







Role of Gender Asset Ownership and Poverty in Determining Women Empowerment: A Village-based Study in South Punjab, Pakistan

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<p>Keywords: Asset Ownership, Poverty Gap, Women Empowerment, Rural Areas</p>	<p style="text-align: center;">ABSTRACT</p> <p><i>This study investigates the determinants of women's empowerment in the agriculture sector of South Punjab, Pakistan, using a cross-sectional analysis. Specifically, the study aims to identify the socio-demographic and economic factors that promote or hinder women's empowerment in this sector, to inform policies and programs that can support gender equality in the region. To estimate the results, we are utilizing data from 900 households located in the Multan, Bahawalpur, and DG Khan divisions of South Punjab Province in Pakistan in 2022 while employing the Ordinary Least Square (OLS) method for analysis. The study also explored the impact of empowerment on women's socio-demographics, economic status, and well-being. The study found that women's empowerment in South Punjab is influenced by a range of factors, including age, marital status, education, income, poverty, and asset ownership prevalence. The study focuses on improving women's education, income, and access to credit, as these factors are found to positively impact women's empowerment in the agriculture sector of South Punjab, Pakistan. Additionally, policies that promote women's participation in decision-making at the household and community levels can contribute to greater gender equality in the region.</i></p>
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1 Introduction

Gender Asset Ownership is primarily linked to Sustainable Development Goal (SDG) 5 i.e. Gender Equality. SDG 5 aims to achieve gender equality and empower all women and girls. The specific targets under SDG 5 include ending all forms of discrimination against women, ensuring equal rights to economic resources, promoting women's participation in decision-making processes, and enhancing women's access to ownership and control over land and other assets. The role of gender asset ownership and poverty in determining women's empowerment directly relates to the pursuit of gender equality. It highlights the importance of addressing the existing disparities and challenges faced by women in terms of access to and control over assets, as well as the impact of poverty on their empowerment. By examining and addressing these issues, progress can be made toward achieving SDG 5 and creating a more inclusive and equitable society for women. Women's empowerment is a critical aspect of gender equality and an essential goal for sustainable development. Empowerment is a multidimensional concept that encompasses various domains, including economic, social, and political empowerment. The determinants of women's empowerment are complex and multifaceted and are influenced by a range of individual, community, and structural factors (Sebhatu, 2012). According to Kabeer (1999), individual-level factors that contribute to women's empowerment include education, employment, and access to resources such as credit and property. Education is a critical determinant of women's empowerment, as it provides women with knowledge and skills, enhances their decision-making abilities, and expands their economic opportunities. Employment, particularly formal employment, can also be a significant factor in promoting women's empowerment, as it provides women with financial independence, increases their social status, and enhances their bargaining power within the household. At the community level, cultural norms and social attitudes play a significant role in shaping women's empowerment. In many societies, traditional gender roles and patriarchal values limit women's mobility and access to education, employment, and other resources.

These cultural norms often reinforce gender-based stereotypes and perpetuate gender inequality. Changing these norms and attitudes requires comprehensive social and cultural change strategies that involve community engagement and education (Orso & Fabrizi, 2016). Structural factors such as legal frameworks, policies, and institutions can also facilitate or hinder women's empowerment. For example, discriminatory laws and policies that limit women's access to property and inheritance rights can undermine their economic independence and perpetuate gender inequality. Conversely, policies that promote gender equality in education and employment, and provide support for women's entrepreneurship and access to credit, can enhance women's empowerment (Haque, Islam, Tareque, & Mostofa, 2011). Women's empowerment is a complex and multidimensional concept that is influenced by individual, community, and structural factors. Addressing the determinants of women's empowerment requires a comprehensive approach that involves changes in cultural norms, legal frameworks, and policies that promote women's education, employment, and access to resources. By promoting women's empowerment, we can create a more equitable and just society for all (M. Khan & Maan, 2008).

2 Literature Review

The literature on the determinants of women's empowerment provides valuable insights into the challenges faced by women in achieving greater levels of empowerment and the factors that contribute to gender inequality. By identifying the key determinants of women's empowerment, this research can inform the development of policies and programs aimed at promoting gender equality and empowering women.

This review of literature synthesizes and critically evaluates the existing literature on the determinants of women's empowerment. It explores the research questions that have been

addressed, the methodologies used, and the key findings from previous studies. Additionally, it identifies gaps in the literature and highlights areas for future research. The review provides a comprehensive understanding of the factors that contribute to women's empowerment and informs policy and program development to promote gender equality and women's empowerment. In Table 1, the studies on the determinants of women's empowerment have been reviewed.

Table 1
Studies on the Determinants of Women Empowerment

Reference(s)	Country/Area	Time/ Observation	Methodology	Main Results
(Kantor, 2003)	India	200 women	quantitative and qualitative techniques	The quantitative analysis found that home-based work had a positive effect on women's empowerment, as measured by their income, mobility, decision-making power, and self-esteem. The qualitative analysis provided further insight into how home-based work contributed to women's empowerment through increased autonomy, social interaction, and skill development. The results of the study indicated that women's empowerment in India was highly uneven, with significant spatial variations across different states and regions. The study found that while some regions had made progress in gender equality, others still had significant gender gaps in terms of education, employment, and health outcomes.
(Gupta & Yesudian, 2006)	India	1991 Census of India	OLS	The results indicated that education and economic participation were positively correlated with women's empowerment, while patriarchal attitudes and cultural norms were negatively associated with it. The study found that education, income, age, marital status, and participation in community organizations were significant determinants of women's empowerment in both domestic and non-domestic issues. The study also found that women's participation in microfinance programs was positively associated with their empowerment in non-domestic issues.
(Chaudhry & Nosheen, 2009)	Pakistan	200 women	Multi regression Analysis	The results of the study showed that women's participation in decision-making processes and access to resources such as credit and training were positively related to their level of empowerment. In contrast, women's age and education were negatively associated with their level of empowerment.
(Rahman, Karmaker, & Mia, 2009)	Chapai Nawabganj district of Bangladesh	400 women	OLS	
(Sebhatu, 2012)	southeastern Tigray, Ethiopia	216 women members of 12 cooperative societies	OLS	

(Assaad, Nazier, & Ramadan, 2014)	Egypt	2006	Multi regression analysis	The findings revealed that factors such as women's education, employment, and household income are significant determinants of women's empowerment. Additionally, the study found that women's empowerment is positively associated with their decision-making power within the household. The study found that community-level factors such as education, media literacy, and availability of community services were positively correlated with the empowerment of women. Furthermore, the study found that the effect of women's individual characteristics on empowerment was contingent upon community context.
(Assaad, Nazier, & Ramadan, 2015)	Egypt	2008	Logistic regression	Their results showed that a partner's positive attitude towards gender equality was positively correlated with the empowerment of women, while the partner's participation in microcredit programs had no significant effect. Additionally, the study revealed that the level of education among women, employment status, and access to media also had a positive impact on their empowerment.
(Orso & Fabrizi, 2016)	Bangladesh	2011	Logistic Regression	The study concluded that microfinance for women can enhance the women empowerment. The study discovered the following results: Dairy cows give households significant financial advantages, but they also make women's lives more time-poor. Time poverty is influenced by a woman's age, economic situation, access to clean water, and level of empowerment. Cows have trouble getting to water since women have a lot of domestic responsibilities. More women than males indicated displeasure with their free time.
(Ahmad, Hussain, Umer, & Parveen, 2017)	Pakistan	2006-2016	Data Envelopment Analysis	According to the findings, there has been a considerable decrease in income poverty and multidimensional poverty as a result of increasing women's access to education, asset ownership, decision-making power over children's health and education, and access to medical facilities.
(Bain, Ransom, & Halimatusa'diyah, 2018)	Uganda	138	Logistic Regression	The outcomes demonstrate that the program simultaneously has a favorable impact on women's
(Wei et al., 2021)	Bangladesh	914	logistic regression and ordinary least squares	
(Rui & Nie, 2021)	China	900	the difference-in-differences	

(Urooj, Ahmad, Bhatti, & Hussain, 2022)	Pakistan	Pakistan Demographic and Health Survey (PDHS) 2017-18	Logistic Regression	matching method	empowerment and poverty alleviation. The empowerment of women has a good impact on reducing poverty, and the women who benefited from it have helped raise household incomes and standards of living. The study showed that women's higher education, age, husband's higher education, and household wealth status, female headship of household, number of living children, and belongingness to the urban area are positively associated with the empowerment of women.
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This study reviews the determinants of women's empowerment. Across different countries, the determinants of women's empowerment may vary. In the literature, various policies have been suggested as remedies to enhance women's empowerment. This study aims to identify the socio-demographic, economic, and asset ownership factors that women empowerment in Multan, Bahawalpur, and DG Khan Divisions of South Punjab Province, Pakistan. To the best of our knowledge, no previous studies have investigated the determinants of women empowerment in these divisions. While other studies have examined some determinants, they have not investigated the numerous dimensions that our study explores. Specifically, our study employs an extensive approach by incorporating three categories of variables: socio-demographic, economic, and asset ownership determinants. Moreover, we utilize data from three divisions, Multan, Bahawalpur, and DG Khan, to analyze the factors that influence women's empowerment.

3 Model, Data and Methodology

3.1 Model Specification

The following models have been specified to explore the nexus of women empowerment in South Punjab. The determinants of women's empowerment are divided into five models: women's economic empowerment model, women's social empowerment model, women's familial empowerment model, women's political empowerment model, and women's overall empowerment model. These models aim to predict the women's economic, social, political, familial, political, and overall empowerment based on several socio-demographic, economic, and gender asset ownership factors.

Model 1: Women's Economic Empowerment Model

$$WEEI = f(AGE, MS_i, EDU, EMPS_i, INCOME, PGI, SPGI, AOPW, AOPM) \tag{1}$$

The econometric form of the model is:

$$WEEI = \beta_0 + \beta_1 AGE + \beta_2 MS_i + \beta_3 EDU + \beta_4 EMPS_i + \beta_5 INCOME + \beta_6 PGI + \beta_7 SPGI + \beta_8 AOPW + \beta_9 AOPM + \varepsilon \tag{2}$$

Model 2: Women's Social Empowerment Model

$$WSEI = f(AGE, MS_i, EDU, EMPS_i, INCOME, PGI, SPGI, AOPW, AOPM) \tag{3}$$

The econometric form of the model is:

$$WSEI = \beta_0 + \beta_1 AGE + \beta_2 MS_i + \beta_3 EDU + \beta_4 EMPS_i + \beta_5 INCOME + \beta_6 PGI + \beta_7 SPGI + \beta_8 AOPW + \beta_9 AOPM + \varepsilon \tag{4}$$

Model 3: Women’s Familial Empowerment Model

$$WFEI = f (AGE, MS_i, EDU, EMPS_i, INCOME, PGI, SPGI, AOPW, AOPM) \tag{5}$$

The econometric form of the model is:

$$WFEI = \beta_0 + \beta_1 AGE + \beta_2 MS_i + \beta_3 EDU + \beta_4 EMPS_i + \beta_5 INCOME + \beta_6 PGI + \beta_7 SPGI + \beta_8 AOPW + \beta_9 AOPM + \varepsilon \tag{6}$$

Model 4: Women’s Political Empowerment Model

$$WPEI = f (AGE, MS_i, EDU, EMPS_i, INCOME, PGI, SPGI, AOPW, AOPM) \tag{7}$$

The econometric form of the model is:

$$WPEI = \beta_0 + \beta_1 AGE + \beta_2 MS_i + \beta_3 EDU + \beta_4 EMPS_i + \beta_5 INCOME + \beta_6 PGI + \beta_7 SPGI + \beta_8 AOPW + \beta_9 AOPM + \varepsilon \tag{8}$$

Model 5: Women’s Overall Empowerment Model

$$WOEI = f (AGE, MS_1, EDU, EMPS_i, INCOME, PGI, SPGI, AOPW, AOPM) \tag{9}$$

The econometric form of the model is:

$$WOEI = \beta_0 + \beta_1 AGE + \beta_2 MS_i + \beta_3 EDU + \beta_4 EMPS_i + \beta_5 INCOME + \beta_6 PGI + \beta_7 SPGI + \beta_8 AOPW + \beta_9 AOPM + \varepsilon \tag{10}$$

Table 2
Variables: Abbreviation, Description and Measurement

Variables	Abbreviation	Measurement
Age	AGE	Continuous
Marital Status	MS	
Married	MS1	1 for married 0 for others
Unmarried	MS2	1 for unmarried 0 for others
Divorced	MS3	1 for divorced 0 for others
Widowed	MS4	1 for widowed 0 for others
Education level	EDU	Continuous
Employment Status	EMPS	
Employee	EMPS1	1 for employee 0 for others
Employer	EMPS2	1 for employer 0 for others
Unpaid family worker	EMPS3	1 for unpaid family worker 0 for others
Other workers	EMPS4	1 for other workers 0 for others

Unemployed	EMPS5	1 for unemployed 0 for others
Poverty gap index	PGI	Continuous
Squared-poverty gap index	SPGI	Continuous
Women's economic empowerment index	WEEI	Continuous
Women's social empowerment index	WESI	Continuous
Women's familial empowerment index	WFEI	Continuous
Women's political empowerment index	WPEI	Continuous
Income of the household	INCOME	Continuous
Asset ownership prevalence among women	AOPW	Continuous
Asset ownership prevalence among men	AOPM	Continuous

Note: See Tufail and Sheikh (2023) for all kinds of Women's empowerment indexes.

3.2 Data and Methodology

Collecting and analyzing data is essential to conducting research, forming the basis for all research activities. Our study utilized primary sources to gather data from rural areas in the Multan, Bahawalpur, and DG Khan divisions of Pakistan. We utilized both simple random and stratified sampling techniques, selecting one district from each division to ensure diversity. We interviewed 300 households in each district, comprising both male and female participants, using a questionnaire with multi-choice and close-ended questions administered to the most informative family member. OLS technique has been used to find the results.

4 Results and Discussions

4.1 Aggregated Analysis of Women's Empowerment

In this section, we have discussed the determinants of women's empowerment. We take five types of women's empowerment indexes: women's economic empowerment index, women's social empowerment index, women's familial or interpersonal empowerment index, women's political empowerment index, and women's overall empowerment index. We have divided the determinants of women empowerment into three categories: socio-demographic variables, economic variables, and asset ownership variables.

Table 3 shows the factors that affect women's economic empowerment, Table 4 illustrates the determinants of women's social empowerment, Table 5 demonstrates the factors affecting women's familial or interpersonal empowerment, Table 6 indicates the determinants of women's political empowerment, and Table 7 shows the factors that affect the overall women's empowerment in South Punjab province of Pakistan. In this study, women's economic empowerment, women's social empowerment, women's familial empowerment, women's political empowerment, and overall women's empowerment are taken as dependent variables. We take three categories of independent variables. The first category is socio-demographic determinants which include age, marital status (there are four groups of the marital status of women: married, unmarried, divorced, and widowed), and years of schooling. The second category of the independent variable is economic determinants which include employment status, log of income, poverty gap index, and the square of the poverty gap. The third category is assets ownership determinants which include asset ownership prevalence among women and assets ownership prevalence among men.

In the socio-demographic category, the first variable is age. Age has a positive association with women's economic, social, familial, political, and overall empowerment which is highly statistically significant. The possible reason for the positive association may be that as women get older they may have more experience regarding economics, social, and familial, political problems. They have power in decision-making. The following studies support that age is positively related to women's empowerment (e.g., (Acharya, Bell, Simkhada, Van Teijlingen, &

Regmi, 2010; M. Khan & Maan, 2008; S. U. Khan & Awan, 2011; Parveen & Leonhäuser, 2005; Wiklander, 2010). The status of women differs in different phases of life (Jejeebhoy, 2000). The elder women are more likely to enjoy higher status, authority, and responsibilities (Ethiopian Democratic and Health Survey, 2005) and empowerment (Nayak & Mahanta, 2012). In less developed countries, daughter in law is responsible for the housework whereas mother in law is responsible for the family decision and affairs in Bangladesh (Haque et al., 2011).

Table 3
Determinants of Women's Economic Empowerment in South Punjab

	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	
	B	Std. Error	Beta			
(Constant)	.375	.014		26.592	.000	
Socio-Demographic Determinants						
Age	.001	.000	.074	2.630	.009	
Marital Status	Married	.188	.092	.111	2.057	.040
	Unmarried	-.085	.043	-.110	-1.963	.050
	Divorced	.004	.019	.004	.204	.838
	Widowed	.021	.005	.090	4.046	.000
Years of Schooling	.003	.001	.068	3.535	.000	
Economic Determinants						
Employment Status	Employee	.009	.001	.211	11.628	.000
	Employer	.088	.010	.158	8.381	.000
	Unpaid Family Worker	-.009	.001	-.211	-11.634	.000
	Other	.087	.010	.156	8.311	.000
Unemployed	-.005	.002	-.064	-2.511	.012	
Income	.122	.039	.136	3.113	.002	
Poverty Gap Index	-.025	.011	-.062	-2.314	.021	
Square of Poverty Gap	-.012	.004	-.088	-3.361	.001	
Assets Ownership Determinants						
Ownership Prevalence among Women	3.19	.072	.641	44.387	.000	
Ownership Prevalence among Men	-.566	.200	-.040	-2.832	.005	
Model Summary						
Model	R Square		Durbin-Watson			
	.249		1.657			

An advanced level of empowerment experience with coming of age may be due to high experiences as women involved in sensible decisions of economic problems (Batool & Batool, 2018a; S. U. Khan & Awan, 2011; Sheikh, Meraj, & Sadaqat, 2015).

The second variable in the socio-demographic determinants is the marital status of women. The married group of females is positively related to women's economic, social, political, and overall empowerment which is statistically significant except in women's political empowerment model in South Punjab. Whereas, the married group of females is negatively related to women's familial empowerment which is highly statistically significant. The possible reason behind positive results may be that most married females are independent regarding their decision-making. They can take any decision regarding their family problems. But the negative result is due to the existence of the power of the males in the family regarding family decisions.

The unmarried group of females is negatively associated with women's economic, social, familial, political, and overall empowerment which is highly statistically significant except in the overall economic empowerment model. The possible reason for the negative association may be due to the existence of dependency on their parents. They depend on their parents to take any decisions. In our society, the right of unmarried women to take a decision is considered bad.

The divorced group of females is positively related to women's economic, political and overall empowerment which is statistically significant except in the women's economic empowerment model. However, the divorced group of females is negatively related to women's social and familial empowerment which is statistically significant in South Punjab. The possibility of a positive result may be that most divorced women do not depend on their parents after separation. They work hard to support themselves and their children.

Table 4
Determinants of Women's Social Empowerment in South Punjab

	Unstandardized Coefficients		Standardized Coefficients			
	B	Std. Error	Beta	T	Sig.	
(Constant)	.371	.021		17.288	.000	
Socio-Demographic Determinants						
Age	-.430	.064	-.103	-6.698	.000	
Marital Status	Married	4.118	.121	.579	33.931	.000
	Unmarried	-3.738	.891	-.063	-4.196	.000
	Divorced	-.032	.017	-.052	-1.862	.063
	Widowed	.638	.113	.085	5.640	.000
Years of Schooling	2.297	1.334	.076	1.722	.085	
Economic Determinants						
Employment Status	Employee	.102	.048	.068	2.101	.036
	Employer	.505	.324	.186	1.555	.120
	Unpaid Family Worker	-.030	.019	-.029	-1.587	.113
	Other	2.982	3.112	.364	.958	.338
	Unemployed	.010	.003	.078	3.101	.002
Income	.012	.005	.082	2.473	.013	
Poverty Gap Index	-.080	.018	-.119	-4.549	.000	
Square of Poverty Gap	-.058	.009	-.172	-6.696	.000	
Assets Ownership Determinants						
Ownership Prevalence among Women	.043	.008	.115	5.247	.000	
Ownership Prevalence among Men	-.387	.044	-.128	-8.727	.000	
Model Summary						
Model	R Square		Durbin-Watson			
	.259		1.539			

The widowed group of females is positively associated with women's economic, social, familial, political, and overall empowerment which is highly statistically significant except in the women's familial empowerment model. The possible reason behind positive results may be that after the death of their husband, it is the responsibility of wives to financially support their children. Now, females are considered the head of the household and they have the right to take any decision about their family.

The study conducted by Rahman et al. (2009) confirmed that married females have high empowerment in decision-making. Indian females considered marriage as a turn in their life that can influence their empowerment level. Married females have a high level of empowerment level as compared to other females and they are not allowed to take any family decisions however, they have a right to preserve cash for their personal use and enjoy some liberty (Biswas & Mukhopadhyay, 2018). It is also evident that married females are more empowered in respect of the education of their children and the social sides of their lives. However, in economic words, married females have the authority to decide on buying different domestic goods. But politically married females are not much aware; they vote for those who come to them to vote, and they don't have a personal opinion. Some females vote for the people of their family choice (Rahman et al., 2009)..

Table 5
Determinants of Women's Familial Empowerment in South Punjab

	Unstandardized Coefficients		Standardized Coefficients			
	B	Std. Error	Beta	T	Sig.	
(Constant)	.370	.010		38.268	.000	
Socio-Demographic Determinants						
Age	-.029	.017	-.210	-1.748	.081	
Marital Status	Married	-.873	.094	-.117	-9.279	.000
	Unmarried	-.322	.160	-.769	-2.012	.044
	Divorced	-.275	.147	-.899	-1.864	.062
	Widowed	.002	.003	.012	.531	.595
Years of Schooling	.001	.001	.038	1.927	.054	
Economic Determinants						
Employment Status	Employee	.023	.020	.037	1.115	.265
	Employer	4.493	1.246	.045	3.607	.000
	Unpaid Family Worker	-9.206	.273	-.427	-33.702	.000
	Other	.022	.008	.051	2.717	.007
	Unemployed	-1.716	.887	-.029	-1.936	.053
Income	.013	.004	.092	3.550	.000	
Poverty Gap Index	-.024	.008	-.087	-3.201	.001	
Square of Poverty Gap	-.055	.013	-.110	-4.200	.000	
Assets Ownership Determinants						
Ownership Prevalence among Women	12.685	2.231	.158	5.687	.000	
Ownership Prevalence among Men	-13.448	2.816	-.131	-4.776	.000	
Model Summary						
Model	R Square		Durbin-Watson			
	.271		1.559			

According to the social structure of Pakistan, the status of married women is considered much better as compared to unmarried, divorced, and widowed. Thus married females enjoy higher status in society. Our results show that the power to take an economic, social, familial, and political decision at the household level is higher for married women as compared to unmarried, divorced, and widowed. The existing studies support our results (Addai, 2017; Batool, 2018).

Table 6
Determinants of Women's Political Empowerment in South Punjab

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.653	.123		5.312	.000
Socio-Demographic Determinants					
Age	.003	.001	.099	2.464	.014
Marital Status	Married	.010	.011	.027	.978 .328
	Unmarried	-.107	.053	-.045	-2.013 .044
	Divorced	.014	.001	.312	18.064 .000
	Widowed	.026	.005	.114	5.164 .000
Years of Schooling	.004	.001	.100	5.240	.000
Economic Determinants					
Employment Status	Employee	.060	.029	.067	2.046 .041
	Employer	.012	.012	.020	1.035 .301
	Unpaid Family Worker	-.067	.038	-.041	-1.764 .078
	Other	.032	.012	.050	2.742 .006
	Unemployed	-.005	.002	-.066	-2.629 .009
Income	.005	.003	.052	1.561	.119
Poverty Gap Index	-.098	.011	-.241	-9.033	.000
Square of Poverty Gap	-.037	.005	-.182	-7.097	.000
Assets Ownership Determinants					
Ownership Prevalence among Women	.208	.031	.623	6.710	.000
Ownership Prevalence among Men	-.200	.069	-.442	-2.881	.004
Model Summary					
Model	R Square		Durbin-Watson		
	.361		1.670		

The third variable in socio-demographic determinants is the year of schooling or education level of females. The level of education has a positive impact on women's economic, social, familial, political, and overall empowerment which is highly statistically significant. Education of females brings awareness among females. They become aware of their rights. Through education, they are free to take their decisions. They also get freedom in politics. Education is known as a milestone for women's empowerment. Since it empowers them to face challenges, oppose their traditional roles, and modify their lives (Shetty & Hans, 2015). Women are less empowered than men due to the existence of the gender gap. The gender gap in less developed societies can be removed through education (Nayak & Mahanta, 2012). Education among women can increase financial decision making but it cannot increase the social and organizational problems of the household (Varghese, 2011). Education is considered a most powerful tool for the liberation of any group of people, mental freedom can be brought through education. It is a guaranteed path to the emancipation of the mind and the improvement of the social and economic status of females. It is suggested that a huge portion of women's empowerment is linked with the education of females

In Fafunwa (1974) opinion education is the summation of the total experience or skills that are person obtains by taking part in daily activities and how to become better by serving these experiences. The formal education of females gives them the wisdom of their rights and independence. It is a fact that education can increase the confidence, awareness, and ability of

women with which they become self-confident in their roles in their social activities. They take their own decisions rather than wait for the decision made by someone else for them (Olakulein & Olugbenga, 2006). The following studies are in line with our results (Batool, 2018; Batool & Batool, 2018b; Bushra & Wajiha, 2015; Gholipour, Rahimian, Mirzamani, & Zehtabi, 2010; Jayaweera, 1997; Nayak & Mahanta, 2012; Olakulein & Olugbenga, 2006; Shetty & Hans, 2015; Varghese, 2011).

The third group is the unpaid family female worker that has a negative impact on economic, social, familial, political, and overall empowerment of women which is statistically significant only in women's economic, familial, and political empowerment models. The fourth group is other employment status such as a part-time job that has a positive effect on the economic, social, familial, political, and overall empowerment of women which is statistically significant in all models except women's social empowerment model.

The last group is unemployed women which is negatively related to women's economic, familial, political, and overall empowerment which is statistically significant. But the unemployed status of females is positively associated with women's social empowerment which is statistically significant. Women's participation in household decisions is not only affected by age and education but also affects by their employment status. It is observed that urban females are more empowered than rural females because the females who are educated and employed are comparatively more empowered. Employment status brings benefits to women in their capacity for decision-making. Employer and employee females are more likely to partake in decision-making. In the urban sector, nuclear families females are more empowered in familial decision-making. Employment is related to better liberty of movement. More access to employment provides more empowerment. Education and employment are the tools through which the process of empowerment is accelerated (Nayak & Mahanta, 2012). The following studies support our results (Al Riyami, Afifi, & Mabry, 2004; S. U. Khan & Awan, 2011; Nayak & Mahanta, 2012; Rahman et al., 2009; Shafiq et al., 2019; Yount, Peterman, & Cheong, 2018).

The second variable in economic determinants is the income level of females. The result shows that the income level of females has a positive impact on the economic, social, familial, political, and overall empowerment of females which is highly statistically significant in all models except in women's political empowerment model. In poor families where women earn equal income to men have the benefit to enjoy high respect in the family and society (Kandiyoti, 1990). High income earned by female means high bargaining power in the family. Earning of females reduces the financial dependency of females that can develop their control over family resources that lead the way to empowerment. A financially strong female have high saving and a high share of income with their family which leads them to high economic power (S. U. Khan & Awan, 2011). A well-educated female who can earn money is more likely to take part in controlling resources, decision making and socially more powerful which leads to increase their empowerment (Batool & Batool, 2018a). The self-esteem of females increases with income and education. Only education cannot bring empowerment among women unless they get a paid job and earn money (McMullin & Cairney, 2004). Women with a low level of education and low level of income have a low level of self-esteem and empowerment (Ross & Mirowsky, 1996). The personal income of females provides the benefit of getting a better education, and health that enhances their self-confidence and empowerment (Al-Amin & Chowdhury, 2008). The economic bargaining theory of households proposed that an increment in the earning of females can enhance their bargaining power (S. U. Khan & Awan, 2011). The following studies support our results (Al-Amin & Chowdhury, 2008; Batool & Batool, 2018a; S. U. Khan & Awan, 2011; McMullin & Cairney,

2004; Mehra, 1997; Parvin, Ahsan, & Chowdhury, 2004; Ross & Mirowsky, 1996; Waqas & Awan, 2019).

The last variable in economic determinants is poverty. The results show that the poverty gap index and square of the poverty gap are negatively associated with the economic, social, familial, political, and overall empowerment of women which is highly statistically significant. The possible reason behind the negative results may be that poor females have no money so they have no power to control their economic resources. Poverty leads to reduce their social circle so social empowerment may also reduce. Poor females may have no power to participate in family decisions they have to wait for someone else who has the power to make the decision for them such as a high-income member of the household or head of the household. Poor women have no political rights they vote for the people who come to them for votes.

Table 7
Determinants of Women Overall Empowerment in South Punjab

	Unstandardized Coefficients		Standardized Coefficients			
	B	Std. Error	Beta	t	Sig.	
(Constant)	.285	.012		24.500	.000	
Socio-Demographic Determinants						
Age	.001	.000	.063	2.265	.024	
Marital Status	Married	.038	.004	.258	9.713	.000
	Unmarried	-.008	.009	-.027	-.964	.335
	Divorced	.031	.003	.256	9.611	.000
	Widowed	.021	.004	.111	5.056	.000
Years of Schooling	.003	.001	.090	4.736	.000	
Economic Determinants						
Employment Status	Employee	.038	.025	.050	1.548	.122
	Employer	.006	.010	.011	.597	.551
	Unpaid Family Worker	-.019	.020	-.027	-.964	.335
	Other	.022	.010	.042	2.276	.023
	Unemployed	-.005	.002	-.086	-3.407	.001
Income	.006	.003	.074	2.236	.025	
Poverty Gap Index	-.061	.009	-.180	-6.788	.000	
Square of Poverty Gap	-.029	.004	-.170	-6.639	.000	
Assets Ownership Determinants						
Ownership Prevalence among Women	.163	.033	.584	4.969	.000	
Ownership Prevalence among Men	-.145	.077	-.384	-1.873	.061	
Model Summary						
Model	R Square		Durbin-Watson			
	.286		1.682			

The last category of the independent variable is asset ownership determinants. The ownership prevalence among women is positively linked with the economic, social, familial, political, and overall empowerment of women which is highly statistically significant. The ownership prevalence among women means the portion of assets owned by women. When females have more assets under their ownership they become more empowered in every aspect of life. The more assets women own, the more powerful they will be. They have more bargaining power in decision-making and can participate in economic, social, familial, and political decisions. The ownership prevalence among men is negatively linked with the economic, social, familial,

political, and overall empowerment of women which is highly statistically significant. The ownership prevalence among men means the portion of assets owned by men. When more assets are owned by men the bargaining power of females regarding decision-making reduces. Now men become more powerful they will not allow their women to participate in any decision-making. As more assets are owned by men, the self-esteem and dignity of females fall. They become less confident in decision making which leads to reduce empowerment.

4.2 Disaggregated Analysis of Women's Empowerment

In this section, determinants of women's Empowerment a disaggregated analysis are discussed. We have divided the determinants of women's empowerment into three categories: socio-demographic determinants, economic determinants, and asset ownership determinants. In the first category social and demographic factors are discussed, in the second category economic factors are discussed and in the third category, asset ownership factors are discussed.

Tables 8, 13, and 18 show the factors that affect women's economic empowerment in Division Multan, Division Bahawalpur, and Division DG Khan respectively. Table 9, 14, and 19 illustrates the determinants of women's social empowerment in Division Multan, Division Bahawalpur, and Division DG Khan respectively. Table 10, 15, and 20 demonstrates the factors affecting women's familial or interpersonal empowerment in Division Multan, Division Bahawalpur, and Division DG Khan respectively. Table 11, 16, and 21 indicates the determinants of women's political empowerment in Division Multan, Division Bahawalpur, and Division DG Khan respectively. Table 12, 17, and 22 shows the factors that affect the overall women empowerment in Division Multan, Division Bahawalpur, and Division DG Khan respectively.

In the socio-demographic category, the first variable is age. In Division Multan, age has a positive association with women's economic, social, familial, political, and overall empowerment which is highly statistically significant except in the women's economic empowerment model. In Division Bahawalpur, age is positively associated with women's economic, social, familial, political, and overall empowerment which is highly statistically significant. In Division DG Khan, age is positively linked with women's economic, social, familial, political, and overall empowerment which is highly statistically significant except in women's overall empowerment model. If we compare the conjugate of all divisions, we can conclude that women of Multan Division have more overall empowerment, women of Bahawalpur Division have more social and familial empowerment women of DG Khan Division have more economic and political empowerment, and as compared to the other division. The second variable in the socio-demographic determinants is the marital status of women.

In Multan Division, the married group of women is positively associated with women's economic, social, political, and overall empowerment which is highly statistically significant except in women's economic and social empowerment model. While the negatively associated with women's familial empowerment which is highly statistically significant. The reason for negative relationship may be that for newly married females all decisions are taken by the mother-in-law. In Bahawalpur Division, the married group of females has a positive impact on women's economic, social, familial, political, and overall empowerment which is highly statistically significant. In DG Khan Division, the married group of females is positively associated with women's economic, political, and overall empowerment which is highly statistically significant. However, the married group of females is negatively associated with women's social and familial empowerment which is highly statistically significant only in the women's familial empowerment model. By comparing, we can state that women of Division Multan have more economic and social empowerment, women of Division Bahawalpur have more familial and overall empowerment, and women of DG Khan Division have political empowerment.

Table 8
Determinants of Women Economic Empowerment in Multan

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
(Constant)	.503	.020		24.666	.000	
Socio-Demographic Determinants						
Age	.025	.016	.054	1.542	.123	
Marital Status	Married	.016	.020	.048	.799	.424
	Unmarried	-.078	.004	-.575	18.865	.000
	Divorced	.078	.026	.103	2.953	.003
	Widowed	.022	.012	.078	1.906	.057
Years of Schooling	.295	.109	.179	2.712	.007	
Economic Determinants						
Employment Status	Employee	.041	.044	.041	.936	.350
	Employer	.006	.019	.012	.319	.750
	Unpaid Family Worker	-1.306	.238	-.281	-5.495	.000
	Other	.187	.023	.321	8.021	.000
	Unemployed	-.005	.001	-.129	-3.137	.002
Income	.033	.005	.233	7.081	.000	
Poverty Gap Index	-.059	.018	-.223	-3.318	.001	
Square of Poverty Gap	-.024	.005	-.175	-4.801	.000	
Assets Ownership Determinants						
Ownership Prevalence among Women	.003	.001	.073	2.082	.038	
Ownership Prevalence among Men	-.432	.125	-.120	-3.458	.001	
Model Summary						
Model	R Square		Durbin-Watson			
	.374		1.732			

In Multan Division, the unmarried group of females is negatively associated with women's economic, social, familial, political, and overall empowerment which is highly statistically significant except in women's overall empowerment model. In Division Bahawalpur, the unmarried group of females is negatively associated with women's economic, social, familial, political, and overall empowerment which is highly statistically significant. In DG Khan Division, the unmarried group of females is negatively associated with women's economic, familial, political, and overall empowerment which is highly statistically significant; however, the unmarried group of females is positively associated with women's social empowerment which is highly statistically significant. The reason behind the positive impact of unmarried females on social empowerment may be in this division unmarried females are friendly so that they have their own social circle. By matching, we can say that unmarried women of Division Multan are more socially and overall empowered, the unmarried women of DG Khan Division are more economically, familial, and politically empowered as compare to other divisions.

Table 9
Determinants of Women Social Empowerment in Multan

	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	
	B	Std. Error	Beta			
(Constant)	.685	.028		24.287	.000	
Socio-Demographic Determinants						
Age	.002	.001	.140	2.566	.010	
Marital Status	Married	.025	.027	.057	.933	.351
	Unmarried	-.341	.276	-.921	-1.236	.217
	Divorced	-.062	.036	-.060	-1.701	.089
	Widowed	.236	.133	.159	1.781	.075
Years of Schooling	.004	.002	.089	2.313	.021	
Economic Determinants						
Employment Status	Employee	.002	.061	.002	.035	.972
	Employer	.015	.004	.135	3.760	.000
	Unpaid Family Worker	-.086	.039	-.154	-2.210	.027
	Other	.006	.002	.137	3.711	.000
	Unemployed	.090	.028	.281	3.176	.002
Income	.017	.014	.051	1.179	.239	
Poverty Gap Index	-.073	.025	-.200	-2.952	.003	
Square of Poverty Gap	-.017	.010	-.106	-1.672	.095	
Assets Ownership Determinants						
Ownership Prevalence among Women	.017	.003	.174	4.842	.000	
Ownership Prevalence among Men	-.001	.000	-.115	-3.003	.003	
Model Summary						
Model	R Square		Durbin-Watson			
	.362		1.642			

In Multan Division, the divorced group of females is positively related with women's economic, political and overall empowerment which is statistically significant. However, divorced group of females is negatively related to women's social and familial empowerment which is statistically significant. In Bahawalpur Division, the divorced group of females is positively related with women's economic, familial, political and overall empowerment which is statistically significant only in women's political empowerment. However, divorced group of females is negatively related to women's social empowerment which is statistically significant. If we compare, we can say that divorced women of Multan Division have more familial empowerment, divorced women of Bahawalpur Division have more social, political and overall empowerment and the divorced women of DG Khan Division are more economically empowered as compare to the other divisions.

Table 10
Determinants of Women Familial Empowerment in Multan

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
(Constant)	.408	.010		39.589	.000	
Socio-Demographic Determinants						
Age	.001	.000	.067	1.876	.061	
Marital Status	Married	-.021	.010	-.127	-2.074	.038
	Unmarried	-.008	.001	-.200	-5.551	.000
	Divorced	-.122	.051	-.594	-2.417	.016
	Widowed	.008	.006	.057	1.366	.172
Years of Schooling	.002	.001	.124	3.209	.001	
Economic Determinants						
Employment Status	Employee	.169	.103	.554	1.642	.101
	Employer	.125	.076	.750	1.634	.103
	Unpaid Family Worker	-.003	.001	-.091	-2.497	.013
	Other	.010	.008	.043	1.214	.225
	Unemployed	-.003	.001	-.162	-4.438	.000
Income	.014	.006	.104	2.459	.014	
Poverty Gap Index	-.037	.009	-.275	-4.059	.000	
Square of Poverty Gap	-.011	.004	-.198	-3.111	.002	
Assets Ownership Determinants						
Ownership Prevalence among Women	.045	.020	.289	2.220	.027	
Ownership Prevalence among Men	-2.995	1.437	-.119	-2.084	.037	
Model Summary						
Model	R Square		Durbin-Watson			
	.340		1.769			

In Multan Division, the widowed group of females is positively associated with women's economic, social, familial, political, and overall empowerment which is highly statistically significant except in women's familial and political empowerment model.

In Bahawalpur Division, the widowed group of females is positively associated with women's economic, social, familial, political, and overall empowerment which is highly statistically significant except in women's overall empowerment model.

Table 11
Determinants of Women's Political Empowerment in Multan

		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
(Constant)		.243	.025		9.611	.000
Socio-Demographic Determinants						
	Age	.094	.027	.125	3.436	.001
Marital Status	Married	.094	.027	.125	3.436	.001
	Unmarried	-.005	.002	-.114	-3.068	.002
	Divorced	.058	.032	.113	1.796	.073
	Widowed	.019	.015	.054	1.331	.184
Years of Schooling		.032	.005	.226	6.670	.000
Economic Determinants						
Employment Status	Employee	.237	.106	.143	2.243	.025
	Employer	.262	.192	.278	1.364	.173
	Unpaid Family Worker	-.008	.007	-.057	-1.113	.266
	Other	.047	.020	.080	2.305	.021
	Unemployed	-.854	.477	-.651	-1.791	.074
Income		.960	.279	.588	3.438	.001
Poverty Gap Index		-.150	.022	-.447	-6.775	.000
Square of Poverty Gap		-.030	.009	-.208	-3.351	.001
Assets Ownership Determinants						
Ownership Prevalence among Women		.007	.003	.093	2.554	.011
Ownership Prevalence among Men		-.011	.004	-.105	-2.851	.004
Model Summary						
Model	R Square		Durbin-Watson			
	.299		1.756			

Table 12
Determinants of Women Overall Empowerment in Multan

		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
(Constant)		.460	.017		27.677	.000
Socio-Demographic Determinants						
	Age	1.194	.244	.257	4.894	.000
Marital Status	Married	.006	.002	.102	2.821	.005
	Unmarried	-.255	.182	-.272	-1.404	.161
	Divorced	.040	.021	.065	1.876	.061
	Widowed	.009	.002	.140	3.959	.000
Years of Schooling		.002	.001	.075	1.980	.048
Economic Determinants						
Employment Status	Employee	.047	.018	.097	2.679	.008
	Employer	.157	.079	.088	2.001	.046

Unpaid Family Worker	-0.983	.416	-.087	-2.364	.018
Other	.019	.013	.051	1.447	.148
Unemployed	-.011	.005	-.033	-2.367	.018
Income	.402	.365	.608	1.103	.271
Poverty Gap Index	-.080	.015	-.366	-5.481	.000
Square of Poverty Gap	-.014	.006	-.149	-2.379	.018
Assets Ownership Determinants					
Ownership Prevalence among Women	.341	.029	.397	11.568	.000
Ownership Prevalence among Men	-.001	.000	-.075	-1.986	.047
Model Summary					
Model	R Square		Durbin-Watson		
	.389		1.890		

In DG Khan Division, the widowed group of females is positively associated with women's economic, social, familial, political, and overall empowerment which is highly statistically significant. By comparing, we can conclude that widowed women of Bahawalpur Division are more economically empowered and women of DG Khan Division have more social, familial, political and overall empowerment.

The third variable in socio-demographic determinants is the years of schooling or education level of females. In all places, the level of education has a positive impact on women's economic, social, familial, political, and overall empowerment which is highly statistically significant. By comparing, we can state that in Multan division the education has a leading role in economic empowerment, in DG Khan division, education has an important role in social, familial, political, and overall empowerment as compared to the other divisions.

The second category of the independent variable is economic determinants which include employment status, income, and the poverty level of women. The first key variable in this category is the employment status of women. The first group is the employee. In Multan Division, the employee status of females is positively associated with women's economic, social, familial, political, and overall empowerment which is statistically significant except in women's social empowerment. In the Bahawalpur Division, the employee status of females is positively associated with women's economic, social, familial, political, and overall empowerment which is statistically significant except in women's social empowerment. In DG Khan Division, the employee status of females is positively associated with women's economic, social, familial, political, and overall empowerment which is statistically significant except in women's social and overall empowerment.

If we compare the value of conjugate, we can say that employee women of Multan Division are more politically empowered, employee women of Bahawalpur Division have more social, familial and overall empowerment and the employee women of DG Khan Division are more economically empowered.

Table 13
Determinants of Women Economic Empowerment in Bahawalpur

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error				
(Constant)	.445	.019		23.361	.000	
Socio-Demographic Determinants						
Age	.069	.035	.053	1.986	.047	
Marital Status	Married	.022	.012	.077	1.865	.062
	Unmarried	-.030	.014	-.094	-2.145	.032
	Divorced	.140	.128	.039	1.093	.275
	Widowed	.138	.065	.085	2.132	.033
Years of Schooling	.003	.002	.079	2.026	.043	
Economic Determinants						
Employment Status	Employee	.003	.001	.064	2.214	.027
	Employer	.313	.156	.150	2.003	.046
	Unpaid Family Worker	-.005	.003	-.059	-1.692	.091
	Other	.125	.058	.077	2.155	.031
	Unemployed	-.030	.013	-.097	-2.284	.023
Income	4.825	3.079	.331	1.567	.117	
Poverty Gap Index	-.031	.017	-.096	-1.845	.065	
Square of Poverty Gap	-.203	.068	-.750	-2.987	.003	
Assets Ownership Determinants						
Ownership Prevalence among Women	.309	.162	.872	1.905	.057	
Ownership Prevalence among Men	-.046	.027	-.120	-1.747	.081	
Model Summary						
Model	R Square		Durbin-Watson			
	.326		1.807			

Table 14
Determinants of Women Social Empowerment in Bahawalpur

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error				
(Constant)	.552	.031		17.671	.000	
Socio-Demographic Determinants						
Age	.215	.097	.108	2.221	.027	
Marital Status	Married	.024	.032	.041	.763	.446
	Unmarried	-.140	.084	-.124	-1.671	.095
	Divorced	-.390	.211	-.065	-1.852	.064
	Widowed	.186	.106	.069	1.748	.081
Years of Schooling	.006	.003	.097	2.493	.013	
Economic Determinants						
Employment Status	Employee	.054	.113	.048	.481	.631
	Employer	.174	.092	.071	1.888	.059
	Unpaid Family Worker	-.279	.142	-.081	-1.969	.049
	Other	.192	.095	.071	2.018	.044

	Unemployed	.233	.132	.153	1.768	.077
	Income	.152	.056	.208	2.726	.007
	Poverty Gap Index	-.014	.003	-.224	-5.408	.000
	Square of Poverty Gap	-.005	.002	-.081	-1.942	.052
Assets Ownership Determinants						
	Ownership Prevalence among Women	.001	.000	.106	2.892	.004
	Ownership Prevalence among Men	-.001	.000	-.058	-1.628	.104
Model Summary						
Model		R Square		Durbin-Watson		
		.340		1.790		

The second group is employer status of females. In Division Multan, employer women is positively linked with economic, social, familial, political, and overall empowerment of women which is statistically significant except in women’s familial and political empowerment model. In Division Bahawalpur, employer women is positively linked with economic, social, familial, political, and overall empowerment of women which is statistically significant except in women’s political and overall empowerment model.

Table 15
Determinants of Women Familial Empowerment in Bahawalpur

	Unstandardized Coefficients		Standardized Coefficients		t	Sig.
	B	Std. Error	Beta			
(Constant)	.303	.023			13.190	.000
Socio-Demographic Determinants						
Age	.155	.039	.158		3.967	.000
Marital Status	Married	.062	.034	.085	1.827	.068
	Unmarried	-.005	.002	-.113	-2.652	.008
	Divorced	.077	.155	.018	.496	.620
	Widowed	.150	.078	.076	1.917	.056
Years of Schooling	.103	.049	.455		2.074	.038
Economic Determinants						
Employment Status	Employee	3.089	.796	1.669	3.883	.000
	Employer	.115	.068	.064	1.695	.091
	Unpaid Family Worker	-.403	.180	-.153	-2.240	.025
	Other	1.010	.272	.792	3.710	.000
	Unemployed	-.016	.033	-.035	-.502	.616
Income	.918	.471	2.139		1.951	.051
Poverty Gap Index	-1.063	.484	-1.805		-2.195	.028
Square of Poverty Gap	-.019	.011	-.083		-1.672	.095
Assets Ownership Determinants						
Ownership Prevalence among Women	.106	.047	.193		2.272	.023
Ownership Prevalence among Men	-.001	.000	-.077		-2.167	.031
Model Summary						
Model		R Square		Durbin-Watson		
		.534		1.786		

In DG Khan Division, employer women is positively linked with economic, social, familial, political, and overall empowerment of women which is statistically significant except in

women's economic and familial empowerment model. By comparing, we can say that the employer of Multan Division have more familial, political and overall empowerment, the employer of Bahawalpur Division are more economically and socially empowered as compared to the other divisions.

Table 16
Determinants of Women Political Empowerment in Bahawalpur

	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	.218	.019		11.296	.000
Socio-Demographic Determinants					
Age	.011	.003	.130	3.589	.000
Marital Status	Married	.152	.069	.164	2.210 .027
	Unmarried	-.076	.043	-.076	-1.746 .081
	Divorced	.065	.032	.147	2.034 .042
	Widowed	.143	.066	.087	2.187 .029
Years of Schooling	.065	.032	.147	2.034	.042
Economic Determinants					
Employment Status	Employee	.076	.043	.076	1.746 .081
	Employer	.077	.057	.052	1.358 .175
	Unpaid Family Worker	-.152	.069	-.164	-2.210 .027
	Other	.172	.120	.631	1.431 .153
	Unemployed	-.392	.180	-.148	-2.180 .030
Income	1.049	.274	.823	3.834	.000
Poverty Gap Index	-.061	.027	-.157	-2.249	.025
Square of Poverty Gap	-.004	.002	-.105	-2.467	.014
Assets Ownership Determinants					
Ownership Prevalence among Women	.003	.001	.083	1.936	.053
Ownership Prevalence among Men	-.223	.126	-.061	-1.767	.078
Model Summary					
Model	R Square		Durbin-Watson		
	.318		1.819		

The third group is unpaid family female worker. In Multan Division unpaid family female workers has negative impact on economic, social, familial, political, and overall empowerment of women which is statistically significant in all models except women's political empowerment model. In Bahawalpur Division, unpaid family female workers have negative impact on economic, social, familial, political, and overall empowerment of women which is statistically significant.

Table 17
Determinants of Women Overall Empowerment in Bahawalpur

	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	.380	.015		25.501	.000
Socio-Demographic Determinants					

	Age	.004	.002	.061	1.689	.092
Marital Status	Married	.043	.026	.068	1.700	.089
	Unmarried	.085	.048	.090	1.779	.076
	Divorced	.162	.100	.057	1.616	.106
	Widowed	.079	.051	.062	1.567	.117
	Years of Schooling	.003	.001	.112	2.868	.004
Economic Determinants						
Employment Status	Employee	.126	.067	.077	1.868	.062
	Employer	.061	.044	.052	1.381	.168
	Unpaid Family Worker	-.008	.001	-.271	-6.568	.000
	Other	.001	.001	.030	.734	.463
	Unemployed	-1.030	.458	-.485	-2.251	.025
	Income	.062	.020	.204	3.015	.003
	Poverty Gap Index	-3.174	1.335	-1.029	-2.378	.018
	Square of Poverty Gap	-.156	.091	-.738	-1.727	.085
Assets Ownership Determinants						
	Ownership Prevalence among Women	.124	.058	.457	2.150	.032
	Ownership Prevalence among Men	-.003	.001	-.114	-3.309	.001
Model Summary						
Model			R Square		Durbin-Watson	
			.349		1.642	

In DG Khan Division, unpaid family female workers has negative impact on economic, social, familial, political, and overall empowerment of women which is statistically significant in all models except women's political empowerment model. By comparing we can conclude that the unpaid family workers of Multan Division are more economically empowered, the unpaid family workers of Bahawalpur Division have more familial and political empowerment, the unpaid family workers of DG Khan Division are more socially empowered.

Table 18
Determinants of Women Economic Empowerment in DG Khan

	Unstandardized Coefficients		Standardized Coefficients			
	B	Std. Error	Beta	t	Sig.	
(Constant)	.365	.017		20.872	.000	
Socio-Demographic Determinants						
Age	.249	.094	.105	2.655	.008	
Marital Status	Married	.004	.001	.138	4.913	.000
	Unmarried	-.041	.009	-.126	-4.351	.000
	Divorced	2.714	.364	6.812	7.447	.000
	Widowed	.020	.016	.041	1.273	.203
Years of Schooling	.003	.001	.089	2.968	.003	
Economic Determinants						
Employment Status	Employee	.123	.038	.177	3.216	.001
	Employer	.025	.027	.031	.915	.360
	Unpaid Family Worker	-.006	.004	-.050	-1.359	.174

Other	.003	.001	.148	4.725	.000
Unemployed	-.011	.010	-.040	-1.085	.278
Income	.017	.009	.113	1.911	.056
Poverty Gap Index	-.099	.035	-.131	-2.830	.005
Square of Poverty Gap	-.297	.061	-.167	-4.851	.000
Assets Ownership Determinants					
Ownership Prevalence among Women	.083	.035	.132	2.409	.016
Ownership Prevalence among Men	-.001	.000	-.213	-7.119	.000
Model Summary					
Model	R Square		Durbin-Watson		
	.380		1.869		

The forth group is other employment status of females such as part time job. In Multan Division, other group of employment status has positive affect on the economic, social, familial, political, and overall empowerment of women which is statistically significant in all models except women’s familial and overall empowerment models. In Bahawalpur Division, other group of employment status has positive affect on the economic, social, familial, political, and overall empowerment of women which is statistically significant in all models except women’s political and overall empowerment models.

Table 19
Determinants of Women Social Empowerment in DG Khan

	Unstandardized Coefficients		Standardized Coefficients			
	B	Std. Error	Beta	t	Sig.	
(Constant)	.229	.014		16.091	.000	
Socio-Demographic Determinants						
Age	.036	.008	.139	4.780	.000	
Marital Status	Married	-.020	.006	-.101	-3.462	.001
	Unmarried	.017	.009	.079	1.845	.065
	Divorced	-.063	.028	-.104	-2.255	.024
	Widowed	1.317	.507	.157	2.597	.010
Years of Schooling	7.277	3.971	.702	1.832	.067	
Economic Determinants						
Employment Status	Employee	.046	.031	.082	1.474	.141
	Employer	.064	.016	.247	4.106	.000
	Unpaid Family Worker	-.653	.124	-.313	-5.266	.000
	Other	6.437	.970	2.499	6.634	.000
	Unemployed	.029	.008	.135	3.622	.000
Income	.363	.889	.055	.408	.683	
Poverty Gap Index	-.143	.073	-.118	-1.965	.050	
Square of Poverty Gap	-.102	.050	-.072	-2.050	.041	
Assets Ownership Determinants						
Ownership Prevalence among Women	.005	.003	.059	1.813	.070	
Ownership Prevalence among Men	-.003	.002	-.050	-1.681	.093	
Model Summary						

Model	R Square	Durbin-Watson
	.359	1.712

In DG Khan Division, another group of employment status has a positive effect on the economic, social, familial, political, and overall empowerment of women which is statistically significant in all models. By comparing, we can say that the other women worker of the Multan division is more economically empowered, the other women worker of the Bahawalpur division have more familial and political empowerment, and the other women worker of DG Khan Division have more social and overall empowerment.

Table 20
Determinants of Women Familial Empowerment in DG Khan

	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	1.541	.637		2.418	.016
Socio-Demographic Determinants					
Age	.021	.005	.082	4.435	.000
Marital Status	Married	-.002	.001	-.053	-1.918 .055
	Unmarried	-.019	.005	-.081	-3.839 .000
	Divorced	-.025	.002	-.205	-11.022 .000
	Widowed	.165	.050	.127	3.323 .001
Years of Schooling	.484	.146	.310	3.312	.001
Economic Determinants					
Employment Status	Employee	.115	.062	.151	1.860 .063
	Employer	.003	.062	.004	.051 .959
	Unpaid Family Worker	-.013	.002	-.120	-5.617 .000
	Other	.099	.032	.076	3.146 .002
	Unemployed	-.160	.190	-.146	-.839 .401
Income	.141	.028	.140	5.097	.000
Poverty Gap Index	-.031	.004	-.239	-7.227	.000
Square of Poverty Gap	.349	.076	.377	4.601	.000
Assets Ownership Determinants					
Ownership Prevalence among Women	.365	.047	.148	7.823	.000
Ownership Prevalence among Men	-.591	.043	-.361	-13.769	.000
Model Summary					
Model	R Square		Durbin-Watson		
	.257		1.678		

The last group is unemployed. In Multan Division, unemployed women are negatively related to women’s economic, familial, political and overall empowerment which is statistically significant. But the unemployed status of females is positively associated with women’s social empowerment which is statistically significant.

Table 21
Determinants of Women Political Empowerment in DG Khan

	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	.221	.004		60.092	.000
Socio-Demographic Determinants					

	Age	.579	.044	.416	13.282	.000
	Married	.644	.272	.035	2.365	.018
Marital Status	Unmarried	-.352	.024	-.352	-	.000
	Divorced	.030	.021	.066	1.396	.163
	Widowed	.192	.110	.023	1.754	.080
	Years of Schooling	2.325	.103	.306	22.616	.000
Economic Determinants						
	Employee	.234	.052	.068	4.504	.000
	Employer	.145	.040	.152	3.597	.000
Employment Status	Unpaid Family Worker	-.017	.011	-.025	-1.487	.137
	Other	.133	.029	.208	4.598	.000
	Unemployed	-.724	1.452	-.029	-.498	.618
	Income	4.147	1.130	.080	3.669	.000
	Poverty Gap Index	-2.488	1.367	-.041	-1.821	.069
	Square of Poverty Gap	-2.311	.500	-.133	-4.626	.000
Assets Ownership Determinants						
	Ownership Prevalence among Women	.174	.052	.044	3.367	.001
	Ownership Prevalence among Men	-.044	.039	-.017	-1.122	.262
Model Summary						
	Model	R Square		Durbin-Watson		
		.335		1.785		

In Division Bahawalpur, unemployed women are negatively related with women's economic, familial, political and overall empowerment which is statistically significant except in women's familial empowerment model. But unemployed status of females is positively associated with women's social empowerment which is statistically significant.

In DG Khan Division, unemployed women are negatively related with women's economic, familial, political and overall empowerment which is statistically significant only in women's overall empowerment model. But unemployed status of females is positively associated with women's social empowerment which is statistically significant.

We can conclude that the unemployed women of Multan Division are politically more empowered, the unemployed women of Bahawalpur Division have more economic, social, and overall empowerment and the unemployed women of DG Khan Division have more familial empowerment as compared to the other divisions. The second variable in economic determinants is the income level of females. In Multan Division, income level of females has positive impact on the economic, social, familial, political, and overall empowerment of females which is highly statistically significant in all models except in women's social and overall empowerment models. In Bahawalpur Division, , income level of females has positive impact on the economic, social, familial, political, and overall empowerment of females which is highly statistically significant in all models except in women's economic empowerment model. In DG Khan Division, , income level of females has positive impact on the economic, social, familial, political, and overall empowerment of females which is highly statistically significant in all models except in women's social empowerment model. If we compare the conjugate, we can say that in the Bahawalpur Division level of income is playing a leading role in economic and familial empowerment and in DG Khan Division level of income is an important determinant in women's social, political, and overall empowerment as compared to the other divisions.

The last variable in economic determinants is poverty. In all places, poverty gap index and square of the poverty gap is negatively associated with the economic, social, familial, political, and overall empowerment of women which is highly statistically significant.

If we compare the conjugate of poverty gap we can say that in Bahawalpur division it is a leading factor in familial and overall empowerment and in DG Khan it is an important determinant in economic, social, and political empowerment. And if we compare the conjugate of the square of the poverty gap we can say that more impact of square of poverty gap on overall women's empowerment in Bahawalpur division and more influence of square of poverty gap on women's economic, social, familial, and political empowerment in DG Khan division.

The last category of independent variable is asset ownership determinants. In all places, the ownership prevalence among women is positively linked with the economic, social, familial, political, and overall empowerment of women which is highly statistically significant.

By comparing, we concluded that in Multan division ownership prevalence among women is playing a leading role in women's social empowerment, in Bahawalpur division ownership prevalence among women showing main role in women's economic empowerment, and in DG Khan division ownership prevalence among women is presenting a dominant role in familial, political, and overall empowerment.

In Multan Division, the ownership prevalence among men is negatively linked with the economic, social, familial, political, and overall empowerment of women which is highly statistically significant. In Bahawalpur Division, the ownership prevalence among men is negatively linked with the economic, social, familial, political, and overall empowerment of women which is highly statistically significant except women's social empowerment model. In DG Khan division, the ownership prevalence among men is negatively linked with the economic, social, familial, political, and overall empowerment which is highly statistically significant except women's political empowerment model. If we compare the value of the conjugate, we can say that in Multan Division ownership prevalence among men is overriding factor in economic and familial empowerment, in Bahawalpur Division, ownership prevalence among men is leading indicator in political empowerment, and in DG Khan Division, ownership prevalence among men is determinant in women's social and overall empowerment.

Table 22
Determinants of Women Overall Empowerment in DG Khan

	Unstandardized Coefficients		Standardized Coefficients			
	B	Std. Error	Beta	t	Sig.	
(Constant)	.242	.006		40.550	.000	
Socio-Demographic Determinants						
Age	.047	.032	.058	1.468	.142	
Marital Status	Married	.001	.000	.126	4.512	.000
	Unmarried	-.019	.003	-.173	-6.015	.000
	Divorced	.008	.022	.010	.356	.722
	Widowed	.592	.100	1.867	5.902	.000
Years of Schooling	.001	.000	.085	2.857	.004	
Economic Determinants						
Employment Status	Employee	.019	.013	.081	1.474	.141
	Employer	.046	.007	.415	6.989	.000
	Unpaid Family Worker	-.468	.080	-.771	-5.821	.000
	Other	.279	.051	2.048	5.440	.000

Unemployed	-.010	.003	-.108	-2.953	.003
Income	6.437	.970	2.499	6.634	.000
Poverty Gap Index	-.653	.124	-.313	-5.266	.000
Square of Poverty Gap	-.100	.021	-.164	-4.770	.000
Assets Ownership Determinants					
Ownership Prevalence among Women	1.317	.507	.157	2.597	.010
Ownership Prevalence among Men	-.005	.003	-.096	-1.632	.103
Model Summary					
Model	R Square		Durbin-Watson		
	.381		1.683		

5 Conclusions and Policy Implications

The study aimed to examine the factors that contribute to women's empowerment in the region and to identify the challenges that women face in achieving greater empowerment. The study also explored the impact of empowerment on women's socio-demographic, economic status, and well-being. The study found that women's empowerment in South Punjab is influenced by a range of factors, including age, marital status, education, and income, poverty, and asset ownership prevalence. Marital status and age were also found to have a significant influence on women's empowerment in South Punjab. Married women were found to have lower levels of empowerment compared to unmarried women, as they are often constrained by patriarchal norms and expectations within the household. Similarly, older women were found to have lower levels of empowerment due to limited mobility, fewer opportunities to acquire education and skills, and a reduced role in decision-making processes. The study found that education is a particularly important factor in promoting women's empowerment, as it enables women to acquire knowledge, skills, and confidence to participate in decision-making and to challenge gender norms. Income and asset ownership were also found to be crucial in providing women with greater autonomy and bargaining power in household and community settings. In contrast, poverty was found to be a significant barrier to women's empowerment, as it limits access to education and economic opportunities and reinforces gendered power dynamics. The study on women's empowerment in South Punjab, Pakistan found that asset ownership prevalence is a crucial factor that contributes to women's empowerment in the region. The study revealed that women who own assets, such as land, livestock, and housing, have greater autonomy and bargaining power in household and community settings. Asset ownership provides women with economic resources that enable them to participate in decision-making, access credit and financial services, and exercise greater control over their lives.

Following policies may be devised to address social norms and stereotypes related to gender roles, marriage, and age may help to promote gender equality and empower women.

- The policymakers may design policies to increase access to education for women may help to enhance their knowledge and skills, and improve their ability to participate in economic, social, and political activities.
- Women's education is a crucial factor in increasing their earning potential. Providing girls with equal access to education may help break the cycle of poverty and empower women to pursue higher-paying jobs.
- Encouraging women to start their own businesses provide them with economic independence and opportunities for growth. Governments have to create policies that support women entrepreneurs, such as providing training, access to funding, and mentorship.

- A policy that ensures equal pay for equal work may help to reduce the gender pay gap, which is a significant barrier to women's economic empowerment. This policy may be implemented through legislation, which requires employers to pay men and women the same wage for the same work.
- Education and skills training may enhance women's human capital, increase their income-earning potential, and improve their bargaining power within households and communities that reduce the poverty. Policymakers may design and implement programs that provide affordable and accessible education and skills training to women, particularly those from low-income backgrounds.
- Implement legal reforms that strengthen women's property rights, particularly in rural areas, where women often face barriers in accessing and owning land and other productive assets. This may be done by enforcing existing laws that protect women's property rights and enacting new laws that explicitly recognize women's rights to property.

References

- Acharya, D. R., Bell, J. S., Simkhada, P., Van Teijlingen, E. R., & Regmi, P. R. (2010). Women's autonomy in household decision-making: a demographic study in Nepal. *Reproductive health*, 7(1), 1-12.
- Addai, B. (2017). Women empowerment through microfinance: Empirical evidence from Ghana. *Journal of finance and accounting*, 5(1), 1-11.
- Ahmad, R., Hussain, A., Umer, M., & Parveen, K. (2017). Efficiency of microfinance providers in Pakistan: An empirical investigation. *Review of Economics and Development Studies*, 3(2), 147-158.
- Al-Amin, M., & Chowdhury, T. (2008). Women, poverty and empowerment: an investigation into the dark side of microfinance. *Asian Affairs*, 30(2), 16-29.
- Al Riyami, A., Afifi, M., & Mabry, R. M. (2004). Women's autonomy, education and employment in Oman and their influence on contraceptive use. *Reproductive health matters*, 12(23), 144-154.
- Assaad, R. A., Nazier, H., & Ramadan, R. (2014). *Individual and households determinants of women empowerment: Application to the case of Egypt*. Paper presented at the Economic Research Forum, Nov.
- Assaad, R. A., Nazier, H., & Ramadan, R. (2015). *Empowerment is a community affair: Community level determinants of married women's empowerment in Egypt*. Paper presented at the Economic Research Forum, WP.
- Bain, C., Ransom, E., & Halimatusa'diyah, I. (2018). 'Weak winners' of Women's empowerment: The gendered effects of dairy livestock assets on time poverty in Uganda. *Journal of Rural Studies*, 61, 100-109.
- Batool, S. A. (2018). *Determinants of women's empowerment in Punjab, Pakistan*. (PhD), University of the Punjab, Lahore.
- Batool, S. A., & Batool, S. S. (2018a). Impact of Education on Women's Empowerment: Mediation Role of Income and Self-Esteem. *Journal of Research & Reflections in Education (JRRE)*, 12(1).
- Batool, S. A., & Batool, S. S. (2018b). Individual, familial, and socio-cultural determinants of women's empowerment. *Paradigms*, 12(1), 82-87.
- Biswas, C., & Mukhopadhyay, I. (2018). Marital status and women empowerment in India. *Sociology International Journal*, 2(1), 29-37.
- Bushra, A., & Wajiha, N. (2015). Assessing the socio-economic determinants of women empowerment in Pakistan. *Procedia-Social and Behavioral Sciences*, 177, 3-8.

- Chaudhry, I., & Nosheen, F. (2009). The determinants of women empowerment in Southern Punjab (Pakistan): An empirical analysis. *European Journal of Social Sciences*, 10, 216-229.
- Gholipour, A., Rahimian, A., Mirzamani, A., & Zehtabi, M. (2010). IMPACT model of women's empowerment. *International Business Research*, 3(1), 57.
- Gupta, K., & Yesudian, P. P. (2006). Evidence of women's empowerment in India: A study of socio-spatial disparities. *GeoJournal*, 65, 365-380.
- Haque, M., Islam, T. M., Tareque, M. I., & Mostofa, M. (2011). Women empowerment or autonomy: A comparative view in Bangladesh context. *Bangladesh e-journal of Sociology*, 8(2), 17-30.
- Jayaweera, S. (1997). Women, education and empowerment in Asia. *Gender and Education*, 9(4), 411-424.
- Jejeebhoy, S. J. (2000). *Women's autonomy in rural India: Its dimensions, determinants, and the influence of context*: na.
- Kabeer, N. (1999). *The conditions and consequences of choice: reflections on the measurement of women's empowerment* (Vol. 108): UNRISD Geneva.
- Kandiyoti, D. (1990). Women and rural development policies: The changing agenda. *Development and Change*, 21(1), 5-22.
- Kantor, P. (2003). Women's empowerment through home-based work: Evidence from India. *Development and Change*, 34(3), 425-445.
- Khan, M., & Maan, A. A. (2008). Socio-cultural milieu of women's empowerment in district Faisalabad. *Pakistan Journal of Agricultural Science*, 45(3), 78-90.
- Khan, S. U., & Awan, R. (2011). Contextual assessment of women empowerment and its determinants: Evidence from Pakistan.
- McMullin, J. A., & Cairney, J. (2004). Self-esteem and the intersection of age, class, and gender. *Journal of aging studies*, 18(1), 75-90.
- Mehra, R. (1997). Women, empowerment, and economic development. *The Annals of the American Academy of Political and Social Science*, 554(1), 136-149.
- Nayak, P., & Mahanta, B. (2012). Women Empowerment in India. *Bulletin of Political Economy*, 5(2), 155-183.
- Olakulein, F., & Olugbenga, O. (2006). Distance education as a women empowerment strategy in Africa. *International Women Online Journal Of Distance Education*, 1(1), 48-54.
- Orso, C. E., & Fabrizi, E. (2016). The determinants of women's empowerment in Bangladesh: The role of partner's attitudes and participation in microcredit programmes. *The Journal of Development Studies*, 52(6), 895-912.
- Parveen, S., & Leonhäuser, I. (2005). *Empowerment of rural women in Bangladesh: A household level analysis* (Vol. 72): Margraf Berlin.
- Parvin, G. A., Ahsan, S. R., & Chowdhury, M. R. (2004). Women empowerment performance of income generating activities supported by Rural Women Employment Creation Project (RWECP): A case study in Dumuria Thana, Bangladesh. *The Journal of Geo-Environment*, 4(1), 47-62.
- Rahman, M., Karmaker, U. K., & Mia, A. R. (2009). Determinants of women empowerment at domestic and non-domestic issues: Evidence from Chapai Nawabganj district in Bangladesh. *Dhulagiri Journal of Sociology and Anthropology*, 3, 143-162.
- Ross, C. E., & Mirowsky, J. (1996). Economic and interpersonal work rewards: Subjective utilities of men's and women's compensation. *Social Forces*, 75(1), 223-245.
- Rui, G. U., & Nie, F.-y. (2021). Does empowering women benefit poverty reduction? Evidence from a multi-component program in the Inner Mongolia Autonomous Region of China. *Journal of Integrative Agriculture*, 20(4), 1092-1106.

- Sebhatu, K. T. (2012). Determinants of women's empowerment in cooperatives societies: survey evidence from south eastern Tigray, Ethiopia. *Continental Journal of Social Sciences*, 5(2), 45.
- Shafiq, A., Hussain, A., Asif, M., Hwang, J., Jameel, A., & Kanwel, S. (2019). The effect of “women’s empowerment” on child nutritional status in Pakistan. *International Journal of Environmental Research and Public Health*, 16(22), 4499.
- Sheikh, Q.-t.-a. A., Meraj, M., & Sadaqat, D. M. (2015). Gender equality and socio-economic development through women’s empowerment in Pakistan. *Ritsumeikan Journal of Asia Pacific Studies*, 34, 142-160.
- Shetty, S., & Hans, V. (2015). Role of education in women empowerment and development: Issues and impact. *Role of Education in Women Empowerment and Development: Issues and Impact (September 26, 2015)*.
- Tufail, A., & Sheikh, M. R. (2023). Determinants of Gender Asset Ownership in Rural Areas of South Punjab, Pakistan: A Cross-Sectional Analysis. *Journal of Policy Research*, 9(1).
- Urooj, K., Ahmad, T. I., Bhatti, M. A., & Hussain, A. (2022). Women Empowerment in Pakistan: Multilevel Measurements, Spatial Differences, and Contributing Factors. *iRASD Journal of Economics*, 4(3), 480-499.
- Varghese, T. (2011). Women empowerment in Oman: A study based on Women Empowerment Index. *Far East Journal of Psychology and Business*, 2(2), 37-53.
- Waqas, M., & Awan, M. S. (2019). Do cash transfers effect women empowerment? Evidence from Benazir Income Support Program of Pakistan. *Women's Studies*, 48(7), 777-792.
- Wei, W., Sarker, T., Żukiewicz-Sobczak, W., Roy, R., Alam, G. M., Rabbany, M. G., . . . Aziz, N. (2021). The influence of women’s empowerment on poverty reduction in the rural areas of Bangladesh: Focus on health, education and living standard. *International Journal of Environmental Research and Public Health*, 18(13), 6909.
- Wiklander, J. (2010). Determinants of Women’s Empowerment in Rural India. *An Unpublished MA thesis*. Submitted to the Department of Economics, Lunds University.
- Yount, K. M., Peterman, A., & Cheong, Y. F. (2018). Measuring women's empowerment: a need for context and caution. *The Lancet Global Health*, 6(1), e29.