

# Factors That Influence an Academic Performance of Female Students in Kabridahar District, Somali Regional State, Ethiopia

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## Abstract

The study was intended to assess the factors that affect academic performance of female students in Kabridahar district, particularly Dr. Mohammed Sirad Dolal preparatory school. To achieve the objective, descriptive research design was employed. The data was collected from a total of 275 female students and 10 teachers by using structured questionnaires' and interviews as well as document analysis. The data was analyzed by using both descriptive and inferential statistics (multiple linear regressions). The result shows various factors, such as personal factors, socioeconomic factors and school factors found to be affecting the academic performance of female students. From the study, it was learned that lack of self-motivation, absence of regular school attendance, less amount of time invested on educational activities, less attendance on tutorial and supportive classes, inability to become well planned and organized and peer pressure of friends were the key personal factors affecting female students' academic performance. Besides, lack of family encouragement in education, low level of education of parents, parental occupation, poor parental-child interaction, need for extensive usage of female students labor and non-conducive home environment were the family related factors that affect female student's academic performance. The multiple linear regressions result showed that school distance, frequency of guidance and counselling service, availability of school facilities, rewards given in the school for best grade scorer female students, availabilities of gender sensitive facilities and level of awareness about gender issues were the school factors that influence academic performance of female students.

## Keywords

Education, Academic Performance, Female Students, School, Factors

## 1. Introduction

Education is essential to the proper functioning and advancement of socio-economic growth of any nation. It is one of the social factors whereby gender disparity is reflected worldwide (Aemiro, 2018). Gender disparity in education remains a distant prospect in 54 countries including 16 countries in sub Saharan Africa (UNESCO, 2004). Like in many other parts of the world, in Ethiopia the participation of women is low in social and economic development in general and in education in particular due to the fact that the largest proportion of women is demoted to traditional roles. According to Kassa (2006), in Ethiopia access to education is more readily available to male more than females at all levels that make the country one of the developing countries with low females' performances in education. Evidence shows that the number of female students in primary, secondary and higher education is not equal to that of male students; this low performance is one of the basic reasons for women's to be underrepresented in different (Kassa, 2006).

The participation and performance of girls' in all primaries, secondary and tertiary education levels was lower than that of boys (Dawit, 2016). Some of the challenges that females face in obtaining an education are the same for males, but, in the case of females, the challenges are more difficult. According to the report of UNICEF (2002), there were 120 million children girls who never go to school in the developing world. Basic education for all is a human right and social development issue that is fundamental to gender equality and women's empowerment in all societies. However, in most developing countries, girls continue to suffer from discrimination in access to schooling (Tuwor & Sossou, 2008).

From the literature, various factors have been identified to affect the academic performance and achievement rates of female students (Aemiro, 2018). For instance, gender, teaching faculty, students previous education background, students behavior of taking drug including chat, families social, educational and economic status. In Ethiopia, the gender disparity becomes wider as we go up the educational ladders. For instance in Ethiopia in 2003/04 female students accounted for 42.6% of primary enrolment, 35.3% of secondary enrolment and 19% at tertiary levels (MoE, 2004). The graduate student population at higher educational level consists of 24.96% females and 75.04% males. The dropout rate at both secondary and tertiary levels is higher for females than it is for males (MoE, 2004). However, there is a quite public investment in the school system. Moreover, the increase in the number of students in higher education is a national goal that has been pursued by education policy. The public spending of the country on education during 1980s remained under 10% of total spending of the country, had scaled up to 24% of total expenditure at the end of 2008/2009. This constitutes 5.5% of gross domestic product (GDP), one of the highest rates on the continent (DFID & Ministry of Education, 2006). However, in spite of all the excessive government investment, failure to achieve a good performance is a major problem that affects all level of education (Sheikh, 2017). Likewise, there are various factors that contribute to the low academic performance of students

in secondary school.

Various studies have been carried out in different parts of Ethiopia on factors that influence an academic achievement of female students both in higher education and secondary school level, for instance: (Bereket, 2015; Gizaw et al., 2020; Moges, 2017; Yenenesh, 2013; Yonas, 2014; Fasika et al., 2015; Getachew, 2018; Gashaw, 2019). Most of the research was conducted at higher education level and not considered at secondary and primary school level and they were also limited to certain factors. With this regard, there is a research gap in addressing more comprehensive factors that hinders female student's academic performance. Moreover, no study has been carried out on the issue under study in preparatory schools of Kabridahar district in general and Dr. Mohammed Sirad Dolal preparatory school particular, despite the factor is serious in the area due to different reason such as geographical setting of the area and pastoralist's nature of the area where the participation of female students in education world is low. In spite of this, assessment might be needed on the factors that influence female students' academic achievement. Therefore, inspiring to fill the exited gap, the study is conducted to assess factors affecting the academic performance of female students in Dr. Mohammed Sirad Dolal preparatory school, Somali Regional State Ethiopia.

## 2. Methodology

### 2.1. Study Area Description

The study is conducted in Kabridahar district, Somali Regional State in eastern Ethiopia. The district is located 1035 km from Addis Ababa. It has a latitude and longitude of 6°44'25"N, 44°16'38"E, respectively. The climate of Kabridahar district is characterized as tropical semiarid. A vast area of the district experiences high temperature and low precipitation with mean annual temperature ranges between 20.75°C - 31.25°C. The annual rainfall of the districts varies between 295 mm and 595.6 mm (NMA, 2007).

The altitude of the district ranges from 456 to 1042 meters above sea level which is found within southeastern lowlands of Ethiopia. The average elevation of the district is 736 meters above sea level (Carter et al., 2018). The lowest elevation of the study area is found along the Fafen River valley which is estimated to be about 456 meters above sea level (Abdulahi et al., 2020). The main economic activities practiced in the district are mainly pastoralists and agro pastoralists. The majority of the inhabitants of the district raise cattle, camels, sheep and goats for their livelihood. Kebridahar district has a total population of 136,142, of whom 77,685 are men and 58,457 women (CSA, 2007). Based on the result of the housing and population census of May, 2007, in 2017 the projected population of Kabridahar district is 176,494 people, out of this 97,694 are males and 78,800 are females.

### 2.2. Research Design

In this study we used mixed research design with combining both quantitative

and qualitative design methods to identify the factors affecting the academic performance of female students in Kabridahar district, because the use of mixed method designs provide the opportunity to avoid deficiencies and weaknesses that come from using a single method. This means that both quantitative and qualitative data were collected and analyzed at the same time. The mixed research approach minimizes some of the limitations of using a single method, because quantitative or qualitative research methods are not sufficient to address the complex social phenomena when they are treated independently (Creswell, 2003). Hence, in this study the mixed method approaches that simultaneously combine the qualitative and quantitative techniques were applied at both data collection (FGD, KII and structured household survey) and analyses techniques in order to obtain information about the factors affecting the academic performance of female students in the study area.

### 2.3. Study Population and Sampling Procedure

Purposive sampling and simple random sampling techniques were used to select both sample schools and study population respectively. Accordingly Dr. Mohammed Sirad Dolal preparatory school was selected purposively as study area due to absence of other preparatory school in the district. The simple random sampling technique was also employed to select parents, teachers and female students. These respondents were selected because they would have more information regarding female students' academic performance given the fact that they are main stakeholders on the issue of education in their schools. Female students were involved in this study because they were the main target of the study while teachers were selected based on the fact they are the ones who facilitate female students' academic performance. Accordingly 275 female students and 10 teachers were selected as sample respondents for the study. Besides, district education experts and heads of school and parents were purposely selected for interviews in order to substantiate the information generated from sample female students and teachers. These respondents were selected because they would provide relevant information that other respondents would not. Because education experts and heads of schools were involved as administrators and supervisors of education on matters in their particular schools while parents were believed to be the closest people to their children.

### 2.4. Data Collection Instruments

The study employed different data gathering instruments to collect relevant data such as survey questionnaire, key informant interviews and document analysis.

**Survey questionnaire:** The study employed both closed ended and open ended questions to collect the relevant data related to factors that influence academic performance of female students. The closed-ended questionnaire was preferred because it is easy to fill out, takes relatively little time, keeps the respondents on the subject, is relatively objective, and easy to tabulate and analyze. The questionnaires were prepared for teachers and female students. The so-

cio-economic status of the family, school related factors, instructors related factors, home related factors and student related factors affecting academic achievement are the major concerns of the questionnaire. The survey was conducted by the principal investigators and two enumerators who have bachelor degrees. The enumerators and supervisors were first trained how to present and explain each question to the respondents. Enumerators informed the respondents about the purpose of the study before starting to fill the questionnaire.

**Key informant interviews:** The interview was employed to get additional information, i.e. for the purpose of triangulation of the data obtained through questionnaires. The interview was mainly used to obtain information about encouragement done to female students to enhance their academic performance, factors associated more with girls' failure to perform well in the school and other related concerns about academic achievement of female students from teachers, school principals and supervisors.

**Document analysis:** For the purpose of cross checking and supplementing data obtained through the aforementioned instruments, current and related documents such as attendance sheet, student result record books that pertains students' achievements, policy documents, and some checklists related to female students' assisting programs were analyzed.

## 2.5. Data Analysis Methods

After the collection of all necessary data the analysis was performed. The data generated through questionnaires, key informant interviews, observation was analyzed and interpreted qualitatively and quantitatively. The quantitative data was first recorded and organized in the Statistical Package of the Social Sciences (SPSS Version 23) and analyzed using descriptive and inferential statistics. The qualitative data that is generated from key informant interviews, observation, and secondary data were analyzed using qualitative method of analysis like organizing data, coding, and theming similar data, then qualitatively expressed in narrations as well as descriptions, whereas the quantitative data was analyzed by descriptive and inferential statistics methods.

Accordingly, the female student (personal), socioeconomic and family related factors that affects the academic achievements of female students were analyzed by descriptive statistics like means, percentages and frequencies. Whereas the school (institutional) related factors affecting academic achievement of female students was analyzed by using inferential statistical methods (multiple linear regression models). This model is suitable when the dependent variable is continuous; in this case that is average academic performance of female students. Since the dependent variable is continuous, multiple linear regression estimation was used to estimate the school factors affecting academic achievements of female students so that the dependent variable in this model is average academic performance of female students for the last semester. The explanatory variables assumed to affect academic performance of female students were: school distance from home, frequency of guidance and counseling service, availability of

school facilities, gender sensitive facilities, teachers quality and commitment to support female students, , approachability and professionalism of teachers, internal rule and regulations that protect safety and security of female students, level of awareness about gender issue and rewards given in the school for best grade scorer female students. The description of these variables is presented in **Table 1** below.

The underlying assumption of multiple regressions is linear relationship between predictors and continuous outcome. In addition, the major assumptions in the multiple regressions such as normality, multicollinearity and autocorrelation were checked for model diagnosis. The values of the residuals are normally distributed and the plot of standardized residuals vs standardized predicted values showed that the variance of the residuals is constant or roughly similar, which indicates that the assumption of homoscedasticity has been met. The Durbin-Watson statistic also showed that the values of the residuals were independent so that this assumption had been met, as the obtained value was close to 2 (Durbin-Watson = 1.963). The values of variance inflation factor (VIF) were less than 5; this reveals the data had no serious problem of multicollinearity which implies that the predictors (explanatory/independent variables) are not

**Table 1.** Explanatory variables and their descriptions.

Variables Name	Description
1. Distance of school from home (SDIST)	Continuous variable
2. Frequency of guidance and counseling service (FGCS)	Dummy, it takes vale of 1 if guidance and counseling service is regularly implemented in the school, 0 otherwise
3. Availability of school facilities (ASF)	Dummy, it takes vale of 1 if proper reading place are available in the school, 0 otherwise
4. Rewards given in the school for best grade scorer female students (RGSFS)	Dummy, takes 1 if rewards given in the school for best grade scorer female students 0 other wise
5. Teachers quality and commitment to support female students (TQCSFS)	Dummy, takes 1 if teachers are highly committed to support female students, 0 other wise
6. Approachability and Professionalism of teachers (APT)	Dummy, 1 if teachers are professionally approached to female students, 0 other wise
7. Availability of gender sensitive facilities(AGSF)	Dummy, 1 if gender sensitive facilities (toilet, water, pad) are available, 0 other wise
8. School rule and regulations that protect safety and security of female students (SRRPFS)	Dummy, 1 if rule and regulations that protect safety and security of female students available in the school, 0 other wise
9. Level of awareness about gender issue (LAAGI)	Dummy, 1 if the level of awareness of school community about gender issue is high, 0 otherwise

too highly correlated. The value of the coefficient of determination ( $R^2$ ) implies that about 63% of the average academic performance of female students was explained by the independent variables in the model. The adjusted R squares were about 63% this indicates the medium predictive power of the independent variables over the dependent variables of the study.

### 3. Result and Discussions

This section presents the findings regarding the factors affecting academic performance of female students in study school. The existing factors were discussed by classifying into three categories' i.e. students, socio economic and family as well as school related factors. Additionally background characteristics of the respondents of the study also presented under this section as presented below.

#### 3.1. Personal Characteristics of the Respondents

The characteristics of the respondents were grouped as age, sex and educational background of female students and teachers. The discussion is presented as follows.

As it is seen from **Table 2**, the majority of respondents are not married and they were school age students. Most of the students (54.5%) were living far away from the school. In line with this **Boyle et al. (2002)** discussed as the distance from home to school is greater, there will be less likely it is that a girl will attend the class. This is mainly because if the school becomes far away from home, parents may not be willing to send females to school. Girls are considered to be weaker than boys to walk to and from school. Furthermore, parents may fear for the safety of girls. Therefore, from the result of respondents' response and literature, we can conclude that distance to school is one of the factors affecting academic achievements of female students.

#### 3.2. The Personal (Female Student) Related Factors That Influence Academic Performance of Female Students

The identified personal factors that affect academic performance of female students in Dr, Mohammed Sirad Dolal Preparatory schools are: Students' self-motivation, absence of regular school attendance, less amount of time

**Table 2.** Female students' background information.

	Age				Marital status			Residence (in relation to proximity to school)		
	16 - 20	21 - 25	26 - 30	Total	Single	married	Total	Nearby school	Far away from the school	Total
F	213	59	3	275	267	8	275	125	150	95
%	77.5	21.5	1	100	97	3	100	45.5	54.5	100

Source: Field survey 2021.

invested on educational activities, less attendance on tutorial and supportive classes and peer pressure of friends. The level of argument of the female students regarding these factors was presented in **Table 3** below.

The item No1, in **Table 3** is about self-motivation of female students for better academic achievement. The result shows that 40% of the respondents said that they are uncertain whether self-motivation of female students affects their academic performance. In contrast, 23.6% of them agreed with lack of self-motivation as a factor that affects academic performance of female students. On the other hand, a higher percentage of teacher respondents (43%) agreed with lack of student self-motivation which highly affects academic performance of female students.

Item 2 in **Table 3** discusses absence of regular school attendance. Many of the student respondents (54.9%) agreed with this factor followed by those who strongly agree. The interviewed school principals of the school also witnessed that female student absenteeism is high compared to male students so as it highly affects academic performance of them. The same is true regarding teachers respondents. Around 43.4% of them realized that female students did not attend their class regularly. This finding is in line with **Yenenesh (2013)**, which reported that absenteeism from the school accompanied by drop out highly affected the academic performance of female students in Harar senior secondary school.

On item 3, they were asked to respond to their degree of agreement regarding the time females invest in educational activities compared to male students.

**Table 3.** Personal factors that affect academic performance of female students.

No	Items	Respondents	Strongly agree (1)	Agree (2)	Uncertain (3)	Disagree (4)	Strongly disagree (5)	$\bar{X} = \frac{\sum Xf}{N}$
1	Students' self-motivation.	F	50	65	110	30	20	1.6
		%	18.2	23.6	40	11	7.2	
2	Absence of regular school attendance.	F	55	151	34	23	12	2.2
		%	20	54.9	12.4	8.4	4.3	
3	Less amount of time invested on educational activities	F	98	134	12	23	8	1.9
		%	35.6	48.7	4.4	8.4	2.9	
4	Less attendance on tutorial and supportive classes	F	123	125	12	9	6	1.7
		%	44.7	45.4	4.4	3.3	2.2	
5	Inability to become well planned and organized	F	112	145	8	3	7	1.72
		%	40.7	52.8	3	1	2.5	
6	Peer pressure of friend	F	104	123	30	10	8	1.8
		%	37.8	44.7	10.9	3.6	3	

Source: Field survey (2021).

Concerning this, around 48.7% strongly agreed and 35.6% of respondents agreed and stated that the factor is among the outstanding constraints that affect their academic performance. Higher percentage of teachers' participants (86.5%) realized the same thing as mentioned above. The finding is agreed with [Gashaw \(2019\)](#).

Regarding less attendance of tutorial and supportive classes which presented in item 4 of [Table 3](#), most of the respondents (90.1%) rated strongly agree and agree. Rests of the respondents (7.9%), uncertain, disagree and strongly disagree with the idea given. As well, 52% of teacher's participants approved that they agreed and stated that less attendance of constructive classes and tutorial classes is another factor that hinders academic performance of female students.

Concerning the options on item 5, which is inability to become well planned and organized, 93.5% of the respondents strongly agree, agree and the rest half of the respondents uncertain, disagree and strongly disagree with the given item.

In [Table 3](#), item 6 is about peer pressure of friends. Regarding this factor, the result indicates a higher percentage of peer pressure which accounts for (82.5%) as a factor that affects the academic status of female students. However, 17.3% of them respond that peer pressure has no effect on academic performance of female students.

### 3.3. The Socio-Economic and Family Related Factors Influencing Academic Performance of Female Students

The major socio-economic and family related factors the affect academic performance of female students in Dr. Mohammed Sirad Dolal Preparatory school is presented in the following [Table 4](#).

#### Socio-economic factors

As it is seen from [Table 4](#), in relation to cost materials 56.7%; 34.7%; said it has very high and effects on academic performance of female students respectively, whereas nearly 3.6%; 2.5%; of the respondents said it has low and very low impact respectively. The remaining 3% rated "uncertain". The mean value 1.6 indicates the female students agree to the issue. Similar to this analysis, [Tesfaye \(2014\)](#) discusses "socioeconomic status appears to be affecting achievement and motivation desire which in turn affects academic performance". Therefore, from the result of respondents' response and literature, we can conclude that the cost material negatively affects the academic performance of female students.

Regarding cost of accommodation, the result of [Table 4](#) indicates that, 4.4%; 3.6%; said very high and high respectively. Nearly 52.7%; 37.8%; of the respondents responded low and very low effects on academic performance of female students respectively. The remaining 1.5% rated "uncertain". The mean value 2, 3 indicates that the respondents agree' to the issue. The highest proportion of respondents rated that all other costs have a high influence upon the achievement of girls except cost of accommodation or house rent. The results of interviews with teachers and school principals also asserted that the cost of school materials like the purchase of pencils, pens, reference books and kits are the

**Table 4.** Socio-economic and family related factors the affect academic performance of female.

No	Socio economic and family related factors.	Rating Scales					$\bar{X} = \frac{\sum Xf}{N}$	
		Very high	High	Uncertain	Low	Very low		
<b>(a) Socio-economic factors</b>								
1	Cost of school materials	F	156	94	10	7	8	1.6
		%	56.7	34.2	3.6	2.5	3	
2	Cost of accommodation or house rent	F	95	157	8	12	3	1.8
		%	35	57	3	4	1	
3	Cost of transportation	F	134	123	7	5	6	1.64
		%	48.7	44.7	2.5	1.9	2.2	
<b>(b) Family related factors</b>								
1	Families encouragement in Education of girls	F	56	69	23	82	45	2.9
		%	20.4	25.1	8.4	29.8	16.3	
3	Level of education of parents of female students	F	112	130	9	13	11	1.84
		%	40.7	47.3	3.3	4.7	4	
4	Parental occupation	F	98	125	24	18	10	1.9
		%	35.6	45.5	8.8	6.5	3.6	
5	Poor parental-child interaction	F	115	87	23	32	18	2
		%	41.8	31.6	8.5	11.6	6.5	
6	Need for extensive usage of female students labor	F	77	139	17	22	20	2.16
		%	28	50.5	6.2	8	7.3	
7	Non-conductive home environment	F	125	68	45	25	12	2
		%	45.5	24.7	16.4	9	4.4	

Source: Field survey (2021).

costs that strongly influence girls. Similarly the focus group discussants pointed out that, the inability of some girls to meet the demand for uniforms and school materials forces them not only to be absent from schools, but also to get low marks and this affect their achievement. They also argued that cost of transportation is another factor which hinders academic performance of female students.

#### Family related factors

Based on **Table 4**, 29.8% and 35.6% of respondents agreed that mothers and fathers were not encouraging them in education respectively. An educated par-

ent involves programs that promote high academic performance in children. The literate parents help their students by doing their homework, asking the situation of their study and knowing the obstacles to solve this leads to high performance of students. Some students' interviewees blame their parents for their poor encouragement exhibited in their home, which in turn affects their effective and efficient management of time. Therefore, from the response and suggestion given above, one can conclude that parents' low expectations about females' academic performance have a negative effect on their academic performance.

Item 3, in **Table 4**, respondents were also asked to rate the effect of the level of education of parents females educational achievement. According to the table given above, 91.3% of respondents rated the education of parents as low which hinders on the students' academic achievement particularly female students. Only a small number, 8.7% of respondents rated that parents' educational background at a higher rate.

Item 4, in **Table 4**, respondents were asked to rate the effect of parental occupation on academic achievement of female education. Accordingly, 35.6% and 45.5% rate very high and high only 6.5% of them rated as low. They also recognize that poor parent-child interaction makes female schooling difficult. The table also depicts that a great proportion of respondents of the research (67%) said that there were non-conducive home environments and the need for extensive usage of female students' labor influence female academic achievement to a high rate. Numerically, 78.2% and 70.2% of respondents realized that the need for extensive usage and non-conducive home environment was majorly affecting female's education. In the same table the respondents realized that there was poor interaction between parents and children which directly affected their motivation toward education.

The result of interviews also supports the above discussion concerning the performance of female students in the study area. In addition to the result of the data collected through questionnaires' from students and teachers discussed above, all key informants of educational leaders and school principals agreed on low academic achievement of female students and they pointed out that most female students had records of low examination performance.

The educational managers of the district and school directors also pointed out that variations or inconsistencies in exam achievements between males and females have been experienced in the district. The asserted that the reason for the females low performance could be raised from personal, socioeconomic and institutional factors that includes modes of teaching, infrastructure, technology, teachers' qualification and devotion to assist students, exam administration system, students talent and commitment to study and motivation to perform high academic result, integrity of school administration and the facility of schools such as reading room, availability of reference materials.

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The respondent interviewee also replied that they agreed large numbers of eligible females are not achieving well. Even if a girl was in school, she has no time to study and to read and to prepare for the lesson rather waiting the daily routine works at home such as fetching water and firewood collection, making coffee, preparing food, rearing cattle in the field, pounding grain and purchasing important items from the market for the family. They also argue that the female students have no time to refer books, study and to do an assignment since the domestic work makes them too busy. The key informants asserted that the problem is worse in rural areas when compared to urban girls. This is because the majorities of the communities in rural areas are uneducated and have no sufficient knowledge about the significance of education either for themselves and country. Due to this reason the family and communities have a negative attitude towards education and this makes female students feel hopelessness, unable to see a bright future and poorly perform in exam. This may hinder females from being motivated to learn as well as to perform well.

### 3.4. The Major School Factors Influencing an Academic Performance of Female Students

The multiple linear regression analysis was employed to see the relationship between average academic performance of female students and a set of explanatory variables. Selected independent /explanatory variables were put into the Multiple Linear Regression (MLR) model to identify the factors influencing the academic performance of female students. Nine explanatory variables were selected to explain the academic performance of female students. The result of the regression release indicates that, out of the total explanatory variables, seven of them significantly influenced average academic performance of female students (**Table 5**).

**Distance from home to school (KM):** The regression output result for the variable distance of school from home shows that of female students academic performance has negative and significant relationship with distance of school from home. Being other variables constant, a one KM increment in the school distance from home decreases the average academic performance of female students by a factor of  $-0.300$  at  $p < 0.05$ . From this, we understand that the longer the school distances from home, the lower the academic performance of female students. This is due to the fact that being far from the school is a big challenge especially for female students since it leads to absenteeism from class and then results in low academic achievements of female students.

**Table 5.** Multiple linear regression result.

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
SDIST	-0.300	0.047	-0.273	-6.385	0.000
FGCS	7.113	0.991	0.312	7.176	0.000
ASF	2.941	1.049	0.122	2.805	0.005
RGBSFS	2.608	1.036	0.110	2.517	0.012
TQCSFS	0.079	0.852	0.004	0.093	0.926
APT	-1.816	0.913	-0.079	-1.989	0.048
AGSF	6.247	0.945	0.281	6.613	0.000
SRRPFS	-0.715	0.878	-0.031	-0.815	0.416
LAAGI	3.269	1.097	0.138	2.981	0.003

Source: Model output, 2021.

**Frequency of guidance and counselling:** it is among the factors that influence the academic performance of female students. The regression output result for this variable shows that, the academic performance of female students has positive and significant relationship with frequency of guidance and counselling service. Being other variables constant, an increment in frequency of guidance and counselling service increases female students academic performance by a factor of 7.113 at  $p < 0.05$ . This shows the counseling and guidance made by school principals, supervisors and other school bodies contribute to the better academic achievements of female students.

**Availability of school facilities:** Availability of school facilities has a positive and significant relationship with academic performance of female students. Being other variables constant, availability of school facilities increases the average academic performance of female students by a factor of 2.941 at  $p < 0.05$ . This illustrates the school facilities like a proper reading place which attracts female students, increases the commitment of the students toward reading and contributes to their high academic performance.

**Rewards given in the school for best grade scorer female students:** As it clearly seen from results of regression analysis indicated in **Table 5**, this variable has positive and significant relationship with academic performance of female students. Being other variables constant, an increment in rewards given in the school for best grade scorer female students increases an academic performance of female students by factors of 2.608. This indicates the more rewards given for female students, the high academic performance female students score and vice versa.

**Availability of gender sensitive facilities:** The regression output result for this variable shows that academic performance of female students has positive and significant relationship with the availability of gender sensitive facilities.

Being other variables constant, one unit increment in gender sensitive facilities like water and toilet increases the academic performance of female students by a factor of 3.074 at  $p < 0.05$ . This implies that the availability of such facilities also increases the attention of female students on reading so that they are not challenged by the problem. As such they score better points and improve their academic performance.

**Level of awareness about gender issue:** as the result of regression shows us, this variable has a positive and significant relationship with academic performance of female students. Being another variable constant, an increase in one level of awareness about gender issue by school communities increases an academic performance of female students by a factor of 3.269 at  $p < 0.05$ . From this we understand that, the high level of awareness of school communities, the high academic performance of female students and vice versa. This implies if the school communities have positive awareness about gender issues, they can easily understand and cooperate female students in any cases. With this regard it contributes for high academic performance of female students.

#### 4. Conclusion

The objective of the study was to assess the factors that affect the academic performance of female students in Dr. Mohammed Sirad Dolal preparatory school. The descriptive research design was employed to achieve the objective of the study. The data was collected from a total of 275 female students and 10 teachers by using structured questionnaires' and interviews as well as document analysis. The data was analyzed by using both descriptive and inferential statistics (multiple linear regressions). The result shows that various factors: personal factors, socioeconomic factors and school factors found to be affecting the academic performance of female students in Dr. Mohammed Sirad Dolal preparatory school. From the study, it was learned that lack of self-motivation, absence of regular school attendance, less amount of time invested on educational activities, less attendance on tutorial and supportive classes, inability to become well planned and organized and peer pressure of friends were the key personal factors affecting female students' academic performance. Besides, lack of family encouragement in education, low level of education of parents, parental occupation, poor parental-child interaction, need for extensive usage of female students labor and non-conducive home environment were the family related factors that affect female student's academic performance. The multiple linear regressions model result showed that school distance, frequency of guidance and counselling service, availability of school facilities, rewards given in the school for best grade scorer female students, availabilities of gender sensitive facilities and level of awareness about gender issues were the school factors that influence academic performance of female students.

#### 5. Recommendations

The personal (female student related) and school factors are identified as the

major factors affecting academic performance of female students. In line with this, it is recommended that female students must be made to believe that they should offer as much sufficient time to their home work as is given to other activities. The schools management and other school communities should also motivate female students to attend normal and tutorial classes regularly, work to increase their self-confidence and give advice and awareness regarding peer pressure and its effects on their academic performance. The schools should also give much attention towards increasing female student's participation in education, because many families do not allow female students to study with male students. School environment should be comfortable for girls' physical and psychological well-being. The district education office should organize a motivation program for high achiever female students and their parents, teachers who participate on female issue as well as female students-teachers committee to increase their motivation.

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### Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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