

# Factors That Affect Students' Academic Achievement in the Faculty of Social Science at the University of Bosaso, Garowe, Somalia

Ahmed Hussein Suleiman

Faculty of Social Science, University of Bosaso, Garowe, Somalia

Email: xaruur143@gmail.com

**How to cite this paper:** Suleiman, A. H. (2023). Factors That Affect Students' Academic Achievement in the Faculty of Social Science at the University of Bosaso, Garowe, Somalia. *Open Journal of Social Sciences*, 11, 446-461.

<https://doi.org/10.4236/jss.2023.112029>

**Received:** January 2, 2023

**Accepted:** February 25, 2023

**Published:** February 28, 2023

Copyright © 2023 by author(s) and Scientific Research Publishing Inc. This work is licensed under the Creative Commons Attribution International License (CC BY 4.0).

<http://creativecommons.org/licenses/by/4.0/>



Open Access

## Abstract

Academic achievement refers to performance outcomes that indicate how far a person has progressed in specific goals of activities in instructional settings, such as school, college, and university. This research was done to study the factors that can distress students' academic achievement so that to find a solution to this problem. This study took place in the faculty of social science at the University of Bosaso, Garowe, Puntland, Somalia as a case study. Although this problem is very large and affects most universities, especially those operating in developing countries. The research used an explanatory case study and a questionnaire as data collection instruments. The research has found many factors that affect students' academic achievements with a negative outcome. The major ones were student factors, such as students' learning skills, parental background, environmental causes, and peer influence. Similarly, teacher-related factors, school factors, socio-cultural factors, and others. This study was conducted on 60 respondents in total, of which 83.3% were students, 10% were administrative staff, and 6.7% were university lecturers. There were 66.7% males and 33.3% females among them. Based on findings, the research has discussed and recommended many factors that can make students successful in their academic performance.

## Keywords

Students, Academic Achievement, Faculty of Social Science, University of Bosaso, Garowe (UOBG)

## 1. Introduction

Success is the achievement of a high result or a goal that one aspires to achieve.

The student on the path to academic success is the one who prioritizes his or her education, spends his or her time wisely, has a straightforward schedule, and spends most of his or her time in the classroom, library, and mosque.

It is widely agreed in all nations that education is the foundation of human understanding and success. Every nation's success and prosperity depends on its level and quality of education.

For individuals, education promotes employment, earnings, health, and poverty reduction. Globally, there is a 9% increase in hourly earnings for every extra year of schooling. For societies, it drives long-term economic growth, spurs innovation, strengthens institutions, and fosters social cohesion.

Certainly, ignorance is the number one enemy of man. Whatever knowledge one acquires will one day be useful. In Somalia, apart from the Qur'an, which every Somali student ought to learn, school and universities are divided into four years of elementary school, four years of intermediate school, and four years of high school, followed by three or four years of university, depending on the program.

It is true that during a long period of study, the student will face many challenges that will cause many students to drop out and others to achieve poor performance. There are many factors that can harm students' academic achievement. Performance is defined or regarded as participants' examination grades at the end of a given duration (term, semester, or programme). It could also be seen as the level of performance in a particular field of study. Higher scores indicate better academic performance.

In this article, we take a closer look at the factors affecting students' academic achievement, especially in the faculty of social sciences at the University of Bosaso, Garowe.

## 2. Conceptual Framework

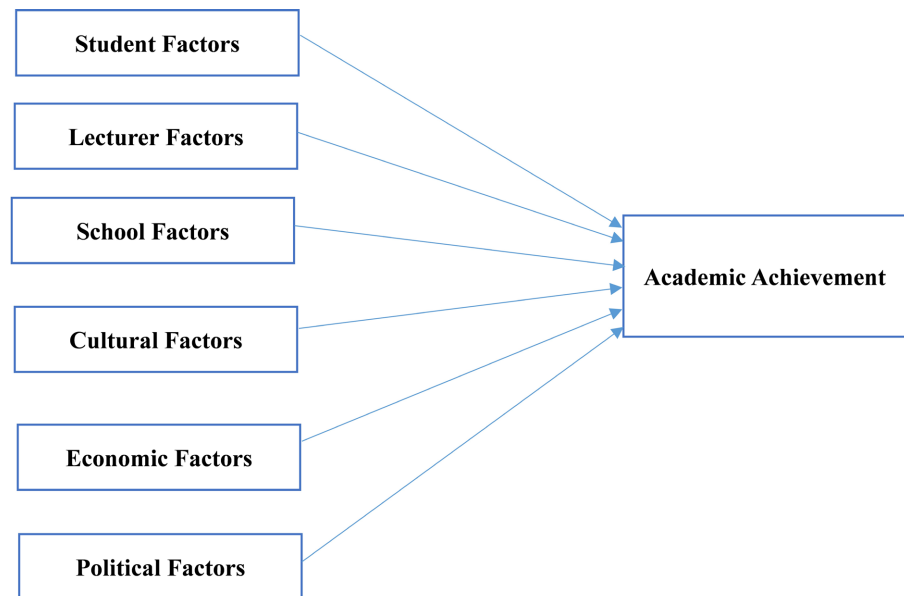
There are a number of factors that have a direct effect on a student's academic achievement; the most prevalent of them are the following. However, these factors may vary from person to person and society to society (**Figure 1**).

### 2.1. Student Factors

As the main stakeholders, students have a major role in their academic achievement. Indeed, researchers such as **Konstantopoulos (2009)** and **Shores, Shannon, and Smith (2010)** concluded that student factors influence students' academic achievement. **Kang and Keinonen (2018)** and other researchers explained that students' time management, self-motivation, engagement, behavior, and attitudes are the key factors governing their academic success.

### 2.2. Lecturer Factors

Many studies have provided empirical evidence of the positive correlation between teacher factors and students' achievements. For instance, **Vizeshfar and Torabi-**



**Figure 1.** Study conceptual framework.

*zadeh (2018)* showed that an effective teacher can dramatically alter students' educational and thus economic outcomes.

On the other hand, if the lecturer lacks the necessary training and teaching experience at the university level, as well as knowledge of effective teaching methods in higher education, the students will undoubtedly face numerous academic challenges.

### 2.3. School Factors

There is a growing consensus, based on pragmatic evidence, that positive influence of successful leadership and school environment in general can have a positive effect on school performance and students' learning achievement (*Allen, Grigsby, & Peters, 2015; Beare, Caldwell, & Millikan, 2018*). Actually, it is revealed that school leaders can improve students' achievement in different ways varying from 1) direct and indirect effect on teaching and learning 2) involving different stakeholders (such as parents) in school 3) university staff skills and leadership and 4) providing a proper ethos and climate, which eventually impact students' academic achievement.

### 2.4. Cultural Factors

Cultures have a great effect on schooling as it determines how we see the world, how we try to understand it, and how we behave throughout our academic studies. As a result, culture has a large influence on both learning and teaching styles. Most African cultures are stiff, and students are expected to be extremely humble while learning. Such socio-cultural behavior may affect a student's academic success. On the other hand, memorization-based examinations are bad practice in which students memorize lessons, which causes them to fail to apply

what they have learnt to society and answer realistic social problems.

### **2.5. Economic Factors**

Students' financial ability is what determines a student's educational choices through the course selection, in education economic status is an important factor for students' schooling and academic career. In addition to that, some researchers concluded that students with high socioeconomic status perform better than those with low socioeconomic status. However, researchers such as [Pedrosa, Dachs, Maia, and Andrade \(2006\)](#) found that students coming from disadvantaged socioeconomic and educational homes perform relatively better than those coming from higher socioeconomic and educational strata. They called this phenomenal educational resilience. Low socioeconomic status students study hard compared to others but they might face study fees difficulties.

### **2.6. Political Factors**

Politics has a significant direct and indirect influence on education. Think about how a student's academic achievement can be a place of political turmoil or a country in which the government's budget for education is lower than 7%.

Different studies and fact-findings have shown that the deteriorating quality of education is due to the low government support for education as well as the poor quality of lecturers. Poor management of institutions as well as poor university facilities such as laboratory and library facilities have added to the deteriorating quality of education. Furthermore, poor learning environments, the content of the curriculum, poor infrastructure, growing privatization and inconsistent government policies regarding higher education have all had negative effects on the quality of education. In one way or another, politics affects all the above-mentioned contests which are challenging our students' academic achievement.

## **3. Materials and Methods**

### **3.1. Design**

The researcher used an explanatory case study as he was investigating factors that may have affected students' academic achievement.

Lower student achievement is a global phenomenon, although it is more prevalent in the developing world where governments don't spend a good budget and don't conduct regular monitoring in education. In order to at least understand the existent factors that make a student successful in academic, we used an explanatory case study in an attempt to find the factors that directly affect students' academic achievement.

### **3.2. Study Area**

The study area of this research was University of Bosaso, Garowe which is a pri-

vate university established in 2012 as a semi-autonomous campus of the University of Bosaso found in Bososo Puntland State of Somalia. The University of Bosaso, Garowe has grown and developed to become one of the most outstanding universities in Somalia in terms of quality in higher education.

It currently offers six faculties (2022): the faculty of social sciences; the faculty of medicine & health sciences; the faculty of commerce & modern management; the faculty of computer science; the faculty of sharia; and the faculty of education. It has two campuses in Garowe, the main campus and the campus of medicine and health sciences.

### 3.3. Participants and Procedures

This explanatory case study was conducted on 60 respondents in total, of which 83.3% were students, 10% were administrative staff, and 6.7% were university lecturers. In addition to that, 66.7% of the participants were males, while 33.3% of the respondents were females.

In general, the faculty of social science lasts for 3 years at the University of Bosaso, Garowe, divided into four departments, including the departments of community development, public administration, international relations, and social work and social administration.

This study has covered all the faculty departments, and the students were assured that their information would remain confidential. Before commencement of the study, written informed consent was obtained from all the students. They were asked to fill out the forms anonymously. Participation in the study was completely voluntary, and those who were willing to participate filled out the questionnaires. The questionnaires were distributed among the students, and they were asked to answer the questions reliably (**Table 1**).

### 3.4. Instruments and Analysis

The instrument for collecting data in this study was the questionnaire. Questionnaires were used because they are the main method of data collection and also the population was literate. The coverage of questionnaire is wide as researchers can reach respondents more easily and is unaffected by problems of “non-contacts”.

Again, the popularity of questionnaires is probably based on some advantages among which are its low cost in terms of both money and time involved (**Sarantakos, 1997**). This research data was evaluated and analyzed for statistical analysis using the Statistical Package for the Social Sciences (SPSS), version 20.

## 4. Results

### 4.1. Demographic Profile

**Table 2** represents the respondents’ demographic profile by gender, whereby 40 of the respondents (66.7%) of the respondents were males and 20 of the respondents

**Table 1.** Students' academic department at the university.

Department	Frequency	Percent	Valid Percent	Cumulative Percent
Social Science, Community Development	7	11.7	14.0	14.0
Social Science, Public Administration	26	43.3	52.0	66.0
Social Science, International Relations	8	13.3	16.0	82.0
Social Science, Social Work	9	15.0	18.0	100.0%
<b>Total</b>	<b>50</b>	<b>83.3%</b>	<b>100.0%</b>	

**Table 2.** Respondents' demographic profile.

Variables	Sub-variables	Frequency	Valid Percent	Cumulative Percent
<b>Gender</b>	Male	40	66.7	66.7
	Female	20	33.3	100.0
	Total	60	100.0	
<b>Age</b>	<20 yrs	12	20.0	20.0
	21 - 25 yrs	34	56.7	76.7
	>26 yrs	14	23.3	100.0
	Total	60	100.0	
<b>Academic Qualification</b>	Bachelor Degree	52	86.7	86.7
	Master degree & Above	8	13.3	100.0
	Total	60	100.0	
<b>Marital Status</b>	Single	49	81.7	81.7
	Married	11	18.3	100.0
	Total	60	100.0	
<b>Occupation</b>	Student	50	83.3	83.3
	Lecturer	4	6.7	90.0
	Administrative Staff/Mgt	6	10.0	100.0
	Total	60	100.0	

(33.3%) were females. In age, 20% of them were less than 20 years old, as some of the respondents were first year, 56.7% were between 21 - 25 years, and 23.3% were over 26 years. In academic qualifications, 52 participants (86.7%) were bachelor's degree holders and 8 participants (13.3%) were master's degree holders. In marital status, 49 of the respondents (81.7%) were single and 11 participants (18.3%) were married. And lastly, in occupations, the analysis shows that 50 participants, which is 83.3%, were students; 4 respondents, which is 6.7%, were university lecturers; and 6 of the respondents, which is 10% of the participants, were university administrative staff.

#### 4.2. Students' Entry Category

According to the findings, the majority of the students received B grades in high school. In this case, the analysis shows that 28 students (46.7%) had a B grade and the next category was grade A, in which 10 students, or 16.7%, had an A

grade, while the third category was grade C, in which 9 students (15%) had and the least grade was grade D, in which only 3 students (5%) had gotten (Table 3).

The above analysis shows that students don't join the faculty when they have very low performance. Although their performance may be influenced by other factors mentioned in the conceptual framework of this study.

#### 4.3. Role of Parents/Family in Faculty Choice

The below Table 4 shows that 55% of the students contacted said their parents/family members had no influence on their faculty choice, while 28.3% said their families had inspired their faculty choice.

#### 4.4. Education Level of Students' Parents/Guardian

Figure 2 shows that 38% of the respondents' parents didn't get an opportunity to study, which is unfortunate as parental education has an impact on their child's education progress. 50% were at school level, and only 12% of the interviewed students' parents achieved a university first degree.

When we study closely at Figure 2. Above, we understand that parental knowledge is low, which means that parents will not be able to have a significant influence on their children's education as they reach university level.

The below Table 5 shows us that 78.3% of the interviewed students selected the faculty of social sciences as their favorite faculty. This indicates that a good number of the faculty's students joined the faculty because of their excitement about studying social sciences. 12.7% of the questioned students stated that they chose the faculty because they thought that it was an easy-to-study faculty, while the remaining 9% have selected it for other reasons rather than it being their favorite and easy-to-study.

Table 3. Students' entry category.

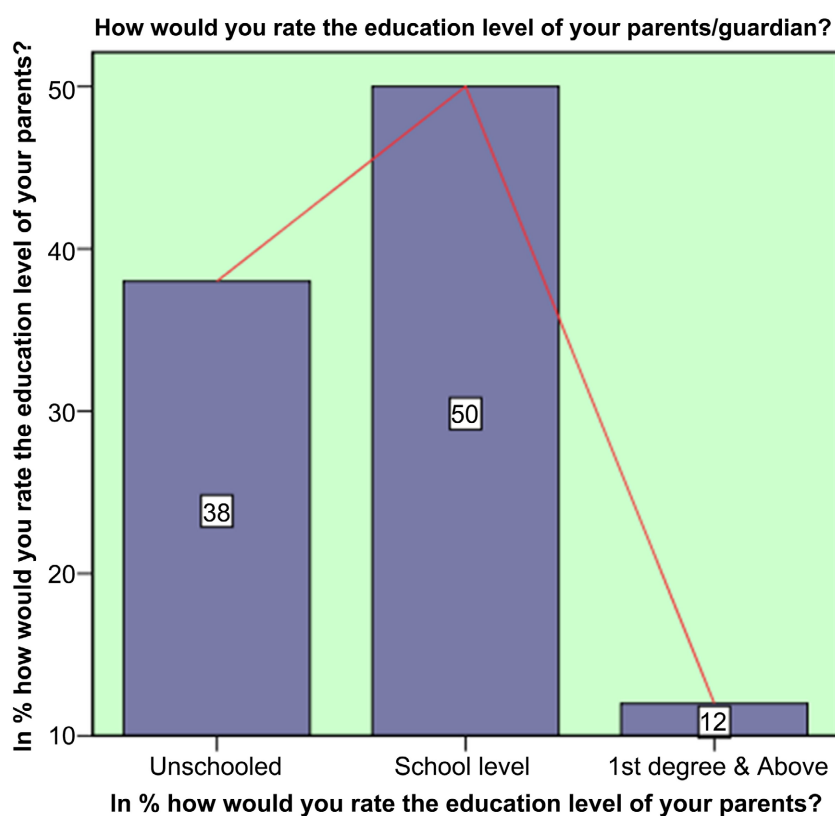
Students' grade entry category into University of Bosaso, Garowe				
Grade category	Frequency	Percent	Valid Percent	Cumulative Percent
A (A+/A-)	10	16.7	20.0	20.0
B (B+/B-)	28	46.7	56.0	76.0
C (C+/C-)	9	15.0	18.0	94.0
D (D+/D-)	3	5.0	6.0	100.0
<b>Total</b>	<b>50</b>	<b>83.3</b>	<b>100.0</b>	

Table 4. Parents/family members influence in faculty choice.

Reaction	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	17	28.3	34.0	34.0
No	33	55.0	66.0	100.0
<b>Total</b>	<b>50</b>	<b>83.3</b>	<b>100.0</b>	

**Table 5.** Department selection.

Why did you choose your department?		
Choices	Frequency	Percent
It was my favorite	41	78.3
It's easy to study	4	12.7
Other Reason(s)	5	9
Total	50	100.0

**Figure 2.** Education level of students' parents/guardian.

As every high school student has different perceptions of the university, the probed students had varied views on the faculty of social sciences before they joined it. For example, 63.1% thought it was excellent to study faculty of social science, 35.2% thought it was good to study, and 1.7% thought it was not good to study, but he/she may choose to study for other reasons (**Table 6**).

#### 4.5. Students' Role on Academic Achievement

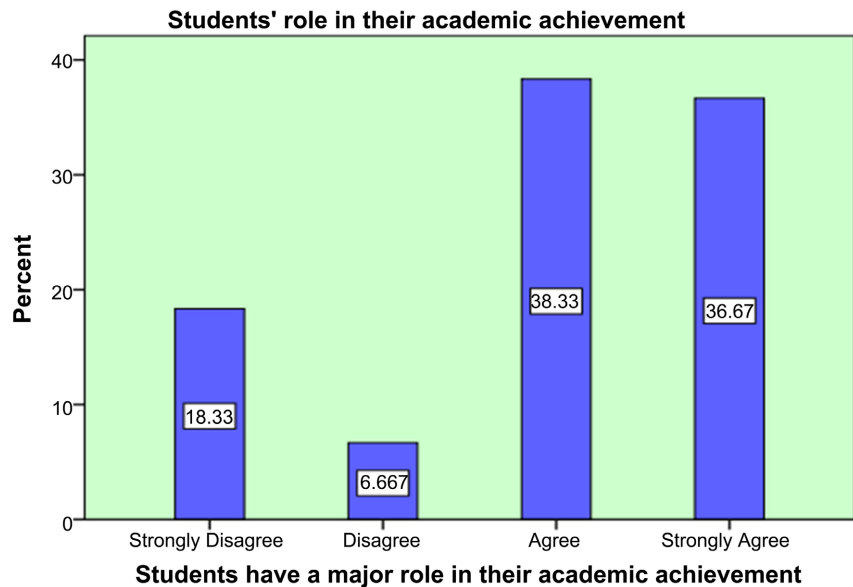
Students' role in academic achievement is a key factor in educational success. Students' self-concepts and task values are more powerful in predicting students' achievement. Students' prior knowledge plays an important role in academic achievement.

Therefore, the below **Figure 3** shows students' perceptions on students' role in their academic performance. 18.33% of learners believed that students don't have



**Table 6.** Students' perception and attitudes towards faculty.

What's your perception and attitudes towards faculty of social sciences?		
Choices	Frequency	Percent
Excellent to study	32	63.1
Good to study	17	35.2
Not good to study	1	1.7
Total	50	100.0



**Figure 3.** Students' role on academic achievement.

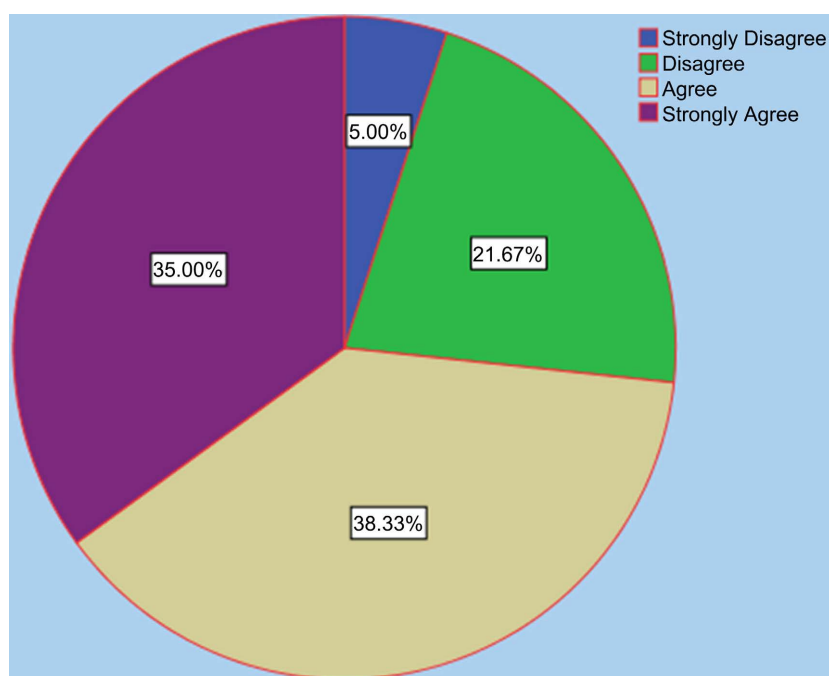
a major role in their academic performance, 6.667% of them disagreed, 38.33%, which is the largest number of the participants, were trusting that students have a major role in their academic achievement, and lastly, 36.67% of participants have faith that their academic achievements depend on the efforts they have made.

#### 4.6. Effects of Lecturers' Methods of Teaching on Students' Academic Achievement

**Figure 4** demonstrates to us that 38.33% of the participants have agreed with the importance of the lecturer's methods of teaching. 35% of the respondents have strongly agreed with the significance of the lecturer's methods of teaching, while 21.67% disagreed and 5% of them strongly disagreed that the lecturer's methods of teaching have a great effect on students' academic achievement. So, in conclusion, the above illustration indicates that the teaching methods of a lecturer have a significant great effect on students' satisfaction rate and academic achievement, and the quality of education can be shaped and determined by the quality of lecture methods.

#### 4.7. Staff Leadership Styles and University Climate

Leadership is the process by which a person exerts influence over other people



**Figure 4.** Lecturer's methods of teaching have a great effect on students' academic achievement.

and inspires, motivates, and directs their activities to help achieve group or organizational goals. Effective leadership increases an organization's ability to meet all challenges, including the need to obtain a competitive advantage, the need to foster ethical behavior, and the need to manage a diverse workforce fairly and equitably (**Table 7**).

At the broadest level, organizational climate describes how organizational members experience organizations and attaches shared meanings to their perceptions of this environment.

Most also agree that individuals interpret these aspects of the organizational environment in relation to their own sense of wellbeing. School/university climate has been defined as the "feel" of a school (Halpin & Croft, 1963), as its "collective personality".

"Climate" is the human environment within which the lecturers of a university do their work. Like the air in a room, the climate surrounds and affects everything that happens in an organization (Freiberg, 1983). As one moves from university to university, it is possible to note that one university feels different from another. This is primarily the result of the university climate. Organizational climate is highly related to student attitudes and behaviors.

In our study, as **Table 7** shows, 20% of the research participants strongly disagreed that staff leadership styles and university climate have an effect on students' academic achievement while 16.7% of them disagreed. On the other hand, 38.3% of the participants agreed that staff leadership styles and university climate have an effect on students' academic achievement. Which the majority of the respondents and 25% of the research contributors strongly agreed. Therefore,

**Table 7.** Staff leadership styles and university climate.

Staff leadership styles and university climate have effect on students' academic achievement				
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	12	20.0	20.0
	Disagree	10	16.7	36.7
	Agree	23	38.3	75.0
	Strongly Agree	15	25.0	100.0
	Total	60	100.0	100.0

this illustration indicates to us that our staff leadership styles and university climate have a strong effect on our students' academic achievement.

#### 4.8. Socio-Cultural Factors Determine to a Great Extent in Both Learning and Teaching Styles

The below **Figure 5** indicates that 35% of the study respondents strongly agree that socio-cultural factors determine to a great extent in both learning and teaching. A similar number of 35% also agree with the above specified statement, while 20% of the participants disagree and 10% strongly disagree.

It is believed that socio-cultural factors in any country have peculiar circumstances based on that country's socio-cultural experiences. Thus, this study has realized that individual background, cultural values, practices, language, learning preferences, lecturer's commitment, and national educational aims, among others, have a great impact on both learning and teaching styles.

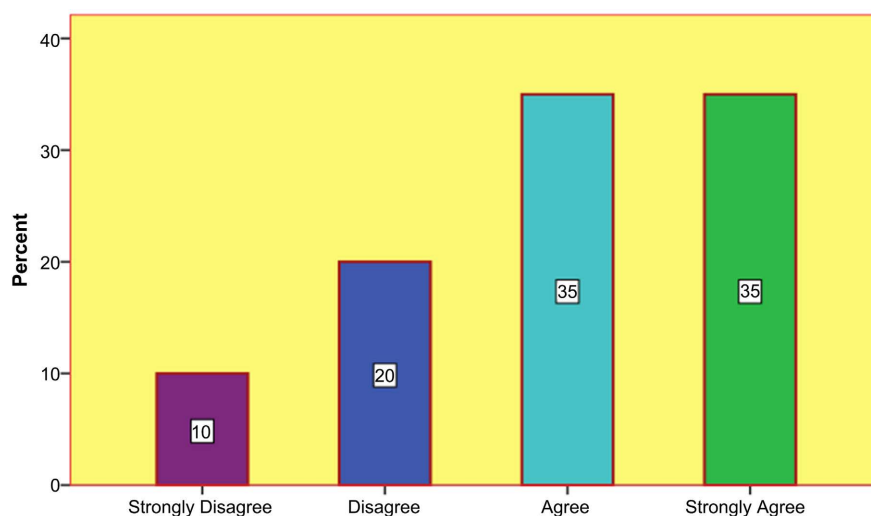
#### 4.9. Students' Financial Ability and a Student's Educational Choice

**Table 8** shows the relationship between students' financial ability and their educational choice. For instance, in the table above, 38.3% of the study participants believed that there was a strong relationship between students' financial ability and their educational choices. 35% of respondents were for the motion (agreed), 20% of participants were against the motion (disagreed), and only 6.7% strongly disagreed with this set-up.

Poor financial status for students affects academic performance, mental and physical well-being, and even their ability to find employment after graduation.

Different studies show that poor financial status for students is strongly connected to a student's educational choice, poverty, and unemployment. The unemployment rate is generally high, more so as there have been some economic recession's worldwide.

The poor economic conditions affecting most native communities in the developing nations and can result in depression, drug use, and violence, all of which contribute to the high suicide rate.



**Figure 5.** Socio-cultural factors determine to a great extent in both learning and teaching styles.

**Table 8.** Students' financial ability is what determines a student's educational choice.

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Disagree	4	6.7	6.7	6.7
Disagree	12	20.0	20.0	26.7
Valid Agree	21	35.0	35.0	61.7
Strongly Agree	23	38.3	38.3	100.0
Total	60	100.0	100.0	

#### 4.10. A Country's Political Situation Has a Strong Direct Impact in Student's Academic Achievement

**Table 9** indicates that 45% of the study respondents strongly agreed that a country's political situation has a strong direct impact on a student's academic achievement. 28.3% agreed, 18.4% disagreed, and only 8.3% strongly agreed that there is a strong direct impact between a country's political situation and a student's academic achievement.

Education is considered a social good, a basic right, and a foundation for broader social stability and economic development. Quality education has been shown to be a better indicator of political stability and economic growth than quantity. In Somalia, more than two decades of conflict have nearly destroyed Somalia's educational system, which is characterized by poor quality, insufficient numbers of qualified teachers, and inadequate resources.

The educational deficit in Somalia is one of the most acute in the world. Of the total 4.7 million school-aged population (12.3 million total Somali population), 972,000 children, or one out of every five Somali school-aged children, are displaced. Specifically, in the months of November 2016 to August 2017, close to 50,000 children lost the opportunity to go to school due to displacement.

**Table 9.** A country's political situation has a strong direct impact in student's academic achievement.

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Disagree	5	8.3	8.3	8.3
Disagree	11	18.4	18.4	26.7
Valid Agree	17	28.3	28.3	55.0
Strongly Agree	27	45.0	45.0	100.0
Total	60	100.0	100.0	

## 5. Discussion

There are many factors that can make a student successful in learning and become efficacious and achieve top ranks in academic performance, as shown in the discussions below.

**Being a visionary student** is not only to help leaders to be focused and to stay motivated through life, but more so, it's important for students. A student should have a vision that he/she wants to achieve every day of their life. If you have that perspective, it will be easier to make your studies a priority. Ask yourself, what is your life vision?

**You should be someone with a plan.** You should have identify and genuinely understand what you are learning. Why are you learning it, where you can learn from it, when will you learn, how will you learn, and from whom if it's possible? In addition to that, it's very important to be a punctual person in your academic life. For instance, in class attendance, meetings, and other academic dates and deadlines.

**Do your assignments faithfully.** The biggest problem that many students have is the issue of cheating. No matter where they are or how old they are. Cheating is one of the most devastating things that students can do to themselves. Cheating by students occurs not only during exams, but also during class assignments. For example, if you plagiarized someone's work from the internet or other sources, you have cheated; if your colleague(s) complete your assignment for you, which you should have completed yourself, you have also cheated.

It's very crucial to know that cheating may help you once, but it will come back to haunt you later in your life. Therefore, be honest with yourself and do your assignments faithfully.

**Listen to the lesson carefully,** if you want to be successful in your academics, then it's very important to listen carefully to your lecturer's explanations. Pay attention to the lecturer's explanation so that you can hear and understand the session.

One of the biggest mistakes some students make these days is using social media while they are in classes, which is devastating and disturbing for themselves and for the lecturer.

A good student is the one who listens, writes, and reads his lessons regularly. Note-taking will help you to read your sessions later and even better understand them. Nowadays, in higher education institutions, it becomes very obvious to see students who don't have an exercise book while they are in classes as a result of endorsed technology and smartphones. This affected even the students' graphology. Therefore, a good student should have good listening skills, note-taking and reading habits.

**Maintain good relations with your lecturers and active students.** Your lecturers and friends can play a big part in both your success and failure. Respecting and having a good relationship with your lecturers will help you get a lot of guidance from them. Most of them will help you correct your weaknesses and become a better student.

It's well recommended to sit in the front seat of the class so that you have more opportunities to ask your lecturers if there's something causing difficulty for you in the previous lessons.

On the other hand, having good friends is very fundamental as different sociologists argue social interactions have a wide range of both physical and mental benefits for us. But also, friends have a huge influence on us.

As a wise saying goes, "*Show me your friends and I'll show you your future,*" meaning it's a non-negotiable that your friends will impact your character, attitude, and academic achievements.

**Don't compare to others.** If you want to be a successful student, never compare yourself to other people, never imitate your classmates, coworkers, neighbors, siblings, or friends. Be a unique person, use your common sense, and act differently.

## 6. Conclusion

In fact, a number of factors are very core to students' academic achievement. Student commitment is the major factor of all. Students have a major role in their academic achievement. Indeed, researchers such as Konstantopoulos (2009) and Shores, Shannon, and Smith (2010) concluded that student factors influence students' academic achievement. Kang and Keinonen (2018) and other researchers explained that students' time management, self-motivation, engagement, behavior, and attitudes are the key factors governing their academic success.

According to a lot of researchers, teaching quality is one of the most important factors that influence academic success. Although there is little evidence proving that the qualifications of teachers can influence the achievement of students, teaching quality is widely considered to be crucial for education. Furthermore, teaching experience has a significant and positive impact on reading test scores and the control of fixed teacher quality. Most universities think that their teaching quality will be improved when they pay more for teachers who have higher diplomas and more experience.

For students, the teaching quality is the main reason of withdrawing from

some courses. There are a lot of issues relating to teaching that may influence the learning of students, such as whether teachers teach students conscientiously, whether they are well-prepared for lessons, and whether they comment on students' assignments carefully.

For school factors, there is a growing consensus, based on pragmatic evidence, that the positive influence of successful leadership and school environment in general can have a positive effect on school performance and students' learning achievement (Allen, Grigsby, & Peters, 2015; Beare, Caldwell, & Millikan, 2018). Actually, it is revealed that school leaders can improve students' achievement in different ways, varying from 1) direct and indirect effects on teaching and learning; 2) involving different stakeholders (such as parents) in school; and 3) providing a proper ethos and climate, which eventually impact students' academic achievement.

### Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

### References

- Allen, N., Grigsby, B., & Peters, M. (2015). Does Leadership Matter? Examining the Relationship among Transformational Leadership, School Climate, and Student Achievement. *International Journal of Educational Leadership Preparation*, 10, 1-22.  
<https://files.eric.ed.gov/fulltext/EJ1083099.pdf>
- Beare, H., Caldwell, B. J., & Millikan, R. H. (2018). *Creating an Excellent School*. Routledge. <https://doi.org/10.4324/9781351041546>
- Freiberg, J. H. (1983). Improving School Climate—A Facilitative Process. In *Seminar in Organizational Development in Schools*, University of La Verne.
- Halpin, A. W., & Croft, D. B. (1963). *The Organizational Climate of Schools*. Midwest Administrative Center, The University of Chicago.
- Kang, J., & Keinonen, T. (2018). The Effect of Student-Centred Approaches on Students' Interest and Achievement in Science: Relevant Topic-Based, Open and Guided Inquiry Based and Discussion-Based Approaches. *Research in Science Education*, 48, 865-885.  
<https://doi.org/10.1007/s11165-016-9590-2>
- Konstantopoulos, S. (2009). Effects of Teachers on Minority and Disadvantaged Students' Achievement in the Early Grades. *The Elementary School Journal*, 110, 92-113.  
<https://doi.org/10.1086/598845>
- Pedrosa, R. H. L., Dachs, J. N. W., Maia, R. P., & Andrade, C. Y. (2006). *Educational and Social-Economic Background of Graduates and Academic Performance: Consequences for Affirmative Action Programs at a Brazilian Research University*.  
<http://www.comvest.unicamp.br/paals/artigo2.pdf>
- Sarantakos, S. (1997). *Social Research*. Palgrave Publishers Ltd.
- Shores, M. L., Shannon, D. M., & Smith, T. G. (2010). Individual Learner Variables and Their Effect on Mathematics Achievement as Students Advance from Fifth to Sixth Grade. *Journal of Research in Childhood Education*, 24, 187-194.  
<https://doi.org/10.1080/02568543.2010.487393>

Vizeshfar, F., & Torabizadeh, C. (2018). The Effect of Teaching Based on Dominant Learning Style on Nursing Students' Academic Achievement. *Nurse Education in Practice*, 28, 103-108. <https://doi.org/10.1016/j.nepr.2017.10.013>

### Appendix. Map of the Study Area: University of Bosaso, Garowe

