

# Factors Affecting Female Students Academic Performance: The Case of Wolaita Sodo Agricultural, Technical, Vocational and Educational Training College

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**Abstract:** *This study on the academic performance of female students at ATVET College, Wolaita Sodo is the first of its kind at ATVET level in the country as per the researcher's knowledge. As the researcher observed and checked with students and officials of ATVET, the academic performance of female students, especially at the graduating years (3<sup>rd</sup> year), seemed much less than their male counterparts. Hence, it was intended to find out those factors that were affecting the academic performance of female student at the ATVET College. Thus, this study was undertaken towards that end. All 79 female students of the 3<sup>rd</sup> year in all the three departments of the college (cooperative, livestock, and natural resource) were the sample units to the study towards collecting primary quantitative data through a semi-structured questionnaire, checklists were used to collect qualitative data through Focus Group Discussion and personal Interview. Appropriate secondary sources were reviewed for this study. Based on personal observation and literature review a conceptual framework comprising psychological, socio-demographic, institutional and economic factors was developed for this study. All variables included in these factors were hypothesized towards affecting the female academic performance in the study area. The qualitative data collected were analyzed using descriptive (percentage and frequency) and inferential statistics ( $X^2$  and t-value). The result showed that the following variables positively affected the academic performance of female students at the ATVET College of Wolaita Sodo: a) College community b) Social participation c) Parents educational level d) Students background e) Family income f) Sanitation facility. Moreover, the qualitative data collected were also in agreement with the interpretation of the quantitative data. Both quantitative and qualitative data agree with the factors that positively affected the academic performance of female students with the exception sex discrimination as the teachers of the college did not agree with this. Based on the findings appropriate recommendations such as (a) creating awareness and bringing the necessary attitude change on the college communities (b) supporting and strengthening the college mini-*

*media activities (c) special tutorial service for female students to strengthen their study and (d); close assistance and encouragement from the college community; supporting the students to develop self-esteem so that the academic performance of female students would improve in the study area.*

## 1. INTRODUCTION

### 1.1 Background of the study

In any society, the provision of education was a fundamental and basic for human resource development. Education represents a major form of human resources development. Human resource development was determined by the availability and quality of education. Human resource development constitutes an underlying basis upon material development. It was a cornerstone for the nation's fast socio-economic development. Engin-Demir (2009) stated that education was not a charity rather a fundamental human right for all people irrespective of their sex, race, economic status which was the key to sustainable development, peace and stability among countries.

In the Universal Declaration of Human Right 1948, Article 13(1 and 2), the development of a system of quality education at all levels shall be actively pursued, and the material conditions of the teaching staff had been continuously improved. Currently, girl's education is a critical development agenda since of its inherent value to individual girls, and benefits for its wider society. There is much attention to make education accessible to girls. This does not mean education is unnecessary for males.

UNESCO (2002), Gender equality was one of the fundamental goals in human development highlighted at numerous global conferences. Eliminating gender gaps and gender inequality means bringing the disadvantaged sex at par with the favored. It ensures that both sexes leave the school system with an education that provides life skills and permits them to pursue higher levels of education or vocational training according to their capabilities and was free from gender stereotyping. Most importantly, they should be equipped with

skills and attitudes that will help them to pursue their potential regardless of their sex.

According to Oxfam (2005), why do some countries succeed in promoting gender parity and equality in education while others do not? The answer often given was 'political will'. Why governments are unwilling or unable to change their policies and priorities to achieve equal access to education for girls and boys, as expected in the third Millennium Development Goal. The answer for second was that policy research should point constraints and should give attention to primary schooling and Secondary Schooling. The balance achieved in both schooling may help as basis for research and Practice in ATVET College and higher Institutions.

According to Amare (1998), education was at the center of rural development and it was an instrument for reducing poverty, improving the living condition of rural people, and building a food secure world. Education was a basic human right by itself. In spite of this, children's access to education in the rural areas of Ethiopia is still much lower than in urban areas, adult illiteracy was much higher and the quality of education was very poor (Emebet, 2001; Ayalew, 2005). The latter further elaborates that expanding access to quality

## RESEARCH METHODOLOGY

### 2.1 Description of the Study Area

Wolaita Sodo ATVET College is one of the 25 agricultural ATVET Colleges in the country and one of the three in SNNPRS. It is found in Wolaita Zone, Sodo town of SNNPRS which is 165 kilometers west of Hawassa 383 kilometers south west of Addis Ababa. The Wolaita Sodo is located in the South of the Hadya Zone, North of the Gamogofa Zone, East of the Dawuroand West of the Sidama. It lays from 6.48 and 6.53 N Latitude 37.44 and 37.99 E Longitude. Sodo town is the Wolaita Zone administrative center.

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The total area of Wolaita Sodo is 98.8km<sup>2</sup> and it has population of 100,755. This gives a population density of 1020 people per km<sup>2</sup>, which is above the average density of the zone 375 per. square km. Topography is mainly flat low land with altitude ranging from 1500 to 2500 m above sea level. Dominant climate is Dega with mean annual temperature (MAT) of 20 °C for Belg and 15.1 °C for kiremt. Rain fall in (mm) is scant and erratic with

education for rural people is of crucial importance in the realization of human rights and achieving the millennium development goals (MDGs). That is why like any LDCs, Ethiopia has also prepared the country's poverty reduction strategic paper entitled Sustainable Development and Poverty Reduction Program immediately after the approval of the interim SDPRSP in 2002 in four pillars i.e. Agriculture development led industrialization (ADLI), Justice System and civil service reform, Decentralization and Empowerment, and Capacity building in public and private sector (Meron, 2006).

The participation and performance of girls' in all primaries, secondary and tertiary education levels was lower than that of boys. The gender disparity becomes wider as we go up the educational ladders (Odapa and Heneveld, 1995). 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. 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, 2003/04).

mean annual temperature (MAT) of 1200 to 1400, according to regional finance and economic bureau.

Thus, under the name of the training center it trained a number of trainees in general agriculture and home economics from 1964 E.C. to 1974 E.C. being under the control of Wolaita Agricultural Development Unit (WADU). The training was given for a total of 18 months on the bases of theoretical and practical framework. The training followed theoretical lessons for 6 months and practical ones for the rest 12 months. It was in 1994 E.C that it developed from a training center to a college. Making extension from prior area and began different building, employ human resources middle level fulfilling start 10 + 3 diploma program. Now days the total area of the college covers 41 hectares of land and the capacity total reception greater than 4000 student in an academic year.

Using this organization Animal Science, Plant Science and Natural Resource Management receiving high school completing students from 1996 E.C to 2005 E.C in seven rounds 10,079 students diploma graduated.

**Table 1**Total student data of the past three years

No	WOLAITA SODO ATVET COLLEGE						
	Department and Academic Year	No of Student Registered			No of Student graduated		
		M	F	T	M	F	T
1	Plant Science (CDET) in 2000 E.C.	167	16	183	135	12	147
2	Animal Science (LDET) in 2000 E.C.	145	18	163	125	18	143
3	NRDET in 2000E.C	152	14	166	135	12	147
4	Plant Science (CDET) in 2001 E.C.	82	23	105	80	20	100
5	Animal Science (LDET) in 2001 E.C.	40	27	67	36	21	57
6	NRDET in 2001E.C	86	22	108	80	14	94
7	Plant Science (CDET) in 2002 E.C.	109	24	133	107	24	131
8	Animal Science (LDET) in 2002E.C.	75	21	96	71	19	90
9	NRDET in 2002E.C	42	11	53	40	11	51
	TOTAL	898	176	1174	809	151	960

Source: ATVET College Registrar Office, August. 2012

**2.2 Sampling Technique**

All third year female students in the year 2012/2013 were purposively selected in the study sample, since they have exposure to collage

**2.3 Data Source and Types**

For the study both primary and secondary data of qualitative and quantitative in nature were collected and used.

**2.4 Data collection Tools**

The primary data were gathered from the sample female students by using semi-structured

**2.5 Data Collection Method**

Focus group discussion was conducted with the compassion of following participants:

Randomly selected 3<sup>rd</sup> year male students from each department (2\*3 = 6)

The administrative officials (Each department head / Dean (2\*3 = 6)

Male and Female Teachers were teach at Third Year Classes (2\*3 = 6)

Total 18 individuals divided into two groups of 9 each.

In-depth interview was used to concretize more the study with qualitative data. In-depth interview were used for two dormitory proctors, female DAs who graduate in 2004 E.C and any available female student drop out/ dismissals that lives near the

college were included. In addition, data were collected from voluntary non-sample individuals who had knowledge and experience with regard to female performance Sodo at ATVET College.

**2.6 Data Analysis**

Quantitative and qualitative data were analyzed using appropriate methods. Quantitative data were

environment. The respondent’s average cumulative academic achievement was taken as the base for performance assessment.

questionnaire, which was checked for its validity and pretested before the actual data collection.. In addition, qualitative data were collected through FGD and Personal Interview from randomly selected 3<sup>rd</sup> year male students, administrative officials of the college, and instructors who teach at third year classes..

analyzed using simple descriptive statistics such as percentage, mean and cross tabulation. In addition, inferential statistics such as standard deviation and chi-square was conducted to show the significance of hypotheses variable. Qualitative data were analyzed through narration, interpretation, and conceptual generalization.

**II. RESULTS AND DISCUSSION**

This chapter deals with presentation, analysis and interpretation of data that were collected through questioner, interview schedule, in-depth personal interviewee, and focus group discussions. In this chapter, the results of the research were discussed to address the two objectives of the study. In this section background information of the respondent; academic performance of the students; socio-demographic factors, economic factors, institutional factors, and psychological factors of the sample respondents were discussed the relation between dependent and independent variables; and the impact of independent variables on academic performance of students that is measured in marks/points that helps the students to get graduate.

However, this study did not measure the independent variables a) Scholarship availability, b) Tutorials given on campus, c) Reservation for female student and d) Guidance and Counseling. This is because there were not provided by the ATVET College, thus there was no variability for measurement.

**4.1 Academic Performance of the students**

In this section of the study, the academic performance of both male and female students has

**Table 3**Frequency distribution of sample students based on their average pass mark

No.	Mark for grading	Frequency		%		Min	max	Mean	St. dev.
		Male		Female					
1	Excellent(≥ 90)	7	2.3	0	0	51	78	61.7468	7.75667
2	Very Good(80-89)	66	21.7	0	0				
3	Good(70-79)	123	40.5	9	11.4				
4	Satisfactory(60-69)	77	25.3	41	51.9				
5	Poor(51-59)	31	10.2	29	36.7				
6	Failed(50% & below)	0	0	0	0				
	Total	304	100	79	100				

Source Wolaita Sodo ATVET College 2005 EC graduating students

As indicated in Table 3, the academic performance of female students in the study college has seen by using their average pass marks. Accordingly, their average pass mark score is divided in six categories that range from 50 below failing and no students under this category, 51 to 59% poor and from the total 304 male student only 31(10.2%) under this category while from the total 79 female student 29(36.7%) under poor performance category. 77(25.3%) of male student performance under satisfactory performing category while 41(51.9%)from the total 79 female students were under the category of 60 to 69% satisfactory, 123(40.5%) from the total of 304 male students under the category of good performance whereas 9(11.4%) from the total 79 female students were under the category of 70 to 79% good performing were under the category of average pass marks.

To conclude on the information given in Table 3 above the academic performance of the students based on their average pass mark; as clearly shown, a lot of female students have skewed at the lower average pass marks of the college under the study then male counterpart. Out of the total sample 88.6% of female students had scored average mark less than 70, whereas 35.5% of male

been discussed in detail based on the information presented in table 3, Academic performance; the dependent variable for this research is measured in average pass mark/point that helps a student to get graduate from college.To address the first objective of the study to assess the current status of the academic performance of female students in the study area, the average pass mark is taken from the ATVET College registrar office three year cumulative result. The following Table has given some useful information on this issue.

student counterparts had scored the average pass mark less 70.

Though the number of students decreases as their average pass mark increase in case of female and the reverse was true for male students. In evidence of Table 3 above implies that male students perform by far better than female students in their education. On its turn, this reveals that there is a gap between male and female students in their academic performance which indicates to assess the current status of the academic performance of female students in the study area.

As observed from Table 3, when one compares the, minimum and maximum average pass makes of the student under the study; there is a variation between the two groups. The minimum average score for males was 55.8 while for females it was 51, likewise, the maximum average score for males was 93.8, whereas for female 78. The gap at the upper level is higher than the gap at the lower level is low, which are 15.8 marks on average. The variation indicates that male students are performing far better than females.

**4.2. Factors affecting academic performance of female students**

**4.2.1. Socio-Demographic Factors**

**4.2.1.1 College community behavior towards female students**

As the Table 4, Shows that female student respondents with regards to administrative body support, students with poor academic performance 29(100%) replied they have not get any support, students with satisfactory academic performance 13(59.1%) has got regular support from administrative body mostly such supports include: following teaching methodologies of instructors, psychological makeup, etc. and all students with good academic performance 9(40.9%) replied they got administrative support regularly. Therefore, this shows that academic performance of female student positively and statistically significantly (at 1%) affected by administrative support. Academic performance and administrative body is highly correlated and highly significant. Contingency coefficient (0.553), these indicate that strong correlation for academic performance and administrative body support. It is believed that as students were integrated into and become more interdependent with both academic and social elements of a college, the probability that the student will leave the college declines (Prince, 1993). Astin (1975) also found that involvement was critical to a student’s decision to persist or drop out from college. In other words, involvement with faculty and student peer groups encourages participation in social and intellectual life of a college and, therefore, helps learning and persistence in college (Astin, 1993). Among college factors that promote female students’ success in higher education the most critical is

sound counseling, and providing staff training to help teachers serve female students more effectively (Nelson, 1993).

Teacher’ attitude towards female students was one of the factors that affected the academic achievement of female student at ATVET College. They replied that in the regards of policy there is no gap while when we see ground reality no practicality and good facility to make intensive support. The girls believed that the teachers and staff believed that female could not perform as well as boys. On this aspect data, were collected from female respondent student.

Thus, the attitude of the College teachers toward female education was not encouraging and it could have affected the academic achievement of female student at ATVET College. Although, the researcher did not observe any guidance and counseling office at ATVET College, some male student who participated in the FGDs were in agreement with the attitude of the females in this regard.

However, the personal interview with non- sampled female students revealed the following additional information in this regard. The non- sampled female students said that had met several such obstacles during their own class days; hence, they were aware of the situation of girls at class and at dormitory. Therefore, they discouraged their female students to perform better in their studies, to stand against any oppression and to create self-confidence. The non-sampled male students said that they were doing all they could to reduce any gender gap that existed on the campus. They were mandated by the government to contribute towards reduction of gender disparity rather than increasing it.

**Table 4**Distribution of academic performance of female students with college community behavior

Academic performance of female students		College community behavior towards female student				Total	
		Yes		No			
		N	%	N	%	N	%
	Poor (51 to 59%)	0	.0%	29	100%	29	100%
	Satisfactory (60 to 69%)	13	31.7%	28	68.3%	41	100%
	Good (70 to 79%)	9	100%	0	.0%	9	100%
Total		22	100.0%	57	100.0%	79	100.0%

Source: Own Survey, 2012/13, N= Number of respondent;  $X^2 = 34.815$  \*\*\* and Contingency coefficient = 0.553

**4.2.1.2 Social Participation**

As Table 5, shows that the respondents of female students with regard to the participation on

different clubs, all poorly academically perform respondents were totally not participate in all clubs, students with satisfactory academic performance were responded that 22(53.7%) that participate in

all clubs and the rests were participate in some clubs such as anti-HIV ADIS, sport, environment protection, girls club, etc. and all students with good academic performance were responded that participate in whole clubs. Students who were the member of FGD express the participation on different clubs and the benefits of participation form different perspectives rise and discuss i.e. participation on different clubs enhances the interaction socially, culturally, politically, and etc. These by itself develop broad mindedness, expand the thinking horizon of the student and also

increase the class room interaction highly. (Seyoum, 2006) express that social interactions value for education on their thesis. Therefore, this indicates that academic performance of female student positively and significantly (at 1%) affected by participate on different clubs. Academic performance and participate on different clubs is highly correlated and statistically significant. Contingency coefficient (0.711), these express that strong association for academic performance and participate on different clubs within the college.

**Table 5** Distribution of Academic performance of female students with clubs participation

Academic performance of female students	Participation on different clubs						Total	
	Participate in all		Participate in some		No participate at all		N	%
	N	%	N	%	N	%		
Poor (51 to 59%)	0	0	0	0	29	100	29	100
Satisfactory (60 to 69%)	22	53.7	17	41.5	2	4.9	41	100
Good (70 to 79%)	9	100	0	0	0	0	9	100
Total	31	39.2	17	21.5	31	39.2	79	100

Source: Own Survey, 2012/13, N= Number of respondent,  $X^2 = 80.927^{***}$ , and Contingency coefficient = 0.711

**4.2.1.3 Parents Educational Level**

Parents educational stand out to be significant factor in determining the education children in a family. In developing countries parental education background and female academic performance have a direct relationship. Students who are come from educated family they aware of some education challenges and their parents aware to afford early.

As presented in Table6, from the total respondents of female students with regard to the parents educational level, students with poor academic performance 11(37.9%) of parents were illiterate, 18(62.1%) were have got the chance of basic education, students with satisfactory academic performance 35(85.4%) were gate the opportunity of basic education and 6(14.6%) of the respondents parents were diploma holder, students with good academic performance 1(11.1%) were diploma holders and 8(88.9%) of the parents were degree holders. Therefore, this indicates that academic performance of female student positively and significantly (at 1%) affected by parents educational level. Academic performance and parents educational level is highly correlated and statistically significant. Contingency coefficient

(0.736), these express that strong association for academic performance and parents' educational level within the college.

Furthermore, the cultures that motivate males to go to school than females had an impact on their academic performance. A student from educated family performs better than that of illiterate family. This can be through motivating them to study, providing learning materials etc. The reason for these might be that educated families support their children for revising what they learned at school; following up their children's day-to-day educational activities; leading their children by plane and program, while these are not accustomed in illiterate families as indicated in the FGD. The results of FGD with male students, instructors, administrative officials and voluntary non-sample individuals who had knowledge and experience with regard to female student performance Wolaita Sodo ATVET College revealed that now-a-day liberated and literate families have positive attitude towards education of both sexes, even though different families have different value for female education. The reflection of these some families were education material requirement of the student, some others are not committed for close

monitoring and follow up of the female education, and etc.

From the above viewed points, it is possible to conclude that parents' educational backgrounds were likely to shape children's attitude toward education. Since educated parents were likely to

reward education, it may be expected that girls normally coming from educated parental background persist and perform good at college. This implies that female education a multiplier effect since it had positive impact on the mothers' desire and ability to educate her daughters.

**Table 6**Distribution Academic performance with parent educational status

Academic performance of female students		Educational status of parents								Total	
		Illiterate		Basic Education		Diploma		Degree and above			
		N	%	N	%	N	%	N	%	N	%
Poor (51 to 59%)		11	37.9	18	62.1	0	0	0	0	29	100
Satisfactory (60 to 69%)		0	0	35	85.4	6	14.6	0	0	41	100
Good (70 to 79%)		0	0	0	0	1	11.1	8	88.9	9	100
Total		11	13.9	53	67.1	7	8.9	8	10.1	79	100

Source: Own Survey, 2012/13, N= Number of respondent,  $X^2 = 93.540$  \*\*\* and Contingency coefficient = 0.736

**4.2.1.4 Student background**

As Table7, shows that the respondents of female students with regard to the student background, students with all poor and satisfactory academic performance were replied that mixed curriculum learning opportunity they have faced i.e. social science and natural science respectively, students with good academic performance 4(44.4%) were replied natural science and 3(33.3%) social science. As the FGD revealing those students join the college from urban and per-urban areas was more

access to the different technology and exposure of different instructional material. Therefore, this indicates that academic performance of female student positively and significantly (at 1%) affected by student background. Academic performance and student background is correlated and statistically significant. Contingency coefficient (0.656), these express that strong association for academic performance and student background within the school.

**Table 7**Distribution Academic performance of female students with Student background

Academic performance of female students		Academic background of female student						Total	
		Natural Science Student		Social Science Student		vocational or mixed science(natural or social science)			
		N	%	N	%	N	%	N	%
Poor (51 to 59%)		0	0	0	0	29	100	29	100
Satisfactory (60 to 69%)		0	0	0	0	41	100	41	100
Good (70 to 79%)		4	44.4	3	33.3	2	22.2	9	100
Total		4	5.1	3	3.8	72	91.1	79	100

Source: Own Survey, 2012/13, N= Number of respondent,  $X^2 = 59.738$  \*\*\* and Contingency coefficient = 0.656

#### 4.2.2 Economic Factors

##### 4.2.2.1 Family Income

This is the income that families of the respondents earn annually bases. It is widely distributed from less than below 5000 to 10000 Birr annual. According to Table 8 and Table 9, all students with poor academic performance were replied that their parents are farmers and their annual income is below 5000Birr, they justify for these parents were not used selected seeds, fertilizers, insecticide pesticide, and etc. as the result yields and annual income amount very less, students with satisfactory academic performance 10(24.4%) on farming 17(41.5%) on trading 14(34.1%) were civil servant and their annual income was above 5000Birr.

Therefore, this indicates that academic performance of female student positively and significantly (at 1%) affected by livelihood of your family income. Academic performance and livelihood of your family income were correlated and statistically significant. Contingency coefficient (0.742), these express that strong association for academic performance and livelihood of your family income.

The result of FGD revealed that female student from the poorest family do not want to go to college or even they forced to drop out because of their inability to fulfill the demand of education and lack of good dressing. The existing good dressing culture influences poor family students' education.

**Table 8**Distribution of Academic performance with livelihood of family income

Academic performance of female students		Source of livelihood of your family income								Total	
		Farming		Trading		Civil servant		daily labour			
		N	%	N	%	N	%	N	%	N	%
Poor (51 to 59%)		29	100	0	0	0	0	0	0	29	100
Satisfactory (60 to 69%)		10	24.4	17	41.5	14	34.1	0	0	41	100
Good (70 to 79%)		0	0	0	0	3	33.3	6	66.7	9	100
Total		39	49.4	17	21.5	17	21.5	6	7.6	79	100

Source: Own Survey, 2012/13, N= Number of respondent,  $X^2 = 96.969$  \*\*\* and Contingency coefficient = 0.742

**Table 9**Academic performance of female students with Estimated Annual Income of parents

Academic performance of female students	Estimated the Annual Income of your parents								Total	
	Below birr 5000		5001-7500		7501-10000		10001 and above			
	N	%	N	%	N	%	N	%	N	%
Poor (51 to 59%)	29	100	0	0	0	0	0	0	29	100
Satisfactory (60 to 69%)	6	14.6	18	43.9	17	41.9	0	0	41	100
Good (70 to 79%)	0	0	0	0	2	22.2	7	77.8	9	100
Total	35	44.3	18	22.8	19	24.1	7	8.9	79	100

Source: Own Survey, 2012/13, N= Number of respondent,  $X^2 = 1.157$  \*\*\* and Contingency coefficient = 0.771

##### 4.2.2.2 Par-time Job

Out of 79 sample female students, 15 were found to have on and off campus par-time jobs. However, all the 15 students were in the category of poor academic performance (51-59%) as the Table 10below revealed. Hence, this variable did not show any influence on academic performance of female students in the study area.

**Table 10** Distribution of Academic performance of female students with par-time job

Academic performance of female students	students with on-campus and off-campus par-time job			
	Below Birr 500		Total	
	N	%	N	%
Poor (51 to 59%)	15	100	15	100
Satisfactory (60 to 69%)	0	0	0	0
Good (70 to 79%)	0	0	0	0
Total	15	100	15	100

Source: Own Survey, 2012/13, N= Number of respondent,  $X^2 = 31.923$  and Contingency coefficient = 0.536

**4.2.3 Institutional Factors**

**4.2.3.1 Sex discrimination on campus**

Table 11, discuss the presence of sexual discrimination on female student adversely affects their academic performance due to low morale and fear of this action. From the sampled respondent female students, all poor academic performance of respondents were sex discrimination on campus and students with satisfactory 11(26.8) also have replied sex discrimination and 30(73.2%) were replied no sex discrimination. Therefore, this indicates that academic performance of female student positively and significantly (at 1%) affected by sex discrimination. Academic performance and sex discrimination is highly correlated and highly significant. Contingency coefficient (0.742), these express that strong association for academic performance and sex discrimination. According to

the discussion of Table 12, all student with poor academic performance were responded that the negative effect of sexual discrimination on psychologically, motivationally and attitudinally. These condition negative and significantly (at 1%) affect the academic performance and its strong association with the academic performance.

The result obtained from the FGD conducted with male student, administrative officials, male and female teachers indicated that insulting, snatching Mobil phone, asking telephone number, coming up to the dorm, and forcing to talk were some of the indicators of sexual harassment occurred on female students. The majors of these acts have occurred by the youths and some youngster male student group. Sometime rape attempt may also occur on those students who live alone in rent house for attending their education.

**Table 11** Sex discrimination on-campus

Academic performance of female students	Sex discrimination on campus				Total	
	Yes		No		N	%
	N	%	N	%		
Poor (51 to 59%)	29	100	0	0	29	100
Satisfactory (60 to 69%)	11	26.8	30	73.2	41	100
Good (70 to 79%)	0	0	9	100	9	100
Total	40	50.6	39	49.4	79	100

Source: Own Survey, 2012/13, N= Number of respondent,  $X^2 = 46.8$  \*\*and Contingency coefficient = 0.610

**Table 12** Sex discrimination negatively influenced academic performance

Academic performance of female students	Sex discrimination negatively influenced academic performance								Total	
	Psychological		Motivational		Attitudinal		All a, b & c		N	%
	N	%	N	%	N	%	N	%		
Poor (51 to 59%)	0	0	0	0	0	0	29	100	29	100
Satisfactory (60 to 69%)	8	19.5	6	14.6	1	2.4	26	63.4	41	100
Good (70 to 79%)	0	0	0	0	9	100	0	0	9	100
Total	8	10.1	6	7.6	10	12.7	55	69.6	79	100

Source: Own Survey, 2012/13, N= Number of respondent  $X^2 = 84.605^{***}$  and Contingency coefficient = 0.719

**4.2.3.2 Sanitation Facility**

This refers to the availability of public health and hygiene facilities in the college for girl students. This basic Sanitation facility includes separate toilets, water, shower, sanitary pad, special dressing and the rest rooms and emergency room facilities. The presence of hygiene, sanitation, and water facilities in the college can create an enabling learning environment that contributes for children’s improved health, welfare, and learning performance. According to Table 13, students with poor academic performance 19(65.5) of female students respondent answered presence of sanitation facilities in the college and 10(34.5%) respondents were replied the water provision not provided i.e. because of the absence of water facilities, and students with satisfactory academic performance 41(100%) replied the absence of sanitation facilities in the college as the result above mention sanitation facilities were missed. Therefore, this indicates that academic performance of female student positive and significantly (at 1%) affected by Sustainable water provision to latrines or toilets. Academic

performance and Sustainable water provision to latrines or toilets is statistically significant. Contingency coefficient (0.594), these express that association for academic performance and Sustainable water provision to latrines or toilets. The result obtained from FGD conducted with all categories indicated that in the study area, there is already sex segregated toilet with no water facilities is available for female students in the study area.

Lack of shower is a serious problem for female students during their menstruation period. Because of the unavailability of these facilities, majority of female students become absente when such time occurs. Some times during menstruation their close may get blood which forced them to be absent. Furthermore, females are afraid to use these toilets in the presence of their male counter part because the presence of toilet at the road side and exposed to the external personals. As a result the students miss the class or they do not come back soon which in turn affects their academic performance.

**Table 13 Distribution of academic performance with sustainable water provision**

Academic performance of female students		Sustainable water provision for sanitation				Total	
		Yes		No			
		N	%	N	%	N	%
Poor (51 to 59%)	19	65.5	10	34.5	29	100	
Satisfactory (60 to 69%)	0	0	41	100	41	100	
Good (70 to 79%)	0	0	9	100	9	100	
Total	19	24.1	60	75.9	79	100	

Source: Own Survey, 2012/13, N= Number of respondent,  $X^2 = 43.132^{***}$  and Contingency coefficient = 0.594

**4.2.3.3 Boarding and Lodging on campus (Dormitories and cafeteria)**

As discuss on Table 14, Academic performance of female students with Standardized food provision, students with poor academic performance 2(6.9%) were responded that very good and 21(72.4%) good and 6(20.7%) students were replied poor. Also all students with satisfactory and good academic performance were poor and very poor on the provision of standardize food, they rationalize for this as the college provided pocket money 240Birr only, it was clear that now a day the fast rate growth inflation and the purchasing power of the money is very weak, because of this factor only they use for the sake of survival. As FGD

revealing, especially most of the time dormitory had cleaned by the student themselves and no cleaners were present. Therefore, this indicates that academic performance of female student positively and statistically significantly (at 1%) affected by Standardized food provision. Academic performance and Standardized food provision were correlated and statistically significant. Contingency coefficient (0.793), these express that strong association for academic performance and Standardized food provision. Regarding the discussion of FGD College supplying birr on behalf of cafeteria service very minimum and provision cafeteria service is mandatory. Most learning and reading times were missed by preparation of food; to solve this challenge most female and male

students make pair together rent the house out of the campus for the sake of food preparation. This condition exposed female students sexual abuse and make abortion, together this all condition high loads on academic performance.

As the Table 14, explains the academic performance with proper provision of dormitory material, students with poor academic performance very good, good, poor and very poor were 2(6.9%), 21(72.4%), 6(20.7%), 41(100%) are respectively. These show that the material provision were very weak. Therefore, this indicates that academic performance of female student positively and

statistically significantly (at 1%) affected by improper provision s such as Bed, Blankets, pillows, Chair, tables and Lighting are provided. Academic performance and Proper provisions such as Bed, Blankets, pillows, Chair, tables and Lighting were correlated and statistically significant. Contingency coefficient (0.793), these express that strong association for academic performance and Proper provision such as Bed, Blankets, pillows, Chair, tables and Lighting are provided. The FGD indicates the timely provision of different dormitory material from the college were very weak.

**Table 14 Academic performance with provision of dormitory material**

Academic performance of female students		Proper provision of dormitory material								Total	
		Very good		Good		Poor		Very poor			
		N	%	N	%	N	%	N	%	N	%
Poor(51 to 59%)		2	6.9	21	72.4	6	20.7	0	0	29	100
Satisfactory (60 to 69%)		0	0	0	0	41	100	0	0	41	100
Good (70 to 79%)		0	0	0	0	0	0	9	100	9	100
Total		2	2.5	21	26.6	47	59.5	9	11.4	79	100

Source: Own Survey, 2012/13, N= Number of respondent,  $X^2 = 1.337^{***}$ and Contingency coefficient = 0.793

**4.2.4 Psychological Factor**

**4.2.3.4 Self Esteem**

Self-esteem allows people to face life with more confidence, benevolence and optimism, and thus easily reach their goals and self-actualize. It allows oneself to be more ambitious, but not with respect to possessions or success, with respect to what one can experience emotionally, creatively and spiritually. However, due to traditional attitudes and early grown low self-concept in being female, girls develop poor perception, lack of vision, hopelessness and assume girls lower than boys. These challenges are affect girls in engaging academic matter and performing well. The traditional attitude of family and the community towards girls’ schooling was negative. It has an impact on female students’ academic performance. On the other hand girls have low self-concept and poor perception about their future. Therefore, the traditional attitudes towards the education of women were not favorable and not encourage females to perform well.

In this line, table 15 indicated that from the total 79 sampled female respondent students, only 10.5% of

them have high self-esteem. All these students have the average pass mark of 70-79. There is no one students who have high self- esteem and scored the average pass mark points less than 60 in this group.

On the other hand, female students who categorized under poor and satisfactory self-esteem are 41.15%, and 48.35% respectively. The average pass mark that these group scored is ( 51-59). There is no student who has average pass mark score greater than 70 from the poor and satisfactory self- esteem group.

The chi square results also support this fact. It indicates that the relation of this variable with the dependent variable is significant at 0.05% level of test ( $\chi^2 = 41.101$ ). This means that the students’ self-esteem has an effect on their academic performance.

From the above viewed points, it is possible to conclude that the presence high self-esteem on the students have a positive impact on their average pass mark which in turn influences their academic performance.

**Table 15 Association between academic performance of female students and self-esteem(N=79)**

Statements		Academic performance of female students			
		Poor (51 to 59%)	Satisfactory (60 to 69%)	Good (70 to 79%)	X <sup>2</sup>
Girls are in no way inferior to the boys in receiving education	Yes	0	27	9	1.042
	No	29	0	0	
	Do not know	0	14	0	
Females are not as strong as Males to pursue education especially at ATVET level	Yes	29	0	0	41.138
	No	0	15	9	
	Do not know	0	26	0	
We are more confident now a days and we can certainly do as good as males or even better in the field of educational performance	Yes	0	28	9	48.001
	No	29	11	0	
	Do not know	0	2	0	
Higher education and professional training are for the males and the females have to do house hold tasks and community services	Yes	23	41	9	11.195
	No	2	0	0	
	Do not know	4	0	0	
Thanks to gender based policies and affirmative action we are improving lot and will excel in our performance and participation	Yes	1	41	9	74.780
	No	8	0	0	
	Do not know	20	0	0	
We will eventually be married and start serving our house-holds. Hence, education is of no significance to us.	Yes	1	40	9	70.645
	No	28	1	0	
	Do not know	0	0	0	

Source: Own Survey, 2012/13, N= Number of respondent, X<sup>2</sup> = 41.135 \*\*\*Contingency coefficient = 0.591

**4.2.3.5 Fears of performance**

According to the discussion of Table 16 academic performance of female student were equal to male, poorly performing female students were replied that the possibility of equal performance with male counter parts and rest groups replied that females cannot perform better than male i.e. 17(58.6%) and 12(41.4%) respectively, satisfactorily performing female students were replied that Female can't

perform better than male and Females were by nature weak 20(48.8%) and 21(51.2%) respectively. All good performing female students were replied that females are by nature weak. As the FGD and the reveal of Table 17, almost all female students were subject wise fear and exam fear this condition statistically influence academic performance of female student.

**Table 16 Female student with fear of academic performance**

Academic performance of female students		Do you believe females can perform equal to males at ATVET College						Total	
		Equal performance is possible		Female can't perform better than male		Females are by nature weak			
		N	%	N	%	N	%	N	%
Poor (51 to 59%)		17	58.6	12	41.4	0	0	29	100
Satisfactory (60 to 69%)		0	0	20	48.8	21	51.2	41	100
Good (70 to 79%)		0	0	0	0	9	100	9	100
Total		17	100	32	100	30	100	79	100

Source: Own Survey, 2012/13, N= Number of respondent, X<sup>2</sup> = 85.958\*\*\*Contingency coefficient = 0.722

**Table 17**Female student with psychological fear during tests and exams of academic performance

Academic performance of female students		Do you have any psychological fear during tests and exams that you can't perform well and eventually drop out						Total	
		Have Subject Wise fear		In our first year of study		Some times during exam			
		N	%	N	%	N	%	N	%
Poor (51 to 59%)		29	100	0	0	0	0	29	100
Satisfactory (60 to 69%)		16	39	22	53.6	3	7.4	41	100
Good (70 to 79%)		0	0	0	0	9	100	9	100
Total		45	100	22	100	12	100	79	100

Source: Own Survey, 2012/13, N= Number of respondent,  $X^2 = 85.958^{***}$  and Contingency coefficient = 0.722

**4.2.3.6 Academic performance of female students with attitude towards profession as DAs in future**

As the Table 18, shown that female students attitude towards profession as DAs in future, all students with poor academic performance replied that their attitude towards DAs in future had negative and discouraging, student with satisfactory academic performance 23(56.1%) were positive and encouraging as the wide opportunity for the entrepreneurship and it is part of the transformation plan of the country now a day and observation during practical attachment period with farmers governments supportive approach towards

agriculture led industrialization and 18(43.9%) were identified negative and discouraging and all student with academic performance were positive and encouraging. Therefore, this indicates that academic performance of female student negatively and significantly (at 1%) affected by attitude towards profession as DAs in future. And participation academic performance and attitude towards profession as DAs in future and participation is highly correlated and highly significant. Contingency coefficient (0.565), these express that strong association for academic performance and attitude towards profession as DAs in future.

**Table 18**Academic performance of female students with attitude towards profession as DAs in future

Academic performance of female students		What is your' attitude towards profession as DAs in future				Total	
		Positive and encouraging		Negative and discouraging			
		N	%	N	%	N	%
Poor (51 to 59%)		0	0	29	100	29	100
Satisfactory (60 to 69%)		23	56.1	18	43.9	41	100
Good (70 to 79%)		9	100	0	0	9	100
Total		32	40.5	47	59.5	79	100

Source: Own Survey, 2012/13, N= Number of respondent,  $X^2 = 37$ . and Contingency coefficient = 0.565

**4.2.5 Summary of the Finding**

The following variables affected the academic performance of the female students in the study area. Table 19Relation between academic performance and independent dummy variables  $X^2$

S.No	Variable	$X^2$ value	
		Dummy variable	Discreet variable
1	College Community behavior	34.815 ***	-
2	Social Participation	-	80.927 ***
3	Parents Educational Level	-	93.540 ***

4	Student Background	-	59.738 ***
5	Family Income	-	96.969 ***
6	Part-time Job	31.923	-
7	Sex Discrimination on campus	46.8 ***	-
8	Sanitation Facilities	43.132***	-
9	Boarding and Lodging on campus or Dormitory and Cafeteria Services	-	1.337***
10	Self-esteem	-	41.135***
11	Fear of performance	-	85.958***
12	Attitude towards profession or as DAs in future	37.*	-

**4.3. Qualitative Data Analysis**

According to Focus Group Discussion with key informants, college officials, third year male students and instructors of third year students the following result were revealed. FGD indicated that academically weak students are not approaching the administrative body and good performing students commonly have got the support make communication with different issues, such as on the teaching learning methodology of instructors, on the coverage of the course totally, on the sanitation and hygiene problem of the college, etc. The result obtained from the FGD and the in-depth personal interviews with the college officials and male and female instructors respectively revealed that the probable reasons for the current academic performance of male students at ATVET in general and the 3<sup>rd</sup> year female student in particular could be due to absence of support, follow up, absence of tutorial class especially for female, absence of the guidance and counseling office, sanitation problem, absence of regular water provision; lack of effort and awareness on the value of education for female students; low social participation and self-esteem of the students; negative attitude of female students towards DA profession in the future. Low self-esteem: As mentioned by the different respondents, due to traditional attitudes and early grown low self-concept in being female, girls develop poor perception, lack of vision, hopelessness and assume girls lower than boys. These challenges are affect girls in engaging academic matter and performing well.

The FGD indication of female student on guidance and counseling with the academic performance, there is total absence of the guidance and counseling in the college. The total absences of this were affecting the female student highly. The result obtained from the FGD conducted with male student, administrative officials, male and female teachers indicated that insulting, snatching Mobil phone, asking telephone number, coming up to the dorm, and forcing to talk were some of the indicators of sexual harassment occurred on female students. The majority of these acts have occurred

by the youth and some young male student groups. Sometime rape attempt also occurred on those students who live alone in rent house for attending their education and presence of sex discrimination on campus from the side of student reveal while teachers did not agree with this view.

Thus, the triangulation made with qualitative data and quantitative data go almost hand in hand except the sex discrimination on campus.

**5.1 CONCLUSION**

The findings of the study indicated that; there are important factors that influence negatively or positively that of female students academic performance in Wolaita Sodo ATVET College. College community behavior toward female student, social participation of female student, parents educational status, economic and family related problems, self-esteem and fear of performance. Each of these categories contains one or more specific problems. The first problem is found to be fear of failure. The second and the third problems constitute economic and being placed in the departments they are enrolled. There exists a significant correlation among the support from teachers, support form administrative body, support from parents, problems female students encounter in higher learning institutions, Students background, parents income of the student, part-time job of the student, absence of tutorial class for student, presence of sex discrimination, Sanitation problem, Guidance and Counseling service absence, Self-esteem and Fear of performance some of the basic problem that encounter student in College.

The interview, FGD and questionnaire made with female students have revealed that the major factors for their low academic performance are the following:

- The college administrative body did not frequently supervise student in general and female student in particular.

- Female student participation on different clubs on campus was discouraging.
- Parents' illiteracy and Parents' incomes affect female students' academic performance.
- The existence of sex discrimination on campus affect female student academic performance, even though instructors and administrative body disagree.
- Toilets cleanness is very bad; it was exposed to outsiders who come for meetings and trainings in college, there was also no sustainable water provision for the toilets, dormitory is also cleaned by the student themselves, thus, solid waste generated from the dorm were dumped near the dormitory.
- The college has no cafeteria service provision for student on campus.
- The absences of high self-esteem on the students have a negative impact on their average pass mark which in turn influences their academic performance.
- Subject wise fear and exam fear of female student was influence academic performance of female student.
- At the ATVET College of Wolaita Sodo have no regular tutorial class provision, no guidance counseling service, no scholarship availability and reservation for female student at all in the college for female students.

The descriptive analysis has pulled out all the above variables as important predictors of female students' academic performance. Parental relationship and support has been one area of study that has received attention from a number of researchers studying factors affecting the academic achievement of students in various locations in the country. A growing body of evidence from these studies indicates that parental involvement and support correlates positively with academic achievement. A study by Young (2000) involving students from the secondary schools in USA found that parental involvement in their children's education contributes positively towards academic success. Parents reported being involved in a number of ways such as supporting the development of their children, building and strengthening relations with schools and their children and being role models for their children. These findings were later echoed by Mahler & Zehm (2000) who brought in the African American perspectives when they also highlighted that students from all ethnic and socio-economic levels perform well when they see their parents involved in their schooling, be it at home, or at school. Even in the United Arab Emirates (UAE) parental involvement was identified as having a strong

influence on the development and academic performance of children (Abu-Hilal, 2001).

## 5.2 RECOMMENDATIONS

One of the purposes of this study was to assess the female students' academic performance in Wolaita Sodo ATVET College with compared to their male counterparts; to assess the major challenges of the study area in improving female students' academic performance; and to suggest strategies that may help to improve female students' academic performance. The research has tried to identify the socio-demographic factors, economic factors, psychological factors and the institutional factors that are significantly affecting areas in female students' academic achievement.

Socio-demographic factors such as the social participation, parents educational level and the college community were statistically significantly affect in female students' academic performance. Furthermore, the result obtained from the FGD conducted with all categories; and the personal in-depth interviewee made with the administrative officials and primary data indicated that to improve academic performance of female students' in the study college, the followings are essential:

Firstly, creating awareness and bringing the necessary attitude change on the college communities that frequent supervision of administrative body on students in general and female student particularly is strongly recommended. The college officials' should encouraged the female students to participate in all possible club activities. The college should give special follow-up for poorly performing student, because of parents illiteracy affect their academic performance.

ATVET College should provide special support for students with academically poorly performing. Those students who are joined from economically poor family, they are also academically poor. These condition express that the relationship between academic performance of female student and economic condition of the female.

Furthermore, institutional characteristics such as s and supportive mechanism discrimination on campus and sanitation facilities as well as absence of provision of tutorial program could affect their achievement.

Low self-esteem: As mentioned by the different respondents, due to traditional attitudes and early grown low self-concept in being female, girls develop poor perception, lack of vision,

hopelessness and assume girls lower than boys. These challenges affect girls in engaging academic matter and performing well.

Inadequate supportive mechanisms: As revealed by most FGD participants and respondent students, in the study area the absence of guidance and counseling, the absence provision of tutorial services and other supportive mechanisms, particularly, the overall academic environment is not adequate and supportive for girls. The issue is related to major challenges of female academic achievements.

Secondly, creating a mechanism through which the instructors and female students should be engaged by the college authorities to discuss frequently as it will help solve many academic problems besides psychological depressions. Cafeteria service provision for student on campus level is a must. The college may arrange seminars or lectures, workshops where eminent speakers might deliver speeches that will boost the self-esteem of female students. The college should have regular tutorial class provision, and guidance counseling service, scholarship availability for female students is a must. The female students have a separate toilet with provision of water. Outsiders coming to college should not be allowed to use the female toilets. The College should provide basic dormitory materials such as blankets, pillows, bed and bed-sheets in hygienic condition.

Provision of basic sanitation facilities in the college for female students; improving the infrastructure facilities; empowering the college women teachers to concern on girls education; Creating a conducive environment for male and female teachers' involvement to improve girl's education; establishing vocational training scheme for female students; Provision of the necessary education materials; supporting and strengthening the college mini-media activities; special tutorial service for female students to strengthening their study; that encourage girls education; and strengthening the existing adult education; close assistance and encouragement from the college community; supporting the students to develop self-esteem; good cooperation and coordination among the department head and academic and student dean, the women affairs office, the Parent teacher association, and the college community.

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