

## GENDER DISPARITY, EDUCATION AND EMPOWERMENT; IMPLICATIONS FOR SUSTAINABLE DEVELOPMENT: A CASE OF SOUTH ETHIOPIA PUBLIC UNIVERSITIES

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**ABSTRACT:** *Mean scores respectively showed that, empowerment is a multidimensional concept, which purports to measure a woman's ability to control resources, her ability to choose and control different outcomes, getting social acceptance, and above all to enhance her self-esteem. Education as very important tools in the realization of empowerment, and maintain parity. Since it significantly matters to the broad-based development agendas of the country, the main objective of this study is critically explore gender disparity, education and empowerment in Southern Ethiopia higher institutions. In order to answer the basic research questions, this study were employed cross-sectional survey and correlation research design. On the other hand, the study used a concurrent mixed approach, in which both the qualitative and quantitative data were generated from the respondents at the same time. Moreover, the study was quantitative dominant qualitative. The current study conducted on three public Universities (Hawassa, Arbaminch, and Wolaita). In the due course, a multi stage sampling technique were used to draw the necessary sample size for the study. Based on this technique, a total of 341 respondents were taken and the sample size determination focuses on 95 % confidence level and within 5 % confident limit. In the latter case, descriptive analysis was carried out. This includes average mean, standard deviation. Pearson product moment correlation based on the level of measurements of the variables were used to check the inter items correlation. Two-sample t-test were used to see mean difference among variables. Chi-squared test were also used to see the relationship between two categorical variables. One way ANOVA were used to see the variations between and within groups by considering its assumptions. Moreover, binary logistic regression model adopted to determine the relationship between a binary dependent variable (empowered or disempowered) and a set of independent variables at Beta label ( $\beta$ ). From the results of this study, it can be said that despite the fact that improvement in women education, monthly incomes; the level of empowerment in their economic, socio-cultural, legal and political dimensions is not significant as compare to their counterpart. The t-test result reveals, there is statistically significant mean difference in females' academic rank and their participation in different positions of the university at 0.01 % and 0.05 % significant level respectively. Furthermore, there is statistically significance relationship between empowerment and education. In nutshell, in this study it is investigated that the level of women empowerment based on five empowerment dimensions were at a very infant stage at the sample universities. Thus, to effective gender parity and economic, socio-cultural, legal, political and psychological empowerment the researcher recommended different strategic pillars.*

**KEYWORDS:** Gender, Disparity, Education, Empowerment, Development

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### INTRODUCTION

In order to transform the developing countries and to build caring and inclusive societies, the attention of gender empowerment are the very prominent which needs the participation of all nation of the world (AU, 2014).

African Union agenda -2063 remarked that, no society can reach its full potential, unless it empowers women and remove all obstacles to women's full participation in all areas of human endeavors and to flourish and reach their full potential (AU, 2014).The Platform for Action and the Beijing Declaration (1995) identifies education as very important in the realization of gender empowerment, parity and social development.

Education plays an important role in gender parity and will help woman in securing their employment, provides information to women about their rights, household decision making, self- esteem and self-confidence and it is indeed necessary to explore further what specific factors work against girls' education in the society (Oyitso & Olomukoro, 2012).

Michael ( 2009) clearly stated that educational institutions is the key target of gender empowerment as it involves the way in which societies transfer norms, knowledge and skills and crucial to empower both men and women and take caution in counterbalancing the existing gender disparities. Universities should be held accountable in ensuring that they do not institute programs that be responsible for existing gender disparities.

Furthermore, investing in women's education carries very high returns; it improves livelihood, leads to better child and maternal health, and favors girls' access to education (Boliva, 2010) and it empower women for social justice and to accelerate better social transformation (MDG, 2000). Empowerment eliminates wrong value systems and oppression beliefs from the society and can be achieved through educating girls, creates a situation where there is no gender discrimination, use their skills to build a friendly society (Swain and Wallentin ,2009)and maintains equal distribution of power between the sexes.

Empowerment of women in a society leads us to improving the condition and status of women in all spheres (Kishor,2005). It is a multidimensional concept, which purports to measure a woman's ability to control resources, her ability to choose and control different outcomes, getting social acceptance, and above all to enhance her self-esteem. Since it significantly matters to the broad-based development agendas of the country, the main objective of this study is critically explore gender disparity, education and empowerment in Ethiopian higher institutions particularly in Southern region. To measure the level of empowerment, five empowerment dimensions (economic, social-culture, legal, political and psychological) were employed.

Economic empowerment as the process which increases women's real power over economic decisions that influence their lives and priorities in society and seeks to ensure that people have the appropriate skills, capabilities and resources and access to secure and sustainable incomes(SIDA, 2009). It entails women's control over income, relative contribution to family support, access to and control of family resources, women's access to employment, ownership of assets and land, access to credit, involvement and/or representation in local trade associations, access to markets, women's representation in high paying jobs, representation of women's economic interests in macro-economic policies, state and federal budgets (CIDA, 1996).

Social-cultural empowerment conceptualized as multidimensional social process which incorporates women's freedom of movement, lack of discrimination against female, commitment to educating females, women's visibility in and access to social spaces, access to modern transportation, participation in extra-familial groups and social networks, shift in patriarchal norms (such as male preference), symbolic representation of the female in myth and

ritual, women's literacy and access to a broad range of educational options, positive media images of women, their roles and contributions (CIDA, 1996)

Piron and Watkins, (2004) considered political empowerment as the capacity to analyze, organize, lead, and mobilize. This results in the collective action that is needed for collective change. It is often related to a rights-based approach to empowerment and the empowering of citizens to claim their rights and prerogatives. It entails knowledge of political system and means of access to it, domestic support for political engagement, exercising the right to vote, women's involvement or mobilization in the institutional political system/campaigns, support for specific candidates or legislation; representation in institutional bodies of government, women's representation in Federal or institutional structures of government, representation of women's interests in effective lobbies and interest groups (CIDA, 1996).

CIDA, (1996) conceptualized legal empowerment as knowledge of legal rights, domestic support for exercising rights, laws supporting women's rights, access to resources and options, and advocacy for rights and legislation, use of judicial system to redress rights violations, community mobilization for rights, campaigns for rights awareness, effective local enforcement of legal rights.

Psychological empowerment also considered to be a cognitive state characterized by a sense of perceived control, perceptions of competence, and internalization of the goals and objectives of the organization (Spreitzer, 1996); self-esteem, self-efficacy, psychological well-being as (CIDA, 1996).

### **Statement of the Problem**

Although societal views over women's role is undergoing continuous transformation, women are still perceived as being less suited than their counterparts in different public sectors and positions. Therefore, unless the root cause of this problem is addressed, glass ceiling will remain firmly in place, and women's empowerment (social-cultural, economic, and political) over the next decades will remain low (Snowdon, 2011). Since the education of girls and women is rightly considered to be the key for changing the public attitudes in order to improve women's socio-economic and political status at all levels, it is indeed necessary to explore further what specific factors work against girls' education in the society.

Unarguably at different geographies of scale, education is recognized as the cornerstone for empowering women and sustainable national development and help women's to achieve opportunities in economy as well as it is a powerful tool of social transformation (Oyitso & Olomukoro, 2012). Hence, education for women has multiple advantages and need to be maintained for such ends.

To strengthen the link between women education, their empowerment and development, Imhabekhai & Olomukoro (2007) point out that education is a basic instrument in social transformation and modernization. It paves the way to development and its possession or otherwise facilitates or retards the level of development. Ezegbe & Akubue (2012) assert that, any society which neglects women in terms of their potential will never achieve socio-economic and political empowerment in the society and social transformation.

As evidenced by developed and industrialized countries that they would not have been able to reach the present level without research, development, and technological transformation all of which require educated women and men (Naomi, 2012). However, the participation of women

in education in developing countries, particularly in Ethiopian higher institutions is insignificant when comparing with their counterparts (CSA, 2014).

Although a number of efforts have been made by the government of Ethiopia and different development partners to address women's and girls' educational attainments, women's and girls' participation and equal access to education remain a challenge at higher education level. In this regard, different studies reported factors behind such overarching challenges. For instance, a study by Emebet (2000) clearly emphasized the constraints against girls' education in to four major factors: economic, family, school, and culture related with each influencing the other.

The labor markets of many developing societies which are characterized by low participation of women have impacts on their education (Gennet, 1998). In Uganda, women constitute 51% of the total population and 31.4 percent of its total labour force (UBOS, 2006). Female labour market participation in Ethiopia has increased in recent years but remains lower than of men. Having knowledge of limited number of job opportunities reserved for women, affects the occupational aspirations and expectations of female students. The selection of field and specialization by parents and teachers will also be influenced by the knowledge of which job is available for women. For instance, in Ethiopia, more worrisome is the fact that barely 9.5% academic staff in public tertiary institutions were women in the academic years of 2011/12 (MoFED, 2013). The societal values that are reflected in the structure of school, its administration, the "hidden" curriculum, teachers behaviors, and attitude, as well as the school textbooks works as influencing agents on women's education (Gennet, 2014).

As we can see the trend of enrollment of women in other countries, women's shares of enrollment in Latine America colleges and Universities is often quite high: Brazil-53%, Argentina-47%, Chile-42 %, Asian countries follow in both India and China 1/3 of college students were women (Jacobs, 1996). Whereas, though there is an increasing in the enrolment of female in Ethiopian higher institutions from time to time, a large percentage of female students also dropout and repeat classes.

**Table 1: Trend of Enrollments in Higher Education Institutions (HEIs) by Program Level (Undergraduate Degree: Government)-Ethiopia**

Year	Regular		Evening		Summer		Distance		Total		% F
	BS	F	BS	F	BS	F	BS	F	BS	F	
2009/10	190043	49921	49553	12836	65575	14422	38936	11140	344107	88319	25.7
2010/11	211197	54159	49044	13864	75292	17592	33721	10271	369254	95886	26
2011/12	250229	66203	54570	16301	85319	19448	28847	9305	418965	111257	26.6
2012/13	294357	82301	61160	19633	88030	20912	30651	9380	474198	132226	28
2013/14	308589	88136	59079	18914	102642	24115	33259	10529	503569	141694	28.1

*Note: BS-Both sex, F- Female (Source: Educational Statistics Annual Abstract-2006 (2013/14))*

For instance, in Ethiopian higher institutions, the total enrolment rate was 25.7%, 26 %, 26.6%, 28 %, 28.1% in five respective years of 2009/10, to and 2013/14. Of this, only 13.8%, 17 %, 14.3% female were graduated in undergraduate programs (EMIS, 2015).

**Table 2: Trend of Enrollments in Higher Education Institutions (HEIs) by Program Level (Undergraduate Degree: Non- Government)**

Year	Regular		Evening		Summer		Distance		Total		% F
	BS	F	BS	F	BS	F	BS	F	BS	F	
	17136	7950	14516	7950	450	196	44178	Female	76280	25310	33.2
2010/09/10	16833	8158	14681	7047	144	57	47123	Female	78438	25038	31.9
2010/11	19633	9631	19108	10069	377	162	36027	Female	75145	27846	37.1
2011/12	23442	12652	18696	9618			37512	Female	79650	33915	43
2012/13	26489	14297	21126	10868			42389	Female	90005	38324	42.6
2013/14											

**Source: Educational Statistics Annual Abstract-2006 (2013/14)**

As compare to Non- government higher education institutions, the trend reveals that the total enrollment of female students in the consecutive academic years from 2009/10 to 2013/14 which is 5 years trend was 33.2%, 31.9 %, 37.1%, 43 %, and 42.6 % respectively. Which is better than even public universities (EMIS, 2015).

In case of post graduate programs, the total enrolment rate from 2009/10 to 2013/14 was only 11.9 %. Of this, only 39%; in 2010/11, 13.8 % of this, 32%; in 2011/12, 20.2 %, of this, 16.67% women were graduated (MoFED, 2013). The total enrollment in the academic years of 20132/13 and 2013/14 was 19.5%. Furthermore, the following tables depicts the five years enrolment trends of Ethiopian higher institutions from the academic years of 2009/10 to 2013/14.

**Table 3: Trend of Enrollment in Postgraduate programs in Both Government and Non-Government Higher institutions**

Year	Government				Non -Government				Total		% Female
	Masters		PhD		Masters		PhD		BS	F	
	BS	F	BS	F	BS	F	BS	F			
2010/09/10	12621	1485	791	47	860	171			14272	1703	11.9
2010/11	18486	2490	789	99	875	193			20150	2782	13.8
2011/12	22804	4635	1849	319	1007	228			25660	5182	20.2
2012/13	25103	5043	3165	356	3036	697			31304	6096	19.5
2013/14	26117	5246	3292	370	3158	725			33882	6597	19.5

**Source: Educational Statistics Annual Abstract-2006 (2013/14)**

**Table4: Higher Education Enrolment by Gender (in %)**

Education Level	2005/6		2006/07		2007/08		2008/09		2009/10	
	M	F	M	F	M	F	M	F	M	F
Higher Ed	75.7	24.3	74.5	25.5	76.3	23.7	71.5	28.5	73.1	26.9
	%	%	%	%	%	%	%	%	%	%

**Source Data compiled from Ministry of Education and CSA, 2012**

UN, (2010) stated that, the standard of gender gap in education is measured by the Gender Parity Index (GPI) which is computed as the quotient of the number of females by the number of males enrolled in a given stage of education. As we can see from the table above, there is little improvement in enrolment at higher education level from 0.32 GPI<sup>1</sup> in 2005/6 to 0.36 GPI<sup>2</sup> in 2009/10 (CSA, 2012). These are small improvements, but improvements nonetheless. It can infer that still a big disparity in the proportion of female and male students at this level of education. Such a wide gap between male and female enrolment at higher education level is likely to hinder the opportunities of female to assume the responsibilities and accountabilities in the government institutions at different levels. It is also likely to block maintaining sustainable socio-economic and political empowerment of women.

By the same token, in many countries, women are found at the lower level of the educational hierarchy. The percentage of women at the highest echelon of educational administrations (department chairs, deans, presidents) is very low (UNESCO, 2010). For instance, as South African Statistics (2003), the average number of women in senior management is about 24% across all the current institutions of higher learning and 20 % in corporate sector. This statistics indicates that South Africa faces a challenges when it comes to the participation and visibility of women in leadership both academia and the corporate sector.

As we can see the Ethiopian case, Gennet (2014) pinpoints that measures that help to make the education system gender friendly such as having women teachers, directors, and supervisors are still lagging behind. In this regard in Ethiopia, the male employees holding of BA/BSc and above degrees were within the range of 83.0 % to 88 % over the period of 2000 to 2010 from the entire number of employees at the federal level. The female were in the range of 17 % to 12% which implies that there is a pronounced disparity between male and female employees at educational levels of BA/BSc and above in a given country (Deribe et al., 2013).

**Table 5: Trend of Academic Staff in Higher Education Institutions (HEIs) in Regular Programme and Percentage of Females in Ethiopia**

<i>Year</i>	<i>BS</i>	<i>Female</i>	<i>% Female</i>
2010/10	13176	1465	11.1
2010/11	15255	1286	8.43
2011/12	17990	1631	9.06
2012/13	20051	1910	9.5
2013/14	20389	2218	10.9

**Source: EMIS, 2015 Education statistics annual Abstract 2013/14**

As we can see from the table above, the pattern of female academic staff from the years of 2009/10 to 2013/14, was 11.1 %, 8.43%, 9.06%, 9.5%, and 10.9 % respectively. It infers that the participation of female academic staff in the 5 years experiences was negligible as compare to their counterparts. Despite the importance of women's contribution to the country's economic development, they have been largely invisible and their participation in the public academic institutions not significant and even has decreasing trends.

Literature also indicated that, the contributions of women to the household income or expenditure are great whether they are working for paid jobs or are self-employed. The Global Monitoring Report of 2007 indicated that the contributions of women in poor households are crucial for maintaining the families. In emphasizing the importance of women's economic

contribution, a World Bank Gender Action Plan, quoted in the Economist (2006) states that, economic growth is driven by women and the economic growth of any country without women participation is unthinkable.

The Global Gender Gap Report (GGGR) (2013), promotion to a higher position is more difficult for women as they are viewed as incompetent and not reliable enough to take up responsible positions. For instance, in the state minister positions of Ethiopia, the participation of women declined from 10.6 % to 6 %. With regard to decision-making position by gender to judiciary levels, the proportion of women declined from 34.1% to 26.5 % in the years of 2006/7 to 2010/11 (Deribe et al., 2013). This can be an indicator of how gender perspectives have not been gained more attention in the development agendas of the government or there is less commitment of all stakeholders to promote gender issues in the entire country.

Gennet (2014) scrutinized the other major challenge of women in Ethiopia as the patriarchy structure of the society. It has curtailed women from having education, gainful employment or access to property, access to leadership and decision-making participation and in the process they have been subjected to despicable dependence on their fathers, husbands and sons. For EMIS (20 13/14), more than 98 % of Ethiopian higher institutions top positions highly dominated and controlled by male executives. This in turns, leads to underutilization of the marginalized women potentials and losing the contribution of women for over all socio-cultural, economic and political development. Gennet also presented different initiatives introduced by government to overcome and balance the empowerment of men and women in different public sectors, including higher institutions.

Despite the government's to attempt to introduce many initiatives to empower women and to narrow the gaps, the effectiveness of the program has been questioned and significant changes are not yet recorded in the socio-cultural, political and economic empowerment of women at higher institutions. Furthermore, although there have been a number of research works on gender issues in Ethiopia, many of the studies (e.g., Amogne, 2015; Wakgari & Teklu, 2013) focus on gender disparity in academic achievement, achievements and challenges of gender mainstreaming in leadership and decision-making (Deribe et al., 2013), (Hora 2014) in factors that affect women participation in leadership and decision making position. Nonetheless, research conducted in the gender disparity, education and empowerment in Ethiopian higher institutions is quite limited. Thus, the main objective of this study is critically exploring the gender disparity, education and empowerment in South Ethiopian higher institutions to which I am familiar with the trends and culture of the region. To achieve its purpose, the study was guided by the following research questions:

1. What is the extent of empowerment (economic, social-cultural, legal, political and psychological) of women with different education level at higher institutions of Southern Ethiopia?
2. What are the factors that impede women empowerment in higher institutions of Southern Ethiopia?
3. Are there associations among gender, education, and women's empowerment in the context of Southern Ethiopian higher institutions?

## RESEARCH METHODOLOGY

### Research Design and Justification

In order to answer the basic research questions, this study were based on both cross-sectional and correlation research design. This is because the nature of the study, basic research questions, and variables of interest demand such kind of research designs. Thus, this study adopts the same approach to make use of the potential benefits of it. On the other hand, the study used a concurrent mixed approach, in which both the qualitative and quantitative data were generated from the respondents at the same time. Moreover, the study was quantitative dominant qualitative.

There are 7 public Universities in Southern Ethiopia. These universities differ in their staff capacity, resources, year of establishments and many other indicators. Accordingly, Southern Ethiopia consists of three first generation, two second generation, and two from third generation universities. The current study conducted on three public universities. The selection is based on their population proportion and the years of establishment. The universities include, Hawassa, Arbaminch, and Wolaita. In the due course, a multi stage sampling technique were used to draw the necessary sample size for the study (Purposive sampling technique for top officials, Deans, Department heads, Directors; whereas availability sampling technique for female instructors and academic staff and FGD). Based on this technique, a total of 341 respondents were taken and the sample size determination focuses on 95 % confidence level and within 5 % confident limit according to (Sidhu, 1973).

Multiple tools of data generation were used. The tools include, survey questionnaire, key informant interviews, and document analysis. Once the relevant data is generated from primary and secondary data sources, the analysis were involved both qualitative and quantitative techniques. In the former case, description, classification and connections of cases based on themes were carried out where cases in boxes and quotes were used. In the latter case, descriptive analysis was carried out. This includes frequency tables and measures of central tendency (average mean, standard deviation). Pearson product moment correlation based on the level of measurements of the variables, were used to check the inter items correlation. Two-sample t-test were used to see mean difference among variables and chi-squared test were used to see the relationship among the two variables.

One way ANOVA was used to see the variations between and within groups by considering its assumptions. Moreover, binary logistic regression model adopted to determine the relationship between a binary dependent variable (empowered or disempowered) and a set of independent variables (age, sex, level of education, years of services, place of residence, academic rank, marital status, religion, position held, monthly salary). The quantitative analysis was carried out by employing statistical analysis software Stata (13.0).

I collected data using a questionnaire administered to academic staff (academic leaders and teaching staff) within three public universities found in southern parts of Ethiopia to which the researcher is familiar with the women empowerment trends. Of the 341 distributed questionnaires, 332 were received, which provides a response rate of 97.3 %.

### Measures

This study assesses the five empowerment dimensions perceived by the academic staff (Deans, Department Heads, Directors, Presidents and Lecturers) of three respective universities which



is Hawassa, Arbaminch and Woliata Sodo universities. The scale contains five main items such as economic, socio-cultural, legal, political and psychological empowerment and each of the five items have its subscale components (*52 items totally*). A Likert-type scale enables the respondents to evaluate each item by providing five alternatives, scoring 0 - Not at all, 1- Once a while, 2- sometimes, 3- Fairly often and 4- Frequently , if not always. The higher scores indicate the perception of being more economically, socio-culturally, legally, politically and psychologically empowered. The measures of empowerment were measured using self-reports

### Analyses

In assessing the reliability of scales used in the questionnaire a coefficient of internal consistency was calculated using Cronbach's alpha methodology. Cronbach's alpha is a widely accepted test of reliability and Spreitzer (1995) reports the alpha measures of each dimension generally fell above .70 therefore; reliability of measures are acceptable which is  $r=0.974$ . The results for the statements contained in the empowerment assessment instrument for both dimensions are shown in Table 1.

**Table 6: Reliability of Empowerment Dimensions at Cronbach's Alpha Label**

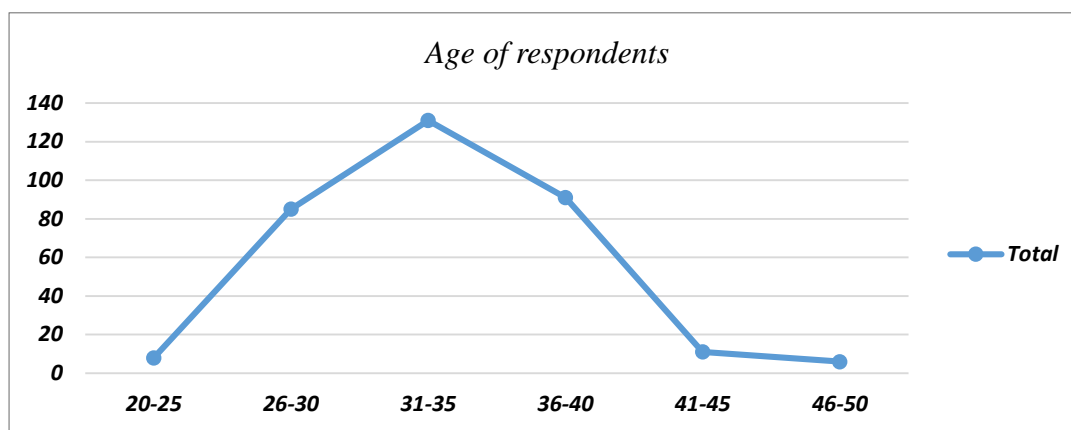
<i>No</i>	<i>Variables</i>	<i>Reliability at Alpha Label (<math>\alpha</math>)</i>
<i>1</i>	Economic Empowerment	<i>0.9702</i>
<i>2</i>	Socio-Cultural Empowerment	<i>0.9703</i>
<i>3</i>	Legal Empowerment	<i>0.9704</i>
<i>4</i>	Political Empowerment	<i>0.9706</i>
<i>5</i>	Psychological Empowerment	<i>0.9711</i>
<i>Scale reliability coefficient at Alpha Label (<math>\alpha</math>)</i>		<i>0.9742</i>

### Presentation and Analysis of Major Findings

#### Part One: Demographic Characteristics of the Respondents

As it has been clearly stated in the methodology part of the paper, the researcher has distributed and successfully collected 332 questionnaires for academic staff of the three universities to have adequate information regarding its gender empowerment dimensions. Below are the demographic characteristics of the respondents in terms of age, sex, working position, year of service, academic rank, and level of qualification, marital status and place of residence. Since the sample size is good enough to represent the total population, the researcher has opted to put in figures as follow:

As figure 1 shows below, 8 respondents from the age category of 20-25, 85 respondents from age category of 26 - 30, 131 respondents form age category of 31 - 35, 91 respondents from age category of 36 - 40, 11 from 41 - 45 and 6 from above 46. The graph also reveals the majority of respondents under the category of 31 - 35 and 36 - 40.

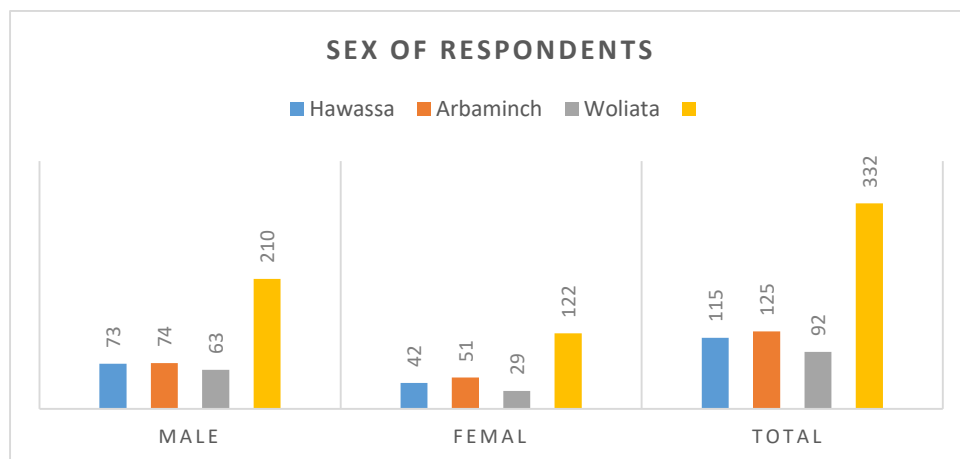


**Fig 1: Graphic Representative of Age Profile of Respondents of Academic staff**

In gender empowerment context, the availability of varied age groups was essential to identify values, assumptions and level of perceptions of the staff from three universities. Thus, the respondents were from different age group to provide ample information to identify the level of gender empowerment of three universities.

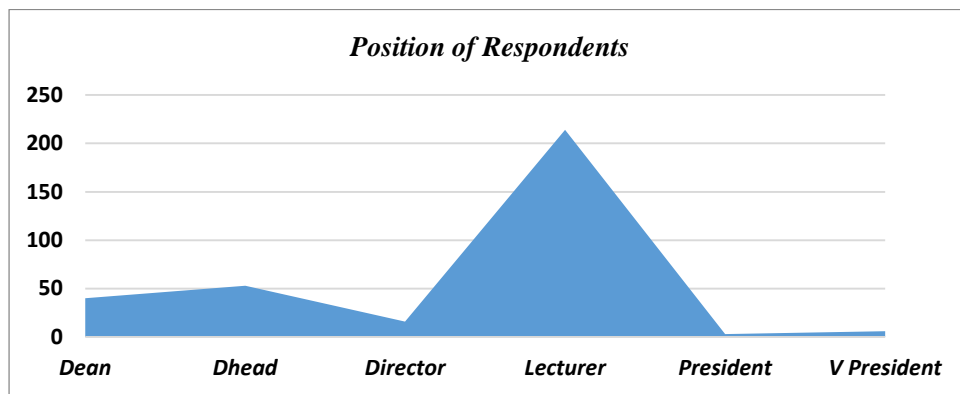
As figure 2 depicts, only 122 (42, 51, 29) (36.74%) of academic staff respondents from three universities (Hawassa, Arbaminch and Woliata) were females respectively. The remaining lion share of proportion, that is, 210 (73, 74, 63) which is (63.26%) of academic staff respondents were males.

**Fig 2: Graphic Representative of Sex Profile of Respondents of Academic staff**

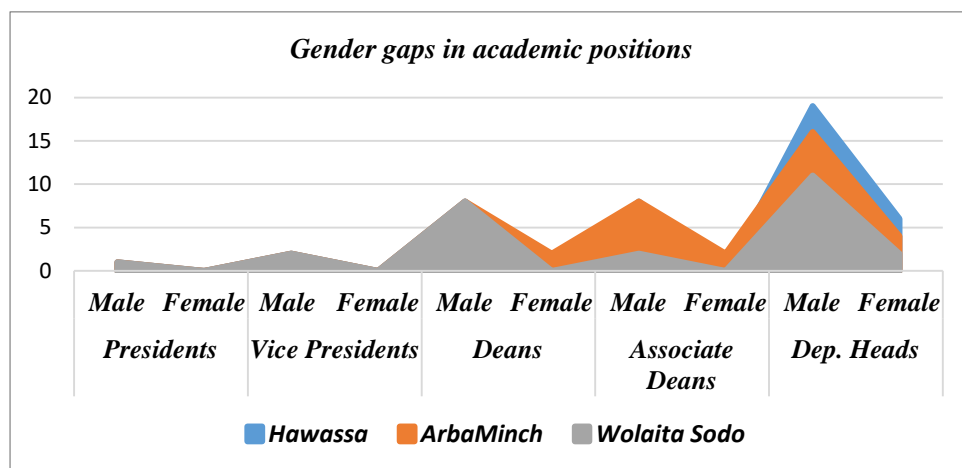


The data make clear that females' participation in all three universities was insignificant as compared to their counterparts. Hence, three universities were experiencing higher level of gender disparity.

**Fig 3: Graphic Representative of Academic Position Profile of Respondents**

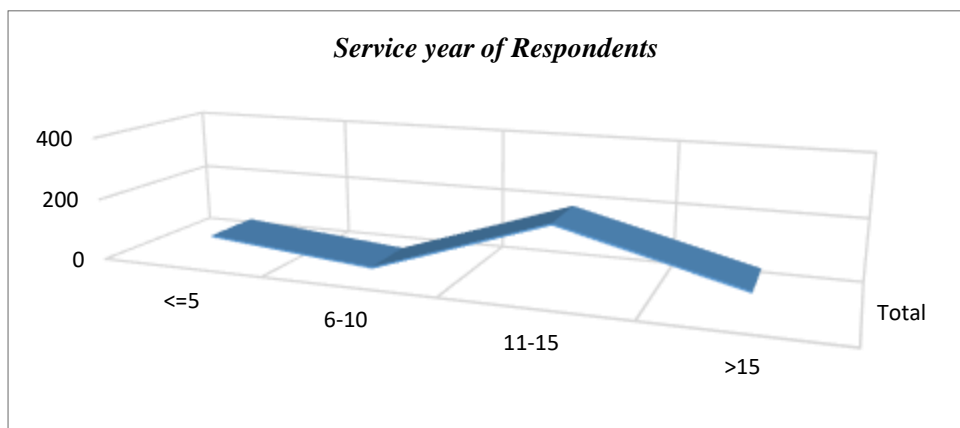


With regards to the academic positions of respondents 40, 53, 16, 214, 3, 6 of academic staff respondents in their respective order were deans, department heads, directors, lecturers, presidents and vice presidents, in different sections of administration of the three universities. The majority of the respondents as the above graph reveals were lecturers. As we can see from figure 4, women were highly underrepresented in academic positions in both universities



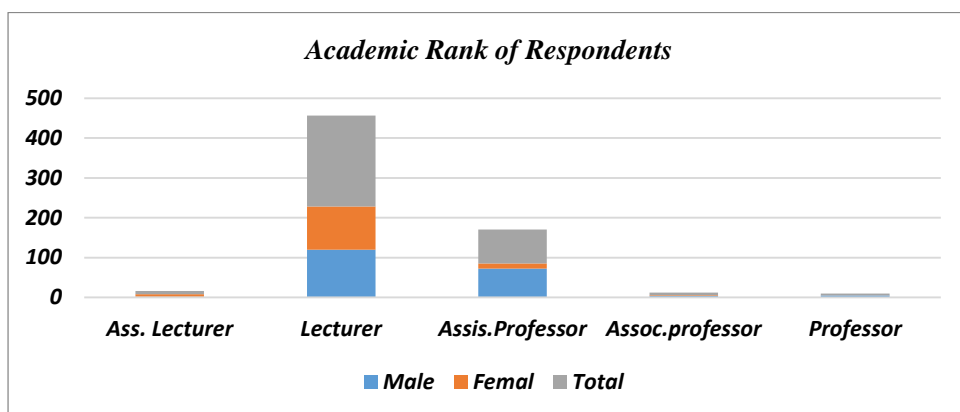
**Fig 4: Graphic Representative of Respondents of Academic staff in terms of Gender Disparity**

Institutions greatly benefit from increasing leadership opportunities for women, which is shown to increase organizational effectiveness. It is estimated that companies with three or more women in senior management functions score higher in all dimensions of organizational effectiveness (Women Matter, 2014). In connection with gender disparity from the above graph, all top positions (presidents and vice presidents, deans and associate dean’s positions occupied by male in Hawassa and Woliata Sodo Universities from total of 16 colleges. But Arbaminch University engaged 4 females in (1 dean and 3 associate deans) leadership positions from the total of 8 colleges. The remaining positions of the Arbaminch University were dominated by their counterpart. This shows that the commitment of the universities leaders to bring female to the academic leadership positions is insignificant in both universities.



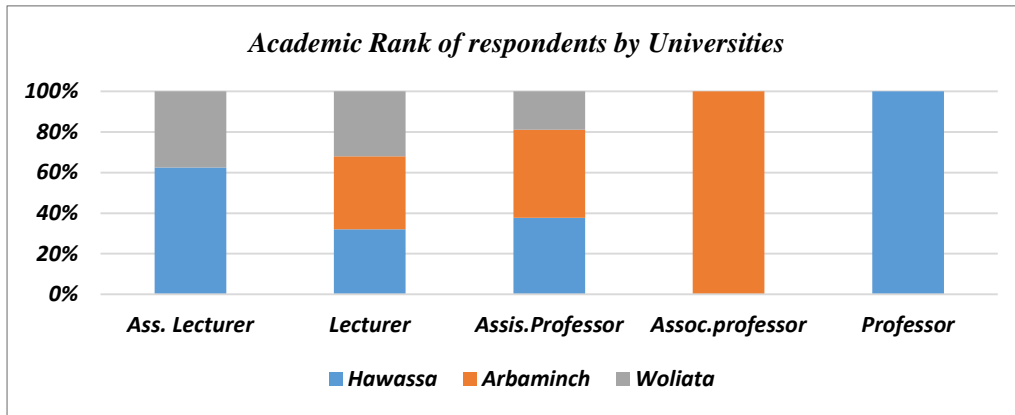
**Fig 5: Graphic Representative Years of Services of Respondents**

When it comes to the service years of the respondents, 59 (17.8%) of the academic staff were served for less than 5 years and above 15 years. Larger proportion of respondents, that is, 203 (61.14%) of the academic staff were scattered between 11-15 years of services as the graph reveals above. The availability of respondents with different years of service or stay in the respective universities could mean that their information is reliable and explanatory to the study pertaining to the prevailing patterns of gender disparity and empowerment.



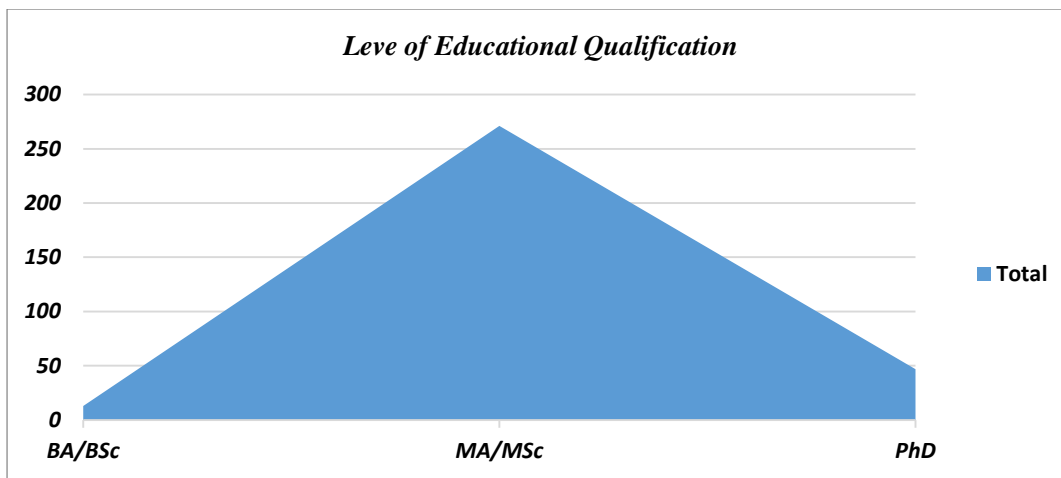
**Fig 6: Graphic Representative Academic Rank of Respondents**

As graph 6 above displays, 6 (75 %), 108 (47.4 %), 13 (15.5 %), 2 (33.3%) of academic staff respondents were female assistance lecturer, lecturer, assistance professor, and associate professor respectively. The remaining 2 (25 %), 120 (53.6 %), 72 (84.5 %), 4 (66.6 %), 5 (100 %) of the academic staff were male assistance lecturer, lecturer, assistance professor, and associate professor and professor respectively. Furthermore, there is no any female associate professor and full professor in the both respective universities.



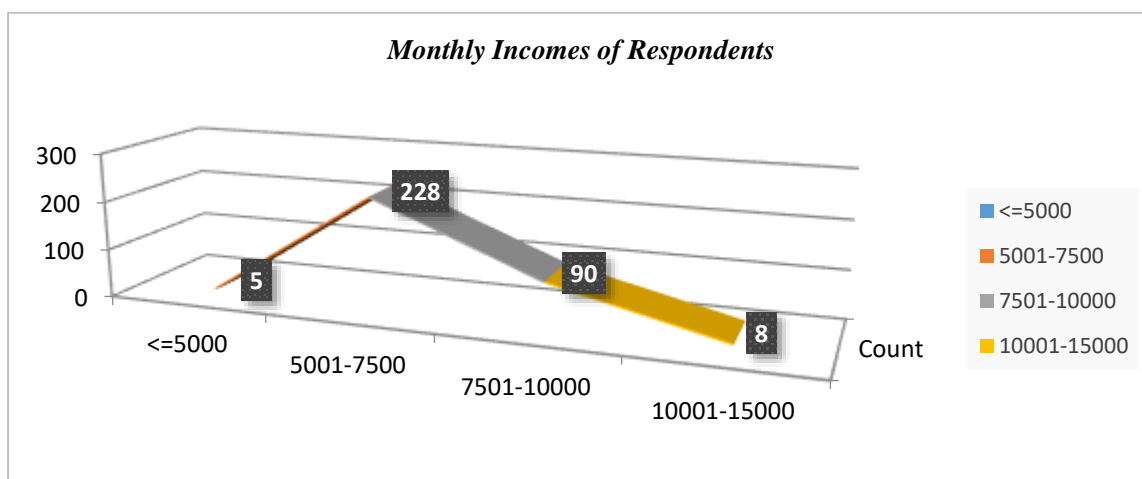
**Fig 7: Graphic Representative of Academic Rank of Respondents by Universities**

In this regards, even though there is better involvement of females in lecturer position, there is still pronounced gender gaps in professorship positions of the three universities.



**Fig 8: Graphic Representative of Level of Educational Qualification of Respondents**

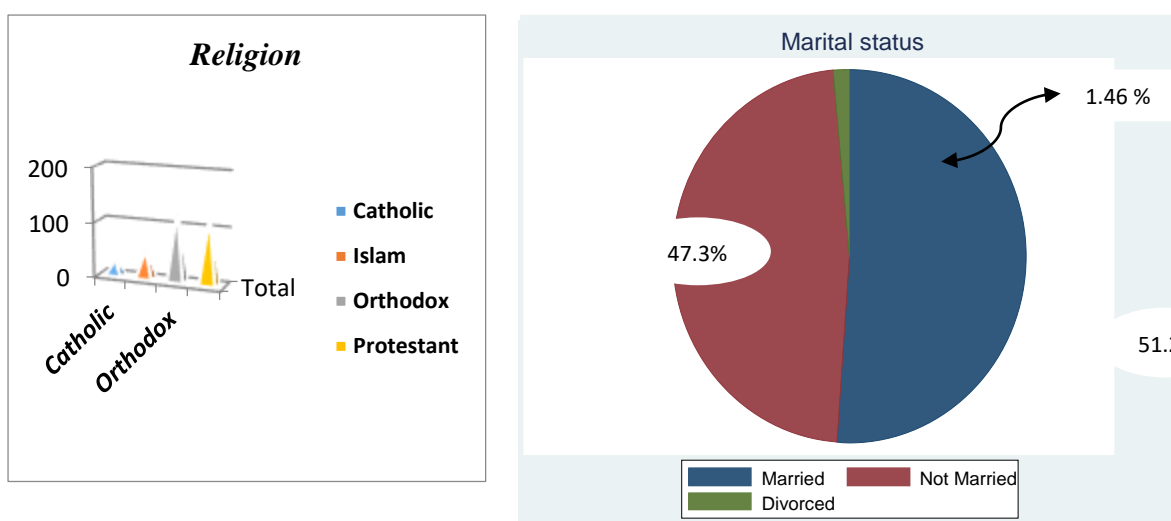
As far as the educational qualification of respondents was concerned, 8 (6 females and 2 males), 271 (156 males and 115 females), 47 (37 male and 10 females) academic staff respectively were BA/BSC, MSC/MA and PhD degree holders. This data reveals that wider qualification gap existed in academic staff with MA/MSC and PhD qualification among the respondents.



**Fig 9: Graphic Representative of Monthly Income of Respondents**

In connection with monthly income of the respondents, the above graph reveals that 228 (69 %) of respondents under the monthly income of 5001-7500 and the other category of 90 (27 %) of the respondents were under 7501-10000 monthly income. Very small number of respondents which is 8 (2 %) and 5 (1.5 %) under monthly income of 10001-15000, and <=5000. Even though the salary scale of the respondents vary based of their level of education, monthly income will increase when academic staff with additional responsibilities of the universities like, dean, department and director and president positions. Furthermore, academic staff who engaged in weekend and extension programs were also increased the monthly income of the academic staff.

**Fig 10: Graphic Representative of Religion and Marital status of the f Respondents**



Religion as one of socio-cultural variable, it plays very prominent roles in women empowerment and advancement in the world. The major reason for incorporating religion as a variable is to see its influence on women future career and level of empowerment. Hence, figure 10 above displays respondent’s religions. Accordingly, the respondents which is 27 (8.13 %),

27 (15.96 %), 129 (38.85 %) and 123 (37.05 %) were members of Catholic, Islam, Orthodox and Protestant religion followers respectively.

In order to see the level of decision of females at house hold level, marital status also very important variable. Therefore, figure two reveals that respondents which is 163 (51.2 %), 146 (47.3 %) and 13 (1.46 %) were married. Among, from total of 129 female respondents, 67 (51.9%) females were married and 62 (48.1%) not married. Similarly, from total of 198 male respondents, 102 (51.5%) were married and 96 (48.5%) were not married. As we can see from the trend, when the level of education increases to both sexes, the opportunities to get married was low.

### **Part two: Logistic Regression Analysis of Different Empowerment Dimensions**

Five different regression models were used to analyze the hypothesis of the research. At first of these models, economic empowerment, then, socio-cultural, legal, political finally psychological empowerment were analyzed and the results were given in the following tables.

**Table 7: Regression Model 1- Economic Empowerment Dimensions**

<i>Variables</i>	<i>Mean</i>	<i>Std.Dev</i>	<i>Std.Coeff.(β)</i>	<i>Std.err</i>	<i>t</i>	<i>Sig</i>	<i>[95% Interval]</i>	<i>Conf.</i>
<b>EEA</b>	1.46	1.30	<b>0.493</b>	0.060	8.17	<b>0.000</b>	.374	.612
<b>EEB</b>	1.92	1.39	<b>0.348</b>	0.042	8.17	<b>0.000</b>	.264	.432
<b>EEC</b>	1.50	1.09	<b>0.188</b>	0.052	3.6	<b>0.000</b>	.086	.292
<b>EED</b>	1.68	1.36	<b>0.258</b>	0.045	5.76	<b>0.000</b>	.169	.345
<b>EEE</b>	1.54	1.09	<b>0.147</b>	0.060	2.42	<b>0.016</b>	.028	.266
<b>EEF</b>	1.67	1.15	<b>-0.139</b>	0.048	-2.92	<b>0.004</b>	-.233	-.045
<b>EEG</b>	1.26	0.89	0.024	0.048	0.49	0.621	-.071	.119
<b>EEH</b>	1.13	0.97	0.017	0.042	0.41	0.683	-.065	.099
<b>EEI</b>	1.64	1.23	0.028	0.048	0.58	0.563	-.066	.122
<b>EEJ</b>	1.63	1.19	<b>0.159</b>	0.048	3.35	<b>0.001</b>	.066	.254

**Note:  $F(9, 322) = 84.16$ ,  $P > F = 0.0000$ ,  $R\text{-squared} = 0.7017$ ,  $Adj\ R\text{-squared} = 0.693$   
Root MSE = .76948**

**Note: EE represents Economic Empowerment**

Women's economic empowerment is recognized as one means for reducing poverty and economic growth. As we can see from the above table, the F value of the first economic empowerment regression model is 84.16 ( $p < 0.01$ ). The whole of ten variables express the dimension of economic empowerment as the ratio of % 70.1 ( $R^2$ ). As depicted in table 7 as the result of analysis, (EEA), women have equal right to control over income as men was rated as 'Once a while' with mean and SD (1.46, 1.30) and ( $\beta = 0.493$ ;  $p < 0.01$ ). The level of economic empowerment of women is not significant to control over incomes as their counterparts.

The second item (EEB), women incomes have relative contribution to family support was rated as 'Sometimes' with highest mean and SD of (1.92, 1.39) and ( $\beta = 0.348$ ;  $p < 0.01$ ). This depicts that, even though women have no equal access to higher institutions employment as the study reveals, there is positive perception of their incomes to support their families. The third item

(EEC), women have access to and control of family and resources as men was rated as “Once a while” with the highest mean and SD value of (1.92, 1.39) and ( $\beta = 0.188$ ;  $p < 0.01$ ) respectively. It also revealed that women have no significant role in access and control over their family resources.

World Bank, (2000) clearly underscored, increased female labour force participation also improves their economic well-being and the distribution of income in the economy. Accordingly, the fourth item (EED), women have equal access to employment as men was also rated as ‘Once a while’ with the highest mean and SD of (1.50, 1.09) and ( $\beta = 0.258$ ;  $p < 0.01$ ), it implies women are still lagging behind to men in line with equal employment access in their respective universities.

As the data reveals, the fifth item (EEE), women have equal right of ownership of the asset and land was rated as ‘Once a while’ with the highest mean and SD of (1.54, 1.09) and ( $\beta = 0.147$ ;  $p < 0.05$ ). It implies that women still are not significantly empowered to equally owned asset and land as their male counterparts. The last item (EEJ), the universities officials, college deans and department heads fairly distribute financial firing benefits to women and men was rated as ‘Once a while’ with the highest mean and SD value (1.63, 1.19) and ( $\beta = 0.159$ ;  $p < 0.05$ ). It shows that the level of fairness in terms of distributions of different benefits to female in the respective universities were not satisfactory. Even the women were not engaged in evening and weekend programs of the universities like Wolaita Sodo and Arbaminch Universities. To sum, the level of economic empowerment of women is at infant stage. Therefore, greater attention needs to be paid to the development of women’s economic empowerment as a way to reducing poverty and promoting economic growth and avoiding dependency.

### **Table 8: Regression Model 2- Socio-Cultural Empowerment Dimension**

Table 8 describes the socio-cultural empowerment dimension of women in their respective universities. As the regression analysis, the F value of the second regression model is 70.62 ( $p < 0.01$ ) and the  $R^2$  is 66.4.

<i>Variables</i>	<i>Mean</i>	<i>Std.Dev</i>	<i>Std.Coeff.(<math>\beta</math>)</i>	<i>Std.er</i>	<i>t</i>	<i>Sig.</i>	<i>[95% Conf. Interval]</i>
<b>SCEA</b>	1.92	1.28	<b>.185</b>	.059	3.10	<b>0.002</b>	.0674 .3025
<b>SCEB</b>	1.47	1.11	<b>.156</b>	.051	3.10	<b>0.002</b>	.0569 .2556
<b>SCEC</b>	1.79	1.24	<b>.366</b>	.055	6.69	<b>0.000</b>	.2580 .4730
<b>SCED</b>	1.50	1.09	.089	.061	1.46	0.146	-.0309 .2081
<b>SCEE</b>	1.75	1.18	.002	.0712	0.03	0.976	-.1389 .1431
<b>SCEF</b>	1.44	.955	.133	.0791	1.69	0.093	-.0223 .2893
<b>SCEG</b>	1.44	1.07	<b>.164</b>	.0541	3.03	<b>0.003</b>	.0576 .2703
<b>SCEH</b>	1.12	1.05	-.002	.0553	-0.04	0.965	-.1112 .1064
<b>SCEI</b>	1.56	1.08	.082	.066	1.24	0.215	-.0478 .2124
<b>SCEJ</b>	1.53	1.09	<b>.159</b>	.053	3.00	<b>0.003</b>	.0551 .2649

**Note: F (9,132) = 70.62; P > F = 0.0000; R-squared = 0.6638; Adj R-squared = 0.6544; Root MSE = .75068**

**Note: SCE represents Socio-Cultural Empowerment**

Based on the regression analysis, the first item (SCEA), women have equal freedom of movement in the university as men were rated as ‘Once a while’ with the highest mean and SD



of (1.92, 1.28) and ( $\beta = .185$ ;  $p < 0.05$ ), it implies freedom of movement of women in the respective universities is not significant as their counter parts.

As depicted in table 8 item 2, (SCEB), there is no any discrimination against women in the university in terms of delegation of responsibilities and accountability was rated as 'Not at all' with the highest mean and SD value (1.47, 1.11) and ( $\beta = .157$ ;  $p < 0.05$ ). This implies that there is significant discrimination of women in both universities to delegate in different positions of the universities. This also assured under demographic characteristics, the composition of the sex in the academic positions of the universities. The third item of table 8 (SCEC), the universities equally committed to educating, provision of training and development to women as to their men counterparts were rated as 'Once a while' with mean and SD of (1.79, 1.24) and ( $\beta = .366$ ;  $p < 0.01$ ). From the analysis it is possible to pinpoint that top officials of the respective universities were not committed for social development of women in terms of further education and training. Moreover, there is significant difference of academic ranks between two sexes as we can see from the demographic characteristics of respondents this is because of limited acceptance of women by their leaders to additional socio-cultural responsibilities.

Item 7 (SCEG), there is shifts in patriarchal norms and beliefs in the universities such as men preference was rated as 'Not at all' with mean and SD of (1.44, 1.07) and ( $\beta = .164$ ;  $p < 0.05$ ). The result reveals that still there is significant domination of men in all aspects of the universities to their women counterpart in both universities. The last item of table 8 (SCEJ), there is positive media image of women, their roles and contribution in the universities media coverage was rated as "Not at all" with the mean and SD of (1.53, .159) and ( $\beta = .159$ ;  $p < 0.05$ ). This implies, even though the universities rented media air to introduce universities roles like, research, and community services, technology transfer and others important issues from their respective regional broadcast agency, there is no any media coverage to introduce the roles and contributions of women to the societies; this also have its own impact on socio-cultural empowerment of women. Rather, the government media playing the vital roles in the awareness creation, introduction of the roles and contributions of women to the development of nations. This is also supported by qualitative finding as we can see below.

As one of the interviewed key informant:

the outlook of the internal and external communities of the universities towards women acceptance, their performance and social roles they are playing, and their contributions to social transformation is not recognized as their counterparts. Furthermore, as the respondent, the commitment of top officials to engage women in different activities, committees and academic positions is not encouraging. It needs to work aggressively on changing of awareness of the community to bring social development in the respective localities. Dean-1

**Table 9: Regression Model 3- Legal Empowerment Dimension**

Table 9 of regression model discussed the legal empowerment dimension. The F value of the third regression model is 29.94 ( $p < 0.01$ ) and the  $R^2 = 50.7$ . As depicted in regression model 3, the first item (LEA), women have fairly participating in institutional decision making process of the universities was rated as 'Once a while' with the highest mean and SD of (1.47, .940) and ( $\beta = .146$ ;  $p < 0.01$ ). The regression analysis result infers that women participation in institutional decision making is not encouraging because as we can see from demographic characteristics of the academic leadership positions of the respective universities were

dominated by their counterparts. The second item of the regression model three is (LEB), women have the right to control over sexual relations without any influence of their counterparts were rated as ‘Once a while’ with the highest mean and SD value of (1.59, 1.07) and ( $\beta = .155$ ;  $p < 0.05$ ). It implies that women are not significantly empowered to control their right over sexual relations without any influence of their male counterpart.

<i>Variables</i>	<i>Mean</i>	<i>Std.Dev</i>	<i>Std.Coeff.(<math>\beta</math>)</i>	<i>Std.err</i>	<i>t</i>	<i>Sig.</i>	<i>[95% Conf. Interval]</i>	
<b>LEA</b>	1.47	.940	<b>.146</b>	.054	2.72	0.000	.0403	.2516
<b>LEB</b>	1.59	1.07	<b>.155</b>	.057	2.72	0.007	.0427	.2665
<b>LEC</b>	1.63	1.06	-.069	.050	-1.37	0.172	-.1677	.0301
<b>LED</b>	1.63	1.00	<b>.134</b>	.054	2.48	0.014	.0275	.2401
<b>LEE</b>	1.44	.935	-.090	.058	-1.56	0.120	-.2043	.0237
<b>LEF</b>	1.63	1.03	<b>.249</b>	.052	4.77	0.000	.1464	.3517
<b>LEG</b>	1.79	1.08	-.061	.065	-0.94	0.347	-.1895	.0668
<b>LEH</b>	1.74	1.17	.062	.062	1.02	0.308	-.0586	.1849
<b>LEI</b>	1.48	1.08	<b>-.107</b>	.048	-2.26	0.025	-.2009	-.0137
<b>LEJ</b>	1.59	.936	<b>.359</b>	.072	5.02	0.000	.2188	.5005
<b>LEK</b>	1.70	1.09	<b>.153</b>	.051	3.01	0.003	.0527	.2522

*Note:  $F(11,320) = 29.94$ ;  $P > F = 0.0000$ ;  $R\text{-squared} = 0.5072$ ;  $Adj\ R\text{-squared} = 0.5072$ ;  $Root\ MSE = .6713$ ;*

*Note: LE represents Legal Empowerment*

In connection with the fourth item (LED), women are equally free from any domestic as well as institutional violence as their counterpart were rated a ‘Sometimes’ with the highest mean and SD value of (1.63, 1.00) and ( $\beta = .134$ ;  $p < 0.05$ ). Despite the gender offices of the universities working to protect women from domestic as well as institutional violence, still it exists at some level in public universities. The other item on the same regression model table 9 is (LEF), there is political, legal, religious support to the empowerment of women in public universities were rated as ‘Once a while’ with the highest mean and SD of (1.63, 1.03) and ( $\beta = .249$ ;  $p < 0.01$ ). Even though different efforts took place on government side to empower women, this studies reveals that there is no significant political, legal and religious support to empower women in this regards in the respective universities.

The last three items on regression model three (LEI), university community mobilization for the rights of women in universities, (LEJ), campaigns for women rights awareness in the universities, (LEK), advocacy for women’s right and legislation, use of judicial system to redress rights, violations were all rated as ‘Once a while’ with the mean and SD of (1.48, 1.08), (1.59, .936), (1.70, 1.09) and ( $\beta = -.107$ ;  $p < 0.05$ ), ( $\beta = .359$ ;  $p < 0.01$ ), ( $\beta = .153$ ;  $p < 0.05$ ) respectively. The regression result depicts, university community’s mobilization for the rights of women, campaigns for women rights awareness, and advocacy for women right and use of judicial system to redress rights violations at the early stage in both public universities and it needs further attention.

**Table 10: Regression Model 4- Political Empowerment Dimensions**

Variables			Std.Coeff.( $\beta$ )		t	Sig.	[95% Interval]	Conf.
	Mean	Std.Dev		Std.err				
PEA	1.48	1.01	.481	.041	11.59	0.000	.3989	.5621
PEB	1.31	.947	.608	.053	11.59	0.000	.5051	.7117
PEC	1.12	1.15	.137	.048	2.84	0.005	.04178	.2296
PED	1.09	.913	.050	.056	0.89	0.374	-.0607	.1609
PEE	1.08	.898	-.039	.055	-0.73	0.469	-.1477	.0681
PEF	1.00	.860	-.037	.054	-0.69	0.489	-.1427	.0684
PEG	1.09	.893	.203	.049	4.13	0.000	.1062	.2993

Note  $F(6, 325) = 93.30; P > F = 0.0000, R\text{-squared} = 0.6327; \text{Adj } R\text{-squared} = 0.6259; \text{Root MSE} = .61514$

**Note: PE represents the Political Empowerment**

The fourth regression model describes political empowerment dimension. The F value of the fourth regression model is 93.30 ( $p < 0.01$ ) and  $R^2$  is 63.27. As we can see from the first item of table 10 (PEA), the university have open procedures to knowledge of political systems and means of access to it to women were rated as 'Once a while' with the highest mean and SD of (1.48, 1.01) and ( $\beta = .481; p < 0.01$ ). The regression results reveals that in the respective universities the political participation of women is very limited and this portrays that there is no access to know the procedures of political systems and a means to easily access it to women. In connection with the second and third items of the table 10 (PEB), institutional support for political engagement of women and (PEC), fairly exercising their right to select and to be selected in the institutional positions were rated as 'Once a while' with the highest mean and SD of (1.31, 1.01) and (1.12, 1.15) and ( $\beta = .608; p < 0.01$ ) and ( $\beta = .137; p < 0.05$ ) respectively. We can infer that the institutional support for political engagement and exercising their right to select and to be selected in the institutional positions is not encouraging. Even, there is no any special treatment those who are selected to lead the colleges and department of the universities.

The last item of regression model 4 (PEG), women fairly participated in the leadership and decision making process of the university affairs as their men counterpart were rated as 'Not at all' with the highest mean and SD of (1.09, .893) and ( $\beta = .203; p < 0.01$ ). As we can see from the demographic characteristics of the respondents, the majority of the university's academic positions all in all dominated by their counterpart. Hence, the level of participation of women in the leadership and decision making processes of the universities are not encouraging as compare to men.

Similarly, the interviewed key informant from senior expert of the university claimed:

the barriers to active leadership and decision-making participation of women are mainly related to historical legacy of patriarchal domination, cultural influences, dual responsibilities of women with strong reproductive focus, low educational status women willingness to pursue senior academic position, lack of proper implementation of affirmative actions, lack of adequate entry opportunities, lack of role models and lack of information were ranked as the top challenges of women at respective universities. Director -1 and strategic documents (BSC, strategic plan, annual performance reports)

**Table 11: Regression Model 5- Psychological Empowerment Dimension**

Variables			Std.Coeff.( $\beta$ )	Std.err	t	Sig.	[95% Interval]		Conf.
	Mean	Std.Dev							
<b>PSYEA</b>	1.84	.996	<b>.502</b>	.042	11.99	<b>0.000</b>	.4197	.5845	
<b>PSYEB</b>	2.15	1.06	<b>.618</b>	.051	11.99	<b>0.000</b>	.5162	.7188	
<b>PSYEC</b>	2.17	.973	<b>.132</b>	.052	2.51	<b>0.013</b>	.0284	.2346	
<b>PSYED</b>	2.28	.934	<b>-.045</b>	.061	-0.74	0.461	-.1642	.0746	
<b>PSYEE</b>	2.23	.926	<b>.019</b>	.065	0.30	0.768	-.1084	.1467	
<b>PSYEF</b>	2.23	1.03	<b>.134</b>	.059	2.28	<b>0.023</b>	.0184	.2495	
<b>PSYEG</b>	2.44	.948	<b>.135</b>	.069	1.95	0.052	-.0009	.2718	
<b>PSYEH</b>	2.64	.908	<b>-.157</b>	.080	-1.96	<b>0.050</b>	-.3152	.0002	
<b>PSYEI</b>	2.65	.913	<b>.039</b>	.076	0.52	0.603	-.1096	.1887	

Note:  $F(11, 320) = 66.66; P > F = 0.0000; R\text{-squared} = 0.6962; \text{Adj } R\text{-squared} = 0.6857; \text{Root MSE} = .59467$

**Note: PSYE represents the Psychological Empowerment**

Psychological empowerment is the fifth regression model in table 11. The F value of the fifth regression model is 66.7 ( $p < 0.01$ ) and  $R^2$  is 69.6. Under this category the first item (PSYEA), women are inspired by what we are trying to achieve as an organization were rated as ‘Sometimes’ with the highest mean and SD of (1.84, .996) and ( $\beta = .502; p < 0.01$ ). It portrays, they are not significantly stirred to work effectively in their respective universities because of lack of enabling environment for their empowerment.

The second and third items of the fifth regression model (PSYEB), women are enthusiastic about working toward the organization's objectives; (PSYEC), women are keen about the contribution their work makes to the organization were rated as ‘Sometimes’ with mean and SD of (2.15, 1.06) and (2.17, .973); ( $\beta = .618; p < 0.01$ ) and ( $\beta = .132; p < 0.05$ ). It can infer that the enthusiastic and keenness of women to their contribution for organizational objective attainment is not significant as compare to their male because of lack of institutional support and advocacy, fair treatment in terms of fringe benefits, participation in leadership positions, social acceptance of women in the universities, and other threats found in the universities.

The last two items of the fifth regression model (PSYEF), the authority to make decisions at work as men and (PSYEH), the capabilities required to do their job well were rated as “Fairly Often” and ‘Sometimes’ respectively with the mean and SD of (2.23, 1.03) and (2.64, .908) and ( $\beta = .134; p < 0.05$ ) and ( $\beta = -.157; p < 0.05$ ). As we can see from the regression analysis, there is encouraging environment toward their authority to make decision at work; women have required capabilities to do their jobs well.

### **Pearson Inter Items Correlations among Empowerment Dimensions**

The following tables describes inter items correlations between empowerment dimensions (Economic, socio-cultural, legal, political and psychological). The inter items correlations of economic and socio-cultural empowerment dimensions were ranged above .60 that suggests the items are highly correlated which would be expected since they are all measuring the same overall construct, and suggest that the items are distinct. In connection with legal, political and psychological empowerment dimensions, the majority inter items correlations ranged between .20-0.59. That suggest the items are moderately correlated, but not highly correlated to suggest that the items are slightly distinct based on the Pearson correlation analysis.

**Table 12. Pearson Correlations among Economic Empowerment Dimension**

	<i>EEA</i>	<i>EEB</i>	<i>EEC</i>	<i>EED</i>	<i>EEE</i>	<i>EEF</i>	<i>EEG</i>	<i>EEH</i>	<i>EEI</i>	<i>EEJ</i>
<i>EEA</i>	1.000									
<i>EEB</i>	0.794	1.000								
<i>EEC</i>	0.725	0.688	1.000							
<i>EED</i>	0.766	0.712	0.673	1.000						
<i>EEE</i>	0.715	0.699	0.720	0.705	1.000					
<i>EEF</i>	0.526	0.590	0.508	0.624	0.681	1.000				
<i>EEG</i>	0.363	0.343	0.373	0.426	0.429	0.537	1.000			
<i>EEH</i>	0.276	0.192	0.327	0.296	0.337	0.134	0.084	1.000		
<i>EEI</i>	0.618	0.551	0.562	0.611	0.628	0.489	0.348	0.357	1.000	
<i>EEJ</i>	0.650	0.591	0.538	0.612	0.578	0.512	0.336	0.166	0.729	1.000

Note: (\*) Correlation is significant at the 0.05 level (2-tailed), (\*\*) Correlation is significant at the 0.01 level (2-tailed).

**Table 13. Pearson Correlations among Socio-Cultural Empowerment Dimension**

	<i>SCE A</i>	<i>SCE B</i>	<i>SCE C</i>	<i>SCE D</i>	<i>SCE E</i>	<i>SCE F</i>	<i>SCE G</i>	<i>SCE H</i>	<i>SCE I</i>	<i>SCE J</i>
<i>SCEA</i>	1.000									
<i>SCEB</i>	0.557	1.000								
<i>SCEC</i>	0.745	0.504	1.000							
<i>SCED</i>	0.627	0.546	0.612	1.000						
<i>SCEE</i>	0.637	0.556	0.696	0.697	1.000					
<i>SCEF</i>	0.660	0.550	0.677	0.705	0.792	1.000				
<i>SCEG</i>	0.580	0.316	0.559	0.543	0.447	0.507	1.000			
<i>SCEH</i>	0.527	0.523	0.537	0.529	0.549	0.497	0.534	1.000		
<i>SCEI</i>	0.630	0.496	0.652	0.596	0.759	0.669	0.534	0.607	1.000	
<i>SCEJ</i>	0.633	0.498	0.623	0.538	0.494	0.546	0.533	0.446	0.558	1.000

Note: (\*) Correlation is significant at the 0.05 level (2-tailed), (\*\*) Correlation is significant at the 0.01 level (2-tailed).

**Table 14. Pearson Correlations among Legal Empowerment Dimension**

	<i>LEA</i>	<i>LEB</i>	<i>LEC</i>	<i>LED</i>	<i>LEE</i>	<i>LEF</i>	<i>LEG</i>	<i>LEH</i>	<i>LEI</i>	<i>LEJ</i>
<i>LEA</i>	1.000									
<i>LEB</i>	0.586	1.000								
<i>LEC</i>	0.366	0.561	1.000							
<i>LED</i>	0.523	0.676	0.562	1.000						
<i>LEE</i>	0.341	0.431	0.476	0.388	1.000					
<i>LEF</i>	0.464	0.503	0.538	0.461	0.524	1.000				
<i>LEG</i>	0.517	0.626	0.587	0.595	0.630	0.635	1.000			
<i>LEH</i>	0.557	0.623	0.486	0.558	0.588	0.466	0.753	1.000		
<i>LEI</i>	0.395	0.585	0.633	0.519	0.498	0.307	0.651	0.757	1.000	
<i>LEJ</i>	0.495	0.455	0.457	0.420	0.542	0.459	0.614	0.661	0.548	1.000

Note: (\*) Correlation is significant at the 0.05 level (2-tailed), (\*\*) Correlation is significant at the 0.01 level (2-tailed).

**Table 15. Pearson Correlations among Political Empowerment Dimension**

	<i>PEA</i>	<i>PEB</i>	<i>PEC</i>	<i>PED</i>	<i>PEE</i>	<i>PEF</i>	<i>PEG</i>
<i>PEA</i>	1.000						
<i>PEB</i>	0.764	1.000					
<i>PEC</i>	0.649	0.699	1.000				
<i>PED</i>	0.553	0.596	0.666	1.000			
<i>PEE</i>	0.441	0.515	0.574	0.558	1.000		
<i>PEF</i>	0.309	0.328	0.419	0.530	0.621	1.000	
<i>PEG</i>	0.525	0.469	0.540	0.555	0.484	0.475	1.000

Note: (\*) Correlation is significant at the 0.05 level (2-tailed), (\*\*) Correlation is significant at the 0.01 level (2-tailed).

**Table 16. Pearson Correlations among Psychological Empowerment Dimension**

	<i>PSYEA</i>	<i>PSYEB</i>	<i>PSYEC</i>	<i>PSYED</i>	<i>PSYEE</i>	<i>PSYEF</i>	<i>PSYEG</i>	<i>PSYEH</i>	<i>PSYEI</i>	<i>PSYEJ</i>
<i>PSYEA</i>	1.0000									
<i>PSYEB</i>	0.7289	1.0000								
<i>PSYEC</i>	0.4960	0.5956	1.0000							
<i>PSYED</i>	0.4245	0.5526	0.5329	1.0000						
<i>PSYEE</i>	0.3894	0.4234	0.3759	0.6505	1.0000					
<i>PSYEF</i>	0.4278	0.4104	0.3642	0.5079	0.7080	1.0000				
<i>PSYEG</i>	0.5185	0.6011	0.5342	0.5385	0.5304	0.6600	1.0000			
<i>PSYEH</i>	0.3804	0.5557	0.5496	0.4965	0.4388	0.4778	0.7316	1.0000		
<i>PSYEI</i>	0.3798	0.5698	0.4188	0.5014	0.4374	0.3989	0.5658	0.7648	1.0000	
<i>PSYEJ</i>	0.3507	0.5454	0.4435	0.4019	0.3242	0.3809	0.5146	0.6875	0.7554	1.0000

Note: (\*) Correlation is significant at the 0.05 level (2-tailed), (\*\*) Correlation is significant at the 0.01 level (2-tailed).

**Table 17. Two-sample t- test for average Mean Difference in Gender Proportion at Different Variables**

<i>Variables</i>	<i>T-test for Equality of Means</i>					<i>95% Conf. Interval</i>	
	<i>t</i>	<i>df</i>	<i>Sig</i>	<i>Mean difference</i>	<i>Std. Err difference</i>	<i>Lower</i>	<i>Upper</i>
<i>Level of Education</i>	2.2721	330	<b>0.0237*</b>	.10877	.04787	.014598	.20294
<i>Service Years</i>	1.5137	330	0.1310	.1170863	.0773486	-.0350723	.269245
<i>Academic Rank</i>	4.8306	330	<b>0.0000**</b>	.32828	.06796	.19459	.46197
<i>Position</i>	-3.237	330	<b>0.0013*</b>	-.71839	.22197	-1.15504	-.2818
<i>Monthly Income</i>	0.8114	330	0.4177	36.444	<b>44.916</b>	-51.9144	124.80

Note: (\*) t- test is significant at the 0.05 level (2-tailed), (\*\*) t- testis significant at the 0.01 level (2-tailed).

Source. Based on data from survey-2015

The alternative hypothesis that the difference in mean between the two groups (Male and Female) is not equal to zero in both variables. Furthermore, on the basis of disparity in the proportion of gender equality at different variables mentioned above, the t-test result revealed,

there is statistically significant mean difference in females' academic rank and their participation in different positions of the universities at 0.01 % and 0.05 % significant level respectively. In addition, there is also statistically significant mean difference in the level of education in both groups at significant level of 5 %. Thus, it demands robust political commitment and attention from top officials of the state and universities to narrowing the disparity among the two groups.

**Table 18. Challenges to Empowering Women in Sample Universities**

Table 18 represents the regression model of challenges women facing to empower economically, socio-culturally, legally and politically at sample universities. The F value of the regression model is 56.6 ( $p < 0.01$ ) and  $R^2$  is 72.87.

Items	Mean	SD	C( $\beta$ )	SE	t	sig
Lack of equal rights to control over incomes	1.46	1.30	.578	.051	11.2	<b>0.000</b>
Lack of fair distribution of incomes in colleges, departments	1.64	1.23	.106	.047	2.24	<b>0.026</b>
Discrimination of women in delegation of responsibilities	1.47	1.11	.023	.051	0.45	<b>0.050</b>
Participating in extra-familial groups and social networks	1.44	.955	.187	.066	2.82	<b>0.005</b>
Lacks Fair symbolic representation of women in myth and rituals	1.13	1.05	.107	.053	1.99	<b>0.048</b>
Lack of media coverage to ward their roles and contribution	1.53	1.09	.261	.055	4.7	<b>0.000</b>
Lack of political, legal and religious support	1.47	.940	-.273	.062	-4.4	<b>0.000</b>
Free access to knowledge of legal rights at university level	1.44	.935	.143	.065	2.21	<b>0.028</b>
Lack of institutional support for exercising their rights	1.88	1.08	.159	.068	2.33	<b>0.020</b>
Absence of campaigns for women rights awareness	1.74	1.17	-.139	.060	-2.32	<b>0.021</b>
Lack of institutional support for political engagement	1.31	.947	.219	.067	3.26	<b>0.001</b>
Lack of commitment to engage women for leadership positions	1.07	.898	-.245	.064	-3.81	<b>0.000</b>
<b>Note: F =56.59; Prob &gt; F=0.0000; R-squared=0.7287, Adj R-squared = 0.7158; Root MSE=.74071</b>						

As we can see from regression analysis, 12 critical challenges were identified with its mean and SD, ( $\beta$ ) value, t value at  $P > |t|$  (sig) in table above.

As obtained from interviewed key informants from gender directorates:

the main reasons for the declining of female participation in the academic positions of universities were described as women poor self- image, women reluctance to assume additional responsibilities, the influences of their counterparts, trust of top officials, underrepresentation of women in each colleges and departments, negative

outlooks of their performance by their staff members, recruitment challenges, of the major one. Director- 2

**Table 19. Pearson Chi-square test for the relationship of variables (Empowerment and Education)**

Variables	Pearson Chi-square test for relationship of variables (Education and Empowerment)		
	Pearson Chi2	DF	P
Economic Empowerment and Education	35.236	12	0.009*
Socio-cultural empowerment and Education	45.182	12	0.000**
Legal Empowerment and Education	42.123	12	0.004*
Political Empowerment and education	45.903	12	0.000**
Psychological Empowerment and Education	43.924	12	0.001*
(*) Chi-squared test is significant at the 0.05 level (2-tailed), (**) testis significant at the 0.01 level (2-tailed).			

Source. Based on data from survey-2015

A chi-square test is used to see if there is a significant relationship between two variables. As we can see from the above table of chi-square test, there is statistically significant relationship between empowerment dimensions and education with value of chi-square with 12 degree of freedom = 35.236, (p = 0.009), at 0.05 level of significance; 45.182, (p=0.000) at 0.01 level of significance; 42.123, (p=0.004) at 0.05 level of significance; 45.903, (p=0.000) at 0.01 level of significance; and 43.924, (p=0.001) at 0.05 level of significance respectively.

## CONCLUSIONS

This study explores the level of empowerment of women working at sample universities based on five empowerment dimensions (Economic, socio-cultural, legal, political and psychological). From the results of this study, it can be said that despite the fact that there is improvement of level of education, monthly incomes; women were not significantly empowered through their economic, socio-cultural, legal and political dimensions as compare to their counterparts because of many challenges as clearly stated under table 18. In connection with psychological empowerment, the study reveals two categories of responses. As regression analysis, women rated their level of psychological empowerment based on the given subscale items as significantly empowered whereas their counterparts rated as moderate. This implies that male respondents were not fully confident on the psychological empowerment of women even though they are in the same educational status.

Tawo *et al* (2009) correlate with education and women's empowerment and the roles of education to empowerment. Even though, there is statistically significant relationship between empowerment dimensions and education as we can see from the findings, it is investigated that the level of women empowerment based on five empowerment dimensions were at a very infant stage at the sample universities and the expected women development were not significantly achieved.



## RECOMMENDATIONS

As we identified under regression analysis, challenges are multifaceted and requires special attention from various stakeholders of the state top officials and universities leaders since without the active participation and incorporation of women perspectives at all level of decision-making, the goal of gender parity, empowerment and development cannot be achieved. Thus, to effective gender parity and economic, socio-cultural, legal, political and psychological empowerment the researcher recommended different strategic pillars:

- ✦ Political dedication and commitment of all state officials in providing awareness creation and information exchange sessions for all members of the universities on gender related matters are vital. This might help to build common understanding on the current trends of gender empowerment of the universities and on the building up of the preferred one.
- ✦ The universities should designed and implemented strategies continuously to attitudinal changes among universities community's to reduce the patriarchal dominance which is highly existed in public higher institutions.
- ✦ The curriculum should focus and incorporate gender issues in education system from primary to tertiary level to create gender balanced nations in all public institutions.
- ✦ One of the fascinating efforts of WSU in the academic year of 2015 was recruiting first ranked female students as assistance lecturer from each department to increase women participation in teaching and to narrow the gaps. Hence, the other universities also should belligerently work on such a strategy to maintain gender parity in public universities.
- ✦ Ministry of education, Ministry of Children, Youth, and Women and top universities officials should work on the development of special agencies which is accountable for the elimination of women sense of inferiority and gender based discrimination in work place.
- ✦ The Ministry of Education and Ministry of Children, Youth and Women and Universities Officials together should set the baseline targets of gender proportions which are achieved in specific time period to ensure gender parity and empowerment.
- ✦ Universities should actively engaged on the provision of regular training to women academic staff to build their self- esteem, self-confidence and to be part of academic leadership careers.
- ✦ The Universities should work with different stakeholders like Non-Governmental Organizations, religious organizations, and civic associations in public awareness creation of the roles and contributions of women in development endeavors.
- ✦ The government (Ministry of Education and Ministry of Children, Youth and Women) together work on institutional cultures and norms of public universities on gender related issues.
- ✦ All stakeholders should aggressively work on structural and institutional barriers/laws, norms/ values that curtailed women from political, social, and economic participation in their respective universities as well as societies.
- ✦ People's belief in their own capabilities and unique personal characteristics helped foster confidence in their ability to take ingenuity in changing their lives. This have its own impacts

and contributed to increased self-esteem that may not have been otherwise possible. In this regards, women should work aggressively as change agent to bring dynamic change in their empowerment process as well as social acceptance through the public.

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