

## **Impact of Education on Women's Empowerment: Mediational Role of Income and Self-Esteem**

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The study was carried out to assess the direct and indirect impact of women's education on their empowerment. A sample of 1000 women of age ranged from 21-49 years participated in the study. A convenient sampling strategy was used to collect the data. The study adopted a cross-sectional research design and it was a correlational survey. A demographic data sheet, Composite Women's Empowerment Index, and Rosenberg Self-Esteem Scale were used to measure the study variables. (Results of structural equation modelling (SEM) analysis showed that education explained 11% of the variance in women's empowerment via income and self-esteem at .05 level of significance. Income and self-esteem fully mediated in the relationship between education and women's empowerment. It is concluded that education was a pre-requisite to enhance women's empowerment, but it appeared to boost up women's empowerment through increasing their income and elevated self-esteem. Implications of the study were also discussed.

**Keywords:** *women's empowerment, education, income, self-esteem*

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### **Introduction**

Women's empowerment is a process and gives women power or authority to challenge certain situations (Basu & Basu, 2001), for example. empowerment of women is a prerequisite and a necessary requirement in order to make the process of personal development and development of a country stable and sustainable; and it generally takes place when women challenge prevailing customs and culture to improve their well-being (Swain & Wallentin, 2008). The campaign for women's empowerment has two-fold objectives: a) social justice, a significant facet of human well-being, which is inherently worth following, and b) a means to additional ends (Sridevi, 2005).

The modern Western world has recognized the rights and importance of women and is working towards equating ranks of women and men; however, in developing countries, the picture is not as promising. According to Ethiopia Demographic and Health Survey (2005), women in the developed world are relatively more empowered economically and have a powerful voice. Gender inequality is taken as a common issue of the developing countries. Women in developing countries are usually tacit and their voice has been hushed due to inherent economic and cultural factors. Around 50 percent of Pakistani population comprises of women (Economic Survey of Pakistan, 2014), who fail to pace with men in many areas for example, Government of Pakistan (2013)

reports literacy rate for women (45%) is lower than men (69%), and for economy to flourish (Oladipo, 2009) such educational gap equates with loss of human resources that could bring flow to financial progress. Recognizing and bringing this dormant group to mainstream developmental processes, women empowerment would play an important role.

Researchers from diverse fields like, economics, sociology, and psychology have been exploring the determinants of women's empowerment since the advent of the present century (e.g., Chaudhary, Chani & Pervaiz, 2012; Khan & Awan, 2011; Kishor & Gupta, 2004; Nayak & Mahanta, 2009; Sridevi, 2005; Wicklander & Thede, 2010). Many studies suggest that women's empowerment is influenced by personal, familial, and socio-cultural factors (Parveen & Leonhauser, 2005), which include, age, age at marriage, family system, conjugal terms, education, and jobs (Sen, 1997). Though external agents (society, culture, organizations and governments) are essential for goading empowerment; internal agents like self-esteem (Spreitzer, 1995) also rapidly influence empowerment.

The present study focuses on three factors: two external (education and income) and one internal (self-esteem) as they promote empowerment. A considerable body of literature supports the idea that women's empowerment is augmented by the rise in educational levels (Gholipour, Rahimian & Mirzamani, 2010). Mishra and Nayak (2010) emphasized that human health and income depend intimately on educational attainment. Ahmad and Sultan (2004) concur and report that education is a

resilient predictor of women's empowerment, mobility and communication with husband. Two studies in Bangladesh reported that formal and informal education in rural Bangladesh led to positive and significant influences on women empowerment (Parveen & Leonhauser, 2005); and found highly educated women in Bangladesh made more economic and household-decisions making them more empowered (Haque, Islam, Tareque, & Mostofa, 2011). Similarly, Sheikh, Meraj and Sadaqat (2015) observed educated women in Pakistan who were economically strong, were more empowered to make decisions about reproductive and household affairs.

Soomro, Bibi, Latif, Kamran, and Ahmed (2013) found that educated housewives did not like dependency on their husbands or life partners as a sole breadwinner because it lowered their self-esteem, but if they were paid it increased their self-esteem (Brown & Bifulco, 1990; Chaudhry, 1995). Women in paid jobs have greater autonomy, have a sophisticated value system, fewer role-conflicts, more support from family, more encouraged and wholehearted lives; such positive features lead them to greater self-esteem. Even in poor women who generated equivalent income to men enjoyed general prestige within a family and society at large (e.g., Kandiyoti, 1990). Education, employment status, and personal income collectively increase the economic bargaining power of women in the family; rich and middle-class women with less than optimal education and reasonable jobs suffered decision making in

their households (Acharya, Bell, Simkhada, van Teijlingen, & Regmi, 2010).

Education appeared to be insignificant in predicting the empowerment of women without jobs in some studies (e.g., Swain & Wallentin, 2008). Education has been supported to escalate the chances of employability, enables women to boost their self-esteem, self-reliance, decision-making confidence and makes them aware of their rights (e.g., Heaton, Huntsman, & Flake, 2005; Khan & Awan, 2011; Kishor & Gupta, 2004; Nayak & Mahanta, 2009; Rahman & Naoroze, 2007; Sridevi, 2005). In some cases merely attaining the education does not guarantee higher levels of self-esteem in women, unless they get paid job (Soomro et al., 2013). The level of self-esteem was significantly higher among working women who earned income compared to educated housewives without jobs.

Income diversification plays a significant role in enhancing self-confidence and self-esteem of women (Al-Amin & Chowdhury, 2008). The economic status of women who are able to finance themselves vis-à-vis their children without seeking support from husband enhances their self-esteem (Wicklender & Thede, 2010). Income earned by paid jobs reduces women's financial dependency and improves their control over family resources that lead them to be empowered (Heaton et al., 2005). An economically strong and active woman having her personal savings and higher income sharing with her family has stronger economic power (Khan & Awan, 2011). Personal income strengthens the bargaining power of women within the

family, thus supplements their empowerment and perspective to challenge the prevalent customs that hamper their capacity to make choices (Ashraf, Karlan, & Yin, 2010; Khan & Awan, 2011; Swain & Wallentin, 2008). Income, property and possession indicate the standard of living of a household, which influences women's empowerment (Wicklender & Thede, 2010). Gholipour et al. (2010) studied empowerment of women in Tehran and found that both formal education and earnings had a substantial impact on women's empowerment, and in cases where women earned money, but did not have control over their income, reduced their empowerment. Sometimes, family and social norms allow women to earn money without holding control over it or gaining any position in the family or society, in such situations men are the ultimate beneficiaries of women's empowerment (Gholipour et al., 2010). Access of women to credit can boost their financial independence, leading to women's greater self-esteem and position in the families and extended community (Goetz & Gupta, 1996; Hultberg, 2008).

The literature suggests education raises self-esteem slowly and leads to empowerment of any individual; thus self-esteem positively affects women's empowerment (Spreitzer, 1995). McMullin and Cairney (2004) found that self-esteem tends to increase with increased education, and so the relationship is straightforward and/or mediated; higher educational attainment leads to higher self-esteem and/or higher education leads to higher status jobs with a positive impact on self-esteem.

### **Conceptualization of the Study**

The direct role of education in empowering women has been supported by numerous researchers (e.g., Ahmad & Sultan, 2004; Parveen & Leonhauser., 2005). Whereas, economic bargaining theory supports education and income both to determine women's empowerment (e.g., Lundberg & Pollak, 1993). The review of literature also reveals that education and income earned by women are not only the direct paths to women's empowerment but also determine women's empowerment indirectly through self-esteem. The significance of education in the process of empowerment is an extensively explored area, but the indirect role of education through income and self-esteem in the women's empowerment has never been explored. The present study was designed to assess the mediating role of income and self-esteem in the relationship between education and women's empowerment. Given this background, we constructed the following hypotheses:

H<sub>1</sub>: There is a positive relationship between education and women's empowerment.

H<sub>2</sub>: There is a positive relationship between income and women's empowerment.

H<sub>3</sub>: There is a positive relationship between self-esteem and women's empowerment.

H<sub>4</sub>: There is a positive relationship between education and income.

H<sub>5</sub>: There is a positive relationship between education and self-esteem.

H<sub>6</sub>: There is a positive relationship between income and self-esteem.

H<sub>7</sub>: Income and self-esteem will mediate the relationship between education and women's empowerment.

The first six hypotheses were constructed to execute the requirements of mediational analysis (Baron & Kenny, 1986) as proposed in the final hypothesis.

### **Method**

**Sample--** We sampled 1000 women age range 21 and 49 years (Mean<sub>age</sub>= 35.55, SD = 7.80) with varying levels of education that ranged between 5 and 18 years of education (see Table 1). The participants were selected from two districts (Lahore and Multan) of Punjab Province, Pakistan, which was purposively selected from upper and lower Punjab and the participants were approached conveniently at homes and workplaces for data collection.

**Inclusion/Exclusion criteria--** Married women with at least one child were selected for the study. We selected married women because the dependent variable in the study measures bargaining power (empowerment) between husband and wife (Lee, 2009). Divorced, separated and issueless (having no child) women were not included in the sample.

### **Measures**

**Demographic Datasheet--** Data regarding age, education, employment status, and monthly income were collected via demographic datasheet.

**Table 1***Descriptive Statistics of the Demographic Variables (N=1000)*

Variables	Frequencies	Percentages
Age in Years		
21-30	335	33.5
31-40	355	35.5
41-49	310	31.0
Education (Years)		
MPhil (18)	120	12
Masters (16)	130	13
B.A(14)	70	7.0
F.A(12)	202	20.2
Matric(10)	180	18.0
Middle(8)	198	19.8
Primary(5)	100	10.0
Income in Pakistani rupees(thousand)		
No income	338	33.8
20—40	186	18.6
41- 60	283	28.3
61-80	193	19.3

***Composite Women's Empowerment Index (CWEI: Batool, 2017)*** -- The CWEI measures four dimensions of women's empowerment: economic, familial, social, and psychological. The CWEI consists of 33-items. Some items are phrased positively (e.g., *I feel that life is very rewarding*) and some are negatively phrased (e.g., *I do not feel particularly pleased with the way I am*). A five-point Likert-type scale was used (5 = *strongly* to 1 = *not at all agree*). Cronbach alphas for economic ( $\alpha = .77$ ), familial ( $\alpha = .84$ ), social ( $\alpha = .74$ ), psychological ( $\alpha = .72$ ) subscales and composite ( $\alpha = .88$ ) empowerments for the present study.

***The Rosenberg Self-Esteem Scale (Rosenberg, 1965)*** -- It is an extensively used scale that offers a uni-dimensional evaluation of global self-esteem. The instrument remains the most esteemed measure due to its high validity and

prominence in personality research and has good psychometric properties (Hatcher & Hall, 2009). The responses are measured on a four-point Likert scale (4 = *strongly agree* to 1 = *strongly disagree*). Higher scores indicate higher self-esteem and vice versa. The Cronbach's alpha for the present study is .77.

#### **Procedure**

The first author approached women personally through personal contacts at their homes and workplaces and sought their consent to take part in the study. The participants were informed about the purpose of the study. The Rosenberg Self-Esteem Scale was translated from English into Urdu by following the forward and backward translation procedure (MAPI institute, 2012) set of three questionnaires: demographic sheet, the CWEI, and Rosenberg's self-esteem measures were

administered. Verbal instructions regarding how to complete the questionnaires were given, and participants were asked if they had any questions before they started to fill out the questionnaires. It took 15-20 minutes

to complete both questionnaires and the demographic sheet.

**Data Analysis and Results**

Before running mediational analysis, simple linear regressions were run to see the direct relationship between the variables.

**Table 2**  
*Summary of Simple Regression Equations of the Study Variables*

Equations	Paths	B	S.E	$\beta$	P	R <sup>2</sup>
1	Education → Women’s Empowerment	4.17	.62	.21**	.000	.04
2	Income → Women’s Empowerment	.49	.09	.15**	.000	.02
3	Self-esteem → Women’s Empowerment	1.47	.14	.30**	.000	.09
4	Education → Income	.47	.04	.33**	.000	.11
5	Education → Self-esteem	.28	.03	.30**	.000	.09
6	Income → Self-esteem	.05	.02	.07	.23	.00

Note: \* $p < .05$ , \*\* $p < .01$ .

Table 2 shows that all the study variables have significant linear relationships with each other all the way from education-income ( $\beta = .33, p < .000$ ) to income-women’s empowerment ( $\beta = .15, p < .02$ ); income-self-esteem ( $\beta = .07, p > .05$ ) relationship was not significant. Since high variance was revealed in women’s empowerment accounted for by self-esteem ( $R^2 = .09$ ), we carried out mediational

analysis in the subsequent step (Baron & Kenny, 1986).

**Mediation Path Analysis--** To see the mediational role of income and self-esteem in the relationship between education and women’s empowerment, we ran a mediational analysis through structural equation modelling (SEM) via AMOS, version 21 (IBM Corp, 2012).

**Table 3**  
*Decomposition Standardized Effect of Independent Variables on Women’s Empowerment in Path Analysis*

Predictors	Indirect Effects	Direct Effects	Total Effects
Education	.12	.06	.18
Income	.00	.12	.12
Self-esteem	.00	.28	.28

Table 3 shows standardized direct (unmediated) impact of women’s education, on women’s empowerment is .06, and the standardized indirect (mediated) effects are .12. The indirect effect of education = .12

on women’s empowerment is due to income and self-esteem of women in the study. This is in addition to any direct (unmediated) effect that women’s education has on their empowerment.

**Table 4**  
*Summary of Model Fit Indices*

Models	Chi-Square	df	Sig	RMR	GFI	CFI	RMSEA
Model 1	.000	0	-----	.000	.99	1	.233

Model 2	4.03	2	.13	.04	.98	.99	.032
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Table 4 shows application of SEM procedures did not show good fit for the first model ( $\chi^2 = .000$ ,  $df = 0$ ,  $GFI = .99$ ,  $CFI = .1$ ,  $RMSEA = .23$ ). However, the second model (Model 2) shows an excellent fit of the data to ( $\chi^2 = 4.03$ ,  $df = 2$ ,  $p = .13$ ,  $GFI = .98$ ,  $CFI = .99$ ,  $RMSEA = .032$ ). Given the intrinsic flaws of the chi-square (sensitivity to sample size of governments' and leaving for normality) assessment of the fit was appended by additional fit indices. These included: the Standardized Root-Mean-Square Residual (SRMR), the Comparative

Fit Index (CFI), and the Root Mean Squared Error of Approximation (RMSEA). In line with the guidelines given by Hu and Bentler (1999), values lesser than .06 for RMSEA and SRMR and, and greater than .95 for CFI and GFI recommend a comparative good fit between the observed data and the hypothesized model.

**Sobel's Test--** In order to test the significance of the mediational role of income and self-esteem in the relationship of education and women's empowerment, we applied Sobel's test of significance.

**Table 5**  
*Sobel's Test to Determine the Significance of Mediation*

Mediational Paths	Test- Values	S.E	P-Values
Education → Income → Women's Empowerment	3.50	.04	.000
Education → self-esteem → Women's Empowerment	6.60	.05	.000

Note:  $p < .01$

Table 5 shows that income and education significantly mediate the relationship

between education and women's empowerment.

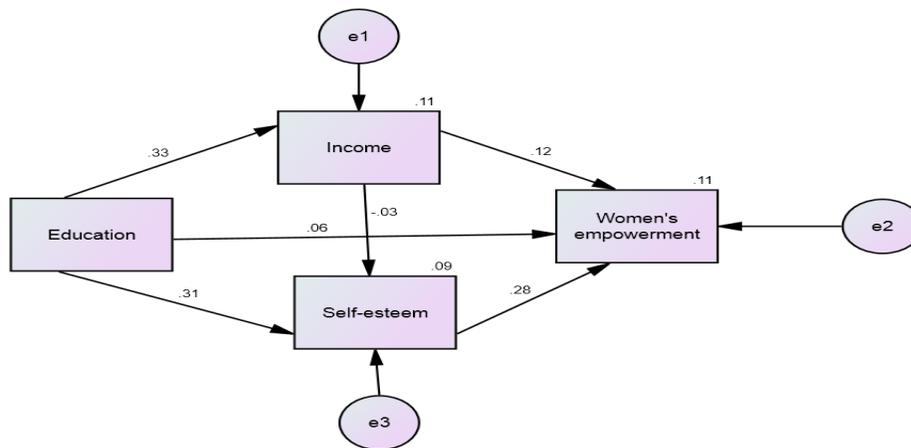


Figure 1. Direct and indirect (via income and self-esteem) impact of education on women's empowerment

Figure 1 shows that the direct path from education to women's empowerment is non-

significant ( $\beta = .06$ ,  $p > .01$ ); education has significant direct path to income and self-

esteem ( $\beta = .33, p < .01$ ;  $\beta = .31, p < .01$ ) respectively. However, indirect path of education in self-esteem via income is insignificant ( $\beta = -.03, p > .01$ ). Whereas,

education shows significant impact on women's empowerment via income and self-esteem ( $\beta = .12, p < .05$ ;  $\beta = .28, p < .01$ ) respectively.

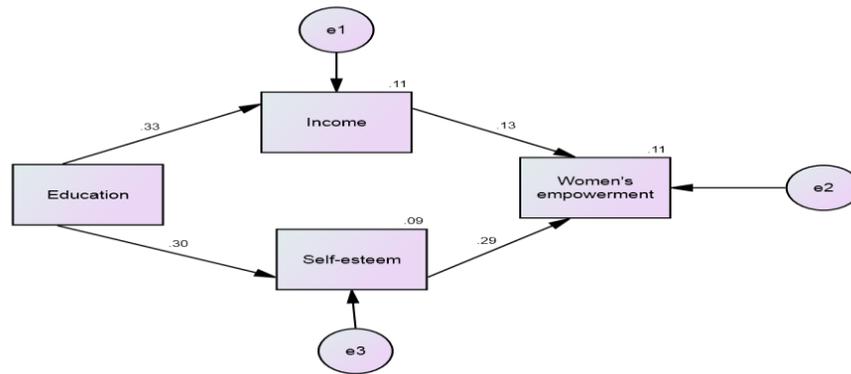


Figure: 2. The indirect impact of education on women's empowerment via income and self-esteem

Since Figure 1 showed direct path from education to women's empowerment was non-significant ( $\beta = .06, p > .01$ ); moreover indirect path of education to self-esteem via income was also non-significant ( $\beta = -.03, p > .01$ ) and the model did not fit well, so we removed these non-significant paths in the second model (Model 2). Figure 2 shows that education has significant indirect impact on women's empowerment via income and self-esteem ( $\beta = .12, p < .05$ ;  $\beta = .28, p < .01$ ) respectively, suggesting 11% of variance in women's empowerment is accounted for by education via income and self-esteem, providing a better fit for Model 2.

### Discussion

The study was carried out to measure the direct and indirect impact of education on women and their empowerment. The results partially supported our hypothesized model and it appeared that women's

education did not have a significant direct impact on their empowerment. Women's income and their self-esteem fully mediated the relationship between education and empowerment (see Figs. 1 & 2). The non-significant direct relationship between education and women's empowerment is in line with what Swain and Wallentin (2008) suggest that despite the fact that education is among the most important investments in the development of a society, statistically, it does not directly determine the empowerment among women. However, the non-significant relationship between education and women's empowerment is inconsistent with previous researches that support the growth of women in terms of education as the solo path through which women could be directly empowered (e.g., Haque, Islam, Tareque, & Mostofa, 2011; Khan & Awan, 2011; Parveen & Leonhauser, 2005; Sheikh, Meraj &

Sadaqat, 2015). The result illustrates that women cannot be empowered by merely attaining degrees in different fields of education but through the impact of education on different personal and social faculties of women, which needs to be explored.

Model 2 shows that women's education had an indirect impact on their empowerment via their income (see Fig. 2). These results are supported in the literature, where empowerment of women is influenced by their education if they work and earn their own income as compared with the educated women who do not do any job to earn money for them. The results are in some way similar to Acharya et al. (2010) that women who came from rich and middle class enjoyed sufficient power of decision making and Khan and Awan (2011) that socio-economic status, level of education and employment status of a woman depicted as effect modifier factors across the empowerment contexts and regions. These results are also in line with (Chiappori, 1988; Lundberg & Pollak, 1993). We may assume that educated women who earn substantial amounts of personal income are more likely to be involved in controlling economic resources, decision-making within the family, and are socially more influential, and this all makes them more empowered than educated women who do not earn their own income. Our findings reveal that having a job with income is a factor that positively and significantly related with women's bigger say on all facets of familial decision-making, because educated women who earn their own money might be in a better position to make their case in domestic

bargaining, as they have the resources to support the costs connected to their own health care, in major purchases as well as financing their family. Indeed, income earned by job reduces women's economic dependence and augments their control over assets that lead them towards empowerment (Heaton et al., 2005; Khan & Awan, 2011). The results suggest that the involvement of educated women in earning their own money reduces their reliance on other members of family and spouse/partner and makes them more confident, self-directed and self-sufficient. The results support economic bargaining theory of household and suggest that growth in both the earned or unearned incomes escalate bargaining power of women.

The results further show that year of educational attainment appears to have a significant impact on self-esteem instead of an indirect impact via income, and self-esteem carries the impact of education to women's empowerment (see Fig 1 & 2). The literature suggests, education does not affect empowerment instantly and directly rather it arouses self-esteem and that self-esteem may lead to the empowerment of an individual. The results are partially in line with (McMullin & Cairney, 2004; Spreitzer, 1995) that self-esteem increases with the increased education and income, and self-esteem positively affect women's empowerment. The results do not support the notion that women who are engaged in paid jobs and earn, even contribute a little to the family expenditure are capable to exercise their rights and authority, the authority that increases their self-esteem and self-confidence (Hultberg, 2008). Self-

esteem happened to be positively associated with psychological empowerment in work environment (Spreitzer, 1995).

### **Implications of the Study**

The findings of the present study support the indirect role of education in women's empowerment and provide additional arguments for the continuity of actions in favour of opportunities for women to earn money for their economic independence and enhancement of their self-esteem by commending their role. The formulation of national policies and programs that target to substantially grow women's status in Pakistan should also contemplate women's economic status, at the same time nurturing positive socio-cultural approaches toward gender equality. The results have implications for the experts in gender issues, economists and policymakers that women are not empowered just by getting higher and higher education unless they do not have opportunities to materialize their knowledge and earn money to have financial autonomy. Education appears to be dynamic in enhancing the self-esteem of women that carry the impact of their education in empowering them.

### **Limitations and Suggestions**

Some of the limitations of the study minimize the generalizability of results for instance, the sample was collected from two major districts of Punjab (Pakistan), so we cannot generalize the results to the women of Pakistan in general. Data for future studies need to be collected from Countrywide. A convenient sampling technique was used to access the sample due to the reason that we

did not have reliable statistics on women in Pakistan, and there is a lack of sampling frame for working/non-working and illiterate/educated women. Questionnaires of the study are self-report measures and we cannot overlook the threat of common method variance. The study was a quantitative survey, which could assess research-based determinants of women's empowerment; however, qualitative studies are recommended to explore the perspective of women on the factors which they deem to be important determining their status and empowerment.

### **Conclusion**

We may conclude that in a society manifested by an extensive recognition of traditional gender roles, education solely is not adequate to affirm women's empowerment unless they have financial autonomy through earning their own income and unless education contains some foundations that enhance their self-esteem. The results support the notion that empowerment is a bottom-up process (Siwal, 2009), which encourages the women to focus on their empowerment through the process to analytically evaluate their own conditions and outline changes in society. So to say, the strategy for women to be empowered must make available the necessary space for women to act themselves as agents of transformation in gender relations (Siwal, 2009). The indirect relationship between education and women's empowerment through the full mediation of personal income and self-esteem has also been established in the study. However, supplementary studies are required to better pinpoint the dynamics that

may explicitly explain remaining 89% variance in the empowerment of women in Pakistan that remained unexplained in the present study.

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