

### EFFECTS OF WOMEN EMPOWERMENT ON ACCESS TO HEALTHCARE IN PAKISTAN

## AFEEFA AHMAD¹, DILSHAD AHMAD²

## **ABSTRACT**

The dream of development in society is not feasible without significant empowerment and participation of women. More particularly in Pakistan, a number of substantial procedures have paying attention for women empowerment yet, their standing is still depressed purposely in rural community. This study attempted to find out, level of rural community women empowerment and influence of empowerment about healthcare access in Punjab, Pakistan. In this research OLS and Cronbach's alpha method were applied for empirical estimation of collected data of 238 married women respondent. Different components scores about women empowerment were regressed over the healthcare access scores in the final estimation this research. Empirical estimates indicated as power of decision-making, self-esteem and mobility has positively and significantly affects access to health care while control over resource has positive but insignificant impact. It is suggested as education, adequate job opportunities and access to media are prerequisite for women empowerment and access to health care. In the aspect of study findings, for more empowering women literacy rate need to increased through provision of educational institutes in neighboring for easy access of schooling at doorstep and providing financial incentives for motivation. Increasing women participation in institutions particular quota about job opportunities need to reserve for ensuring suitable status in society.

Keywords: Women empowerment, Ordinary Least Square, Healthcare, Media

JEL Codes: J16, C20

# I. INTRODUCTION

In developing countries, increasing social awareness has highlighted most of the severe issues among them gender inequality and inadequate women empowerment have attained more significance (Murtza, 2012). Empowerment authorizes citizen of society to deem in their own potential, to improve their economic and social participation and having proper status in society (Kandpal et al., 2013). In both genders empowerment matters, yet; it is close, linked to women for the reason that women more deprived status in society (Malhotra, 2005). Women empowerment refers to their essential right of having vigor so to manage their home and outside participation (United Nations, 1995). Women empowerment allows them having own intellectual and material resources for their self-supportive and selfgoverning status as women consists half of world population (Jali et al., 2017). Regrettably, in world various regions women comparatively are not capable to attain their rights owing to dominance ideology of male (Karim et al., 2017). In the reason of deprived rights women have deprived from their rights so have to play secondary role in society (Panigraphy & Bhuyan, 2006). In the current scenario, some significant factors accountable for depressed state of women such as lesser decision powers, male dominant society and limited opportunity of jobs (Bradshaw & Linneker, 2003). In Pakistan women consists half of population whereas having miserable status in society and n playing significant participation in the country (Patel, 2010). In South Asian region, Pakistan has regional status regarding gender equality and women empowerment is questionable (UNICEF, 2006). Women have particular rights and protection in aspect of constitution of Pakistan whereas these rights frequently dishonored and violated through different fragments of society (Khan, 2017). In Pakistan, socio-cultural values, norms and severe cultural inequality effects women status in the society (Klein & Nestvogel, 1992). In urban areas of country women status is comparatively improved whereas in rural areas violation of women rights are very terrified and serious (Karim et al., 2017). In the statistics aspect, almost seventy-five percent of female population lives in rural areas of the country (Shahid, 2004) where in most of rural areas feudal system still exists where cultural customs more prefer over

<sup>&</sup>lt;sup>1</sup> MS Scholar, Department of Management Sciences, COMSATS University Islamabad, Vehari Campus, Pakistan

<sup>&</sup>lt;sup>2</sup> Corresponding Author, Department of Management Sciences COMSATS University Islamabad, Vehari Campus Pakistan: <a href="mailto:dilshad@ciitvehari.edu.pk">dilshad@ciitvehari.edu.pk</a>

constitution and law and Islam's inclusive teachings (Baig et al., 2017) where deep rooted cultural norms hurdles in women empowerment.

In the most deprived areas of the country such as Southern Punjab, women consider lower class and survive in detrimental situation where they confronted various cultural and social unfairness behaviors. Low socioeconomic status, poverty, family regulations and traditional norms major constraints in women job status which reduces the women empowerment (Shahid, 2004) whereas facing different economic, legal and social discriminations (Agnes, 1996; Qureshi, 2007). The lack of formal education, Unsuitable nutrition, inadequate formal schooling, limited social networking, religious barriers and mobility restriction outside the home negatively affects in health access of women (Noorali et al., 1999). Early marriages in cultural tradition causes to early birth of first baby develop complex health issues in the women. Furthermore, in Pakistan insufficient accessibility of trained health professionals' mainly for female and smaller amount vaccination of tetanus toxoid (TT) accessible which supply sky-scraping rate of maternal mortality (Ashraf, 1996; Ahmed, 2000; Rizvi & Nishtar, 2008). In physical development, mental health and social status family traditions play significant role where various cultural values rooted intensely in civilization that restrictions women contact to healthcare services and mould to dependent regarding their living aspects. World Health Organization (2009), Gender based resources inequalities distribution in schooling and health status is considerably linked with reduced well-being and poor health (Katung, 2001;Fatmi, 2002; Stephenson, 2004; Audi et al., 2021; Audi et al., 2021; Haider and Ali, 2015; Kaseem et al., 2019; Roussel et al., 2021; Senturk and Ali, 2021).

In literature, the aspect of women empowerment discussed with various dimensions as some significant research studies focused the role of education in women empowerment (Benedicta, 2011; Khatri, 2016; Chandra-Mouli et al., 2018; Basheer, 2018; Engida, 2021; MAGAJ, 2021), some addressed the empowerment role in sustainable development (Malhotra, 2009; Murphy, 2012; Warth and Koparanova, 2012; Bayeh, 2016; Ali and Ahmad, 2014; Ali and Audi, 2016; Ali and Audi, 2018; Ali and Rehman, 2015; Ali and Senturk, 2019; Ali and Zulfigar, 2018; Ali et al., 2016; Ali et al., 2021; Ali et al., 2021; Ali et al., 2015; Arshad and Ali, 2016; Ashraf and Ali, 2018; Audi et al., 2022; Audi and Ali, 2017; Audi and Ali, 2017; Audi et al., 2021; Audi and Ali, 2016) and some studies discussed the determinants of women empowerment (Upadhyay et al., 2014; Akram, 2018; Asaolu et al., 2018; Abbas et al., 2021) and the aspect of healthcare regarding to women empowerment illustrated in limited studies such as (Kar et al., 1999; Ahmed et al., 2010; Holmström and Röing, 2010; Camerini et al., 2012; Davis et al., 2014; Nasrabadi et al., 2015; Ali and Naeem, 2017; Ali, 2011; Ali, 2015; Ali, 2018; Ali and Bibi, 2017) whereas this aspect not properly addressed in Pakistan and particularly in the southern Punjab where women status is more miserable as compared to rest of the country so in addressing this research gap this study focused the aspect as the effects of women empowerment in healthcare in this study. The significance of the study is that Southern Punjab is relatively more underdeveloped, deprived one and backward area as compared to other parts of Punjab. There exists a feudal social structure especially in villages of these areas, where women are treated according to their cultural norms, caste, and socioeconomic status regardless of their rights. The objective of the present study is to examine the current position of women empowerment in district Vehari of Southern Punjab and to identify the effect of women empowerment on access to healthcare of women in the selected district. In Southern Punjab women in this locations faces threats of multiple forms in their domestic life, social and cultural differences against women. Burning, killing, acid throwing, and physical abuse are common practices in Southern Punjab compared to rest of the Punjab (Baig et al., 2018). This study has contributed to literature by analyzing the extent of rural women empowerment and access to health care specifically the region of southern Punjab that has relatively neglected regarding this type of study, which has not conducted in this region according to author knowledge.

## II. DATA AND METHODOLOGY

This study was focused on Southern Punjab because this region considers most critical area regarding women status of domestic abuse and inhuman treatment in Punjab province (The Express Tribune, 2017). The study used survey data, collected from employed and unemployed married female respondents from villages of Vehari district with a sample size of 238. Simple random sampling approach was applied for data collection in the study area. District Vehari among higher deprived area regarding women status in province (Baig et al., 2018) was particularly selected for study in first stage. In second stage, Malsi and Vehari tehsils from district were selected whereas one union council from each tehsil was specifically selected from each tehsil in third stage. In the last stage, two villages from each union council more preferably the more deprived areas select for the study and respondents were randomly selected. In data collection procedure, a well-structured and pre-tested questionnaire was developed. Data was collected from face-to-face meeting with respondent through their formal permission and informing purpose and utilization of data. The

reason behind the selection of married female respondents was that they live in the same area for the longest time and can have the better effect on access to healthcare.

The model OLS general form:  $Y = \alpha_i + \sum_{i=1}^n \beta_i X_i + \mu$ 

Ordinary Least Squares regression (OLS) is named linear regression more commonly (simple or multiple which depends on the number of independent variables). Self-esteem, freedom of mobility, role in making a decision and resources control are four major aspects of empowerment of women (Mahmud et al., 2012; Jejeebhoy, 2002). These four components of empowerment of women had used and their scores were obtained by employing the Cronbach's alpha ( $\alpha$ ) approach that is developed by Lee Cronbach (1951) and also employed by Mahmud et al., (2012).

In the next procedure with score estimation for investigation factors that have an effect on above-explained components of women empowerment four models were established as models are given below

Self-esteem =  $\phi_0 + \phi_1 X_1 + \phi_2 X_2 + \phi_3 X_3 + \phi_4 X_4 + \phi_5 X_5 + \phi_6 X_6 + \phi_7 X_7 + \phi_8 X_8 + \phi_9 X_9 + \phi_{10} X_{10} + \epsilon$ .... (1)

 $Role\ of\ Decision\ Making = \psi_0 + \psi_1\ X_1 + \psi_2\ X_2 + \psi_3\ X_3 + \psi_4\ X_4 + \psi_5\ X_5 + \psi_6\ X_6 + \psi_7\ X_7 + \psi_8\ X_8 + \psi_9\ X_9 + \psi_{10}\ X_{10} + \mu.\ (2)$ 

Freedom of Mobility =  $\hat{\beta}_0 + \hat{\beta}_1 X_1 + \hat{\beta}_2 X_2 + \hat{\beta}_3 X_3 + \hat{\beta}_4 X_4 + \hat{\beta}_5 X_5 + \hat{\beta}_6 X_6 + \hat{\beta}_7 X_7 + \hat{\beta}_8 X_8 + \hat{\beta}_9 X_9 + \hat{\beta}_{10} X_{10} + v.......$  (3)

Control of Resources  $= \phi_0 + \phi_1 \, X_1 + \phi_2 \, X_2 + \phi_3 \, X_3 + \phi_4 \, X_4 + \phi_5 \, X_5 + \phi_6 \, X_6 + \phi_7 \, X_7 + \phi_8 \, X_8 + \phi_9 \, X_9 + \phi_{10} \, X_{10} + \Psi$ ....... (4) Self-esteem (SE), Freedom of Mobility (RDM), Freedom of Mobility (M) and Control of Resources (COR) showed scores as four components about women empowerment. In these models education as  $X_1$ , family type as  $X_2$ , children

scores as four components about women empowerment. In these models education as  $X_1$ , family type as  $X_2$ , children of women as  $X_3$ , household head gender as  $X_4$ , women job status as  $X_5$ , adequacy of salary as  $X_6$ , print media access as  $X_7$ , access to television as  $X_8$ , radio access as  $X_9$  and access to social media as  $X_{10}$ .

As a final point, in the model (5) to scrutinize the effect of dimensions of women empowerment on healthcare access as illustrated there

Access to Healthcare =  $\delta_0 + \delta_1$  Self-esteem +  $\delta_2$  Role of Decision Making +  $\delta_3$  Freedom of Mobility +  $\delta_4$  Control of Resources +  $\epsilon_i$ .....(5)

Access to healthcare model indicated in (5) where women empowerment dimension score obtained as explanatory variables to estimate the related influence. In using the Cronbach's alpha (α) technique access to healthcare score was constructed. In measuring the access to health care was through the questions related availability of permission of household's head and distance from basic health unit for women to visit healthcare unit outside and their village in their villages. In the model, reliability of variables as obtained by the values of Cronbach's alpha while showing the consistency of the variable on one another also having the value ranges from 0 to 1 (Bland & Altman, 1997; Baig et al., 2018). Lastly, in using the approach of Ordinary Least Square (OLS) by SPSS Statistics version 23 women empowerment four components were regressed over the score of health access.

## III. RESULTS AND DISCUSSION

In this section table 1 indicated the women empowerment and their score of 240 married women from rural areas where women empowerment each component additionally subdivided in to some factors in accounting the responses of respondents of the study. Estimates of the study indicated as more of the women want to have input in decisionmaking will have more self-esteem in rural women where women empowerment dimensions as alike to the studies of Mahmud et al. (2011) and Baig et al. (2017). In addition, the majority of the women have power in decision making about household related issues as findings are consistent with the study of Baig et al. (2017). In table 1, women empowerment is mobility as illustrated that in the study are only limited women having the mobility empowerment whereas majority women cultural constraints regarding mobility while these results are in line with the study of Shah et al., (2011) and Baig et al., (2018). Estimates of the study also indicated as limited women in the area having no control over resources whereas majority having proper control over resources. Table 2 shows the description of explanatory variables description applied in the model with standard deviations, frequencies (%) and mean are presented in this table 2. Table 3 indicated the components of women empowerment reliability score while application of Cronbachs alpha (a) these scores of women empowerment were estimated (as used by Jejeebhoy, 2002; Mahmud et al. 2012). Regarding the value of Cronbach's alpha ( $\alpha$ ) rule of thumb consider regarding levels such as level of unacceptable consistency  $0.5 > \alpha$ , level of poor consistency  $0.6 > \alpha \ge 0.5$ , level of questionable consistency  $0.7 > \alpha \ge 0.5$ 0.6, level of acceptable consistency  $0.8 > \alpha \ge 0.7$ , level of good consistency  $0.9 > \alpha \ge 0.8$  and level of excellent consistency  $\alpha \ge 0.9$  (Tavakol & Dennick, 2011). According to table 3, self-esteem, is cumulative of five diverse conditions which has internal consistency acceptance. Internal reliability (a) regarding decision-making score illustrated internal consistency of high quality which shows combination of six diverse situations. There is various factors of mobility having good quality internal consistency. The final component of women empowerment is control over resources consider the women empowerment final component having the high level internal consistency with acceptance status. In the scenario of estimation the score of empowerment four components by application the method of Cronbach's alpha ( $\alpha$ ) four models were generated for the investigation of women empowerment factors.

Table 1: Women empowerment components and responses

Study components	Frequency of response			
Self-esteem	Response yes	%	Response no	%
Women desires input in household decisio	n		•	
In buying livestock and furniture	209	87.08	31	12.92
In family savings spending	218	90.83	22	9.17
In loan taking	189	78.75	51	21.25
In doctor visits	213	88.75	27	11.25
In outside the home visits	210	87.5	30	22.50
Decision making	Opinion Significance	% Opi	nion Insignificance	%
Women having decision making power		•		
Purchase livestock and furniture	214	89.16	26	10.84
Family savings spending	202	89.59	38	10.41
Loan taking	216	84.16	24	15.84
Doctor visits	198	82.5	42	17.5
Outside the home visits	201	83.75	39	16.25
Her father home visits	217	90.42	23	9.58
Mobility	Without Permission	on went%	With permission%	
In previous year, she				
Outside village friend visits	39	16.25	201	83.75
Clinic or hospital visits	28	11.66	212	88.34
Fathers home visits	37	15.42	203	84.58
Her relatives visits	59	24.58	181	75.42
Children school visits	97	40.41	143	59.59
Shopping visits	48	20.0	192	80.0
Outing visits	36	15.08	204	84.92
Control over resources	Response yes	% Response no %		%
According to her wish spending money				
Furniture related budget	103	42.91	137	57.09
Husband salary control	142	59.16	98	40.84
Own salary control	123	51.25	117	48.75
Other things budget	197	82.08	43	17.92
Precious jewellery sale control	134	55.83	106	44.17
Saved money spending	199	82.91	41	17.09
Husband's family/relatives loan giving	169	70.41	71	29.59
Her family/relatives loan giving	191	79.58	49	20.42

Source: Response calculation by the author from collected data

Table 2 Explanatory variables descriptive statistics

Description of variables	Mean value	Standard Deviation	Frequency
Education level	5.98	4.761	
Respondents family type	0.68	0.397	
Type of joint family=0			31.94
Type of independent=1			68.06
Number of children	4.32	3.11	
Gender status household	0.058	0.211	
Male status=0			89.67
Female status=1			10.33
Respondents status of job	0.19	0.387	
Unemployed status=0			68.91
Employed status=1			31.09
Status of salary adequacy	0.32	0.345	
Adequate salary=0			66.89
Inadequate salary=1			33.11
Print media access	0.49	0.431	

Having inadequate print media access = 0			52.67
Having adequate print media access = 1			47.33
Television (TV) access	0.87	3.11	
Inadequate TV access = 0			7.91
Adequate TV access = 1			92.09
Radio access	0.81	4.87	
Inadequate radio $access = 0$			19.06
Adequate radio access = 1			80.94
Social media access	0.74	5.11	
Inadequate social media access = 0			23.87
Adequate social media access = 1			76.13

Table 3 Women empowerment scores

Serial no	Women empowerment dimensions	Scores of Cronbchs alpha (α)
1	Self-esteem (SE)	0.74
2	Role of decision making (RDM)	0.83
3	Freedom of Mobility (M)	0.86
4	Control over resources (COR)	0.87

Calculated by using the methods of Jejeebhoy (2002)

Table 4 Women empowerment regression results of four components

Table 4 Women empowerment regression results of rour components				
Factors	Model 1 (SE) <sup>1</sup>	Model 2 (RDM) <sup>2</sup>	Model $3 (M)^3$	Model 4 (COR) <sup>4</sup>
Education level	0.31*(0.0674)	0.076*(0.082)	0.014**(0,037)	0.089*(0.051)
Respondents family type	0.178*(0.019)	-0.43(0.397)	-0.21(0.743)	0.078(0.812)
Number of children	-0.311(0.687)	-0.218(0.113)	0.039(0.587)	0.034(0.611)
Gender status household	0.018*(0.541)	0.241*(0.011)	0.76(0.198)	0.21*(0.084)
Respondents status of job	0.029(0.741)	0.19(0.625)	0.037(0.497)	0.024**(0.078)
Status of salary adequacy	0.043(0.761)	0.26*(0.0643)	0.239**(0.0591)	-0.078(0.371)
Access of media				
Print media access	0.016(0.649)	0.038(0.498)	-0.058(0.387)	-0.011(0.841)
Television (TV) access	0.0028**(0.054)	0.87*(0.021)	-0.186(0.634)	0.037(0.487)
Radio access	-0.87(0.341)	0.064(0.311)	-0.312(0.597)	0.026(0.732)
Social media access	0.147**(0.078)	-0.43(0.654)	0.419(0.789)	-0.0029(0.827)
Constant	0.621(0.311)	0.431(0.387)	0.498(0.189)	0.698(0.254)
Adjusted R <sup>2</sup>	0.14	0.21	0.29	0.24

Self-esteem, 2Role of decision making, 3Mobility, 4Control over resources: \*5% level of significance, \*\*10% level of significance

In table 4, regression results of these four models are illustrated where estimated of women empowerment first component elaborated as women having fewer children with higher schooling, having self-governing family system as those females which are household head, employed and having adequate salary enjoying complementary self-esteem as rather than other female in society. Lastly, women with adequate access of TV, electronic media and print media have more self-esteemed rather than women just having access of radio. Estimates about women empowerment in role in making decision, illustrated as women who are literate, fewer children, living in joint family systems, employed, adequate salary, female household head having more role in decision making rather than those having less education, independent family systems, less education, employed and male household head. In estimates the negative relationship of social indicated contrast picture whereas women have adequate access of radio, TV and print media having more power of decision making. Estimates of mobility dimension illustrated as those women have managing joint family, more education, status of household head, having more children, having adequate social media access, employed with adequate salary were indicated more mobile rather than rest of women. Fascinatingly women with adequate access to radio, TV and print media were considered limited mobile as compared to those women not having access to these media services. In conclusion, estimates also illustrated as women who independently living, educated, are having fewer children, employed with sufficient salary and female household head having adequate access to radio and TV have more control of resources as compared to other women in the society. In the empirical estimation, healthcare access score was 0.87 showing the level of good internal consistency. In conclusion, in table 5 the women empowerment four components scores were regressed related to access to healthcare scores and their influence was obtained. Estimates illustrated as women self-esteem one unit raises their access and usage to healthcare facilities increase 0.049% that consider statistically significant at significance level of 10%. In the other aspect as women

capacity and self-esteem to be strengthening women will move away to health and can systematize the economic and social policies, so their status shatterproof in all sphere of life (Samb, 2017). In society where women having lower self-esteem experience miserable in attaining healthcare and not capable to complete their household objectives as alike to the study of Gullette (2006). Experience of mistreatment in disturbs women self confidence and self-esteem and self-confidence. Living partner violence with woman influenced negatively which need to control with iron hands for smooth system of household as these practices hurdles in health seeking for women (Ganley, 1998). In table 5, estimates illustrated as increase one unit in women decision-making power caused to raise healthcare facilities access as 0.034 units which shows the significant relationship. Household level or family-based capability of women to having decisions raises their usages and access of services regarding healthcare. Women empowerment regarding decision making positively influences their household level. Estimated illustrated as no domestic violence, good interaction with their husband, high status of personal autonomy have significant impact on outside home visits and healthcare access as findings similar with the study of Anwar et al. (2013).

Table 5 Women empowerment on healthcare access in regression estimates

Factors	Coefficients	Standard Error	P-value
Self-esteem (SE) score	0.039**	0.029	0.0478
Role of decision making (RDM) score	0.034**	0.021	0.0741
Mobility (M) score	0.0.98**	0.063	0.0459
Control over resources (COR) score	0.068	0.037	0.318
Constant	0.0679	0.259	0.586
Adjusted R <sup>2</sup>	0.18	-	-

<sup>\*</sup> Significance level at 5 percent, \*\* significance level at 10 percent

In table 5, the estimates about women mobility illustrated as raise in one unit women mobility raises the 0.98 units of women health access such as the mobility factor raises the women control over their lives regarding decisions. These findings indicated as women having more access of schooling, market purchasing and health access due mobility as results are alike with the study of Fernando (2002). Limited and inadequate access of mobility is negatively affecting the utilization of resources and health access. Mobility makes possible to women to make decision related to ideas and views. Results regarding control over resources illustrated as one unit control over resources raise healthcare access by 0.068 units as indicating statistically insignificant association. Control over resources capable women to having healthcare access, purchasing decision outside the house. Women have proper control to spending money have confidence of husband in taking decisions about household matters as results are in line with the studies of Boateng and Falanagen (2008) and Baig et al., (2017).

#### IV. CONCLUSION AND SUGGESTIONS

This study focused the effects of women empowerment to access of healthcare in southern Punjab of Pakistan by using the collected data of 238 household respondents. In policy perspective some significant legislation has developed by State for empowering women and improves their social and economic status in society particularly in Pakistan. Empirical estimates of the study illustrated as socioeconomic factors are affecting the women empowerment components with the certain variation. Family type, education, social media access, TV access and gender of household status have significant and positive effect on the self-esteem of women in society. There is positive and Significant and positive relationship was estimated regarding household gender status, education, TV access and adequate salary regarding the component of decision-making. Furthermore, positive and significant influence of mobility dimension was related to adequate salary and education. In conclusion, about the control of resources significant and positive relationship was indicated regarding the factors of job status and gender status of household head. Estimates about empowerment status in access to healthcare indicated as mobility, decision-making and selfesteem significantly and positively effects healthcare while no significant relationship was illustrated about the dimension of control over resources whereas in access to healthcare economic and social factors have major role. National level and local based appropriate policies for improvement in women empowerment for improving access to healthcare need to implement through legislative measure. Free and easy access of schooling, provision of job opportunities, print media and electronic media are some significant measure of increasing women empowerment. Access of technology and positive electronic media can play significant role regarding awareness of women rights. Female educational institutes need to extend at doorstep at village level. State authorities should introduce microfinance schemes and some training programs at household level so that women can start their small business. Although this is an academic research, these results are expected helpful in understanding phenomenon and issues in women empowerment. The suggested instrument will help in improvement of women empowerment and enhance chances of adequate access to healthcare in the study area as well as throughout the country.

#### REFERENCES

- Abbas, S., Isaac, N., Zia, M., Zakar, R., & Fischer, F. (2021). Determinants of women's empowerment in Pakistan: evidence from Demographic and Health Surveys, 2012–13 and 2017–18. *BMC Public Health*, 21(1), 1-14.
- Abrar-ul-haq, M., Jali, M. R. M., & Islam, G. M. N. (2017). Empowering rural women in Pakistan: empirical evidence from Southern Punjab. *Quality & Quantity*, 51(4), 1777-1787.
- Agnes, F. (1996). Economic rights of women in Islamic law. Economic and Political Weekly, 2832-2838.
- Ahmed, S., Creanga, A. A., Gillespie, D. G., & Tsui, A. O. (2010). Economic status, education and empowerment: implications for maternal health service utilization in developing countries. *PloS one*, *5*(6), e11190.
- Akram, N. (2018). Women's empowerment in Pakistan: its dimensions and determinants. *Social Indicators Research*, 140(2), 755-775.
- Ali, A. & Naeem, M.Z. (2017). Trade Liberalization and Fiscal Management of Pakistan: A Brief Overview. *Policy Brief-Department of Economics, PU, Lahore*. 2017 (1), 1-6.
- Ali, A. (2011). Disaggregated import demand functions of Pakistan; An empirical Analysis. M-Phil Thesis, NCBA&E, Lahore, Pakistan, 1-70.
- Ali, A. (2015). The impact of macroeconomic instability on social progress: an empirical analysis of Pakistan. (Doctoral dissertation, National College of Business Administration & Economics Lahore).
- Ali, A. (2018). Issue of Income Inequality Under the Perceptive of Macroeconomic Instability: An Empirical Analysis of Pakistan. *Pakistan Economic and Social Review*, 56(1), 121-155.
- Ali, A. and Bibi, C. (2017). Determinants of Social Progress and its Scenarios under the role of Macroeconomic Instability: Empirics from Pakistan. *Pakistan Economic and Social Review* 55 (2), 505-540.
- Ali, A., & Ahmad, K. (2014). The Impact of Socio-Economic Factors on Life Expectancy in Sultanate of Oman: An Empirical Analysis. *Middle-East Journal of Scientific Research*, 22(2), 218-224.
- Ali, A., & Audi, M. (2016). The Impact of Income Inequality, Environmental Degradation and Globalization on Life Expectancy in Pakistan: An Empirical Analysis. *International Journal of Economics and Empirical Research*, 4 (4), 182-193.
- Ali, A., & Audi, M. (2018). Macroeconomic Environment and Taxes Revenues in Pakistan: An Application of ARDL Approach. *Bulletin of Business and Economics* (BBE), 7(1), 30-39.
- Ali, A., & Rehman, H. U. (2015). Macroeconomic instability and its impact on the gross domestic product: an empirical analysis of Pakistan. *Pakistan Economic and Social Review*, 285-316.
- Ali, A., & Şenturk, I. (2019). Justifying the Impact of Economic Deprivation, Maternal Status and Health infrastructure on Under-Five Child Mortality in Pakistan: An Empirical Analysis. *Bulletin of Business and Economics*, 8(3), 140-154.
- Ali, A., & Zulfiqar, K. (2018). An Assessment of Association between Natural Resources Agglomeration and Unemployment in Pakistan. *Pakistan Vision*, 19(1), 110-126.
- Ali, A., Ahmed, F., & Rahman, F. U. (2016). Impact of Government Borrowing on Financial Development (A case study of Pakistan). *Bulletin of Business and Economics* (BBE), 5(3), 135-143.
- Ali, A., Audi, M., & Roussel, Y. (2021). Natural Resources Depletion, Renewable Energy Consumption and Environmental Degradation: A Comparative Analysis of Developed and Developing World. *International Journal of Energy Economics and Policy*, 11(3), 251-260.
- Ali, A., Audi, M., Bibi, C., & Roussel, Y. (2021). The Impact of Gender Inequality and Environmental Degradation on Human Well-being in the Case of Pakistan: A Time Series Analysis. *International Journal of Economics and Financial Issues*, 11(2), 92-99.
- Ali, A., Mujahid, N., Rashid, Y., & Shahbaz, M. (2015). Human capital outflow and economic misery: Fresh evidence for Pakistan. *Social Indicators Research*, 124(3), 747-764.
- Anwar, B., Shoaib, M., & Javed, S. (2013). Women's autonomy and their role in decision making at household level: a case of rural Sialkot, Pakistan. *World Appl Sci J*, 23(1), 129-136.
- Arshad, S., & Ali, A. (2016). Trade-off between Inflation, Interest and Unemployment Rate of Pakistan: Revisited. *Bulletin of Business and Economics (BBE)*, *5*(4), 193-209.
- Asaolu, I. O., Alaofè, H., Gunn, J. K., Adu, A. K., Monroy, A. J., Ehiri, J. E., ... & Ernst, K. C. (2018). Measuring women's Empowerment in sub-Saharan Africa: exploratory and confirmatory factor analyses of the demographic and health surveys. *Frontiers in psychology*, *9*, 994.
- Ashraf, I., & Ali, A. (2018). Socio-Economic Well-Being and Women Status in Pakistan: An Empirical Analysis. *Bulletin of Business and Economics (BBE)*, 7(2), 46-58.
- Ashraf, T., (1996). Maternal mortality: a four year review. *Journal of the College of Physicians and Surgeons of Pakistan*, 6(3), pp.159-161.

- Audi, M & Ali, A. (2017). Socio-Economic Status and Life Expectancy in Lebanon: An Empirical Analysis. *Archives of Business Research*, 5(11), 159-170
- Audi, M. & Ali, A. (2017). Environmental Degradation, Energy consumption, Population Density and Economic Development in Lebanon: A time series Analysis (1971-2014). *Journal of International Finance and Economics*, 17(1), 7-20.
- Audi, M. Sadiq, A. Ali, A. and Roussel, Y. (2021). Performance Evaluation of Islamic and Non-Islamic Equity and Bonds Indices: Evidence from Selected Emerging and Developed Countries. *Journal of Applied Economic Sciences*, 16(73), 251–269.
- Audi, M., & Ali, A. (2016). A Causality and Co-integration Analysis of Some Selected Socio-Economic Determinants of Fertility: Empirics from Tunisia. *Bulletin of Business and Economics (BBE)*, 5(1), 20-36.
- Audi, M., Ali, A., & Al-Masri, R. (2022). Determinants of Advancement in Information Communication Technologies and its Prospect under the role of Aggregate and Disaggregate Globalization. *Scientific Annals of Economics and Business*. https://doi.org/10.47743/saeb-2022-0009.
- Audi, M., Ali, A., & Roussel, Y. (2021). Aggregate and Disaggregate Natural Resources Agglomeration and Foreign Direct Investment in France. *International Journal of Economics and Financial Issues*, 11(1), 147-156.
- Audi, M., Ali, A., & Roussel, Y. (2021). Measuring the Tax Buoyancy: Empirics from South Asian Association for Regional Cooperation (SAARC). *Empirical Economics Letters*, 20(12).
- Audi, M., Ali, A., & Roussel, Y. (2021). The Advancement in Information and Communication Technologies (ICT) and Economic Development: A Panel Analysis. *International Journal of Innovation, Creativity and Change*, 15(4), 1013-1039.
- Baig, I. A., Batool, Z., Ali, A., Baig, S. A., Hashim, M., & Zia-ur-Rehman, M. (2018). Impact of women empowerment on rural development in Southern Punjab, Pakistan. *Quality & Quantity*, 52(4), 1861-1872.
- Basheer, R. P. (2018). Empowerment of women through education: a special reference to Mahatma Gandhi. *International J Res Anal Rev*, 5(3), 1756-1758.
- Bayeh, E. (2016). The role of empowering women and achieving gender equality to the sustainable development of Ethiopia. *Pacific Science Review B: Humanities and Social Sciences*, 2(1), 37-42.
- Benedicta, U. (2011). Female gender in Professional Education. In FIG Working Week.
- Bland, J. M., & Altman, D. G. (1997). Statistics notes: Cronbach's alpha. Bmj, 314(7080), 572.
- Bradshaw, S., & Linneker, B. (2003). Challenging women's poverty. *Perspectives on Gender and Poverty Reduction Strategies from Nicaragua and Honduras*.
- Camerini, L., Schulz, P. J., & Nakamoto, K. (2012). Differential effects of health knowledge and health empowerment over patients' self-management and health outcomes: a cross-sectional evaluation. *Patient Education and Counseling*, 89(2), 337-344.
- Chandra-Mouli, V., Plesons, M., Hadi, S., Baig, Q., & Lang, I. (2018). Building support for adolescent sexuality and reproductive health education and responding to resistance in conservative contexts: Cases from Pakistan. *Global Health: Science and Practice*, 6(1), 128-136.
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. psychometrika, 16(3), 297-334.
- Engida, Y. M. (2021). The three dimensional role of education for women empowerment. *Journal of Social Sciences*, 17(1), 32-38.
- Fatmi, Z., & Avan, B. I. (2002). Demographic, socio-economic and environmental determinants of utilisation of antenatal care in a rural setting of Sindh, Pakistan. *Journal of Pakistan Medical Association*, 52(4), 138.
- Fernando, P., & Porter, G. (2002). Balancing the load: women, gender and transport. Zed Books.
- Gullette, D. L., & Lyons, M. A. (2006). Sensation seeking, self-esteem, and unprotected sex in college students. *Journal of the Association of Nurses in AIDS Care*, 17(5), 23-31.
- Haider, A., & Ali, A. (2015). Socio-economic determinants of crimes: a cross-sectional study of Punjab districts. *International Journal of Economics and Empirical Research*, 3(11), 550-560.
- Holmström, I., & Röing, M. (2010). The relation between patient-centeredness and patient empowerment: a discussion on concepts. *Patient education and counseling*, 79(2), 167-172.
- Jejeebhoy, S. J. (2000). Women's autonomy in rural India: Its dimensions, determinants, and the influence of context. na.
- Kandpal, E., & Baylis, K. (2011). Standing Together: Peer Networks, Female Empowerment, and Child Welfare. Working Paper.
- Kar, S. B., Pascual, C. A., & Chickering, K. L. (1999). Empowerment of women for health promotion: a meta-analysis. *Social Science & Medicine*, 49(11), 1431-1460.

11(2), 01/2. <u>Importation of 10/201/201040.001</u>

- Karim, R., Lindberg, L., Wamala, S., & Emmelin, M. (2018). Men's perceptions of women's participation in development initiatives in rural Bangladesh. *American journal of men's health*, 12(2), 398-410.
- Kassem, M. Ali, A. & Audi, M. (2019). Unemployment Rate, Population Density and Crime Rate in Punjab (Pakistan): An Empirical Analysis. *Bulletin of Business and Economics (BBE)*, 8(2), 92-104.
- Katung, P. Y. (2001). Socio-economic factors responsible for poor utilisation of the primary health care services in a rural community in Nigeria. *Nigerian journal of medicine: journal of the National Association of Resident Doctors of Nigeria*, 10(1), 28-29.
- Khan, M. T., & Maan, A. A. (2008). Socio-cultural milieu of women's empowerment in district Faisalabad. *Pakistan. Journal of Agricultural Science*, 45(3), 78-90.
- Khatri, R. (2016). The role of education towards women empowerment in India. *International Journal of Advanced Research*, 4(11), 550-555.
- Klein, H. G., & Nestvogel, R. (1992). Women in Pakistan: General Conditions, Approaches and Project Proposals for the Development and Vocational Qualification of Women in the Province of Punjab. Vanguard.
- Magaji, R. J. (2021). Evaluation of The Enrolment and Retention Strategies of Masallaci National Model Adult Education Centre, KANO, NIGERIA, 2007-2017 (Doctoral dissertation).
- Mahmud, S., Shah, N. M., & Becker, S. (2012). Measurement of women's empowerment in rural Bangladesh. *World development*, 40(3), 610-619.
- Malhotra, A., & Schuler, S. R. (2005). Women's empowerment as a variable in international development. *Measuring empowerment: Cross-disciplinary perspectives*, 1(1), 71-88.
- Malhotra, A., Schulte, J., Patel, P., Petesch, P., Swaminathan, H., Ashburn, K., ... & Herbert, K. (2009). Innovation for women's empowerment and gender equality.
- Moonzwe Davis, L., Schensul, S. L., Schensul, J. J., Verma, R. K., Nastasi, B. K., & Singh, R. (2014). Women's empowerment and its differential impact on health in low-income communities in Mumbai, India. *Global public health*, 9(5), 481-494.
- Murphy, K. (2012). The social pillar of sustainable development: a literature review and framework for policy analysis. *Sustainability: Science, practice and policy*, 8(1), 15-29.
- Murtaza, K. F. (2012). Women empowerment through higher education in Gilgit-Baltistan. *International Journal of Academic Research in Business and Social Sciences*, 2(9), 343.
- Nasrabadi, A. N., Sabzevari, S., & Bonabi, T. N. (2015). Women empowerment through health information seeking: a qualitative study. *International journal of community-based nursing and midwifery*, 3(2), 105.
- Noorali, R., Luby, S., & Hossein Rahbar, M. (1999). Does use of a government service depend on distance from the health facility? *Health policy and planning*, 14(2), 191-197.
- Patel, R. (2010). Gender equality and women's empowerment in Pakistan. Oxford University Press.
- Qureshi, R., & Rarieya, J. F. (2007). Gender and education in Pakistan. Oxford University Press.
- Rizvi, N., & Nishtar, S. (2008). Pakistan's health policy: appropriateness and relevance to women's health needs. *Health policy*, 88(2-3), 269-281.
- Roussel, Y., Ali, A., & Audi, M. (2021). Measuring the Money Demand in Pakistan: A Time Series Analysis. *Bulletin of Business and Economics (BBE)*, 10(1), 27-41.
- Sajid, A. & Ali, A. (2018). Inclusive Growth and Macroeconomic Situations in South Asia: An Empirical Analysis. *Bulletin of Business and Economics (BBE)*, 7(3), 97-109.
- Samb, O. M., & Ridde, V. (2018). The impact of free healthcare on women's capability: a qualitative study in rural Burkina Faso. *Social science & medicine*, 197, 9-16.
- Şentürk, İ., & Ali, A. (2021). Socioeconomic Determinants of Gender Specific Life Expectancy in Turkey: A Time Series Analysis. *Sosyoekonomi*, 29(49), 85-111.
- Sohail, M. (2014). Women empowerment and economic development-an exploratory study in Pakistan. *Journal of Business Studies Quarterly*, 5(4), 210.
- Stephenson, R., & Hennink, M. (2004). Barriers to family planning use amongst the urban poor in Pakistan.
- Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International journal of medical education*, 2, 53.
- The Express Tribune, 14 February (2017). Retrieved from https://tribune.com.pk/story/1325981/inhuman-treatment-south-punjab-tops-list-domestic-violence-cases/
- Upadhyay, U. D., Gipson, J. D., Withers, M., Lewis, S., Ciaraldi, E. J., Fraser, A., ... & Prata, N. (2014). Women's empowerment and fertility: a review of the literature. *Social science & medicine*, 115, 111-120.
- Warth, L., & Koparanova, M. S. (2012). *Empowering women for sustainable development* (pp. 1-26). Geneva, Switzerland: United Nations Economic Commission for Europe.
- World Health Statistics (2009). World Health Organization.