

Impact of Cash Transfer on Women Empowerment in Pakistan: Evidence from Micro Data

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Abstract

The study has explored the impact of cash transfers on women empowerment in Pakistan. Women empowerment is basically providing women power in space of society where they not have, this promote to gender equality and help to attain sustainable developmental goals (SDG'S) 2030. To measure the women empowerment an index generated with five factor of women decision making (marriage decision, children decision, and food purchasing decision, cloth purchasing decision and travel decision) through Principle Component Analysis (PCA). Data extracted from Household Integrated Economic Survey (HIES) 2018-19 in Pakistan. Cash transfers used as a combination of Benazir Income Support Program (BISP), Zakat/Usher and other sources. Geography (rural or urban) of household, Information and Communication Technology (ICT) proxy of usage of mobile, desktop, laptop or other device and Head of Household (male or female) used as control variables. According to data nature Ordinary Least Square (OLS) regression applied in this research. After checking the impact of cash transfers on women empowerment in Pakistan, impact of disaggregated cash transfer also examined. Outcomes of this research shows that cash transfers have positive impact on women empowerment in Pakistan, head of household has negative impact on women empowerment, its mean if female will be head of household it will positively contribute in women empowerment, but if men will be head than its impact will be negative on women empowerment. Information and communication technology and geography have positive impact on women empowerment. Disaggregated results indicates that Benazir Income Support Program has positive but negligible influence on women empowerment, Zakat/Usher has great role in women empowerment, while other sources not have any vital role in women empowerment.

Introduction

Globally women have fewer chances for economic and social contribution than men, less access to basic education, more health and safety risks, less decision power and slighter political representation. The word gender defines the socially-constructed parts and responsibilities that social order consider suitable for men and women and both have equal right and control for monetary autonomy, instruction and individual development (United Nation, 2018). Women empowerment definition by UN women states as women being able for take control over their lives, set their own agenda, gain self-confidence, gain skills, self-sufficiency and solve their problems (United Nation Women, 2011). Women empowerment could be a basic perspective of achieving gender equality. Women empowerment means achievement of equal rights between men and women as beneficiaries of development, peace, security and human rights (United Nation, 2013). Gender inequality is the practice to permit or denying rights or privilege to a person based on gender. Further, gender inequality means unequal actions or behavior by gender (Wani & Dastidar, 2019). Though this issue is for both men and women but mostly women are deprived from their rights. Nowadays this issue is common in most countries especially in developing countries, Pakistan is also included in

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developing country which facing numerous problems such as poverty, illiteracy, joblessness, injustice, violence in human rights but most critical and evolving issue is gender inequality. Due to gender inequality women have less rights in societies, women empowerment is key point to handle inequality issue. Women empowerment is a global issue that's why it's includes in Millennium Developmental Goals (MDG's) and stated that it is effective means to combat poverty, hunger and disease, as well as to stimulate development and for sustainability (Kabeer, 2010).

The Global Gender Gap Index and score of Global Gender Gap stand at 68.6% (based on population average weighted) and score of South Asia Gender Gap stand at 66%, whereas score of Pakistan Gender Gap just closing 56%, performance represent improvement from previous, but it is not adequate for enter into high rank . Pakistan ranked 151 out of 153 countries. Only 25% percent women participate in labor force participation, remaining 85% are men in Pakistan and according to estimation only 18% labor income goes to women. Literacy rate of women is less as compared to 71% men. Women political empowerment score only stand at 20.2% and men score recorded 79.8% (World Economic Forum, 2020).

Women have an important role in development and prosperity of country (Iqbal, Afzal & Inayat, 2012). Empowered and better women may lead to superior generation in upcoming years. Women participation in economic activates across all the sectors is essential for build a stronger economy expansion and sustainability (Bukhari, Gaho & Soomro, 2019). But due to gender gap women have not equal rights, to close up the gender gap women empowerment is an important factor. Women can empower in many ways, there are different factors that determine to women empowerment such as providing education to women, participation in politics, providing jobs, level of income, health status, decision making, number of children, area, domestic violence, mobility, autonomy, ownership of household assets, freedom, participation in political, social and developmental awareness, reproductive rights, exposure to media information (Dey & Khudhri, 2015, Zaman et al, 2012, Chudhary & Nosheen, 2009, Chudhary & Nosheen, 2009, Biswas & Kabir, 2004). In this research women empowerment determined by decision making about children, marriage, purchasing of cloth and food, decision of travel, to measure women empowerment decision making right is more suitable factor (Akram, 2018).

Women empowerment has huge impact on development in many ways. Women bestows to their families, societies and countries monetarily this brings expansion in the economy (Sohail, 2014). Women are pillar of any country; therefore they should be more influential and confident. Sustainable development attained by providing equal rights to women (Planning Commission, 2011). Women empowerment and economic progress both are closely related, also women empowerment has great role for improvement in some children welfare angles, mainly in health, nutrition and several other expenses as education (Duflo, 2012). Grants helps to purchasing basic needs of women as food items and specially women play independent role their houses and makes energetic member of family (Waqas & Awan, 2019).

Women have an important role in development and prosperity of country (Iqbal, Afzal & Inayat, 2012). Women empowerment works direct as poverty alleviation, gender equality and eventually inclusive growth (Waqas & Awan, 2019). The gender equality goal of United Nations Millennium Developmental Goals (MDG's) requires equivalent chances for male and female. But society behaves different towards women, specifically in poor and developing countries limits are fixed for women. Such restrictions not only women to limited access in markets, employment and higher education but also makes women sluggish part of society, even she has no independent role for household decision making (Waqas & Awan, 2019).

To attain the goal of women empowerment cash transfers is an important element (Corona & Gammage, 2017). Cash transfer system states to implemented social and economic policies designed to reduction poverty and income inequality by providing relief to the most vulnerable

and relegated sections of the society, provide regular income to poor household (Holmlund & Sohlman, 2016; Smith et al, 2003). Cash transfers are important factor for advancing gender equality and women empowerment and plays key role for closing gaps between genders (Corona & Gammage, 2017). Cash transfers make women more independent and women actively participate to take decisions (Zaky, 2014). Cash transfers program target to women stimulate gender equity and construct to economic empowerment (Migwi, 2017). Cash transfers inspires to education and health status of women, improves well-being of mothers that bring upgrading in children attainments (Sinha, Raju and Morrison, 2007).

For highlight the impact of cash transfers many studies work on cash transfers and women empowerment and find out that cash transfer has positive impact on women empowerment, BISP leads to well-being of women and bring improvement in voting and mobility of women in Pakistan (Iqbal, Padda & Farooq, 2020), the experience of cash transfers in other studies such in Brazil, Mexico, South Africa, Argentina, Nicaragua and Afghanistan and Bangladesh illustrations that involvement of women to labor market, intra-household decision making, self-employment and distribution of resources by providing cash transfers to women (Bobonis et al; 2013, Devereux, 2002, Soares et al; 2007 & SRC, 2011).

According to World Bank recent estimate about 734 million people of world's population lived on less than \$1.90 a day. During COVID-19 the World Bank estimated around 40 to 60 million additional people will fall into extreme poverty under in \$1.90 per day (Economic Survey 2019-20). Pakistan multi-sectorial poverty reduction policies encompasses such as Benazir Income support program (BISP), Pakistan Bait-ul-Mal, Zakat, Employees Old Age Benefit Institutions (EOBI), Usher programs, Worker Welfare Fund (WWF) and provisional Employees Social Security Institutions. Pakistan developed a social protection methodology in 2007, and declared the BISP as its primary social security net program in 2008. The BISP at first pointed to assist the "poorest to the poor" through unconditional cash transfers (Ambler and Brauw, 2017).

The Benazir Income Support Program is a distinctive case in cash transfer for several reasons. First, it is an unconditional transfer, secondly its nationwide programs that has expanded quickly (Ambler & Brauw, 2017). Due to its importance current government, increased budgetary allocation that in 2016 was 102 billion and increase as 180 billion in FY2020, number of beneficiaries stands now 4.5 million. In Pakistan Bait-ul-Mal has disbursed RS 2.705 billion during FY2020 and total collected zakat amount Rs. 9,256.66 million during FY2019 (Economic Survey, 2019-20). Women make up 48.8 percent of Pakistan population; female literacy rate is 49 percent which is relatively lower than male literacy rate of 70 percent. 60 million women are in working age and only 20 percent participate in working paid (SDG's report, 2019). Women continue face gender disparity not only in labor market but also in decision making, property assets ownership, education seeking and family planning. Women contribution in labor force gradually increasing in Pakistan. Women managerial position has increase from 0.3 percent in 2012-13 to 0.5 percent in 2018 (Economic Survey, 2019-20).

Women in urban casual settlement of the middle and low income nations confront diverse challenges, mostly are unemployed and have no access to resources, in these nations cash transfers have sufficient role for women because typically women spend their income for their families welfare (Slater & Holmes, 2004). Cash transfer plays a vital role to support labor sector of women and positive impact on decision making (Ambler & Brauw, 2017). Women are in dominant in household decision making when they are economically powerful. Cash transfers support women to take part in income generate activities and finance their families, it raise the level of revenue that's enhance the decision making power in family and their society (Khan et al, 2010). Cash transfers make women more independent and women actively participate to take decisions (Zaky, 2014). Cash transfers program target to women stimulate gender equity and construct to economic empowerment (Migwi, 2017). Cash transfers inspires

to education and health status of women, improves well-being of mothers that bring upgrading in children attainments (Sinha, Raju and Morrison, 2007).

Women empowerment is global key for the development of country. It has many shapes with the passage of time but it's closely linked with social, economic, political, familial and psychological spheres. Like other countries Pakistan also has signatory of a few universal announcement till now to support women but Pakistani women highly facing gender discrimination and have economic dependency on others (Choudhry, Mutalib and Ismail, 2019). Social cultural factors effecting women empowerment in Pakistan as educational barrier, education is basic part of any child which creates environment of less poverty in coming years and delayed marriages and settle in business market. But in many families early marriages preferred, these disparities also based on social economic status and geography, in Sindh 52 percent girls are out of school and in Baluchistan 78 percent girls are out of school (UNICEF, 2019). There is a close relationship between educational attainment and economic earnings; educational gap affects the female participation in labor market (Verick, 2018). Formal employment is most important factor of women empowerment but in developing countries 90% men held for high quality jobs (Stotsky, 2016). Women have legally right in property and control over their resources but in practice women have no access or control over inheritance (Mehdi, 2002). Percentage of women whose not getting any share from their parental or husband is 50.6% in Pakistan, in Gilgit 50%, KPK/FATA 55%, Punjab 97%, and highest in Baluchistan is 100% (Mehdi, 2002).

Main purpose of cash transfers is to provide support to poorest household in for improve their living condition specially consumption and investment in children (Ambler & Brauw, 2017). After huge findings about impact of cash transfers in different countries, this study designed to check how cash transfers contribute and whose factors have more impact by providing cash transfers to women. Cash transfers have positive impact on women empowerment by improving their decision making rights. Cash transfers target to women to increase their decision power in household level (El-Enbaby, 2019). Five basic dimensions about decision making (decision making right about marriage, children, purchasing of goods or food, decision about more children and decision about travel) in present study used for check the women empowerment, because decision making plays an important role for women empowerment. Cash transfers positively contribute in women choices or decision making about marriage and fertility and cash transfers reduce abuse by male partner (Zanker, 2017).

This study is contribution to existing literature in many ways as in south Asian countries, specifically in Pakistan, where women decision making is very low; women have few rights for participation in family decision. This study designed to focus on the impacts of cash transfers for women empowerment in Pakistan by using latest data from household Integrated Economic Survey 2018-19 (HIES). Estimated effectiveness of cash transfers by measuring women empowerment with five major dimensions of decision making. Cash transfers data taken of those people who received from Benazir Income Support Programs (BISP), zakat and usher and other sources. Zakat and usher contribute effectively for support to women and alleviate poverty (Anis & Kassim, 2016). This study highlights the importance of zakat and usher for empower to women in Pakistan economy where women are highly treated unequally. Significance of the study is to analyze the role of cash transfers in women lives and how women disempowerment or inequality problem can be tackle with cash transfers. This study will be helpful for gain sustainable development goals. Therefore, this study conduct to investigate the impacts of cash transfers on women empowerment at household level in Pakistan by using micro data.

Data and Methodology

The main objective of this study is to find the impact of cash transfers on women empowerment at household level in Pakistan by using Household Integrated Economic Survey (HIES) micro

data 2018-19. To measure the women empowerment proxy of decision making five variables used. In this chapter discussed about how index generated and about weights of each variable of decision making that used for index.

This chapter comprises of research methodology in which methods and tests are discussed which are used to get results, summarize conclusions, in order to make policy recommendation of the given study of cash transfers and women empowerment. In these section econometric model, description and definition of variables, data source and estimation techniques are discussed that are used in order to obtain empirical results of this research.

Data Sources and Description

This section consists of data sources. The study will investigate the impacts of cash transfer on women empowerment by using Household Integrated Economic Survey data.

Household Integrated Economic Survey (HIES): HIES 2018-19 is the eleventh round of the survey that was originated in 2004. This project provides data at national/provisional level with rural and urban analysis. HIES covered 24809 households data based on 1802 rural and urban primary sample units. Provide detail outcome on indicators as health, education, water, housing, welfare, information communication and technology (ICT), food insecurity, income and expenditure. Social indicators in HIES 2019-20 discussed in detail information at national and provisional level with rural and urban breakdowns. Format of HIES 2018-19 almost same as Household Integrated Economic Survey (HIES) conducted in 2004-05, 2005-06, 2007-08, 2010-11, 2011-12, 2013-14 and 2015-16.

By team approach comprising of both male and female enumerators data is being collected in 2019-20. Separate information collected on male and female enumerators. Data collection at provisional level is used for developing social and economic indicators as, primary enrollment, dropout rate, literacy rate, immunization, infant mortality rate, delivery thorough skilled attendant and total fertility etc. present result about employment, household consumption, and expenditure pattern.

Data collected through survey Household Integrated Economic Survey (HIES) is provisional level will be used for 24 SDG's indicators and provide consumption expenditure data for computation of poverty by ministry of planning and special indicatives. Sampling frame updating from census 2007 has been used for sample selection. Each enumerator block well-defined with 200-250 houses with map and boundaries. In urban areas each enumerator block is treated as PSU and in rural areas villages are divided in to blocks. Sample design a stratified two stage sample design has been used for every survey. For urban domain, each administrative domain division of all four provinces has been considered as independent section. For rural domain, each organizational district in Punjab, Sindh and Khyber, Pakhtunkhawa and each administrative division in Baluchistan has been considered as independent segment.

Table-1: Variables Description

Variable	Variable Description	Data source	References
WE_Index	Women Empowerment Index measured by Decision Making	HIES	(Abrar-ul-haq et al, 2017), (Akram, 2018), (Biswas & Kabir, 2004), (Tahmeena,2020), (Waqas & Awan, 2019), (Abbas et al, 2021)
Cash Transfers	Cash transfers measured by BISP Zakat and Usher, Others	HIES	(Ambler & Brauw, 2017) (Tehmeena, Padda & Farooq, 2020), (Waqas & Awan, 2019)
Geography	Urban or Rural	HIES	(Abbas et al, 2021), (Waqas & Awan, 2019)
ICT	Have Personal Mobile, Laptop, Desktop or other	HIES	(Suresh, 2011), (Hafeez et al, 2020), (Nikulin, 2016)
Head of Household	Male or Female	HIES	(Ambler & Brauw, 2017), (Abbas et al, 2021), (Naqvi & Shahnaz, 2002)

Model and Data

This study will investigate the impact of cash transfers on women empowerment at household level in Pakistan by using micro data of Household Integrated Economic Survey 2018-19. The study will measure women empowerment by using women empowerment index (Biswas & Kabir, 2004), (Mahmud, Shah & Becker, 2013). This study will find the relationship between cash transfers and women empowerment and other control variables will help to generate basic model. In this four models used for estimation

$$WE_i = \beta_0 + \beta_1 CT_i + \beta_2 GH_i + \beta_3 HH_i + \beta_4 ICT + \mu_i \dots \dots \dots (1)$$

$$WE_i = \beta_0 + \beta_1 Z/U + \beta_2 GH_i + \beta_3 HH_i + \beta_4 ICT + \mu_i \dots \dots \dots (2)$$

$$WE_i = \beta_0 + \beta_1 BISP_i + \beta_2 GH_i + \beta_3 HH_i + \beta_4 ICT + \mu_i \dots \dots \dots (3)$$

$$WE_i = \beta_0 + \beta_1 Others_i + \beta_2 GH_i + \beta_3 HH_i + \beta_4 ICT + \mu_i \dots \dots \dots (4)$$

In this model, i subscript represent different cross sectionals. In this model, WE denote women empowerment which is dependent variable, CT showing the cash transfer which taken as independent variable remaining are control variables as GH denotes to Geography of Household, HH head of Household ICT stands for Information and Communication Technology. All data computed by Household Integrated Economic Survey of Pakistan 2018-19.

HIES (Household Integrated Economic Survey 2018-19) used for constructing women empowerment index, cash transfers and other control variables for Pakistan, in this study cross sectional data used. Cross -sectional study covers, observing at people who differ on one main representative at one particular period. Data is composed at the same time period from individual who are similar in other features but diverse in a crucial factor of awareness.

Estimation Procedure

HIES (Household Integrated Economic Survey 2018-19) used for constructing women empowerment index, cash transfer (Benazir income support program, zakat and usher, others) used as independent variable, geography, head of household and ICT (information and technology communication) taken as controlled variables for Pakistan, in this study cross sectional data used.

Cross sectional study covers, observing at people who differ on one main representative at one particular period. Data is composed at the same time period from individual who are similar in other features but diverse in a crucial factor of awareness. The simplest one (ordinary least square) OLS regression is a generalized linear modeling technique that corresponds to minimize the sum of square. The method may be useful to multiple, single exploratory variables that have been appropriately coded.

Results and Discussion

Descriptive Statistics and Econometric Methodology

The most adapted methodology is that which starts with some descriptive statistics of these five variables from the HIES data sets (Table 1) measure the impact of cash transfers on women empowerment.

Table 2: Descriptive Statistics

Variable	Observation	Mean	Std. Dev.	Minimum	Maximum
Women Empowerment Index	23, 784	.399047	.2753543	0	.97
Cash Transfers	27, 231	1659.05	19319.41	1	1876000
Head of Household	23, 784	.021443	.1448588	0	1
Geography	23, 784	.342499	.4745555	0	1
ICT	23,784	.0660949	.3484531	0	1

The total observations of women empowerment index are 23,784 used from cross sectional data from household integrated economic survey of Pakistan 2-18-19. Number of observation varies due to the respondent's response.

The outcomes of the above table illustrate the descriptive statistics of women empowerment index that is mean and its deviancy from mean. The minimum and maximum value of women empowerment index fulfills the boundaries in the response which were (0, 1) respectively, that represented how much values were spread out. The consequences showed a mean value of

women empowerment index is 0.39 and standard deviation 0.27 stated the deviancy of response from its mean.

The statistics of cash transfers, its mean and standard deviation. The minimum and maximum value of cash transfers are 1 and 187600, 1 represent in data those people whose received data from zakat and usher, highest amount of maximum value is due to other sources or government recipients. The above statistics showed the mean value of cash transfers is 1659.05 and standard deviation value is 19319.41 which stated the deviancy from its mean.

Descriptive of head of household, its mean and standard deviation, the minimum and maximum value of head of household fulfill boundaries in the response where 0 in minimum value for men head and 1 is maximum value for women head. 0 and 1 values adjusted according to respondent response about head of household men or women. Mean value of head of household is 0.21 and standard deviation is 0.14 specified the deviancy of responses from its mean.

The minimum and maximum value of geography fulfill boundaries in the response where 0 is minimum value and 1 is maximum value, 0 showed respondent living in rural area and 1 represents those respondent whose living in urban area. Statistics showed the mean value of geography is 0.34 and standard deviation of geography is 0.47 that indicated the deviancy of responses from its mean.

The descriptive statistics of information and communication and technology, its mean and standard deviation, the minimum and maximum value of ICT fulfill the boundaries as 0 minimum and 1 maximum. Respondent include those who used mobile, desktop or computer and those not used, therefore minimum and maximum values are in 0 and 1. Mean value of ICT is 0.06 and standard deviation is 0.24.

Table 3: Weights through PCA

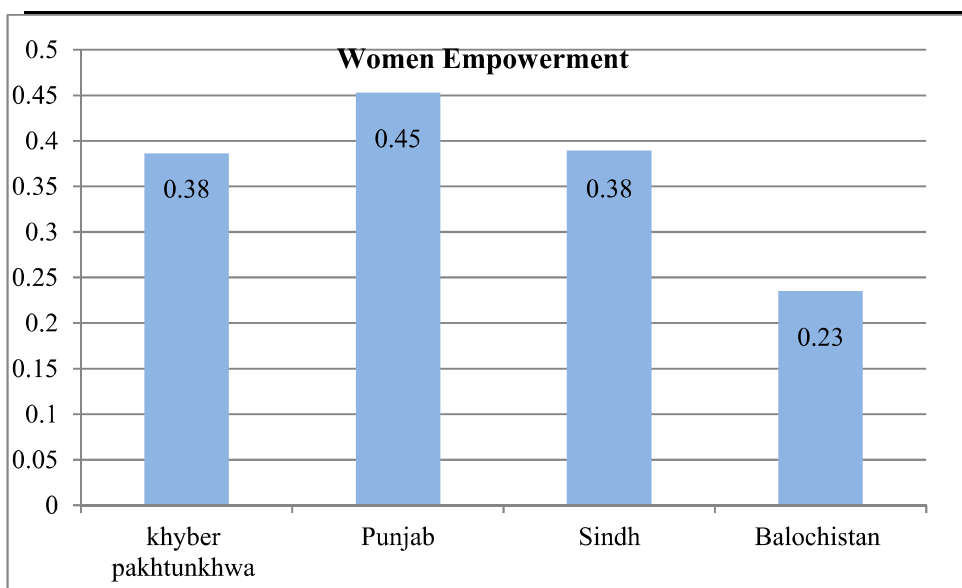
Variables	Weights
Marriage Decision	0.30
Children Decision	0.14
Cloth Purchasing Decision	0.03
Travel Decision	0.09
Food Purchasing Decision	0.41
Author's own calculation	

Table 4: Correlation Matrix

	WE-Index	CT	HH	Geography	ICT
Women-Empowerment Index	1.0000				
Cash Transfers	0.0070**	1.0000			
Head of Household	-0.0380**	-0.0041**	1.0000		
Geography	0.0707**	0.0037**	-0.0047**	1.0000	
ICT	0.0160**	-0.0045**	-0.0078**	0.0059**	1.0000

Note: **denotes statistically significant at 5% level.

Table 4 shows the status of correlation matrix, independent variables head of household, geography of household and information and communication and technology are significantly correlated with dependent variable women empowerment index.

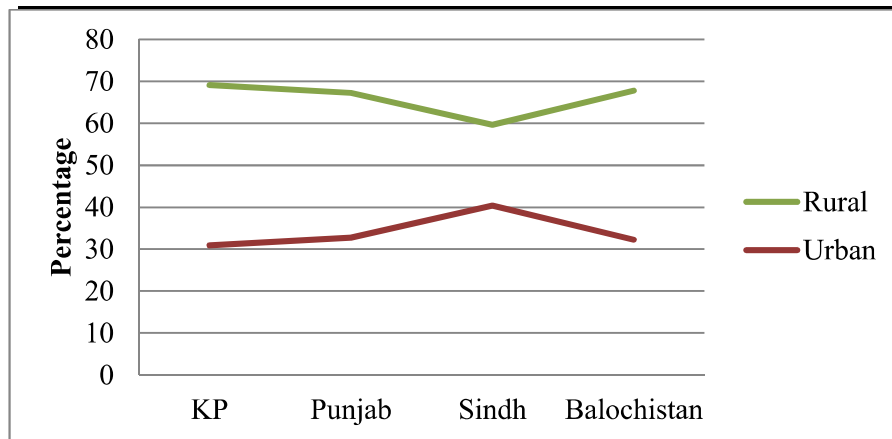
Figure 6. Women Empowerment Index Among Regions

Source: (Author's Own Calculation)

Women empowerment range is (0-1), "0" shows to disempowered and "1" represent to empowerment. Figure 6 shows that in Khyber Pakhtunkhwa, women empowerment is 0.38, in Punjab 0.45, in Sindh 0.38 and in Balochistan is 0.23, so according to the situation, in Punjab women empowerment is more than other regions because value of women empowerment in

Punjab is closer to 1 as compare to other regions. Most least women empowerment is estimated in Balochistan 0.23, because digit of this region is near to zero and in study we consider 1 mean women empowerment and 0 mean disempowerment.

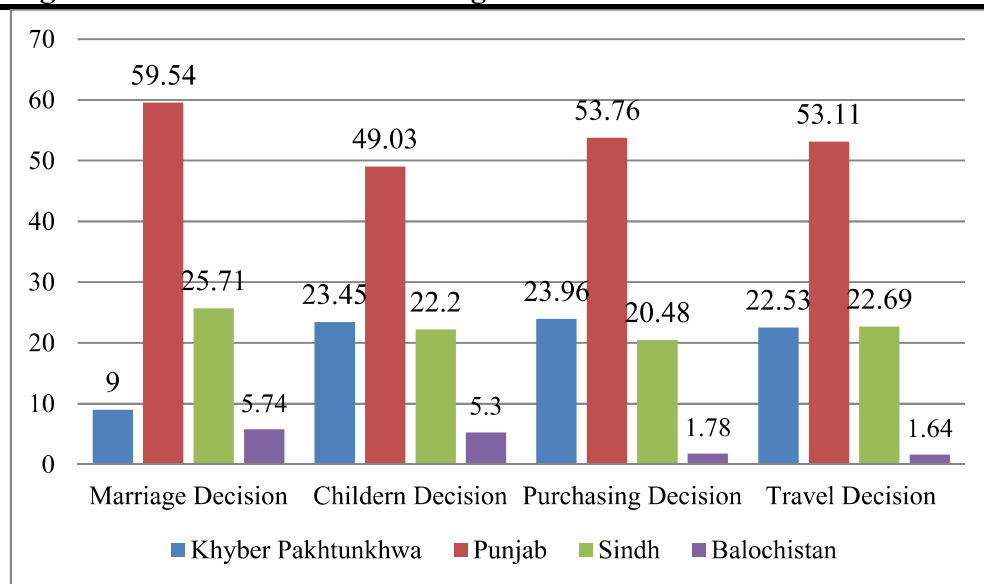
Figure 7. Geographical Proportion Among Regions



Source: (Authors Own Calculation)

Figure 7 is about geographical (rural or urban) proportion of household in Khyber Pakhtunkhwa, Punjab, Sindh and Balochistan. In this research geography used as control variable, and this variable has positive impact on women empowerment. 0 mean rural area and 1 mean urban area. This figure draws to check the shows more fraction of rural and urban in regions, Khyber Pakhtunkhwa and Balochistan is consist on rural area. Sindh and Punjab have more proportion of urban area household.

Figure 8. Women Decision Making and Provinces



Source: (Authors Own Calculation)

Figure 8 is about decision making right to women in Khyber Pakhtunkhwa, Punjab, and Sindh and in Balochistan. This figure is basically for examine the correlation between women empowerment ratio and decision making right. In Punjab women have more right for decisions

and women empowerment ratio also more as compare to others. In Balochistan women have less power to take decisions about children, purchasing, travel and marriage and women empowerment ratio in Balochistan is less as equate to others. This figure 3 shows how much decision making right relate to women empowerment in Pakistan. When women have more decision making power than they will more empower.

Regression Results

In the first model dependent variable is women empowerment index, cash transfers is independent variable all other variables are taken as control variables. The results of OLS regression shows that cash transfers has positive and statistically insignificant related to women empowerment, whereas ICT and geography positively and head of household negatively related.

Table 9: Regression Results of first Model		
Women Empowerment Index	Coefficients	Significance
Cash Transfers	0.0213257	0.003
Head of Household	-0.071255	0.000
Geography	0.040871	0.000
ICT	0.0169816	0.018
Constant	0.3429618	0.000

Source: (Authors Own Calculation)

Mean VIF= 1.00

Note= If VIF>10, multicollinearity exist

In this model, this study checked the impact of cash transfers on women empowerment in Pakistan. Women empowerment is dependent variable which is measured by using index of women decision making, cash transfers is independent variable and all other Head of Household, Geography and Information and Communication Technology plays a central role in women empowerment.

Cash transfers have positive and significant impact on women empowerment index, which means if cash transfers increase, women empowerment will be increased. Women empowerment is measured by PCA and index based on decision making right to women. Cash transfers are important factor for advancing gender equality and women empowerment and have key role for closing gaps between genders (Corona & Gammage, 2017). Cash transfer plays a vital role to support labor sector of women and positive impact on decision making (Ambler & Brauw, 2017). Cash transfers make women more independent and women actively participate to take decisions (Zaky, 2014). Women are in dominant in household decision making when they are economically powerful. Cash transfers support women to take part in income generate activities and finance their families, it raise the level of revenue that's enhance

the decision making power in family and their society (Khan et al, 2010). Cash transfers target to women to increase their decision power in household level (El-Enbaby, 2019). All these previous studies support to this study result that cash transfers positively linked to women empowerment.

Head of Household has negatively and statistically significantly association with women empowerment index. This result indicates that when head of household will be men than it disempower to women, in contrast if women will be head of household than women will be more empowered. (Ayeubumwan, Popoola & Adeoti, 2016) estimated female headed household more empowered than male headed household. A household survey find-out that women which living in female headed will be more empowered than male headed because female headed women have more power to take decision (Naqvi & Shahnaz, 2002).

Geography and women empowerment have positive and significant influence. This relationship specifies that women living in urban area are more empowered as compare to those women which lives in rural area. Urban women have better education, more facilities and more job opportunities and have more decision making right. (Abbas et al, 2021) concluded that urban women have more access to information and technology; able to do jobs therefore they are more empowered as women of rural. Some other studies also support to this relationship of geography and recommend that place of residence significantly associated with women empowerment. Rural women face many lacks of opportunities they have dependent role in their houses and have less decision making power; therefore urban women are more empowered than rural women (Bonilla, 2017; Paduel & Araujo, 2016).

According to this study result Information and communication technology (ICT) and women empowerment positively and significantly linked. Those women have more facility of ICT they are more empowered. ICT is a tool for the promotion of the gender equity and women empowerment, ICT enhance women skills, knowledge and access to and use to information technology, makes easy access to get education and jobs opportunities, increase the participation in expression and decision making (Sandys, 2005). Another study find-out that ICT is core driver of women empowerment especially for South Asian countries (Hafeez et al, 2020). ICT is the process of inclusion low skilled and traditional groups into update factors; ICT has positive impact on women labor participation rate by providing them more online jobs opportunities that positively contribute in women empowerment (Nikulin, 2016).

Lastly, all variables are free from heterogeneity because of robustness, to secure from heterogeneity in the model used robust function, in this way our model free from heterogeneity. For multicollinearity, this study uses variance inflation factor, so according to this there is no multicollinearity among the independent variables, if mean variance inflation factor (VIF) is greater than 10 then multicollinearity exist.

Cash Transfer from Zakat/Usher

In this section only those respondents took which received cash transfer from zakat/Usher. Large part of cash recipient receives cash from Zakat/Usher; therefore its source has more impact on women empowerment. To estimate the impact of Zakat/Usher individually on women empowerment following model designed.

In this model, i subscript represent different cross sectionals. In this model, WE denote women empowerment which is dependent variable, Z/U showing the cash transfer received from Zakat/Usher which taken as independent variable remaining are control variables as GH denotes to Geography of household, HH Head of Household ICT stands for Information and Communication Technology. All data computed by Household Integrated Economic Survey of Pakistan 2018-19.

Regression Results

The dependent variable is women empowerment index, cash transfers is independent variable all other variables are taken as control variables. The results of OLS regression shows that cash transfers has positive and statistically insignificant related to women empowerment, whereas ICT and geography positively and head of household negatively related.

$$WE_i = \beta_0 + \beta_1 Z/U + \beta_2 GH_i + \beta_3 HH_i + \beta_4 ICT + \mu_i \dots \dots (2)$$

Table 10. Regression Results of second Model

Women Empowerment Index	Coefficients	Significance
Zakat/Usher	0.3489233	0.000
Head of Household	-0.054167	0.000
Geography	0.0265185	0.000
ICT	0.0401828	0.000
Constant	-0.3577497	0.000
Source: (Authors Own Calculation)		

Mean VIF= 1.00

Note= If VIF>10, multicollinearity exist

In this model, this study checked the impact of Zakat/Usher on Women Empowerment in Pakistan. Women empowerment is dependent variable which is measured by using index of women decision making, Zakat/Usher is independent variable and all other Head of Household, Geography and Information and Communication Technology used as control variables.

Zakat and Usher have positive and significant relationship with women empowerment index, which means if zakat and usher amount increase, women empowerment will be increased. Women empowerment is measured by PCA and index based on decision making right to women. Zakat is tool for economic empowerment; zakat/usher is alternative source of finance to poor women (Anis & Kassim, 2016).

Head of Household has negative and significant link with women empowerment (Naqvi & Shahnaz, 2002), geography has positive and significant relationship with women empowerment (Abbas et al, 2021), and Information and Communication Technology also have positive and significant relationship with women empowerment in Pakistan (Nikulin, 2016).

All variables are free from heterogeneity because of robustness, to secure from heterogeneity in the model used robust function, in this way our model free from heterogeneity. For multicollinearity, this study uses variance inflation factor, so according to this there is no multicollinearity among the independent variables, if mean variance inflation factor (VIF) is greater than 10 then multicollinearity exist.

Cash Transfer from Benazir Income Support Program (BISP)

Benazir Income Support Program (BISP) program support to poor and vulnerable women and empower to women. In this section this study examines only the Benazir Income Support Program (BISP) impact on women empowerment.

$$WE_i = \beta_0 + \beta_1 BISP + \beta_2 GH_i + \beta_3 HH_i + \beta_4 ICT + \mu_i \dots \dots (3)$$

Table 11. Regression Results of third Model

Women Empowerment Index	Coefficients	Significance
Cash Transfers	0.0000489	0.000
Head of Household	-0.0284612	0.000
Geography	0.0159201	0.000
ICT	0.0165134	0.000
Constant	1.127275	0.000

Source: (Authors Own Calculation)

Mean VIF= 1.00

Note= If VIF>10, multicollinearity exist

In this model estimated impact of Benazir Income Support Program (BISP) on women empowerment by using Head of Household, Geography of Household and ICT as control variables. Individually BISP has significant impact on women empowerment but have limited impact on independence and women status in society (Ghazi et al, 2021), because according to data 2,182 household received cash transfer from BISP. This amount may not be sufficient to fulfill household needs. In this model head of household has negative impact and geography, ICT have positive and significant impact on women empowerment (Naqvi & Shahnaz, 2002, Hafeez et al. 2020, Waqas & Awan, 2019). Overall model is good fit and significant. Multicollinearity of this model is less than 10, hence there is no multicollinearity exist between independent variables.

Cash Transfer from Others Sources

Other sources of cash transfer include pension, social security schemes, worker welfare fund and employee's old age benefits institutions. These social security schemes are for safety and protection from unforeseen circumstances. These cash is hope for elderly people who have limited economic chances. Purpose of these security schemes is to save individual, household and communities from acute deficiency and unintentionally decline in income by formal and informal provisions (private, public pension and social security programs). These programs basically organized for three types of exposed groups; disable retired and departed worker families who died during employment (Mehmood & Nasir, 2008). This model is developed to check the impact of these sources on women, whether these sources empower to women or not.

In this model women empowerment is taken as dependent variable and other sources as independent variable, control variables are ICT, geography and head of household.

$$WE_i = \beta_0 + \beta_1 Others_i + \beta_2 GH_i + \beta_3 HH_i + \beta_4 ICT + \mu_i \dots (4)$$

Table 12. Regression Results of Fourth Model

Women Empowerment Index	Coefficients	Significance
Others	-0.0014089	0.000
Head of Household	-0.0707318	0.016
Geography	0.0405518	0.000
ICT	0.0171068	0.000
Constant	0.4118137	0.000

Source: (Authors Own Calculation)

Mean VIF= 1.00

Note= If VIF>10, multicollinearity exist

In this model, this study checked the impact of Zakat/Usher on Women Empowerment in Pakistan. Women empowerment is dependent variable which is measured by using index of women decision making, Zakat/Usher is independent variable and all other Head of Household, Geography and Information and Communication Technology used as control variables.

Other sources have negative and significant relationship with women empowerment index, which shows that other sources are not contributing in women empowerment. Women empowerment is measured by PCA and index based on decision making right to women. Head of Household has negative and significant link with women empowerment (Naqvi & Shahnaz, 2002), geography has positive and significant relationship with women empowerment (Abbas et al, 2021), and Information and Communication Technology also have positive and significant relationship with women empowerment in Pakistan (Suresh, 2011).

All variables are free from heterogeneity because of robustness, to secure from heterogeneity in the model used robust function, in this way our model free from heterogeneity. For multicollinearity, this study uses variance inflation factor, so according to this there is no multicollinearity among the independent variables, if mean variance inflation factor (VIF) is greater than 10 then multicollinearity exist.

Conclusion

This study aims to measure the women empowerment in Pakistan and investigate the impact of cash transfers on women empowerment. This study measures women empowerment by using the Household Integrated Economics Survey HIES (2018-19). To measure the impact of cash transfers on women empowerment, control variables such as head of household, geography and information and communication technology (ICT) played an important role in women empowerment in Pakistan.

This research used Ordinary Least Square (OLS) regression analysis to identify the impact. The study reveal that cash transfers have positive impact on women empowerment (Ambler & Brauw, 2017). This study used decision making (decision in purchasing, decision in travel, and decision in children and decision in marriage) as a proxy to measure the women empowerment. According to this study estimation Punjab women have more decision power as compare to others and Punjab women are more empowered. This result shows that decision making is best proxy for measure women empowerment (Biswas & Kabir, 2004, Tahmeena, 2020, Waqas & Awan, 2019, Abbas et al, 2021). Women empowerment coded as 0 and 1, "0" indicates to disempowerment and "1" shows to empowerment of women. Cash transfers taken from Benazir Income Support programs, Zakat and Usher and others.

In this study Head of Household, Geography and Information and Communication Technology used as control variables. Head of Household and women empowerment negatively correlated, this relation shows that if men will be head than women empowerment will be less as compare to those households where women will be headed. Head of household code by 0 and 1, if women head than coded as "1", otherwise coded "0". By this estimation its find-out that for promote to women empowerment women should be headed (Ayevbuomwan, Popoola & Adeoti, 2016).

Geography variable used to measure the impact of rural and urban area on women empowerment. Rural coded by "0" and urban coded by "1". In this study it's concluded that geography and women empowerment positively linked. This result shows that geography plays an important role for women empowerment. Those women live in urban area they are more empowered than rural women (Abbas et al, 2021).

The graph of women empowerment in region wise represent the women empowerment index range is (0-1), "0" represents highly disempowerment and "1" represents empowerment. Graph depict that in Punjab, women empowerment is .453, Sindh .389, Blochistan .235 and Khyber Pakhutnkhwa .386, so according to the situation, Punjab women are more empowered because it is closely to 1 as compare to others.

Impact of Benazir Income Support Program (BISP) and Zakat/Usher estimated separately, how much BISP and Zakat/Usher have contribution in women empowerment. According to the approximation of results it's concluded that Benazir Income Support Program have impact on women empowerment but not such like Zakat/Usher because Zakat/Usher program is working from previous many years as compare to BISP which was established in 2008 and number of cash receiver household from Zakat/Usher is 24, 803 and number of household that receive cash transfer from BISP is 2, 182 this number is very small as compare to Zakat/Usher program, therefore impact of Zakat/Usher is large. Other sources of cash transfer covered only 61 household and according to this study estimation it's conclude that other sources have no positive impact on women empowerment because these programs not specially working for women.

Zakat/Usher system and Benazir Income Support Program have almost identical goals of providing monetary assistance to the poorest section of the society though they have different historical background and sources of financing. These programs can play energetic role for enlightening the lives of the poor household, but still sincere needs to do effort on these program societies, stake holder and particularly the government.

There is extensive need to integrate and coordination among the administration of these programs. Federal government should make some strategies that improve the social economic stability of beneficiary's household women for long run, not only remove short term poverty. Women are necessity to be conscious of their legal rights and update themselves according to the society. Government should launch a legitimate cell integrated with local government for deliver free advice to women about their equitable rights. Various programs organized through

social media, posters and arrange seminars especially in rural areas that effectively aware to women and support them about empowerment strategies.

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