

# Psychological Empowerment Model in Iranian Pregnant Women

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## ABSTRACT

**Background:** Women's empowerment programs during pregnancy focus primarily on increasing women's health goals and psychological empowerment has been considered important in most issues related to pregnant mothers' mental health. Using path analysis, this study aims to examine the direct and indirect components of psychological empowerment of pregnant mothers.

**Methods:** This model-testing study was conducted in Gorgan, northwest of Iran during three months in spring of 2015. Through random cluster sampling, a total number of 160 pregnant women were selected from 10 urban medical centers and clinics as primary centers. We used Spritzer's Psychological empowerment scale. Suitable sampling based on Nunally and Bernstein was followed in the model. The relationships between the dependent variables were then examined by means of path analysis using Amos 18.

**Results:** The psychological empowerment of pregnant mothers (PEPW) model is impacted by individual factors, such as marriage age and employment, including some subjectively rated factors such as marital satisfaction and experience of violence. The PEPW model was deemed appropriate as optimum conditions indicators of goodness of fit; low index of  $\chi^2/df$  shows little difference between the conceptual model and observed data, while RMSEA value indicated the goodness of fit. Other indicators such as CMIN=0.957, CMIN/DF=0.957, P-CLOSE=0.418,  $\chi^2=0.957$  and probability level=0.328 the fact that the model is ideal. The mothers' employment had the highest coefficient in the PEPW path model .731 (0.443, 0.965) bootstrap confidence intervals by 95%, and with a p-value of less than 0.05.

**Conclusions:** The mothers' employment is the most important factor in psychological empowerment, but it cannot be addressed quickly. Programming to increase marital satisfaction followed by a decrease in family violence and prevention of early marriage are necessary for promotion of psychological empowerment during pregnancy.

**KEYWORDS:** Power (Psychology); Pregnancy; Health; Statistical models

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## INTRODUCTION

Empowerment as a primary outcome has been considered in most interventions related to women's health, and focusing on other issues has caused the clinical importance of the incensement of empowerment and its subsequent health benefits to be neglected. Empowerment of women was designed to develop skills and resources needed to effectively cope with future stresses and traumas.<sup>1</sup> Given the fact that stress and anxiety during pregnancy cause mental health problems for pregnant women, factors affecting their psychological state should be recognized so that mothers are provided with the means to achieve health and psychological empowerment.<sup>2</sup>

Prenatal empowerment improves people's ability to help themselves, especially in times of difficulty making it a useful quality, especially during parenting. Research has shown that more capable mothers experienced better conditions during prenatal care, and coped better during delivery and in caring for and bringing up their children; ultimately their empowerment strengthens their families' foundations.<sup>3</sup>

The International Conference on Population & Development (ICPD) identifies the empowerment of women as an essential element in achieving results in reproductive health in the Program of Action conference; empowerment is credited with improving the health status of women and is deemed essential for achieving sustainable social development.<sup>4</sup>

The concept of empowerment is used in a wide range of contexts and levels.<sup>5</sup> Therefore, empowerment is a psychological state that allows an individual to engage in effective social communication and subsequently leads them to take responsibility for their own health.<sup>6</sup> Ultimately, increased empowerment can play an important role in the improvement of prenatal care and maternal health. However, the main factors affecting psychological empowerment of mothers are a matter of debate. Several studies have been conducted

on women's empowerment and its contributing factors.<sup>7-10</sup> In such a study in Ethiopia, mother's employment was the predictor of women's empowerment<sup>9</sup> and a study in Uganda showed that the maternal health status of mothers is affected by violence against women and early marriage as well as the mother's income.<sup>8</sup> However, there is dearth of research on psychological empowerment of pregnant women (PEPW) in Iranian context. Due to the fact that empowerment is a context based issue, we need to study this main concept in our cultural context. Therefore, given the importance of maternal empowerment, the current study was conducted with the aim of studying direct and indirect components of PEPW with the use of path analysis.

## MATERIALS AND METHODS

In this model-testing study, we used Spritzer's psychological empowerment scale based on the assumption framework of Conger and Kanungo and Thomas and Velthouse.<sup>11</sup> This scale consists of 12 items in seven-point Likertscale (1=quite disagree to 7=quite agree) with four sub-scales (meaning, impact, self determination and competence) and total score is between 12 to 84. In Golparvar's study, the Spritzer's questionnaire was translated to Persian and exploratory factor analysis was performed, with Varimax rotation method. Kaiser normalization was equal to .86, and Bartlett's Test of Sphericity was equal to 2286/18 ( $P < 0.001$ ); thus, sphericity was rejected. The eigen value  $> 1$  and factor analysis obtained total Variance Explained equal to 77.85% and Cronbach's alpha for four subscales was 0.79–0.90.<sup>12</sup> In this study, we calculated Cronbach's alpha 90.9% for this scale. Although Spritzer's scale is not specific to PEPW, many researchers have used this questionnaire.<sup>13,14</sup> This tool is the most reliable scale for psychological empowerment, and thus it was used in the present study.

Marital relation satisfaction was measured based on fundamental items of Locke-Wallace Marital Adjustment.<sup>15</sup> The mothers were asked about the level of satisfaction in marriage,

the degree of expressing love to their partner, and mutual understanding in the marriage on a four-point scale ranging from 1 to 4 (4=excellent; 3=very good; 2=good; 1=bad) with total score 3-12.

Violence was classified in four ways (physical, verbal, behavioral and sexual) and each was rated between 0 and 4 (0=never; 1=seldom; 2=occasionally; 3=often, 4=constant) and sum of this score was considered as the score of violence with a minimum of 0 and a maximum of 16.

### *Conceptual Model*

In this model-testing study, we did not have any model for PEPW. As such, it was necessary to go through five steps of modeling process.<sup>16</sup>

#### *Step 1: Model Specification*

For investigating markers of PEPW, these markers were first calculated by linear regression and the two following parts were done:

##### Part 1: Investigating markers of PEPW Model

In this study, multiple regressions have been used to predict empowerment, so that with the use of indicator variables, the empowerment of mothers could be modeled. For regression, ensuring normal distribution of variables is important and therefore it is necessary to examine bivariate relationships in order to assure their linearity. However, if the relationship is linear and the dependent variable for each independent variable is normally distributed, then distribution of residuals should be almost normal; then it can be examined through a regression-standardized residual histogram; meanwhile, the plotted scores in the Normal Probability Plot are placed close to a line.<sup>17</sup> Also, for examining the independent residuals, Durbin-Watson (DW) statistics have been used: these should be from 1.5 to 2.5. Moreover, to check whether the residuals are linear uncorrelated, collinearity test was used. If statistics were  $VIF < 10$  and  $Tolerance > 0.1$ , those conditions are established.<sup>18</sup>

Before doing linear regression, the correlation between predictor variables and psychological empowerment was measured using a correlation coefficient matrix. If the correlations are significant, the related statistical tests should be performed. Then, variables including mother's age, marriage age, length of marital relationship, employment status of mothers, participation in prenatal education classes, marital satisfaction score, violence score, ownership score, high literacy, financial independence, living status and spiritual support score, as determining factors in empowerment, are imported to the linear regression in backward model. The results of regression in Table 1 showed that psychological empowerment levels of mothers are predictable, taking into account individual factors such as age of marriage and employment status as well as psychological factors such as the experience of violence by a spouse and marital satisfaction ( $R$  Square=0.609).

##### Part 2: Specification of Conceptual Model

What is certain is that employment is an important factor affecting empowerment, as confirmed by many researchers such as Gholipour.<sup>19</sup> Therefore, in this conceptual model, employment is considered as an exogenous variable affecting other variables in the model. Women with high economic empowerment are more noticed and better understood in the family and experienced less violence at the hands of their spouses.<sup>20</sup> Therefore, in this conceptual model, we bring violence under the influence of the mother's employment. On the other hand, domestic violence, as a measure of women's empowerment<sup>10,21</sup> has a negative correlation; the higher the level of empowerment, the less violence is experienced by the woman.<sup>22</sup>

Age of marriage is also considered an important element of women's empowerment,<sup>23</sup> one that is affected by the mother's employment; and with the increase of women's employment rate, the age of marriage rises.<sup>24</sup> It is also affected by domestic violence; those who are married at a younger

**Table1:** Demographic Characteristics of the Survey Sample

Variables measured in the study	Mean±SD/N (%)
Age (years)	25.08±4.79
Marriage age (years)	22.13±4.46
Lengthof marital relationship	2.98±1.76
Number of household members	2.28±.86
Gravid	1.11±43
Sense of spiritual support score	14.11±1.82
Ownership by taking a loan	33±20.62
Ownership score (0-3)	0.27±0.44
Marital satisfaction score (6-12)	10.559±1.44
Violence score (0-9)	0.6184±1.37
Physical	14 (%8.75)
Sexual	17 (%10.62)
Verbal	34 (%21.25)
Behavioral	40 (%25)
Participation in prenatal education classes	54 (%33.75)
Wanted pregnancy	147 (%91.87)
Ethnicity:	
Fars	113 (%70.6)
Sistany	6 (%3.75)
Turkman	16 (%10)
Native	21 (%13.12)
other	4 (%2.5)
Literacy:	
High	63 (%39.37)
Intermediate	62 (%38.75)
Low	35 (%21.87)
Housewife	128 (%80)
Employee	32 (%20)
Living status	
Home Owner	75 (%46.87)
Live in rental home	85 (%53.12)

age experienced more violence from their spouses.<sup>25</sup>

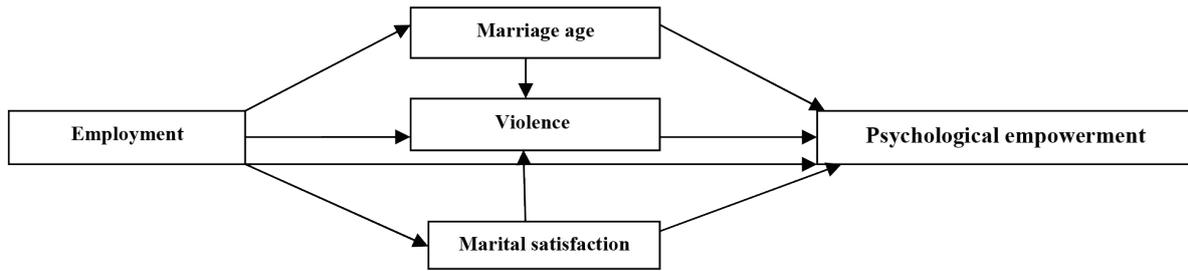
As can be seen in Figure 1, the conceptual model of PEPW is formed as a recursive model, because there is a one-way causal flow and all routes between variables are one way, as assumed in path analysis.<sup>17</sup>

### Sampling

Based on the Nunally and Bernstein method, path model uses at least 30 persons per independent variable;<sup>26</sup> in the model above, there is a dependent variable (Spitzer’s psychological empowerment) and four independent variables (violence score, mothers’ employment, marriage age and marital satisfaction score); therefore, a sample

of at least 120 is required. Pregnant women were selected from 10 urban medical centers and clinics as primary centers via two stage random clustering method with Design Effect equal to 1.5. Thus we needed 180 participants (120\*1.5=180).

Based on the importance of the maximum variation in the samples, we used private and public institutions. After determining the exact number of existing centers and bases, two centers from the east, south, north, west and center of Gorgan—for a total of 10 centers—were randomly selected. From each center and based on the number of low-risk nulliparous pregnant, visiting women who were literate, and eligible were randomly selected. Based on the letters list, 180 nulliparous pregnant



**Figure 1:** Conceptual model of PEPW

mothers were selected. After the exclusion of 20 participants (11.11 %) due to lack of interest in participation, response rate was in normal distribution clusters. Eventually, 160 pregnant women participated in 25, March to 25, June 2015. After informed consent forms were completed, a study questionnaire was distributed among them. The mothers completed the questionnaires themselves. All nulliparous pregnant women who were urban residents and were able to read and write were entered into the research; the high-risk pregnant women and mothers who were not willing to participate were excluded from the study.

### *Step 2: Model Identification*

In the next phase, Amos 18 software (IBM, Armonk, NY, USA) was used for identification of the model. In this model, mothers' employment is exogenous. The independent variable is not affected by other variables, and the dependent psychological empowerment variable is an endogenous variable. Also, marital satisfaction, violence and age of marriage are endogenous variables because they are influenced by the other variables in the model.

### *Step 3: Model Estimation*

In the next phase, path analysis was performed by Amos 18 software to indicate the relationship between psychological empowerment variables, which will be discussed further. Path analysis is basically a regression model; it is a causal modeling technique that theorizes the relationships between variables and is used to answer study questions relating to the impact of independent

variables on the dependent variable in a model.<sup>17</sup> For evaluating the suitability of the model, there are several indicators. The best and most famous indicator for determining the fitness of structural equation modeling and path analysis, and the optimum conditions for these indicators is expressed by Hu and Bentler.<sup>27</sup>

### *Ethical Considerations*

Permission for this study was issued after it was approved by a research committee and a regional ethics committee on 25.01.2014 with 921488 code. All ethical considerations such as voluntary participation with complete awareness and obtaining permission were done. Mothers were reassured that the information they provided would remain confidential and that only researchers had access to collected data. Personal information (name and surname) were entered as code numbers into software, so that all data would be securely protected. A consent form was provided to them and a questionnaire was completed.

## **RESULTS**

Descriptive information on the demographic characteristics of mothers who participated in the study is shown in Table 1. Meanwhile, the average psychological empowerment in this study was calculated as  $60.056 \pm 9.105$  using Spitzer's scale with a minimum of 32 and maximum of 84.

The psychological empowerment indicators using linear regression analysis were: mother's age of marriage, mother's employment; marital satisfaction; and experience of

violence. Increases in levels of mothers' age of marriage, mothers' employment, and marital satisfaction of the mother during pregnancy saw the empowerment of women increase. Increased violence against pregnant mothers reduced their psychological empowerment (Table 2).

*Step 4: Model Testing*

According to the conceptual model of the study, the following path analysis of the model was provided by Amos software 18 (Figure 2).

Indicators of goodness of fit of the model were good and demonstrated the fitness of the model (Table 3). On the other hand, the low index of  $\chi^2/df$  shows little difference between

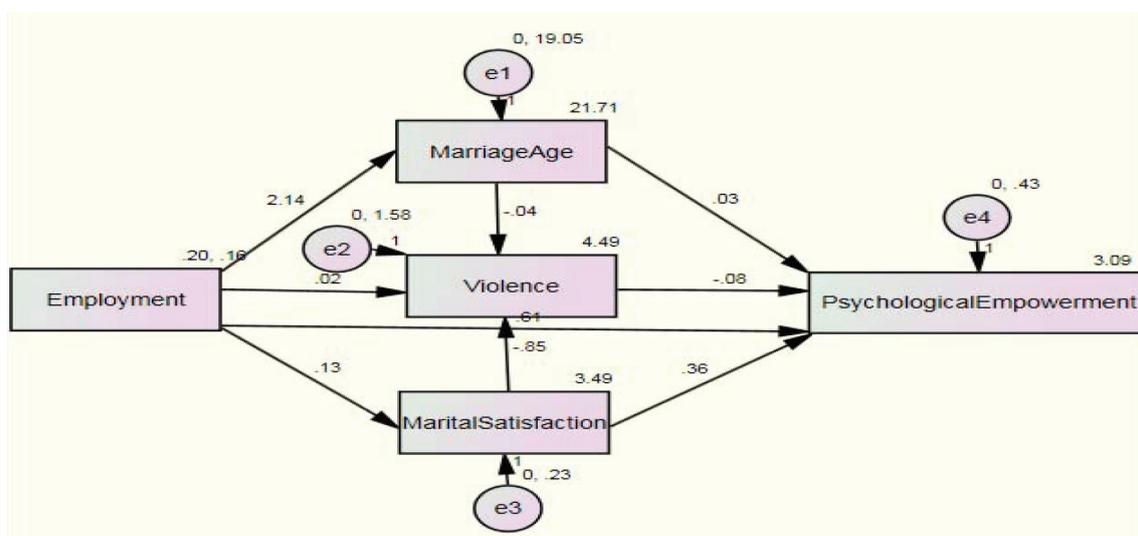
the conceptual model and observed data, while RMSEA value indicated the goodness of fit. Other indicators such as CMIN=0.957, CMIN/DF=0.957, P-CLOSE=0.418,  $\chi^2=0.957$  and probability level=0.328 the fact that the model is suitable. As a result, the model has the necessary fitness and is approved in its entirety, showing that the set relationships of variables on the theoretical framework are reasonable.

Chi-square testing should not be significant because in the null hypothesis "an inappropriate model by reducing the goodness of fit" would be accepted. If the chi-square is not significant, the model will fit the data, and a NORMAL FIT INDEX (NFI) indicator

**Table2:** Results of linear regression model for predictive factors of empowerment

Psychological Empowerment Predictors	Unstandardized Coefficients		Standardized Coefficients	T	P value	Tolerance	VIF
	B	Std. Error	Beta				
Employment of mothers	0.553	0.134	0.303	4.125	<0.0001	0.855	1.170
Marital satisfaction score	0.430	0.106	0.292	4.038	<0.0001	0.884	1.131
Violence score	-0.078	0.037	-0.153	-2.078	0.040	0.085	1.175
Marriage age	0.023	0.011	0.144	2.044	0.043	0.929	1.076
Lengthof marital relationship	0.055	0.030	0.134	1.831	0.069	0.859	1.076
Constant	2.775	0.471		5.896	<0.0001		

Durbin-Watson (DW)=1.600; R square=0.609



**Figure 2:** Path diagram of psychological empowerment in pregnant women

**Table 3:** Goodness of fit indexes of the model in comparison with the acceptable and the ideal range

Goodness of fit indexes	Ideal range	Acceptable range	This study
GFI	$0.95 \leq \text{GFI} \leq 1$	$0.9 \leq \text{GFI} < 0.95$	1.000
AGFI	$0.95 \leq \text{AGFI} \leq 1$	$0.9 \leq \text{AGFI} < 0.95$	0.995
NFI	$0.95 \leq \text{NFI} \leq 1$	$0.9 \leq \text{NFI} < 0.95$	0.998
CFI	$0.95 \leq \text{CFI} \leq 1$	$0.9 \leq \text{CFI} < 0.95$	0.988
RMSEA	$0 \leq \text{RMSEA} < 0.05$	$0.05 \leq \text{RMSEA} < 0.08$	0.957
$\chi^2/\text{df}$	$\chi^2/\text{df} \leq 2$	$\chi^2/\text{df} \leq 5$	0.137

calculates the simple differences between the two models by dividing chi-square and a number equal to or higher than 0.90 (it is better to be higher than 0.95) approves the goodness of fit of this model. When the number is closer to 1, we would have a better fitness. Another index is COMPARATIVE FIT INDEX (CFI), which is the best index even for small samples and it stands between zero and one. Numbers higher than 0.95 (or 0.9 and above) show the goodness of fit of the model. CMIN/DF is an index that shows how the fitness of data decreases in the model. If we lose one or two tracks, and if the index is above 2 or 3, we have lost a lot of routes. Finally, the RMSEA indicator (Root Mean Square Error of Approximation) estimates the lack of proportion in comparison to the saturated model; a number of 0.05 or lower means goodness of fit and a number of 0.08 or less means sufficient fitness.<sup>27</sup>

Path coefficients show the severity of the impact of a variable on other variables in the model. Using path coefficients allows us to recognize which independent variable had the most direct impact on the dependent variable. Determining direct and indirect impacts of dependent variables is one of the advantages of path analysis, and with its use, the general impact of a dependent variable can be recognized. Moreover, in this way, it can be decided which dependent variable is used in the intervention as target.<sup>17</sup>

We know that if the relationship between variables is significant, there is a causal relationship. Otherwise, the relationship would be non-causal.<sup>17</sup> In the model above, the only relationship that is not significant is the relationship between marital satisfaction

and experience of violence: the rest are significant relationships. Therefore, the mother's employment does not have a causal relationship with marital satisfaction and experience of violence, but it has direct and indirect impacts on their levels.

Mother's employment with high coefficient has a causal relationship with the age of marriage. If the age of marriage is higher, the rate of employment is also higher. In addition, there is a negative causality relationship between the age of marriage and violence, with the reduction of the age in marriage, women's score of violence increases. On the other hand, there is a negative causality relationship between marital satisfaction and score of violence; with the increase of marital satisfaction, the score of violence decreases (Table 4).

As is seen in Tables 4 and 5, the mothers' employment is the independent variable that has the greatest impact on the psychological empowerment of pregnant women. After that, marital satisfaction had the greatest impact on PEPW. The greatest path coefficient is related to the influence of the mothers' employment on the age of marriage. Finally, all the effects of independent variables in the model (age of marriage, employment, marital satisfaction and experience of violence) on PEPW are shown to boost confidence intervals (Table 5).

#### *Step 5: Model Modification*

In this study, because of the ideal range of Goodness of fit indexes of model, we didn't make any modification for better fitness.

## **DISCUSSION**

The most important advantage of using path

**Table 4:** Maximum Likelihood Estimates of variables in model on each other

Variable in the model		Employment	Marital satisfaction	Violence	Marriage age
Marital satisfaction	Estimate	0.131	-	-	-
	SE	0.094			
	CR	1.391			
	p	0.164			
Violence	Estimate	-0.067	-0.880	-	-
	SE	0.253	0.211		
	CR	-0.265	-4.178		
	p	0.791	P<0.0001		
Marriage age	Estimate	2.044	-	-0.518	-
	SE	0.855		0.255	
	CR	2.390		-2.034	
	p	0.017		0.042	
Psychological empowerment	Estimate	0.614	0.359	0.085	0.025
	SE	0.134	0.115	0.041	0.012
	CR	4.593	3.120	-2.046	2.106
	p	P<0.0001	0.002	0.041	0.035

analysis is that in the regression analysis, in addition to direct effects, indirect effects of each independent variable on the dependent variable could be identified.<sup>17</sup>

In this study, mothers' employment is the indigenous independent variable in the model that has the greatest impact on women's psychological empowerment. Of course, we know many factors affecting women's empowerment. Of these, employment plays a huge role in the empowerment of women.<sup>28,29</sup> In fact, employment and skill acquisition in women give them more ownership of their lives and have a more important role in the economic empowerment of women.<sup>1</sup> In addition to helping to improve their economic conditions, women's employment can also influence social, political and psychological dimensions of empowerment.<sup>29</sup> Therefore, it can be said that access to resources (employment and income) is an important factor in women's empowerment.<sup>30,31</sup>

In a study in Ethiopia, mother's employment was the predictor of women's empowerment and independence.<sup>9</sup> Employment status and economic factors such as owning property were associated with the empowerment of mothers. Also, mother's age and wealth were important factors during prenatal care in the presence of the spouse. There is a strong

positive relationship between socioeconomic status and the health of pregnant women.<sup>7</sup> We can also consider control of household income as a criterion in the empowerment of women.<sup>21</sup> The employment of the mother had direct and indirect non-eminent effects on the experience of violence and marital satisfaction of mothers; it means that working mothers experienced less violence and more marital satisfaction. Therefore, the mothers' employment not only has an economic dimension, but also has drastic effects on the lives of pregnant mothers in its psychological dimensions. It has been suggested that women's economic situation can influence their risk of violence,<sup>20</sup> and that financial independence is protective or associated with increased risk,<sup>32</sup> but many studies<sup>1,7,20,33</sup> such as this study have shown that the mother's employment empowered women as a protective personal resource against domestic violence. In programs for women who have experienced domestic violence, accessing financial resources and being employed are executive solutions.<sup>33</sup> In a study of empowerment in Ghana, domestic violence was determined as one of the empowerment indicators of pregnant women. The researchers in this study suggest that while strong links between the different aspects of empowerment such as freedom

**Table 5:** Direct, indirect and total standardized effect of variables in model on psychological empowerment

Variable in the model	Psychological empowerment			
	Employment	Marital satisfaction	Violence	Marriage age
Marital satisfaction	Direct effect (C.I)	0.131 (-0.001, 0.278)	0.000	0.000
	two-tail sign	0.114		
	Indirect effect (B.C.I)	0.000	0.000	0.000
	two-tail sign			
Violence	Total effect (B.C)	0.131 (-0.001, 0.278)	0.000	0.000
	two-tail sign	0.114		
	Direct effect (C.I)	-0.067 (-0.429, -0.359)	-0.880 (-1.775, -0.425)	-0.000
	two-tail sign	0.856	0.003	
Marriage age	Indirect effect (B.C.I)	-0.116 (-0.370, -0.014)	0.000	0.000
	two-tail sign	0.063		
	Total effect (B.C)	-0.183 (-0.527, 0.252)	-0.880 (-0.425, -1.775)	0.000
	two-tail sign	0.487	0.003	
Psychological empowerment	Direct effect (C.I)	2.044 (0.943, 3.281)	0.000	0.000
	two-tail sign	0.010		
	Indirect effect (B.C.I)	0.095 (-0.162, 0.363)	0.456 (0.194, 0.854)	0.000
	two-tail sign	0.378	0.006	
Psychological empowerment	Total effect (B.C)	2.138 (0.940, 3.344)	0.456 (0.194, 0.854)	-0.518 (-0.889, -0.139)
	two-tail sign	0.010	0.006	0.033
	Direct effect (C.I)	0.614 (0.393, 0.829)	0.359 (0.168, 0.568)	-0.085 (-0.153, -0.005)
	two-tail sign	0.007	0.009	0.121
Psychological empowerment	Indirect effect (B.C.I)	0.117 (0.038, 0.266)	0.086 (0.011, 0.233)	-0.013 (-0.037, -0.001)
	two-tail sign	0.011	0.035	0.084
	Total effect (B.C)	0.731 (0.443, 0.965)	0.445 (0.245, 0.666)	-0.098 (-0.158, -0.011)
	two-tail sign	0.008	0.007	0.080

CI: Confidence Interval; BCI: Bias-corrected confidence interval; BC: Bootstrap Confidence

of movement and control over finance have been observed, abuse by a partner—whether emotional, physical or sexual—is a neglected empowerment indicator.<sup>10</sup> Domestic violence is associated with the health care of women and to increase women's mental health, physical and sexual violence by husbands should be prevented, as this violence determines the mental health of women.<sup>34</sup>

On the other hand, domestic violence as an empowerment criterion for women has a negative correlation with marital satisfaction; with an increase in marital satisfaction, less violence is experienced by women.<sup>33</sup> In this study, it was also found that the violence experienced by pregnant women at the hands of the husband is one of the great eminent factors in the empowerment of women; this is highly influenced by the marital satisfaction variable. At the same time, in addition to its direct influence on psychological empowerment, marital satisfaction has an indirect impact on domestic violence. Moreover, many studies have also shown that people's health is associated with their marriage quality and that marital satisfaction causes people to be healthier, while couples who experience marital distress have fewer skills in terms of emotional disclosure.<sup>35</sup> Therefore, limited emotional expression may cause damage to people's physical and psychological health, for the reason that marital distress is an important risk factor for mental health;<sup>36</sup> and It can be noted that socio-familial empowerment in contexts of marital conflict or negotiation, and domestic violence can determine women's empowerment.<sup>21</sup>

Although the age of marriage in this study doesn't have a high coefficient in the path analysis its elimination causes the model to lose its balance, and therefore having the lowest coefficient plays an important role in mother's empowerment. Experience of violence has a causal relationship with the age of marriage; the lower the mother's age, the more violence they experience. It is also believed that age, age of marriage and age at first pregnancy as underlying factors that

affect empowerment.<sup>37</sup> In fact, in the present study, the age of marriage was a causal factor in mother's employment; mothers who married later had higher rates of employment. In support of this study, in a study in 36 countries in Africa and Southwest Asia, it was found that each year of delay in marriage is associated with a half-year increase in a girl's education (one semester).<sup>38</sup> And therefore with a reduction in the age of marriage, women's employment has also decreased, affecting the level of violence experienced by them and ultimately their PEPW. In support of this, Ahmad believes that to improve mothers' maternal health in developing countries, their economic and social status and education should be increased.<sup>7</sup> Other researchers found an association between education and socioeconomic status with decision-making power of individuals to seek medical care.<sup>39</sup>

It was found that the acceptance of women as equal partners for achieving development is growing every day in all communities. This has been addressed at conferences in Cairo and Beijing. Barriers to women's health, along with socio-economic obstacles, can cause a community's efforts to achieve sustainable development to fail.<sup>4</sup> Therefore, consideration should be given to women's education and their access to economic resources—especially in terms of their fertility—as the main factors in empowering more women. Similar to this article, a study in Uganda showed that the maternal health status of mothers is affected by key determinants of health, such as violence against women and early marriage, as well as the mother's income.<sup>8</sup>

#### *Strengths and Limitations*

One of the limitations of this study was the exclusion of multiparous and high-risk pregnant women. Also, the study was limited by the nature of cross-sectional data. The cross-sectional measures did not capture the dynamicity of empowerment. Despite these limitations, the study's strengths are the use of diverse ethnicity, randomized sampling, path analysis and compatibility

with existing tools.

## CONCLUSION

It can be concluded that if the mother has married at an early age and become pregnant immediately the chances are high that she won't be sufficiently psychologically empowered to cope with pregnancy. But this fact should not lead to the assumption that later marriage will solve the problem of mothers' psychological empowerment; perhaps with empowerment strategies, this issue could be resolved. However, increasing the possibility of mothers' employment should be made a priority in planning and policymaking and certainly will not be possible in the short term. But marital satisfaction played the biggest role in the mother's psychological empowerment. Strategies to increase marital satisfaction should be used to reduce domestic violence and increase the mothers' psychological empowerment.

In another study, it would be better to examine this study in multiparous with a larger sample size, so that the findings can be used in the empowerment programs during pregnancy.

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