, UD= Undecided, A= Agree SA= Strongly Agree

The next Table 4.32 provides descriptive statistics of mean and standard deviation scores of items 1-9.

Tabl	e	4.32	

No.		Ν	Mean	Std. Deviation
	Items			
1	I could have chosen another faculty	336	3.01	1.553
2	Orientation program helped my integration	336	3.31	1.234
3	Language courses contribute into adjustment	336	3.15	1.353
4	comfortable with equipment and teaching materials	336	3.13	1.268
5	Facilities available in the library helped me	336	3.46	1.267
6	Participation in extracurricular activities relieves	336	3.05	1.277
7	Services and facilities in the hostel helped me	336	2.72	1.395
8	Support from faculty members and other staff	336	2.90	1.306
9	Satisfied with studying at university	336	3.72	1.229
	Valid N (listwise)	336		

#### Descriptive statistics of responses on Institutional factors

The above Table 4.32 shows that 47.3% (n= 159) of the students indicated that they strongly agreed or agreed to item 1 in which they could have chosen another faculty if they had given chance, with no much difference between male (n= 83 or 24.7%) and female (n= 76 or 22.6%). On the contrary, about 40.5% (n= 136) indicated that they strongly disagreed or disagreed on item 1 with male represents (n=95 or 28.3%) almost two fold of the female students (n= 41 or 12.2%). In the same table of item 1, about 12.2% (n= 41) indicated their uncertainty and resorted to be undecided, this also male outnumbered (n=26 or 7.7%) their female counterparts (n=15 or 4.5%). The mean score of item 1 as showed in Table 4.32 were

3.01. This indicates that students are in favour of item1 statement that they would have liked to choose another faculty of study if they had given a chance to choose their favourite faculty. It shows that many students are admitted into their respective faculties study without asking their priority and preference. In the same Table 4.31 indicates that 53.3% (n = 179) of the respondents strongly agreed or agreed to the item 2 that orientation program helped their integration into university. In this percentage male students represented 33.6% (n= 113) as female students represented 19.7% (n= 66). In this item 2 about 25.0% (n=84) strongly disagreed or disagreed as male and female students are almost divided into two halves represented 13.1% (n=44) and female represented 11.9% (n=40), while 21.7% (n=73) were undecided whether the orientation program contributed into their integration to university with male students represented 11.9% (n=40) and female students represented 9.8% (n=33). The mean score of item 2 were 3.31 which indicates that above average respondents benefited from the orientation program also called induction program served for the purpose of integration into the university academically and socially.

It is also noted from Table 4.31 that 47.7% (n=160) strongly agreed or agreed to the item 3 that language course contributed to the student adjustment to university, out of 160 respondents, 99 respondents (29.5%) were males while 61 respondents (18.2%) were females. A notable respondents of 113 (33.7%) strongly disagreed or disagreed with almost similar representation within gender as male respondents represented 16.0% (n=54) and female respondents represented 17.5% (n=59). The undecided sample represented 18.8% (n=63) with male representation of 13.1% (n=44) and female representation of 5.7% (n=19). This item 3 scored mean of 3.15 which shows that average respondents agreed to language courses taken as prerequisite by the students especially foreign students have contributed into adjustment of the students to university.

As shown in the same Table 4.31 about 43.2 (n=145) of the respondents strongly agreed or agreed to the item 4 with male represented 25.3% (n=85) and female represented 17.8% (n=60). Of the respondents 32.2% (n= 108) strongly disagreed or disagreed to the item 4 statement which suggested variance within the respondents upon the equipment and teaching materials available in the lecture halls. From 108 respondents, male students represented 18.1% (n=61) while female respondents represented 13.9% (n=47). Nearly, A quarter of the respondents of item 4 (n= 83 or 24.7%) opted to be undecided which shows a significant percentage of respondents are uncertain with impact of equipment and teaching materials in lecture halls. The mean score of item 4 were 3.13 which indicates that average respondents were satisfied with the equipment and teaching materials available in lecture halls.

A great percentage of respondents (n= 205 or 61%) strongly agreed or agreed to Item 5 in the Table 4.31, that facilities available in the library helped them accomplish their research assignments, most of them were male students (n=127 or 37.8%) whereas female students constituted 23.2% (n=78). On the contrary, 24.3% (n=82) indicated that they strongly disagreed or disagreed to item 5, with male representation of 11% (n=37) and female representation of 13.3% (n=45). Only 14.6% (n=49) indicated that they are undecided to item 5 with male respondents percentage of 9.8% (n=33) and female respondents of 4.8% (n=16). The mean scores of item 5 were 3.46 which indicates that average respondents opined that facilities available in the library helped them accomplish their research assignments.

Regarding item 6 in the Table 4.31, about 41.9% (n=141) strongly agreed or agreed with majority of male respondents (n=87 or 25.9%) as female represented 16% (n=54) that participation in the extracurricular activities relieved them from the study pressure. A remarkable percentage of the respondents 35.1% (n=118) strongly disagreed or disagreed to item 6 with male representation of 19.6% (n=66) and female counted 15.5% (n=52). Less

than a quarter of the respondents 22.9% (n= 77) were undecided whether extracurricular alleviated pressure of the study. The mean scores of the item 6 were 3.05 which indicates the average respondents were relieved their pressure by participation of extracurricular activities.

On the item 7 in Table 4.31 a high percentage of 47.9% (n= 161) strongly disagreed or disagreed that hostel services and facilities helped students for their continuation of study. Male respondents represented 25.9% (n= 87) and female respondents represented 22% (n=74). In item 7 also a total of 33.3% (n=112) strongly agreed or agreed with male percentage of 20.8% (n= 70) and their female counterpart of 12.5% (n=42). In the same item 7 of Table 4.31 a percentage of 18.8% (n=63) responded to be undecided the utility of the services and facilities at hostel. The mean scores of item 7 were 2.72 which indicates slightly above the average of the respondents' belief that services and facilities available at the hostel helped them continue the study. In pertinent to the statement of item 8 a percentage respondents of 41% (n=138) strongly agreed or agreed to that faculty members and other academic staff extend required support to the students. Within respondents, male represented 19.3% (n=65) while female represented 11.9% (n=40). Almost equal half of 40.4% (n=136) strongly disagreed or disagreed to item 8 of male counted 22.3% (n=75) and female constituted 18.1% (n=61). Less than a quarter of respondents which is 18.5% (n=62) with male representation of 10.7% (n=36) and female of 7.7% (n=26) were undecided whether faculty members and other staff provide the required support for the students. The mean scores of item 8 were 2.90 which indicates that moderately above the average of the respondents receive required support from the faculty members and other staff.

The last item 9 of Table 4.31 showed the majority of the students 228 (67.9%) strongly agreed or agreed to that they are generally satisfied with their study at their respective universities. Majority of them were male students (n=140 or 41.7%) while the remaining (n=88 or 26.2%) were female students. The rest of item 9 respondents are divided

almost into two halves for 16.3% (n= 55) responded to strongly disagreed or disagreed with male counted 30 students (9%) and female numbered 25 students (7.5%). While a proportion of 15.8% (n=53) responded undecided with male representation of 8% (n=27) and female representation of 7.7% (n= 26). The mean scores of item 9 were 3.72 which indicates above average of respondents agreed to that they are generally satisfied with their study at their respective universities.

### 4.12.2. Discussing analysis of hypothesis 2

The study tested the null hypothesis 2 that stated: "There is no significant influence of the institutional factors on academic achievement of undergraduate students from the selected countries of east Africa." To verify this hypothesis multiple linear Regression analysis was used. The result showed insignificant difference of academic achievement with regard to institutional factors, this proved by p-value =.895 which is greater than p=.05 that indicates statistically insignificant level. Therefore, we accept the H02 that stated; "There is no significant influence of the institutional factors on academic achievement of undergraduate students". The finding of this study with respect to statistical insignificance of institutional factors is in line with the study conducted by Ogbogu (2014) who investigated the institutional factors which affect the performance of Public Administration students in a Nigerian University which revealed that the institutional variables considered did not have any significant impact on students' performance. The result of the study generally revealed that the institutional variables considered (such as unfavourable learning conditions, interrupted water supply, poorly equipped library etc) did not have any significant impact on students' performance. On other hand, some studies indicated inconsistency with the finding of this study and revealed that institutional resources and facilities have significant impact on students' performance. For instance, the study of Odeh et al (2015) who investigated the influence of school environment on academic achievement of students in secondary schools

in Zone "A" Senatorial District of Benue State, Nigeria. The results of the study indicated that school climate, discipline and physical facilities has significant influence on academic achievement of secondary school students in Zone 'A' Senatorial District of Benue State. Based on the findings of this study, the researchers recommended among others that appropriate school authorities should enable to provide a conducive school environment that has good climate for effective teaching and learning. Similarly, a study carried out by Zenebe (2015) which aimed to assess the factors that affect student academic achievement in Government secondary schools. The key finding of this study indicated that physical environment and the school facilities, instruction facilities and materials, teacher qualification and training, teacher experience were found to be a contributing factors for student academic achievement. The finding of this study also disagreed with Akomolafe and Adesua (2015) who discussed in their paper research the impact of the classroom environment as a motivating factor in enhancing the academic performance of secondary school students in South West Nigeria. The result of the paper showed that there was a significant relationship between classroom environment and the academic performance of senior secondary school students. This inconsistency within the literature might be attributed to the different focus areas of the researches as there are numerous factors related to the educational institution such as; institutional infrastructure, availability of services, accommodation and out of class activities in addition to the policies maintained by the institution. Therefore, lack of inclusiveness or accuracy of models employed may have created this conflicting results.

#### 4.12.3. Analysis of responses on parental involvement

The research instrument –the questionnaire- comprised items related to parental involvement (items from 10-15) to measure students perspective on parent's role on academic achievement. Table 4.33 presents percentages and frequencies of items (from 10-15) responses as the researcher follow up with more discussion.

## Frequencies and percentages of response on parent involvement

No.	Items	SD			D			UD				А				SA					
		М			F	]	М	I	7	I	м	F		N	1	]	F	N	1	F	I
		n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
10	Family had role in choosing of faculty	57	17.0	35	10.4	50	14.9	43	12.8	23	6.8	4	1.2	35	10.4	32	9.5	32	9.5	25	7.4
11	communication with parent to inform obtained grades	20	6.0	17	5.1	39	11.6	27	8.0	25	7.4	7	2.1	72	21.4	41	12.2	41	12.2	47	14.0
12	Financial support from the family helps to continue	18	5.4	13	3.9	14	4.2	14	4.2	12	3.6	3	0.9	48	14.3	31	9.2	105	31.2	78	23.2
13	Instructions and advise from the family related to study	14	4.2	18	5.4	20	6.0	27	8.0	28	8.3	11	3.3	66	19.6	39	11.6	9	20.5	44	13.1
14	Rewarded from the family for academic achievement	32	9.5	13	3.9	30	8.9	44	13.1	37	11.0	15	4.5	49	14.6	34	10.1	49	14.6	33	9.8
15	Direct communication between university and family	100	29.8	69	20.5	37	11.0	40	11.9	14	4.2	6	1.8	24	7.1	15	4.5	22	6.5	9	2.7

n= Number, M= Male, F= Female, SD= Strongly Disagree, D= Disagree, UD= Undecided, A= Agree SA= Strongly Agree

The following Table 4.34 presents the descriptive statistics of mean scores and standard deviations of items from 10 to 15 related to impact of the parental involvement on academic achievement of the students.

#### Table 4.34

#### Descriptive statistics of responses on parent involvement

No	Items	Ν	Mean	
				Std.
				Deviation
10	Family had role in choosing of faculty	336	2.71	1.475
11	communication with parent to inform obtained grades	336	3.44	1.353
12	Financial support from the family helps to continue	336	4.06	1.325
13	Instructions and advise from the family related to study	336	3.65	1.325
14	Rewarded from the family for academic achievement	336	3.25	1.387
15	Direct communication between university and family	336	2.07	1.363
	Valid N (listwise)	336		

Table 4.33 provides that on item 10 a majority of the respondents (n= 185 or 55.1%) strongly disagreed or disagreed on that Family had role in choosing of faculty, most of them represented male respondents with total percentage of 31.9% (n=107) while female respondents represented 23.2% (n=78). On the other hand, about 36.8% (n=124) strongly agreed or agreed to Family had role in choosing of faculty, within them male represented 19.9% (n= 67) along with female percentage of 16.9% (57).

A few of the respondents with percentage of 8% (n= 27) were undecided if the family been involved in selecting faculty of study as undecided male portion represented 6.8% (n=23) along with few of female representation of 1.2% (n= 4). In addition, Table 4.33 shows that the mean scores of item 10 were 2.7 which indicates that slightly above average of the respondents revealed that family had a role on faculty of study they had chosen. The same Table 4.33 illustrates that on item 11, majority of the respondents representing 59.8% (n= 201) strongly agreed or agreed on regular communication with parent conveying obtained semester grades. Among them male represented 33.6% (n= 113) while the female represented 26.2% (n= 88).

A considerable number of respondents represented 30.7% (n=88) strongly disagreed or disagreed on the item 11 with dispersion of male respondents represented 17.6% (n=49) and female respondents of 13.1% (n= 39). The undecided respondents represented 9.5% (n=32) with composed of 7.4% (n=25) and of female 2.1% (n=7). The mean scores of item 11 as shown in Table 4.34 were 3.44 which implies that above the average of the respondents had regular contacts with family and shared with their grade points averages.

On item 12 in Table 4.33, a great majority of respondents of 77.9% (n=262) strongly agreed or agreed that Financial support from the family helps to continue study at university. Within these respondents male students represented 45.5% (n=153) while their female counterparts represented 32.4% (n=109). On the contrary, about 17.7% (n=59) strongly disagreed or disagreed with males representation of 9.6% (n= 32) and females representation of 8.1% (n=27). A few percentage of 4.5% (n=15) opted to undecided with males represented 3.6% (n=12) and females represented 0.9% (n= 3). As presented in Table 4.34, the mean scores of item 12 were 4.06 which indicates that high average of respondents receive financial support from their families that enabled them continue their study.

Regarding item 13 in the same Table 4.33 the majority of respondents with percentage of 64.8% (n=218) strongly agreed or agreed that they receive instructions and advise related to study from their families. In this responses male students represented 40.1% (n=135) while female students represented 24.7% (n=83). A total of 23.6% (n=79) responded

inversely and strongly disagreed or disagreed to item 13 with males represented 10.2% (n=34) and females represented 13.4% (n=45). A percentage of 11.6% (n=39) opted to be undecided to this item with males represented 8.3% (n=28) and females represented 3.3% (n=11). The mean scores of item as presented in Table 4.34 were 3.65 which indicates a great average of the respondents agreed to the statement of item 13 that they receive instructions and advise related to study from their families.

Table 4.33 also shows that 49.1% (n=165) of the respondents strongly agreed or agreed to the statement of item 14 that they are rewarded from the family for academic achievement in which males represented 29.2% (98) and females represented 19.9% (n=67). On the other side, about 35.4% (n=119) showed that they are not rewarded for any academic achievement and almost equal percentage of gender representation as males represented 18.4% (n=62) and females represented 17% (57).

The least respondents were undecided in the item 14 with proportion of 15.5% (n=52) distributed to males with 11.0% (n=37) and females with 4.5% (n=15). The mean scores of item 14 as presented in Table 4.34 were 3.25 which indicates above average of respondents are with statement of students are rewarded by their families fir their academic achievement. On last item 15 of Table 4.33, about 73.2% (n=246) strongly disagreed or disagreed on occurrence of direct communication between university and student family. In this majority males represented 40.8% (n=137) while females represented 32.4% (n=109).

A total of 20.8% (n=70) strongly agreed or agreed with males represented 13.6% (n=46) and females represented 7.2% (n=24). The least percentage of 6.0% (n=20) responded to be undecided with more males (n= 14 or 4.2%) than females (n=6 or 1.8%). The mean scores of item 15 as projected in Table 4.34 were 2.07 which indicates that majority of the

average respondents were against the statement of item 5 that implied the non-existence of direct contacts between university and family of most students participated in this study.

## 4.12.4. Discussing analysis of hypothesis 3

The study attempted to examine the impact of parent involvement on academic achievement of the undergraduate students. For this aim, study hypothesized that: "There is no significant influence of parent involvement influence on academic achievement of university students from Eastern Africa." The combined items of the parent involvement were analyzed with regression analysis that resulted in p-value=.527 which is greater than p=.05 indicating statically insignificant level and consequently accepting the null hypothesis that states; There is no influence of parent involvement on academic achievement. This finding of the study is consistent with the reviewed study of **Ogunshola and Adewale (2012)** who investigated the relationship between home-based environment factors and the academic performance of students in selected secondary schools.

The findings of the study showed that parental socio-economic statuses and parental educational background did not have significance effect on the academic performance of the students. However, the result revealed by the present study is inconsistency with reviewed literature such as **Chowa et al. (2013)** who examined the relationship between parental involvement and youth academic performance and the mediating effects of parental involvement in the relationship between Social Economic Status and academic performance.

Findings of this study showed that parents whose children perform well academically appear to be more involved at home with their children's school work, whereas parents whose children do not perform well academically appear to be more involved at school. Result of this research also disagreed with finding of **Farooq et al (2011)** who revealed that socioeconomic status (SES) and parents' education have a significant effect on students'
overall academic achievement as well as achievement in the subjects of Mathematics and English. The high and average socio-economic level affects the performance more than the lower level. It is very interesting that parents' education means more than their occupation in relation to their children's academic performance at school.

In general most of studies reviewed (Jama et al, 2014; Considine and Zappala, 2002; David et al., 2010; Mazharul Islam, 2014; Zenebe 2015; luke and mavis 2014) reported significant impact of parent involvement on academic performance of the student.

However, some reviewed studies searched the parents' level of education and their involvement in helping their children who are in primary and secondary level of school who are apparently in need of parents' constant scrutiny and supervision over their performance. However, the interest of this study was to investigate though mature undergraduates yet students live and study in foreign country that necessitates the parent's involvement in terms of support and regular contact with them in which this study concluded insignificance of parent involvement on academic achievement of the student.

### 4.14. Analysis of responses on instructional methods

The questionnaire consisted of items to measure the effect of the Instructional Methods on academic achievement of the students. Table 4.35 presents percentages and frequencies of responses to items from 16 to Item 28 as the researcher follow up with more discussion.

### **Table 4.35**

### Frequencies and percentages of response on instructional factors

No.	Items	SD			D				UD				Α				SA				
		ľ	м		F	I	м		F	I	M	F	7	Ι	Л	]	F	N	Л	F	
		n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
16	working on assignments by myself	18	5.4	20	6.0	33	9.8	25	5 7.5	29	8.6	5	1.5	69	20.5	46	13.7	48	14.3	43	12.8
17	Preferring cooperation with group	24	7.1	37	11.0	54	16.1	45	13.4	36	10.7	5	1.5	37	11.0	35	10.4	46	13.7	17	5.1
18	liking lecture supported with audio-visual aids	13	3.9	12	3.6	13	3.9	11	3.3	27	8.0	11	3.3	77	22.9	52	15.5	67	19.9	53	15.8
19	Preferring lecture rather than assignments	19	5.7	19	5.7	40	11.9	31	9.2	40	11.9	13	3.9	74	22.0	43	12.8	24	7.1	33	9.8
20	Preferring assignments rather than lecture	33	9.8	37	11.0	61	18.2	43	12.8	28	8.3	7	2.1	58	17.3	27	8.0	17	5.1	25	7.4
21	Dependent on handouts	27	8.0	15	4.5	35	10.4	3(	8.9	31	9.2	11	3.3	78	23.2	61	18.2	26	7.7	22	6.5
22	Difficult of understanding lecture in the class	55	16.4	34	10.1	52	15.5	36	10.7	28	8.3	21	6.2	41	12.2	33	9.8	21	6.2	15	4.5
23	Participating and presenting in the class	15	4.5	16	4.8	20	6.0	31	9.2	39	11.6	8	2.4	84	25.0	52	15.5	39	11.6	32	9.5
24	Benefiting from academic advice offered by the university	37	11.0	25	7.4	34	10.1	28	8.3	35	10.4	25	7.4	55	16.4	39	11.6	36	10.7	22	6.5
25	Discussing with lecturers out of the class	36	10.7	22	6.6	42	12.5	5 46	13.7	31	9.3	17	5.1	56	16.7	41	12.2	31	9.3	13	3.9
26	Finding new things by myself	11	3.3	15	4.5	14	4.2	8	2.4	29	8.6	13	3.9	70	20.8	46	13.7	73	21.7	57	17.0
27	Timely and constructive feedback on assignments	19	5.7	32	9.5	40	11.9	31	9.2	66	19.6	18	5.4	50	14.9	40	11.9	22	6.5	18	5.4
28	Acquiring knowledge and skills through practices	9	2.7	12	3.6	14	4.2	15	4.5	28	8.3	24	7.1	78	23.2	34	10.1	68	20.2	54	16.1

n= Number, M= Male, F= Female, SD= Strongly Disagree, D= Disagree, UD= Undecided, A= Agree SA= Strongly Agree

The following Table 4.36 presents the descriptive statistics of mean scores and standard deviations of items from 10 to 15 related to impact of the parental involvement on academic achievement of the students.

### Table 4.36

No	Items	N	Mean	Std.
				Deviation
16	working on assignments by myself	336	3.49	1.349
17	Preferring cooperation with group	336	2.93	1.409
18	liking lecture supported with audio-visual aids	336	3.88	1.190
19	Preferring lecture rather than assignments	336	3.25	1.278
20	Preferring assignments rather than lecture	336	2.78	1.361
21	Dependent on handouts	336	3.26	1.272
22	Difficult of understanding lecture in the class	336	2.64	1.359
23	Participating and presenting in the class	336	3.49	1.239
24	Benefiting from academic advice offered by the university	336	3.07	1.376
25	Discussing with lecturers out of the class	336	2.94	1.333
26	Finding new things by myself	336	3.90	1.210
27	Timely and constructive feedback on assignments	336	2.99	1.252
28	Acquiring knowledge and skills through practices	336	3.85	1.186
	Valid N (listwise)	336		

### Descriptive statistics of responses on instructional factors

As depicted in Table 4.36, a great percentage of 61.3% (n=206) strongly agreed or agreed on to the statement of item 16 that is preferring individual work on assignments and projects. As male students represented 34.8% (n=117) and female students represented

26.5% (n=89). On the contrary, 28.7% (n=96) strongly disagreed or disagreed with male representation of 15.2% (n=51) and female representation of 13.5% (n=45). About 10.1% (n=34) were undecided on the statement with males percentage of 8.6% (n=29) and few females of 1.5% (n=5). The item 16 scored mean of 3.49 which suggests that majority of respondents liked working individually on study assignments rather than cooperating with other students (cooperative learning).

On item 17 of the same table 4.35, slight majority of 47.6% (n= 160) strongly disagreed or disagreed on preferring cooperation with approximately equal representation of males (n=78 or 23.2%) and females (n=82 or 24.4%). A remarkable percentage of 40.2% (n=135) strongly agreed or agreed on the statement of the item with males represented 24.7% (n=83) and females represented 15.5% (n=52). The undecided were 41 respondents (12.2%) with males constituted 10.7% (n=36) and females counted 5 students (1.5%). The mean scores of item 17 were 2.93 which indicates that majority of respondents disliked cooperative learning even though a moderate percentage liked it.

In pertinent to item 18 in Table 4.35, an overwhelming majority of respondents of 74.1 percent (n=249) strongly agreed or agreed to liking lecture supported with audiovisual aids as male students represented 42.8% (n=144) and female students represented 31.3% (n=105). On the other side, 14.7 percent (n=74) strongly disagreed or disagreed with males counted 26 (7.8%) and females numbered 23 (6.9%). The total undecided on the item 18 were 33 respondents (11.3%) with males of 22 (8.0%) and females of 11(3.3%). The mean scores of item 18 as depicted in table 4.36 were 3.88 which suggests large percentage of respondents liked the instructional technology that is lectures supported with multimedia teaching materials rather than habitual delivery of lectures. Altogether, half of the respondents, 51.7% (n=174) strongly agreed or agreed on item 19 in table 4.35 that is Preferring lecture rather than assignments with larger males proportion of 29.1% (n=98) and females percentage of 22.6% (n=76). One third of the respondents, 32.5% (n=109) strongly disagreed or disagreed on the statement of this item, with males portion represented 17.6% (n=59) and females represented 14.9% (n=50).

A less percentage of 15.8% (n=53) were undecided respondents with males represented 11.9% (n=40) along with females of 3.9% (n=13). The mean scores of item 19 as showed in table 4.36 were 3.25 which indicates that a great deal of respondents preferred attending lectures instead of imposing assignments and academic tasks on them. For preferring assignment, 51. 8 percent (n=174) strongly disagreed or disagreed on item 20 in table 4.19 with males outnumbered (n=94 or 28.0%) the females (n=80 or 23.8%). A great number of respondents represented 37.8 percent (n=127) strongly agreed or agreed on preferring assignments rather than routine lecture, within this percentage males represented 22.4% (n=75) and females represented 15.4% (n=52). A relatively few respondents opted to be undecided to the statement of item 20 that is whether to prefer assignments or lecture on the issue under discussion. The mean scores of item 20 as displayed in table 4.36 were 2.78 which indicates that a large proportion of respondents were not easy with academic tasks and assignments, instead they would like to get the information in the form of traditional lecture delivered by the instructors in the class.

In the same above table 4.35, more than half of the respondents of 55.6% (n=187) strongly agreed or agreed on item 21 statement that is dependency of handouts provided by the instructors, as males represented 30.9 percent (n=104) while females represented 24.7 percent (n=83). On the opposite extreme, 31.8 percent (n=107) strongly disagreed or disagreed on the item 21. In this, male respondents represented 18.4 percent (n=62) and female respondents represented 13.4 (n=45). The undecided proportion was 12.5 percent (n=42) as male students were 8.3 percent (n=28) and female students were 2.1 percent (n=7). This Item 21 scored mean of 3.26 which shows most of respondents were in favour

of depending on handouts prepared by the instructors/lecturers which suggests the limited extent of doing further search on the topics covered by the instructors.

Regarding item 22 in the same Table 4.35, above half of respondents with percentage of 52.7% (n=177) strongly disagreed or disagreed that they face difficult of understanding lectures in class. In this responses male students represented 31.9% (n=107) while female students represented 20.8% (n=70). On the contrary, a total of 32.7% (n=110) responded that they strongly agreed or agreed to item 22 with males represented 18.4% (n=62) and females represented 14.3% (n=4548). A proportion of 14.5 percent (n=49) were to be undecided to this item with males represented 8.3% (n=28) and females represented 6.2% (n=21). The mean scores of item 22 as projected in Table 4.36 were 2.64 which indicates a great average of the respondents disagreed to the statement of item 22 that they face constraints on understanding lectures in the class. This implies their proficiency of language of instruction in university. A great number of respondents, that is 61.6 percent (n=207) strongly agreed or agreed on item 23 in table 4.35 which is about class participation and presentation amid males representation of 36.6 percent (n=123) and females representation of 25 percent (n=84). Almost a quarter (n=82 or 25.4%) of the respondents strongly disagreed or disagreed with males constituted 10.5 percent (n=35) along with females of 14.0 percent (n=47). A total of 14.0 percent (n=47) were undecided whether they participate and do presentation in class. Within this undecided group, males represented 11.6 percent (n=39) while the females represented 2.4 percent (n=8). The mean scores of item 23 as provided in table 4.36 were 3.49 which indicates majority of respondents did participate and present in class.

On the statement of item 24 which is related to benefiting from academic advice offered by the university, a relative majority of 45.2 percent (n=152) strongly agreed or agreed amongst them males represented 27.1 percent (n=91) while females represented

18.1 percent (n=61). A considerable percentage of 36.8 percent strongly disagreed or disagreed on the statement of item 24 as males counted 21.1 percent (n=71) and females represented 15.7 percent (n=53). Also, a notable respondents of 17.8 percent (n=60) were undecided whether they benefited from academic advising offered by the university. Amongst the undecided, male students represented 10.4 percent (n=35) and female students represented 7.4 percent (n=25). This item 24 as presented in table 4.36 scored mean of 3.07 which shows a great number of respondents benefited from the academic advising and consultations provided by their respective university.

With regard to item 25 in table 4.35 that is related to discussing with lecturers out of the class, respondents are almost equal on the two extremes as 43.5 percent (n=146) strongly disagreed or disagreed with males represented 23.2 percent (n=78) and females represented 20.3 percent (n=68). Approximately, equal percentage of 42.1 percent (n=141) strongly agreed or agreed as males represented 26 percent (n=87) and females represented 16.1 percent (n=54). About 14.4 percent (n=48) were undecided on whether they discuss topics related to courses and lectures with their instructors outside the class. Within the undecided proportion males represented 9.3 percent (n=31) and females represented 5.1 percent (n=17). The mean scores of item 25 as depicted in table 4.36 were 2.94 which indicates a remarkable percentage of respondents did not discuss with their instructors outside the class. An overwhelming majority of respondents, 73.2 percent (n=246) strongly agreed or agreed on item 26 that is "finding new things by myself" with males students represented 42.5 percent (n=143) and females represented 30.7 percent (n=103). In less proportion of 14.4 percent (n=48) strongly disagreed or disagreed with males counted 7.5 percent (n=25) while females constituted 6.9 percent (n=23). The undecided respondents were almost equal to this later proportion as they represented 12.5 percent (n=42) with males percentage of 8.6 percent (n=29) and females of 3.9 percent (n=13). The mean

scores of the item 26 as projected in table 4.36 were 3.90 which suggests that a great deal of respondents like discovery style of learning by finding new things, of course with the guidance of the instructors.

On item 27 in table 4.35, which related timely and constructive feedback on assignments, respondents are almost divided with small higher percentage of 38.7 percent (n=130) strongly agreed or agreed and males represented 21.4 percent (n=72) and females represented 17.3 percent (n=58). The other less percentage of 36.3 percent (n=122) strongly disagreed or disagreed with nearly similar gender proportion as males represented 17.9 percent (n=59) and females represented 18.7 percent (n=63). A quarter of overall respondents, that is 25 percent were undecided to the item 27 of "timely and constructive feedback on assignments" most of undecided were male respondents as they represented 19.6 percent (n=66) and females represented 5.4 percent (n=18). The mean scores of item 27 as presented in table 4.36 were 2.99 which indicates slight above average respondents agreed to "timely and constructive feedback on assignments" even though undeniable percentage disagreed with this item. A great majority of respondents, 69.6 percent (n=234) strongly agreed or agreed on item 28. That is, "acquiring knowledge and skills through practices" with male respondents represented 43.4 percent (n=146) and female respondents represented 26.2 percent (n=88). The remaining respondents are almost equal percentage divided into two halves as 15.4 percent (n=52) were undecided with males representation of 8.3 percent (n=28) and females representation of 7.1 percent (n=24). This followed by 15 percent (n=50) strongly disagreed or disagreed with males counted 6.9 percent (n=23) and females constituted 8.1% (n=27). The mean scores of item 28 as projected in table 4.36 were 3.85 which indicates a large percentage of respondents preferred "acquiring knowledge and skills through practices" that is hands-on learning which is one of the learning styles of students.

### 4.12.6. Discussing analysis of hypothesis 4

Another hypothesis that this study tried to test was the impact of the teaching methods on academic achievement of the student. This null hypothesis states; "There is no significant influence of the instructional methods on academic achievement of undergraduate students". And to test this hypothesis, the study used regression analysis to determine the level of significance of instructional methods to predict academic achievement of student.

Based on the result of the analysis, there is insignificant level of instructional methods in relation to academic achievement of student. This insignificance is proved by p-value of p=.061 which is greater than p=.05 that indicates statistically insignificant level so to accept the null hypothesis of; "There is no significant influence of the instructional methods on academic achievement". This finding of this disagreed with revelations of the reviewed literature that concluded the significance of the teaching methods on academic performance of the students. However, the reviewed studies used different approaches to examine effect of a specific instructional method on students' achievement. For instance; effects of problem-based teaching methods (Eze T.I. et al., 2016; Nafees et al., 2012), cooperative learning (Oviawe, 2010; Khazaei A et al., 2015), Composite Instructional Method (Kwalia et al., 2016), Demonstration and Lecture (Omwirhiren and Ibrahim, 2016) in addition to Haas (2002) who reported effect of several instructional methods namely; direct instruction, problem-based learning, technology aided instruction, cooperative learning, manipulatives, models, and multiple representations, and communication and study skills. Each of the aforementioned study reported the particular significance of specified method while this study combined instructional methods as one component in the items of questionnaire to report overall effect of the instructional

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methods in which the result shows the insignificance of instructional methods with respect to the academic achievement of the students.

### 4.12.7. Analysis of responses on student's traits of study

The questionnaire consisted of items to measure the effect of the study habit on academic achievement of the students. Table 4.37 presents percentages and frequencies of responses to items from 29 to Item 38 as we follow up with more discussion.

# Table 4.37

## Frequencies and percentages of response on student's study habit

No.	Items	SD			D				UD				Α				SA				
		М	Ι		F	I	M	F	ק	I	M	F		I	М	]	F	ľ	М	1	?
		n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
29	Attending the class with having read about the lecture	17	5.1	34	10.1	34	10.1	42	12.5	41	12.2	29	8.6	67	19.9	24	7.1	38	11.3	10	3.0
30	Taking notes during the lecture in the class	7	2.1	11	3.3	14	4.2	13	3.9	32	9.5	19	5.7	86	25.6	63	18.8	58	17.3	33	9.8
31	assignment submission on time	7	2.1	10	3.0	13	3.9	25	7.4	35	10.4	35	10.4	86	25.6	44	13.1	56	16.7	25	7.4
32	Discussing lecture with students out of class	15	4.5	18	5.4	29	8.6	26	7.7	39	11.6	24	7.1	79	23.5	48	14.3	35	10.4	23	6.8
33	Putting daily schedule for studying	17	5.1	17	5.1	24	7.1	31	9.2	45	13.4	26	7.7	74	22.0	40	11.9	37	11.0	25	7.4
34	Allocating time for the Library	7	2.1	18	5.4	23	6.8	35	10.4	41	12.2	12	3.6	63	18.8	46	13.7	63	18.8	28	8.3
35	Studying seriously when exam approaches	9	2.7	8	2.4	7	2.1	11	3.3	24	7.1	10	3.0	59	17.6	38	11.3	98	29.2	72	21.4
36	Relating the topic studied with experiences	6	1.8	10	3.0	11	3.3	10	3.0	53	15.8	54	16.1	81	24.1	36	10.7	46	13.7	29	8.6
37	Setting goals for the study for motivation	7	2.1	4	1.2	13	3.9	14	4.2	36	10.7	38	11.3	74	22.0	49	14.6	67	19.9	34	10.1
38	Making efficient use of time	9	2.7	22	6.5	17	5.1	21	6.2	45	13.4	30	8.9	64	19.0	43	12.8	62	18.5	23	6.8

n= Number, M= Male, F= Female, SD= Strongly Disagree, D= Disagree, UD= Undecided, A= Agree SA= Strongly Agree

The following Table 4.30 presents the descriptive statistics of mean scores and standard

deviations of items from 29 to 38 related to learner's study habit on academic achievement of

the students.

### Table 4.38

### Descriptive statistics of responses on student's study habit

No.	Items	Ν	Mean	Std. Deviation
29	Attending the class with having read about the lecture	336	3.03	1.296
30	Taking notes during the lecture in the class	336	3.80	1.090
31	Submission of assignment on time	336	3.65	1.114
32	Discussing with students out of class	336	3.36	1.224
33	Putting daily schedule for studying	336	3.34	1.238
34	Allocating time for the Library	336	3.54	1.259
35	Studying seriously when exam approaches	336	4.15	1.122
36	Relating the topic studied with experiences	336	3.64	1.045
37	Setting goals for the study for motivation	336	3.82	1.053
38	Making efficient use of time	336	3.53	1.241
	Valid N (listwise)	336		

As indicated in Table 4:37, 41.4% (n= 139) of the students strongly agreed or agreed to the item 29, that is attending the class with having read about the lecture, with majority of them are male students (n= 105 or 31.2%) and remaining are female students (n= 34 or 10.2%). By contrast, about 37.8% (n= 127) indicated that they strongly disagreed or disagreed on item 29 with females representation of 22.6% (n=76) and males representation of 15.2% (n=51). In the same item of 29, a relatively great number of respondents of 20.8% (n=70) indicated their uncertainty and resorted to be undecided on "attending the class with having read about the lecture" with males represented 12.2% (n=41) and their female counterparts represented 8.6% (n=29). The mean score of the item 29 as showed in Table

4.38 were 3.03. This indicates that slight above average of students are in favour of item 29 statement that they attend the class with having read about the lecture.

In the same above Table 4.37 an overwhelming majority of students of 71.4% (n=240) strongly agreed or agreed to the item 30 that is "taking notes during the lecture in the class". In this percentage male students represented 42.9% (n= 144) as female students represented 28.6% (n= 96). This is followed by 15.2% (n=51) of undecided on the statement of item 30, as the undecided males constituted 9.5% (n=32) while undecided females represented 5.7% (n=19). In this item 30 about 13.4% (n=45) strongly disagreed or disagreed as male and female students are almost divided into two halves with female represented 7.2% (n=24) and male represented 6.3% (n=21). The mean score of item 30 were 3.80 which indicates that above average respondents indicated that they perform "taking notes during the lecture in the class.

In the same Table 4.37, a great percentage of 62.8% (n=211) strongly agreed or agreed to the item 31 that related to "submission of assignment on time" out of 211 respondents, 142 respondents (42.3%) were males while 69 respondents (20.4%) were females. A notable respondents of 70 (20.8%) were undecided on the submission of assignment on time with equal representation of males and females 10.4% (n=35) and 10.4% (n=35) respectively. A least percentage of 16.4% (n=55) strongly disagreed or disagreed with females representation of 10.4% (n=35) and male respondents represented 6% (n=20). This item 31 scored mean of 3.65 as shown in table 4:38 that indicates that above average respondents agreed to submission of assignment on time.

Regarding item 32 in the same Table 4.37, a percentage of 55% (n=185) of the respondents strongly agreed or agreed to the item 32 which related to "discussing with students out of class" with male represented 33.9% (n=114) and female represented 21.1%

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(n=71). Of the respondents 26.2% (n=88) with equal number of males and females 13.1% (n=44) and 13.1% (n=44) respectively, strongly disagreed or disagreed to the item 32 statement which suggested variance within the respondents upon "discussing with students out of class". The undecided respondents on this item represented 18.8% (n=63) with males representation of 11.6% (n=39) and females representation of 7.1% (n=24). The mean score of item 32 as shown in Table 4:38 were 3.36 which indicates that majority of respondents agreed to "discussion with students out of class". A slightly greater than half of the respondents (n= 176 or 52.4%) strongly agreed or agreed to Item 33 in the Table 4.37, that related to "putting daily schedule for studying", most of them were male students (n=111 or 33.1%) whereas female students constituted 19.3% (n=65). On the contrary, 26.5% (n=89) indicated that they strongly disagreed or disagreed to item 33, with females representation of 14.3% (n=48) and female representation of 12.2% (n=41). A remarkable percentage of 21.1% (71) indicated that they are undecided to item 33 with male respondents percentage of 13.4% (n=45) and female respondents of 7.7% (n=26). The mean scores of item 33 as presented in table 4:38 were 3.34 which indicates that majority of respondents opined that "putting daily schedule for studying"

On item 34 of "allocating time for the Library" in the Table 4.37, a notable majority of 59.4% (n=200) strongly agreed or agreed with majority of male respondents (n=126 or 37.6%) as female represented 22% (n=74). Approximately a quarter of the respondents 24.7% (n= 83) were undecided about allocating time for library with female students majority of 15.8% (n=53) and males students represented 8.9% (n=30). The least number of respondents (n=53 or 15.8%) were undecided about allocating time for the library with majority of them were males who represented 12.2% (n=41) and few females who represented 3.6% (n=12). The mean scores of the item 34 as presented in table 4:38 were 3.54 which indicates the majority of respondents agreed to "allocating time for the Library".

A great percentage of the respondents 79.5% (n=267) strongly agreed or agreed to item 35 which related to "studying seriously when exam approaches" with high male students representation of 46.8% (n=157) and female students counted for 32.7% (n=110). The remaining respondents are divided equally whereas 10.5% (n=35) strongly disagreed or disagreed with female students represented 5.7% (n=19) and male students represented 4.8% (n=16). Almost similar number of respondents 10.1% (n=34) were undecided on the statement of item 35 on student's serious study in examination period. The mean scores of the item 35 were 4.15 which indicates a great majority of students agreed to "studying seriously when exam approaches". A significant percentage of 57.1% (n=192) strongly agreed or agreed on item 36 in the same table 4: 37 which is related to "relating the topic studied with experiences" with male students representation of 37.8% (n= 127) and their female counterparts of 19.3% (n=65). A remarkable percentage of 31.8% (n= 107) were undecided on this item 36 of "relating the topic studied with experiences" with almost equal representation of male students (n=53 or 15.8%) and female students (n=54 or 16.1%). A least number of respondents (n=37 or 11.1%) strongly disagreed or disagreed on the statement of item 36 with nearly equal representation of male students (n=17 or 5.1%) and female students (n=20 or 6%). The mean scores of the item 36 as portrayed in table 4:38 were 3.64 which indicates a great majority of students agreed to "relating the topic studied with experiences".

In the same table 4:37 and on item 37 a great majority of respondents 66.7% (n=224) strongly agreed or agreed to "setting goals for the study for motivation". Within these respondents, male represented 41.9% (n=141) while female represented 24.7% (n=83). This followed by undecided percentage of 22% (n=74) with almost equally divided between male students (n=20 or 6%) and female students (n=18 or 5.4%). Less than a quarter of respondents which is 22% (n=74) with male representation of 10.7% (n=36) and female of

11.3% (n=38) indicated to strongly disagreed or disagreed to "setting goals for the study for motivation". The mean scores of item 37 as shown in table 4:38 were 3.82 which indicates that majority of respondents agreed to the statement "setting goals for the study for motivation".

The last item 38 of Table 4.37 shows a moderately high percentage of the students that is 57.1% (n=192) strongly agreed or agreed to "making efficient use of time" that they are generally satisfied with their study at their respective universities. Majority of them were male students (n=126 or 37.5%) while the female students represented 19.6% (n=66). A relatively high percentage of 22.3% (n=75) were in favor of undecided with males represented 13.4% (n=45) and females constituted 8.9% (n=30). The least percentage of 20.5% (n=69) strongly disagreed or disagreed on the statement of item 38 with more female students of 12.7% (n=43) and males represented 7.8% (n=26). The mean scores of item 38 as presented in table 4:38 were 3.53 which indicates majority of respondents agreed to "making efficient use of time".

### 4.12.8. Discussing analysis of hypothesis 5

Lastly, the study tested the null hypothesis that states; "There is no significant effect of study habit on academic achievement of undergraduate students". In the same manner of the above hypotheses, a multiple regression analysis was conducted to determine the predictive level of significance of study habit in relation to academic achievement of student. The result indicated that there is statistical significance for study habit on academic success of student. This result confirmed by p-value of .017 that is less than p=.05 which is statistically significant level that reveals to reject the null hypothesis that states; "There is no significant effect of study habit on academic achievement of undergraduate students". And accordingly, to accept the alternative hypothesis of "there is significant effect of study habit on academic achievement of undergraduate students".

The result of the hypothesis test - in relation to statistical significance of study habitis consistency with literature reviewed such as; Adamu, and Duna (2018) who conducted a research that examined the relationship between study habits and academic performance among students of Umar Suleiman College of Education Gashua, Yobe State, Nigeria. The study found that there is a significance relationship between study habits and academic performance among students. This means those students who possess good study habits are likely to improve their academic performance. Similarly, the research of **Rabia et al. (2017)** on study habits and academic performance of students concluded that there is significant relationship between study habits and academic performance of the students. It is also in line with **Chandana (2014)** who examined effect of Study Habit on Academic Achievement and reported that there is a significant relationship between the study habits and academic achievements of the male and female University students. The result added that there is a significant difference in the academic achievement of male and female university students. Since the female students devote more study hours, they tend to have higher academic achievements scores than the males.

Overall, there are numerous studies reviewed (Nonis & Hudson, 2010; Miguel & Ksenia, 2015; Tesfaw and Derebew, 2014; Abisola and Kudirat, 2017; Ayodele and Adebiyi 2013;) who reported study habit is powerful predictive of academic achievement of student as they investigated study habits including; attending classes regularly, taking down notes during teaching, participating in class discussions and activities, talking to the instructor after class, completing and check all work and submitting assignments on time, having proper rest periods, monitor your progress and following a time table, having a special time for study each day, Learning to use the library and test-taking strategies.

### **CHAPTER FIVE**

### CONCLUSION, IMPLICATIONS, RECOMMENDATIONS AND SUGGESTIONS FOR FURTURE RESEARCH

### **5.1. Introduction**

This chapter presents a conclusion of the study revealed by the different analyses conducted to determine the factors affecting the academic achievements of the students participated in this study. It is the chapter that demonstrates the major findings yielded by hypotheses tests and answers to the research questions of the study. Moreover, it put forward practical implications as well as general recommendations and further research in the future.

### 5.2. Summary

This study has attempted to determine factors affecting the academic achievement of foreign undergraduate students in Sudanese universities. Participants of the study were students from three countries namely; Kenya, Somalia and Ethiopia who are studying at Africa International University and Ahfad University for Women. These two universities were selected because of hosting high percentage of foreign undergraduate students in Sudan.

The population of the study was the undergraduate students of the academic year 2018/2019 and the total respondents of the study were 336 from the three countries with 50.3% of them from Somalia and the remaining were students from Kenya and Ethiopia with percentage of 37.8% and 11.9% respectively.

Furthermore, the study employed survey tool of questionnaire to collect the data on factors affecting the academic achievement of the foreign undergraduate students. The dependent variable in this study was academic achievement measured by the accumulative grade point obtained. Demographic variables such as; gender, age, residence, year of study, field of study and language of instruction in high school were included also as independent variables.

In addition, a questionnaire of four components was developed to identify factors affecting the academic performance of undergraduate students. These components were; Institutional factors (9 items), Parent involvement (6 items), instructional factors (13 items) and learning habit (10 items). After collection of required data, descriptive analyses of frequencies and percentages and inferential analyses of independent samples of t-test, analysis of variance ANOVA and multiple linear regression analysis were used to analyze the collected data in order to verify the formulated hypotheses and to answer the research questions.

The study as a whole yielded major findings in relation to the factors affecting foreign undergraduate students and students were in general similar to their responses on determinants of academic success despite slight differences expressed towards of certain influential factors. However, the study was guided by the hypotheses formulated to be tested and research questions to be answered and major findings are outlined in the following:

#### 5.3. Major findings of the study

Transition from high school to university combined with travelling to study abroad is very crucial stage of students' academic pursuit as it presents formidable challenge to many students in order to fulfil their dream of successful postsecondary education and professional career in their future life. Many studies employing various approaches and different methods have emerged in recent years to explore factors affecting academic achievement of students in diverse educational levels.

In the literature reviewed for this study, the researcher have come across a myriad of factors examined and probed qualitatively and quantitatively in different research designs.

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However, there is inconsistency within literature with regard to factors influencing academic achievement of students because of the wide range of theories and perspectives grounded in educational researches.

In this context, this study attempted to contribute in ongoing academic discourse over determining factors and predicting variables related to academic attainment of students. And by taking into account the extant literature, this study categorised factors affecting academic performance as sociodemographic, institutional, instructional and personal habits and derived multiple variables from these broad components and accordingly formulated hypotheses to be tested and research questions to be answered through multiple analyses in order to arrive at conclusions and expected findings of the study.

The study applied descriptive research design with the instrument of survey questionnaire and analysed the data collected descriptively in terms of frequencies and percentages as well as inferentially by employing multiple analyses of t-test samples, analysis of variances (ANOVA) and multiple regression analysis. Findings of the study revealed that: 1- Some of demographic variables such as; gender, residence, field of study, previous language of instruction are not statistically significant in relation to academic achievement of students.

2- Analysis indicated statistical significance of two demographic variables these are; age and year of study which suggests the impact of age and year of study on academic performance of students as result showed senior and mature students have scored high grade points compared to other junior students.

3- The study further discovered the insignificance of the parent involvement with respect to academic attainment despite remarkable responses which agreed on maintaining regular contacts with parents to share semester results and also receive advices and direction that indicates some sort of involvement from parent.

4- The study found insignificance of the institutional factors related to academic performance but frequency of responses to questionnaire items indicates that orientation program, language courses and extracurricular activities helped their adjustment and academic integration into university. Respondents also agreed with facilities available in the library helped accomplishing research assignments.

5- Majority of the respondents expressed dissatisfaction with hostel services and facilities as well as provision of required support for the students from faculty members and other staff.
6- Analysis of items in the component of instructional factors showed statistically insignificant with regard to academic success of students in terms of obtained grade point average. Even so, a considerable percentage opted to work on individual assignments rather

than group work and cooperative learning. They also agreed to like incorporating instructional media and technology in teaching profession and expressed facing no constraints of medium of instruction and participate discussions and presentations in the class but ironically dependent on handouts provided by the instructors/lecturers.

7- On contrary to general trend of insignificance, this study found study habit factor statistically significant in relation to academic achievement of students. This result suggests that study habits which are individual norms of learning such as; having daily schedule of time management, allocating time to library, regular attendance, submission of assignments on time have impact on academic success of the student.

Overall, the study revealed insignificance of most demographic variables with exception to age and year of study, it also concluded insignificance of parental involvement, institutional factors and instructional factors. Conversely, the study ascertained to the significance of study habit which indicates the decisive effect of the student's effort on academic achievement. The finding of this study with regard to the significance of study habit corroborates the established practice and theory of student involvement/ engagement

that is student academic success is contingent on the amount of physical and psychological energy that the student devotes to the academic experience.

In a nutshell, this study does not claim conclusive findings on factors affecting academic achievement but presents results of analysis of some variables selected as determining factors influence academic success of student in the context of foreign students. Therefore, it is part of ongoing educational researches on the course of investigating underlying causes of academic success or failure.

#### 5.4. Implications of research findings

Based on the findings of this study, there are some implications for policy, practice and theory. These implications are discussed hereinafter.

#### **5.4.1. Implications for Policy**

It is important to point out that Sudanese universities offer scholarships on annual basis to great number of foreign students who are from different ethnics and nationals with variety of social and cultural backgrounds especially from Africa and Asia. And as a result, the participants of this study were foreign students particularly from Eastern Africa countries.

Apparently, there are policies and strategies in place with regard to foreign students in their respective institutions, yet findings of this study are considered first-hand evaluation of foreign students towards policies and strategies implemented by the higher education institutions in Sudan. And it will add some inputs to improve policies and strategies relevant to academic and social integration of foreign students.

For instance, induction programs for freshmen that familiarize institution's norms, values, objectives, as well as vision and mission with the new student particularly foreign students. This is a gateway into the navigation of the university environment and very

beneficial as expressed by majority of the surveyed students in this study. Equally helpful are language courses provided by the university to the foreign students that assisted them to keep the pace of academic advancement.

Other issues of major challenges experienced by the foreign students include conditions of the accommodation, extracurricular activities and support and services for foreign students which are essential elements for foreign students.

Therefore, if Sudanese universities want to maintain its reputation they should develop better supportive services to help foreign student population and improve the ones that are already in place. Insufficient services or failure to develop adequate services will result in low academic completion rates for foreign students. It will also have a negative effect on the number of foreign students choosing to study in Sudan.

### **5.4.2. Implications for practice**

Findings of this study display that freshmen students have obtained lower grade points compared to other senior students. This implies that freshmen are in much need of constant academic guidance and regular consultation with instructors and faculty staff that prompt an early intervention and corrective measures to be taken as soon as problems are identified.

Results of this study also indicates the inclination of majority of the respondents to work individually rather than cooperative learning and preferring lectures delivered with audio-visual medium which is a signpost to direct instructors and lecturers to suitably design favourable teaching methods with incorporation of instructional technology for the students.

Furthermore, this study concluded the requisite of rapport between students and academic staff through regular academic advising and interaction outside of lecture halls which give rise to the necessity of assigning academic advisor to each student in order to follow up his academic progress from enrolment to the graduation.

Similarly, this study found majority of respondents have chosen hands-on learning experience and discovering new things through experimental and practical procedures in which we infer the tendency of students to acquire knowledge by practicing and exercising in actual conditions and workable scenarios.

### **5.4.3.** Implications for theory

This study sought to explain the most pressing topic of factors impacting the academic achievement of student which encompasses in its details spectrum of theoretical perspectives. However, the study was informed by Astin's theory of student involvement, Tinto's theory of student departure and Welberg's theory of educational productivity.

Astin's theory postulate student's effort and perseverance is the determining factor that affect academic success of the student. This postulation is affirmed by the result of this study that shows the significance of student study habit in relation to academic attainment. Similarly, result of this study revealed that the senior students who stayed longer have scored high grade point. This conforms to Tinto's theory of departure that students who are integrated academically and socially into their institution are more likely to be successful in their study and perform better than those who are not integrated.

### 5.5. Recommendations

Since this study is related to factors affecting academic performance of segment amongst foreign students studying in Sudanese higher education institutions, it has important implications for educational institutions and policy makers in Sudan in general and for the lecturers and instructors of the tertiary education who are entrusted to enhance the academic performance of the students. Thus, based on the findings of this study, the researcher would like to put forward the following recommendations;

- 1- Higher education institutions in Sudan should maintain robust policy of social and academic integration of foreign students that is specifically developed for better learning environment to foreign students in order to keep the reputation of Sudanese universities as emerging destination of study for many foreign students.
- 2- Mature students at age of 22 and above should be criterion for the admission and if younger students admitted they should be assessed to test their competency and if they show their capability they move on to join the regular program otherwise they should take prerequisite courses and get duly prepared.
- 3- Improving the level of interaction between students and faculty members including academic and non-academic staff by creating more space for academic advice, educational counselling and close follow up of student's progress.
- 4- Consideration should be given to previous school background of students especially medium of instruction for not to face constraints at university or to be assigned to prerequisite language courses.
- 5- Hostel facilities and accommodation services should be improved to relieve students of homesick stress and other related feeling of foreignness.
- 6- Active involvement and engagement of students should be boosted in teachinglearning process by adopting leaner-centred approach in which students shoulder more individual assignments and research projects.
- 7- Instructional media and technology should be incorporated into teaching profession in addition to provision of course outlines and guiding handouts.
- 8- Workshops and seminars related to study skills and learning strategies should be conducted to raise students' competency that leads to academic achievement.

- 9- Induction programs targeting foreign students should be maintained in regular basis which increase student adaptability to institution's environment in terms of policy and practice.
- 10-Many -if not all- foreign students in Sudan have got admission through scholarship programs. Therefore, the educational institutions should pay attention to socioeconomic status of the students to prevent cases of dropouts or departures because of economic hardships.

#### **5.6. Suggestions for future research**

Based on the findings and the conclusions reached, the study made the following suggestions for future research work to expand knowledge upon factors impact academic performance of student:

- 1- This study employed quantitative method of research through self-reported survey and convenience sampling. Therefore, employing different approach of qualitative methodology through interviews and focus group discussions may result in more concrete conclusions.
- 2- Due to certain circumstances during the Corona pandemic, this study did not succeed to include participants from university lecturers and other relevant staff who might have had insightful views on factors affecting academic success. So for future research on foreign students should include faculty members, instructors and other administration staff.
- 3- The heterogeneity of the sample from three countries of different social and cultural backgrounds in addition to various field and level of studies have created an onerous task in the course of analysis. Therefore, for future research it would be suggested to concentrate on more homogenous sample of study.

- 4- Adding other variables such as educational background, learning styles, peer-tutoring, self-regulating, lecturer characteristics and motivational attitudes could have contributed to explore more about factors that influence students' academic achievement. However, this does not devalue the current study in any sense.
- 5- The study could be a starting point to conduct further studies pertaining to factors affecting the different nationalities of foreign students in Sudanese high education institutions, whereby such studies contribute enhancing academic achievements of the students and create favourable learning environment that cater to the diverse interests and needs of the foreign students.
- 6- It is also suggestable that more items would be necessary to glean a wider scope of factors that impact academic performance of foreign students. In other words, further studies may be conducted to modify and add more items that may provide vital information which confirm or disconfirm the findings of the present study.

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# Appendices

## Appendix 1

#### استبيان للطلاب

#### QUESTIONNAIRE FOR STUDENTS

Dear brothers/ sisters,

Assalamu Alaikum,

My name is Ahmed Abdi Aden, I am currently undertaking Doctorate study in Education at the Sudan University of Science and Technology.

As a requirement In order to complete my study, I am hereby conducting a survey on "Factors affecting academic achievement of the foreign undergraduate students in Sudanese Universities: A case study of students from selected countries of eastern Africa.". The aim of this study is to investigate your views towards the factors influencing the academic achievement of foreign undergraduate students especially students from Eastern African countries. The outcome of this study would contribute towards enhancing the academic performance of the students.

I will appreciate if you could attend to this questionnaire and respond to it honestly and sincerely. Your privacy and the personal information you will provide here would be kept strictly confidential your cooperation in responding to this questionnaire is highly appreciated.

Thank you.

### البيانات الشخصية SECTION A: DEMOGRAPHIC INFORMATION

Instruction: Please answer all questions honestly in the necessary boxes and spaces.

1.	Gender : Male Female الجنس:
2.	Age: 19-21 22-24 25-27 28 and above : العمر :
3.	لغة English Other English التدريس في الثانوية
4.	البلدNationality:
5.	الجامعة الجامعة الجامعة المعة المعة المعة المعامين المعامين المعامين المعامين المعامين المعامين المعام
6.	الكليةFaculty :
7.	Year of study: 1 <sup>st</sup> year 2 <sup>nd</sup> year 3 <sup>rd</sup> year 4 <sup>th</sup> year and above السنة الدراسية :
8.	السكن : فير داخلية/Off Campus داخلية/Residence: On Campus
9.	مجموع معدل الدرجات : 2.5-3 3-3.5 3.5-4 4-5 : مجموع معدل الدرجات :

#### SECTION B

**Instruction:** Please read each statement and choose the number of response which corresponds most closely to your view of factors affecting the academic achievement of the student.

Key:
1= Strongly disagree
2= Disagree
3= Neutral
4= Agree
5= Strongly agree

<u>دلیل</u> 1= غیر موافق جدا 2= غیر موافق 3= محاید 4= موافق جدا

	العوامل المؤسسية \الجامعة Institutional Factors					
1.	If I was given chance I had chosen to study another faculty at the university لو أعطيت فرصة لكان اختياري أن أدرس كلية أخرى في الجامعة					5
2.	Participation in orientation and awareness program for foreign students helped my integration into university مشاركتي في برنامج التهيئة والتوعية التي تنظمها الجامعة للطلاب الوافدين الجدد ساعدني الاندماج في الجامعة					5
3.	Participation in language courses contribute into adjusting to the university. مشاركتي في الدورات اللغوية للوافدين قبل بدء دراسة الكلية ساهم في تكيفي مع الجامعة					5
4.	I am comfortable with the equipment and teaching materials of lecture halls in the university.	1	2	3	4	5
5.	Equipment and facilities available in the library help me for accomplishing my assignments تجهيزات وتسهيلات مكتبة الجامعة تساعدني في إنجاز واجباتي الدراسية				4	5
6.	My participation in extracurricular activities relieve me academic pressure مشاركتي في النشاطات الطلابية التي تقدمها الجامعة خفف عني الضغوط الدر اسية					5
7.	Services and facilities available in the hostel help me for continuing my study الخدمات والتسهيلات المتوفرة في داخلية الجامعة تساعدني في مواصلة الدراسة				4	5
8.	I get support from faculty members and other staff أحصل على المساعدة من أعضاء الكلية والموظفين الآخرين					5
9.	عموما أنا راض عن دراستي في الجامعة I am satisfied with studying at my university				4	5
	دور الأسرة Parent involvement		1	1		
10.	. My family had role in choosing of faculty I am studying. أسرتى كان لها دور في اختيار الكلية التي أدرسها				4	5
11.	I communicate with parents to inform them my obtained grade points every semest. أتواصل مع أسرتي دائما لاطلاعهم على معدل الدرجات التي أحصل عليها في كل فصل دراسي				4	5
12.	I receive financial support from the family to help continue my study. أتلقى الدعم المالي من الأسرة للإعانة على مواصلة الدراسة				4	5
13.	I get instruction and advice from my family in relation to my study at university. أتلقى توجيهات ونصائح من أسرتي فيما يخص در استى في الجامعة				4	5
14.	I get rewarded from my family for my academic achievement. أسرتي تكافئني في إنجازاتي الدراسية في الجامعة				4	5
15.	In some cases there was a communication between my family and university في بعض الحالات تم التواصل بين أسرتي والجامعة					5

الرجاء قراءة عبارات الاستبيان بتمعن ثم اختيار رقم الإجابة المناسب لحالتك

	طرق التدريس Instructional methods					
16.	أحب العمل لوحدي في ألواجبات الدر اسية. I like working on projects/assignments by myself	1	2	3	4	5
17.	I prefer cooperating with group on projects/assignments. أفضل التعاون مع مجموعة من الطلاب في عمل الواحبات الدر اسية	1	2	3	4	5
18.	I like lecture supported with audio-visual aids (power point slides, video clips أحب المحاضرة المدعومة بوسائل سمعية-بصرية في الفصل.	1	2	3	4	5
19.	I prefer lectures rather than assignments or projects أفضل تلقى المحاضرات بدلا من تكليفي بواجب دراسي	1	2	3	4	5
20.	I prefer assignments/projects rather than lecture	1	2	3	4	5
21.	. I am dependent on handouts prepared by lecturers أعتمد على المذكرات الدراسية التي يعدها المدرسون في الجامعة				4	5
22.	I face difficult in understanding lectures presented in class. أواجه صعوبة في فهم لغة التدريس في الفصل	1	2	3	4	5
23.	أقوم بالمشاركات وتقديم العرض في الفصل I participate and do presentation in the class.	1	2	3	4	5
24.	I get benefit from academic advice program offered by the university. أستفيد من بربامج الإرشاد الأكاديمي الذي تقدمه الجامعة للطلاب الوافدين	1	2	3	4	5
25.	I discuss with lecturers about assignments/ projects out of class. أناقش المدرسين حول الواجبات الدراسية خارج الفصل	1	2	3	4	5
26.	أحب اكتشاف أشياء جديدة بنفسي I like finding new things by myself	1	2	3	4	5
27.	I receive timely and constructive feedback about my assignments أحصل على التعقيب والرد البناء من المدرس حول الأعمال الدر اسية التي أقدمها في حينها دون تأخر	1	2	3	4	5
28.	I like acquiring knowledge and skills through practical learning outside of lectures أحب اكتساب المعارف والمهارات بواسطة التجارب العملية بدلا عن المحاضرات	1	2	3	4	5
	سمات التعلم للطالب Student learning traits					
29.	I attend the class ready with having read about the topic of lecture. أحضر الفصل مستعدا وقد قرأت عن موضوع المحاضرة	1	2	3	4	5
30.	I take notes and remarks from the lecturer during the lecture in the class. أقوم بتدوين الملاحظات وأخذ النقاط من كلام المحاضر خلال إلقائه الدرس في الفصل	1	2	3	4	5
31.	I always submit my assignments on time. أنا دائما أقوم بتقديم الواجبات الدر اسية في الموعد المحدد	1	2	3	4	5
32.	I discuss issues learned out of the class with the students. أناقش الدروس التي تعلمناها مع الطلاب خارج الفصل	1	2	3	4	5
33.	I always control myself with putting daily schedule for my study. أنا أضبط نفسي دائما بوضع جدول يومي للمذاكرة	1	2	3	4	5
34.	أنا أخصص وقتا للقراءة في المكتبة I allocate some time for the library	1	2	3	4	5
35.	أنا أدرس بجدية عندما يحين الامتحان. I study seriously when the exam approaches	1	2	3	4	5
36.	I relate what I study with my experience related to the topic أربط بما أدرس من موضو عات بخبرتي التي لها علاقة بالموضوع	1	2	3	4	5
37.	أضبع أهدافا لدر استي لكي أحفز نفسي I set goals for my study to motivate myself	1	2	3	4	5
38.	عموما أحسن استغلال الوقت بشكل فعال Generally, I make efficient use of time	1	2	3	4	5

Thank you very much for your time.

## Appendix 2

Questionnaire Items Statistics						
	Mean	Std. Deviation	Ν			
I could have chosen another faculty	3.01	1.553	336			
Orientation program helped my integration	3.31	1.234	336			
Language courses contribute into adjustment	3.15	1.353	336			
comfortable with equipment and teaching materials	3.13	1.268	336			
Facilities available in the library helped me	3.46	1.267	336			
Participation in extracurricular activities relieves	3.05	1.277	336			
Services and facilities in the hostel helped me	2.72	1.395	336			
Support from faculty members and other staff	2.90	1.306	336			
Satisfied with studying at university	3.72	1.229	336			
Family had role in choosing of faculty	2.71	1.475	336			
communication with parent to inform obtained grade	3.44	1.353	336			
Financial support from the family helps to continue	4.06	1.325	336			
Instructions and advise from the family related to study	3.65	1.325	336			
Rewarded from the family for academic achievement	3.25	1.387	336			
Direct communication between university and family	2.07	1.363	336			
working on assignments by myself	3.49	1.349	336			
Preferring cooperation with group	2.93	1.409	336			
liking lecture supported with audio-visual aids	3.88	1.190	336			
Preferring lecture rather than assignments	3.25	1.278	336			
Preferring assignments rather than lecture	2.78	1.361	336			
Dependent on handouts	3.26	1.272	336			
Difficult of understanding lecture in the class	2.64	1.359	336			
Participating and presenting in the class	3.49	1.239	336			
Benefiting from academic advice offered by the university	3.07	1.376	336			
Discussing with lecturers out of the class	2.94	1.333	336			
Finding new things by myself	3.90	1.210	336			
Timely and constructive feedback on assignments	2.99	1.252	336			
Acquiring knowledge and skills through practices	3.85	1.186	336			
Attending the class with having read about the lecture	3.03	1.296	336			
Taking notes during the lecture in the class	3.80	1.090	336			
Submission of assignment on time	3.65	1.114	336			
Discussing with students out of class	3.36	1.224	336			
Putting daily schedule for studying	3.34	1.238	336			
Allocating time for the Library	3.54	1.259	336			
Studying seriously when exam approaches	4.15	1.122	336			
Relating the topic studied with experiences	3.64	1.045	336			
Setting goals for the study for motivation	3.82	1.053	336			
Making efficient use of time	3.53	1.241	336			