

# The role of social capital on unwillingness toward childbearing in reproductive-aged women

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## Abstract

**Context:** Although Middle-east is a region with high population growth, but in some countries such as Iran, the population growth significantly decreased rapidly. Social capital is an important factor in formatting the positive willingness of childbearing among couples. Social capital referred to resources that individuals access them through the personal relationships.

**Aims:** This study aimed to investigate the role of social capital on unwillingness toward childbearing in reproductive-aged women referred to Babol Health Care Centers in 2018.

**Setting and Design:** A cross-sectional study in Babol Health Centers, Iran, in 2018.

**Materials and Methods:** Three hundred reproductive-aged women 18–39 years with maximum of two children were recruited through a systematic sampling method. Demographic fertility characteristics form, Miller's childbearing motivation questionnaire, Onyx, and Bullen social capital questionnaire were used for the data collection.

**Statistical Analysis Used:** Descriptive statistics such as frequency, mean  $\pm$  standard deviation, the Pearson correlation coefficient, and multiple regression were used for the data analysis.

**Results:** The most reasons of unwillingness for childbearing included “worrying about the health and safety of my child,” (83%) “being responsible for a needy and demanding baby,” (78.8%) and “worrying whether I am raising my child the right way.” (77%) Unwillingness to childbearing was associated with the factors such as social capital ( $\beta = -0.259, P = 0.001$ ), being employed ( $\beta = 0.207, P = 0.001$ ), and well self-evaluation of socioeconomic status ( $\beta = -0.187, P = 0.004$ ).

**Conclusions:** Improving the current conditions of childbearing in the Iranian society requires the involvement of policy-makers in the various domains and levels of decision-making at the family, community, and macrolevels.

**Keywords:** Childbearing, Motivation, Reproductive-Aged Women, Social Capital

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## INTRODUCTION

Fertility, as one of the most important components of the population science worldwide, plays a main role in the quantitative and qualitative transformation of the population in each country.<sup>[1,2]</sup> As family formation is closely related to childbearing, so that childbearing is considered as one of the most important motivations for marriage in individuals.<sup>[3]</sup> Although Middle East is a region with high population growth, but in some countries such as Iran, the population growth significantly decreased rapidly.<sup>[4,5]</sup> The available census and statistical data in Iran showed that the fertility rate during three recent decades has been decreasing so that the total fertility rate (TFR) arrived at 2.01 in 2016 from about 7.7 children per woman in 1966.<sup>[6]</sup> Mazandaran province is one of the regions in Iran that is fundamentally different from other provinces in terms of decreasing the fertility rate. According to the population and housing census in 2016, the TFR in this province was 1.51 in the rural and 1.44 in the urban areas.<sup>[7]</sup> Based on the fertility rate census of 1395, the TFR in Mazandaran was calculated 1.6 that is considerably lower from most of cities in Iran. Its rate was similar to provinces such as Tehran and Markazi. The higher and lower TFR in Iran was in Sistan and Baluchestan (3.9) and Gilan (1.3) provinces, respectively, in 1395 census. The mean age of childbearing in Iran in 2010–2020 was calculated 28.59 years.<sup>[8]</sup> The decrease in the fertility rate in the past years has led to Mazandaran shift into elderly condition so that according to the census of 1390, the growth rate of fertility in the province was announced as 2.01, which shows a significant decrease compared to the rate of 3.9 in 1355–1365.<sup>[9]</sup>

If the TFR decreased below the replacement level, not only the population will become the elderly and the economic dependency index will increase, but also governments will be severely affected by challenges such as labor supply, the crisis of retired organization, and therapeutic and health-care system.<sup>[10]</sup> Therefore, it is so important that each demographic policymaker be aware of the couple's reasons for unwillingness for childbearing. It is also crucial to note that the willingness or unwillingness to childbearing is a direct determinant of the fertility behavior.

In recent decades, fertility variations and child-bearing motivations have been associated with social, economic, and demographic characteristics of the households.<sup>[11,12]</sup> In the human societies among the socioeconomic variables, social capital as one of the newest and the most well-known cognitive theories, effects on individual's tendency and fertility behaviors through social interactions and the related social networks.<sup>[13-16]</sup> The result of a study showed that even

in the cases of negative motivations for childbearing, social pressure and psychological atmosphere created by others, leading to the decision-making for childbearing between couples.<sup>[17]</sup> In this regard, it has been shown that individuals believed that childbearing lead to worsening in the various aspects of life, and those feeling less pressure for childbearing by close reference groups, it is likely that have no children in the future, despite access to economic resources and support required for childbearing.<sup>[18]</sup> Fertility research, increasingly considered the role of social networks as one of the social capital indicators which acts intermediaries through which individuals learn a lot of issues regarding population behaviors and create the type of social capital associated with fertility.<sup>[19-21]</sup>

Although various studies have been conducted on attitudes toward childbearing and fertility behaviors in Iranian women,<sup>[1,3,21,22]</sup> only in one study, the fertility motivations in reproductive-aged women were assessed and in this study the positive and negative motivations of childbearing were investigated. The literature review showed that the reasons for unwillingness to childbearing have received less attention. In this regard, few studies have further pointed to the economic problems and obstacles<sup>[23]</sup> and the well-being and children of reproductive aged women;<sup>[24]</sup> however, there is no study which assessed the relationship between social capital and child-bearing motivation in Iran. Therefore, considering to above issues and 5 years after the county's political announcement to correct the current population growth rate to the level of succession,<sup>[25]</sup> this study aimed to investigate the role of social capital on unwillingness toward childbearing in reproductive-aged women referred to Babol Health Centers, Iran in 2018.

## MATERIALS AND METHODS

### Study design

The present study was a descriptive, cross-sectional study in which the study population included all reproductive-aged women referred to Babol (a city in northern of Iran) Health Centers in 2018.

### Ethical considerations

This research project was approved by the Ethics Committee of Mazandaran University of Medical Sciences (IR.MAZUMS.REC.1397.2833), Sari, Iran. During conducting the study, an informed written consent was also obtained, and participants were also assured that their responses would be used for research purposes and that all their information will be confidential during all study procedures.

### Participants and procedures

The inclusion criteria included married women aged 18–39 years with a maximum of two children and Iranian nationality, having literacy, lack of pregnancy, lack of menopause, and lack of current infertility and cohabitation with their spouses and nonresponse to minimum of 10% of questions of questionnaires was considered as exclusion criteria.

The primary sample size was determined 250 individuals with considering 10 samples for each independent variable<sup>[26]</sup> and examining 25 independent variables in this study. With considering 50 individuals as basis sample, overall 300 individuals were enrolled in the current study. The samples enrolled in the study through two-stages sampling procedure. Initially, based on the districts of Babol municipality, out of 20 urban health centers in Babol, six health centers were selected using a random number table. Then, considering the total population of married women aged 18–39 years of Babel city (411,149 individuals) and also considering the required sample for this study (300 individuals), the sample size was allocated to the selected centers in proportion to the total number of married women aged 18–39 years. Then, a list of women from selected centers was prepared by referring to the “Integrated health system” and sampling was carried out systematically. Eligible women were asked to refer to the health center and complete the relevant forms as self-fulfillment if they agreed to participate in the study.

### Data collection

Data collection tools included a demographic-fertility characteristics form, Miller’s childbearing motivation questionnaire and Onyx, and Bullen social capital questionnaire.

### Demographic-fertility characteristics form

This tool included variables such as age, age of spouse, marital status, woman and husband’s educational level, woman and husband’s job, woman’s age of marriage, age at first pregnancy, number of children, evaluation of socioeconomic class, and desired number of children.

### Miller’s motivation for childhood motivation questionnaire

In order to investigate the causes of women’s unwillingness to childbearing, Miller’s childbearing motivation questionnaire that had designed in 1995 by Warren Miller was used.<sup>[27]</sup> This questionnaire comprised of two dimensions of positive and negative dimensions of motivation of childbearing. The positive dimension of

child-bearing motivation comprised of 34 questions and the negative dimension included 19 questions in dimensions: Fears and worries of parenthood (7 questions), negatives of child care (8 questions), and parental stress (4 questions). In order to scoring the above questions, the 4-point Likert scale was used in a completely disagree (score 1) to completely agree (score 4). In this questionnaire, higher scores in the positive child-bearing motivation dimension and lower scores in negative childbearing motivation showed the higher participant’s motivation of childbearing. The validity of this questionnaire was approved by a group of expert team in Mashhad. Also to assess the reliability of this tool through test and retest reliability and approved with Cronbach’s alpha 0.98 for whole of tool. The internal consistency of this tool was approved with Cronbach’s alpha 0.94 in the Iranian population.<sup>[28]</sup>

### Onyx and Bullen social capital questionnaire

This tool was designed by Onyx and Bullen in 2000<sup>[29]</sup> and includes 36 questions in eight dimensions: Value of life (three questions), tolerance of diversity (three questions), neighborhood connections (five questions), family and friends connections (three questions), work connections (four questions), participation in the local community (seven questions), feelings of trust and safety (five questions), and proactivity in a social context (six questions). The scoring method is based on the 5-point Likert score (5-1). The minimum and maximum scores of women’s social capital are 36 and 180, respectively, and the higher score indicates higher social capital. The internal consistency of this tool has been confirmed in the Iranian population using Cronbach’s alpha coefficient of 0.79 and the content validity of this tool approved.<sup>[30]</sup> The reliability of this tool has also been reported more than 0.70, for all dimensions using intraclass correlation coefficient. The overall reliability of questionnaire was approved with Cronbach’s alpha coefficient of 0.82.<sup>[31]</sup>

### Statistical analysis

Data analysis was performed by SPSS 16 (SPSS for Windows, Version 16.0. Chicago, SPSS Inc). Descriptive statistics such as frequency (percent) mean  $\pm$  standard deviation, the Pearson correlation coefficient, and multiple regression were used for the data analysis, and level of significance was considered  $P < 0.05$ .

## RESULTS

The mean age of women and their spouses was  $31.26 \pm 4.88$  and  $36.55 \pm 5.55$ , respectively. Most of the participants had been married for 10–14 years. In terms

of education level, approximately half of participants had a bachelor's of science degree and two-third of participants was homemaker. The average number of children in the samples was  $1.52 \pm 0.60$  children. Other demographic-fertility characteristics of the participants are shown in Table 1.

According to the findings of this study, the most common causes of unwillingness to childbearing in Iranian women were related to worrying about the health and safety of child born (83%), being responsible for a needy and demanding baby (78.8%) and worrying whether I am raising my child the right way (77%) [Table 2].

The results of Pearson correlation coefficient test showed that there is a significant inverse relationship between different dimensions of the social capital and women's unwillingness to childbearing. Among these, the highest correlation coefficient was observed between the value of life and parental stress ( $r = -0.307$  and  $P < 0.001$ ) [Table 3].

In order to investigate the relationship between the affecting variables on women's unwilling to childbearing and also to evaluate the combined effect of the variables studied in this study, all significant variables with  $P$  value lower than 0.2 in the bivariate regression analysis were entered into the multiple regression model. The results showed that unwillingness to childbearing in women with higher social capital (standardized coefficient  $\beta = -0.259$  and  $P = 0.001$ ) and those who evaluated their socioeconomic class well (standardized coefficient  $\beta = -0.187$ ,  $P = 0.004$ ) were lower in comparison with others. While employed women were more unwillingness to childbearing compared to homemakers (standardized coefficient of  $\beta = 0.207$   $P = 0.001$ ) [Table 4].

## DISCUSSION

The aim of this study was to determine the role of social capital on unwillingness toward childbearing in reproductive-aged women referred to health centers in Babol, Iran. The results of the regression model showed that with increasing social capital, women's unwillingness to childbearing decreased. The finding was consistent with studies, indicated that women's participation in social activities and membership in official groups develops their fertility knowledge and can be effective on their fertility tendencies and behaviors through this pathway.<sup>[32-34]</sup> It seems that the tendency to childbearing has cultural, behavioral roots at the individual and societal levels, and changes in the context of demographic transition and economic and social development.<sup>[34,35]</sup> In a population-based longitudinal study aimed at determining

**Table 1: Demographic fertility characteristics of reproductive-aged women referred to Babol Health Centers in 2018 (n=300)**

	Frequency (%)
Marital duration	
<5	53 (17.7)
5-9	85 (28.3)
10-14	96 (32.0)
>15	66 (22.0)
Educational level	
Less than diploma	44 (14.7)
Diploma	142 (47.3)
Associate degree	26 (8.7)
Bachelor and higher	88 (29.3)
Spouse educational level	
Less than diploma	75 (25.0)
Diploma	95 (31.7)
Associate degree	32 (10.6)
Bachelor and higher	98 (32.7)
Job status	
Homemaker	228 (76.0)
Employed	72 (24.0)
Spouse job	
Worker and farmer	55 (18.3)
Clerk	61 (20.3)
Free	182 (60.7)
Unemployed	2 (0.7)
Desire to childbearing after marriage (month)	
>12	211 (70.3)
12-24	39 (13.0)
<24	50 (16.7)
Number of desired children	
1	149 (49.0)
2	79 (26.3)
≤3	17 (5.7)
Desired child gender	
Girl	109 (36.3)
Boy	74 (24.7)
No different	117 (39.0)

the social capital and willingness to childbearing showed that factors such as receiving informal assistance from professional caregivers to care for the first child, relying on individuals and trusting them are influencing factors on women's desire to have a second child in the next 2 years.<sup>[33]</sup> Social capital includes trust, participatory norms, and networks of social bonds that lead to individuals being able to pursue their individual and group interests better and easier and achieve to their common goals.<sup>[33-36]</sup>

Current studies on the effects of economic status and household's income level on the childbearing are associated with different results. While some studies revealed that family's income have no much effect on decreasing or increasing of fertility, but inconsistent with this result, a study showed that individuals living in better socioeconomic status regions had lower fertility average and higher socioeconomic status does not necessarily equate to a greater willingness to childbearing.<sup>[32]</sup> In this regard, also showed that

**Table 2: Absolute and relative distribution of related factors of unwillingness to childbearing of reproductive-aged women referred to Babol health centers in 2018 (n=300)**

Domains	Factors	Frequency (%)	
		Completely agree or agree	Completely disagree or dis agree
Fears and worries of parenthood	I fear of experiencing labor pain	183 (61.0)	117 (39.0)
	Having an unhappy and poorly adjusted child	213 (71.0)	87 (29.0)
	Worrying about the health and safety of my child	249 (83.0)	51 (17.0)
	Having a baby who is born deformed	212 (70.7)	88 (29.3)
	Worrying whether I am raising my child the right way	231 (77.0)	69 (23.0)
	Having a child who embarrasses or disgraces the rest of the family	171 (57.0)	129 (43.0)
Negatives of child care	Feeling guilty or inadequate as a parent	60 (20.0)	240 (80.0)
	Being kept from my (having my wife being kept from her) career or job by a baby	68 (22.7)	232 (77.3)
	Being responsible for a needy and demanding baby	236 (78.7)	64 (21.3)
	Spending time and energy involved in childcare	92 (30.7)	208 (69.3)
	Having to put up with the mess and noise that children make	144 (48.0)	156 (52.0)
	Burdening our family finances with a child	169 (56.3)	131 (43.7)
	Taking care of a baby who is disagreeable and irritating	165 (55.0)	135 (45.0)
	Taking care of a sick child	210 (70.0)	90 (30.0)
	Having a baby who takes away my freedom to do other things	122 (40.7)	178 (59.3)
	Parental stress	Having a baby who strains my (wife's) health	39 (13.0)
Having a child who is a burden to my husband (wife)		10 (3.3)	290 (96.7)
Having a child who makes it necessary for me (my wife) to have a job		107 (35.7)	193 (64.3)

**Table 3: Correlation coefficient between unwillingness to childbearing and social capital in reproductive aged-women referred to Babol health centers in 2018 (n=300)**

Social capital domains	Unwilling to childbearing ( <i>r</i> , <i>P</i> )		
	Fears and worries of parenthood	Negatives of child care	Parental stress
Value of life	0.207, <0.001	0.271, <0.001	0.307, <0.001
Tolerance of diversity	-0.031, 0.597	-0.203, <0.001	-0.242, <0.001
Neighborhood connections	-0.059, 0.312	-0.061, 0.293	-0.126, 0.029
Family and friends connections	-0.007, 0.899	-0.101, 0.080	-0.073, 0.206
Work connections	-0.095, 0.102	-0.207, <0.001	-0.184, 0.001
Participation in the local community	-0.095, 0.102	-0.207, <0.001	-0.184, 0.001
Feelings of trust and safety	-0.072, 0.217	-0.164, 0.004	-0.219, <0.001
Proactivity in a social context	-0.102, 0.076	-0.204, <0.001	-0.121, 0.036

**Table 4: Multiple linear regression analysis between related factors of unwillingness to childbearing and demographic-fertility variables among reproductive aged- women referred to Babol health centers in 2018 (n=300)**

Independent variables	B (unstandardized coefficients)	β (standardized coefficients)	P
Constant	66.036	-	0.001
Social capital	-0.125	-0.259	0.001
Marital duration	0.026	0.015	0.790
Spouse educational level			
Less than diploma	Reference	-0.034	0.637
Diploma	-0.644	-0.106	0.106
Associate degree	-3.029	-1.356	0.163
Bachelor and higher	-1.897		
Job status			
Homemaker	Reference		0.001
Employed	8.534	0.207	
Evaluation of socioeconomic status			
Weak	Reference		
Moderate	-2.165	-0.102	0.113
Well	-7.147	-0.187	0.004

$R=32.5$ ,  $R^2=11\%$ ,  $F=3.805$

the unwillingness to childbearing in the residents of the upper and middle regions of Tehran (with better financial status) was higher than others<sup>[37]</sup> and this is partly due to the fertility behavior, as a social behavior that occurs in a social environment, in addition to the couple's decision, influenced by individuals factors,

attitudes and motivations of the childbearing, and also environmental factors such as pressure and sociocultural norms of the society.<sup>[38,39]</sup> Meanwhile, although economic problems and increased living costs, especially parenting, play a role in delaying or temporarily delaying childbearing, other sociocultural

factors, and the prevailing discourse in the current social environment in Iran play an important role in this regard.

The unwillingness to childbearing in employed women confirms that although there have been changes in gender roles in recent years, women still have lower scores than men on various socioeconomic criteria so that in employed women, the main burden of housekeeping and childbearing is on these women.<sup>[40]</sup> In this regard, studies indicated that in developing countries, women experience more social status through education and employment, and as a result, they pursue their own expectations and individual aspirations and decreased their fertility. This issue can be explained that childbearing and child care in premodern traditional society have been considered as the primary role of women and prevent them from achieving their individual aspirations and goals. However, in such circumstances, supportive networks can play an important and positive role in reducing the cost of child care and in encouraging women to fertility.<sup>[41,42]</sup>

Based on the findings of this study, the health and safety of newborn, the double responsibility of parents to meet the newborn's needs and the concern about the proper raising of the child in future have been reported as the most important factors in women's unwillingness to childbearing. In other words, apart from the various responsibilities of child care, unpleasant experiences, such as child care challenges, the couple's psychological well-being can be effective in women's unwillingness to childbearing. Parents' desire and love to have children are accompanied by a number of contradictions. In this regard, having or not having a child is affected by a series of factors, from the pleasures and deprivations of personal life to the commitment and happiness of becoming a parent.<sup>[43]</sup> Overall, in Iranian society, recent years due to the economic problems and concerns regarding the expenditure of child raising as one of the main barriers of childbearing, the willingness of childbearing among couples significantly decreased. Furthermore, in this study, the main parental stress for childbearing was that having a child may makes it necessary for women to have a job. This result is explained that the high expenditure of childbearing in Iran may be a significant cause for couples to work together. Increasing the level of life expectancy and the higher life goal standards and ultimately the will influence couple's decision to have small families, to able to allocate more resources to each child and try to improve the quality of their children.<sup>[1,2]</sup> Paying attention to the above points will make it possible for population policy-makers to pay more attention to fertility issues by considering these variables.

The current study contributes to the literature by addressing an important yet relatively neglected area of research. The current study also points to some important directions for

future research, specifically, an examination of the factors influencing unwillingness of childbearing. However, the current study's findings should be considered in light of its limitations. First, the probability of the temporality bias must be considered as causal directions of relations among variables examined cannot be empirically evaluated because this study is cross-sectional and is unable to explain the cause and effect relationships in the studied variables. Second, only self-reported paper and pencil questionnaires were used to data gathering that may prone the result to the social desirability bias. Third, the generalizability of the findings from this study may be limited due to a restricted sample that was recruited from the primary health care centers of one city of Mazandaran province and was relatively homogeneous in terms of geographic residence and is not representative of the more general population reproductive-aged women.

## CONCLUSIONS

The findings of this study in addition to deepening the existing knowledge in fertility issue can be helpful in designing effective interventions to increase the childbearing by identifying the causes and associated factors of unwillingness to childbearing in the Iranian women. Due to childbearing is a matter that is formed in the context of marital relationship and common marital decision-making, it is recommended that the subject of this research be performed in pairs in the future studies. Overall, assessment of social capital not only can lead to wider identification of associated factors of reproductive in society but also help to design the effective interventions to promote the reproductive motivation and as a result to increase the rate of childbearing in the Iranian population.

## Conflicts of interest

There are no conflicts of interest.

## Authors' contributions

ZSH: Study design, definition of intellectual content, AY: Data collecting, manuscript preparation, NM: Data analysis and statistical analysis, ZH and MA: Manuscript editing and manuscript review.

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