



# Childbearing Motivation and Its Predictors among Married Women in Mashhad, Iran: A Cross-Sectional Study

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## Abstract

**Background:** Over the past three decades, a global demographic challenge has emerged due to a substantial decline in fertility rates. In response, Iran has introduced significant pronatalist policies to address this trend. This study aims to identify predictors of childbearing motivation among women in the Iranian context.

**Methods:** A cross-sectional study was conducted from November 2023 to December 2023, using convenience sampling, among 301 married women aged 18–50 years in Mashhad, Iran. Data were gathered through demographic questionnaires and Miller's Childbearing Questionnaire (CBQ). The CBQ assesses childbearing motives across two dimensions: positive (including pleasure in pregnancy, birth, and childhood; traditional parenthood; satisfaction from parenting; feeling needed and connected; and instrumental use of children) and negative (including fears and worries about parenthood; parental stress; negative aspects of childcare).

**Results:** The mean (SD) age of women was 35.75 ( $\pm 6.7$ ) years. According to the model, education level was positively associated with the subscales of satisfaction of childrearing ( $\beta=0.64$ ,  $P=0.002$ ) and feeling needed and connected ( $\beta=0.63$ ,  $P=0.006$ ). Moreover, employment status was inversely associated with all positive subscales, and these women reported lower motivation scores across subscales ( $\beta$  ranging from  $-0.32$  to  $-0.48$ ,  $P<0.05$ ).

**Conclusion:** Declining fertility rates in Iran are influenced by various factors such as employment status, number of children, and socio-economic constraints. Women's decisions to delay or limit childbearing require targeted support and flexible policies to ensure sustainable population growth and family well-being.

**Keywords:** Childbearing, motivation questionnaire, Fertility preferences, Reproductive, Iran

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## Introduction

Over the past three decades, a significant global demographic issue has emerged: a sharp decline in fertility rates. This trend results from the complex interplay of social, economic, and individual factors, including shifts in reproductive behavior, higher educational attainment, economic insecurity, and delayed marriage (1, 2). The global total fertility rate dropped from 4.5 births per woman in 1970–1975 to 2.5 in 2005–2010. This widespread decline affects many countries, including Iran, which is now confronting negative population growth (3). In Iran, the desire to have children has significantly declined, reducing the total fertility rate from 6.5 in the late 1970s to the replacement level by 1999, with estimates showing a

further drop to 1.13 between 2020 and 2024 (4).

Decisions about having children are shaped by how individuals perceive the challenges of parenting and the emotional value of children, especially in early childhood. While fathers often find personal fulfillment in parenthood, mothers tend to balance traditional and practical values influenced by social norms (5). Several factors have contributed to the recent decline in fertility, including low personal satisfaction, feeling unprepared for parenthood, marital tensions, and concerns about future financial stability (6).

Studies highlight that social and economic status, personal choices, religious beliefs, education level, career paths, residence, age at marriage, unemployment, and



government population policies significantly affect family planning decisions in Iran. Limited access to contraception remains a major barrier. Cultural norms and religion continue to influence fertility, with higher childbearing desires seen in lower-income families. Early marriage is also associated with increased fertility rates (6).

The ongoing decline in childbearing has become a complex demographic, social, and cultural challenge that significantly contributes to Iran's population decrease (7, 8). Childbirth is a key factor in population studies, often more influential than events such as mortality or migration (4). With Iran's declining population growth, understanding the factors affecting fertility rates is essential (9). The main goal of this study is to identify factors that predict the willingness to have children in Iran, addressing the growing need to better understand childbearing decisions amid declining fertility rates.

### Materials and Methods

This cross-sectional study was conducted among women of reproductive age in Mashhad, Iran, from November 2023 to December 2023. Three hundred one women were selected through the convenience sampling method. Participants were recruited via social media platforms, including WhatsApp, Eitaa, and Soroush. Following eligibility confirmation, each participant completed an online informed consent form prior to accessing the questionnaire. All data were collected through a web-based survey system, enabling wide accessibility and coverage across the target population.

Women were eligible to participate in this study if they met the following criteria: they were Iranian nationals residing in Mashhad and aged 18 to 50. Participants were required to be married and able to read and write. Additionally, neither the women nor their spouses should have any known medical conditions affecting fertility. Participants were also excluded if they did not provide informed consent or did not fully complete the questionnaires.

Data were collected using two sets of questionnaires: a demographic questionnaire and Miller's Childbearing Questionnaire (CBQ). Data collection was thus conducted entirely via an online survey platform, enabling a broad reach within the target population.

**Demographic questionnaire:** In this section, data were collected on participants' age, educational level, spouse's educational level, occupation, spouse's occupation, desired number of children, and current number of children.

**Miller's Childbearing Questionnaire (CBQ):** The CBQ assesses childbearing motives across two dimensions: positive and negative. Each item is rated on a 4-point Likert scale ranging from 1 (completely disagree) to 4 (completely agree). Subscale scores are calculated by summing responses to the items in each subscale.

- **Positive motives (34 items)** include: Pleasure of

pregnancy, birth, and childhood (6 items): score range 6–24; Traditional parenthood (6 items): score range 6–24; Satisfaction from parenting (6 items): score range 6–24; Feeling needed and connected (5 items): score range 5–20; Instrumental use of children (11 items): score range 11–44. **The total positive motives score** ranged from 41 to 164.

- **Negative motives (19 items)** include: Fears and worries about parenthood (7 items): score range 7–28; Parental stress (8 items): score range 8–32; Negative aspects of childcare (4 items): score range 4–16. **The total negative motives score** ranged from 19 to 76.

The overall CBQ score is obtained by summing all positive and negative items. The questionnaire demonstrated strong psychometric properties, with a Cronbach's alpha of 0.98 and a test-retest reliability coefficient of 0.91. It was translated and culturally adapted for use in the Iranian population (10).

Qualitative variables were summarized using frequencies and percentages, and quantitative variables were summarized using means and standard deviations (SD). Associations between CBQ subscales (dependent variables) and participant characteristics (independent variables) were analyzed using simple and multiple linear regression. Categorical independent variables (such as education level, job status, household income level, age at marriage, duration of marriage, and number of children) were dummy-coded before entering the regression models, with one category set as the reference group. Variables with  $P < 0.20$  in simple regression were included in the multiple models. Crude and adjusted regression coefficients ( $\beta$ ) were reported, with significance set at  $P < 0.05$ . Analyses were performed using Stata version 17.

This study was approved by the Ethics Committee of Mashhad University of Medical Sciences (IR.MUMS.FHMPM.REC.1401.133) after obtaining the required permit for the research. The participants provided written informed consent and were assured of confidentiality. All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional research committee, as outlined in the 1964 Helsinki Declaration.

### Results

A total of 301 participants were included in the study. The mean age of women was 35.75 with a standard deviation of 6.75. Most of the participants had a bachelor's degree (56.81% of women and 39.20% of Husbands). Homemakers accounted for 66.44% of the women. Other characteristics of the participants are shown in [Table 1](#).

The mean scores for Miller's Childbearing Questionnaire (CBQ) are shown in [Table 2](#), with the Subscales labeled negative and positive.

[Table 3](#) presents the results of simple and multiple linear regression analyses for the positive and negative subscales

**Table 1.** Demographic characteristics of participants, Mashhad, 2023

Characteristics	Women (N=301)
Age (year), mean (SD)	35.75 ( $\pm$ 6.75)
Spouse's age, mean (SD)	40.13 ( $\pm$ 7.06)
<b>Education level, %</b>	
Below high-school diploma	11 ( $\pm$ 3.65)
High-school diploma	54 ( $\pm$ 17.94)
Bachelor's degree	171 ( $\pm$ 56.81)
Master's degree	52 ( $\pm$ 17.28)
PhD degree	13 ( $\pm$ 4.32)
<b>Spouse's educational level, %</b>	
Below diploma	31 ( $\pm$ 10.30)
Diploma	66 ( $\pm$ 21.93)
Bachelor's degree	118 ( $\pm$ 39.20)
Master's degree	56 ( $\pm$ 19.60)
PhD degree	26 ( $\pm$ 8.64)
<b>Job, %</b>	
Housekeeper	200 ( $\pm$ 66.44)
Employee	76 ( $\pm$ 25.25)
Self-employment	25 ( $\pm$ 8.31)
<b>Spouse's Job, %</b>	
Government employee	177 ( $\pm$ 58.80)
Self-employed	124 ( $\pm$ 41.20)
<b>Household income level, %</b>	
Less than 30 million IRR (<\$71)	11 ( $\pm$ 3.65)
30 to 50 million IRR (\$71 to \$118)	44 ( $\pm$ 14.62)
50 to 100 million IRR (\$118 to \$236)	130 ( $\pm$ 43.19)
More than 100 million IRR (>\$236)	116 ( $\pm$ 38.54)
<b>Age at marriage, %</b>	
Less than 18 years old	60 ( $\pm$ 19.94)
18 to 30 years old	230 ( $\pm$ 76.41)
More than 30 years old	11 ( $\pm$ 3.65)
<b>Duration of marriage, %</b>	
Less than 5 years	27 ( $\pm$ 8.97)
5 to 10 years	68 ( $\pm$ 22.59)
More than 10 years	206 ( $\pm$ 68.44)
<b>Number of children, %</b>	
Without children	23 ( $\pm$ 7.64)
1	44 ( $\pm$ 14.62)
2	117 ( $\pm$ 38.87)
3	78 ( $\pm$ 25.91)
4 children or more	39 ( $\pm$ 12.96)

of Miller's Childbearing Questionnaire (CBQ). In positive motivations, higher levels of women's education were positively associated with "Satisfaction with childbearing," "Feeling needed and connected," and "Joys of pregnancy, birth, and infancy" (e.g., Bachelor:  $\beta = 2.23-2.84$ ,  $P = 0.02-0.005$ ; Master:  $\beta = 2.23-4.78$ ,  $P = 0.003-0.006$ ). Women's

occupation was inversely associated with all positive subscales; compared to homemakers, government employees and self-employed women had lower scores ( $\beta = -1.42$  to  $-2.48$ ,  $P = 0.02-0.009$ ). The number of children was inversely associated with "Instrumental values of children" (4 children or more:  $\beta = -3.03$ ,  $P = 0.03$ ). Other characteristics, including men's age, education, occupation, household income, and duration of marriage, were not significant.

In negative motivations, the number of children was inversely associated with parental stress and negatives of childcare (4 children or more:  $\beta = -2.00$  to  $-2.21$ ,  $P = 0.02-0.07$ ). Women who married at the age of 18-30 had slightly lower negative scores, while those married after 30 years had higher scores on parental stress and fears of parenthood ( $\beta = -2.41$  to  $-2.69$ ,  $P = 0.06-0.08$ ). Women's occupation showed minor associations with negative motivations, whereas education, men's characteristics, household income, and duration of marriage were not significant.

## Discussion

Our findings demonstrate a clear positive association between women's educational level and their motivations for childbearing. In contrast, women's employment was negatively associated with positive childbearing motivations, with government employees reporting lower scores compared to homemakers. Additionally, a greater number of existing children was associated with lower motivation to have additional children. These results align with a meta-analysis of 53 studies showing that, in most developed countries, higher educational levels among couples are associated with stronger childbearing intentions (11). Education reflects broader economic and cultural factors. Highly educated women often have greater resources and opportunities, which contribute to higher fertility intentions (12). In countries supporting female education, structural factors such as life satisfaction and supportive family policies positively influence fertility (13). Additionally, highly educated women tend to find similarly educated partners, facilitating larger family plans (14). However, some studies report the opposite: for instance, Khadivzadeh et al found that higher levels of education may be associated with reduced fertility (15), and others noted difficulties in isolating specific factors that affect delayed parenthood (16). Childbearing may interfere with educational attainment, leading to delayed parenthood among educated women (17). Education affects fertility through both economic means and cultural transitions (16). Educated women are more informed about family planning and often have more autonomy in decision-making, leading to lower fertility rates (17). Their employment and childcare concerns also contribute to smaller family sizes (18). In some societies, the limited availability of educated male partners has led

**Table 2.** Mean and standard deviation of Miller’s Childbearing Questionnaire (CBQ), Mashhad, 2023

Childbearing motive	Subscales	Number of items	Mean $\pm$ SD	The lowest–the highest value obtained	The lowest–the highest possible value
<b>Positive</b>	Joys of pregnancy, birth, and infancy	6	21.66 $\pm$ 3.01	6.00–24.00	6.00–24.00
	Traditional parenthood	6	19.80 $\pm$ 3.81	6.00–24.00	6.00–24.00
	Satisfaction of childrearing	6	21.36 $\pm$ 2.94	6.00–24.00	6.00–24.00
	Feeling needed and connected	5	17.46 $\pm$ 2.87	5.00–20.00	5.00–20.00
	Instrumental values of children	11	30.73 $\pm$ 5.34	12.00–44.00	11.00–48.00
	Total sum	34	111.02 $\pm$ 15.30	41.00–136.00	41.00–164.00
	Total average	-	3.27 $\pm$ 0.45	1.21–4.00	1.00–4.00
<b>Negative</b>	Fears and worries of parenthood	7	18.00 $\pm$ 4.18	7.00–28.00	7.00–28.00
	Parental stress	8	19.30 $\pm$ 4.75	8.00–32.00	8.00–32.00
	Negatives of childcare	4	7.66 $\pm$ 2.32	4.00–16.00	4.00–16.00
	Total sum	19	44.97 $\pm$ 9.47	19.00–71.00	19.00–76.00
	Total average	-	2.37 $\pm$ 0.50	1.00–3.74	1.00–4.00

educated women to consider elective egg freezing (19). In sum, the complex links between education, employment, and fertility highlight the importance of context-sensitive policymaking, particularly in the Iranian setting.

In line with our findings, most studies indicate an inverse relationship between women’s employment status and their desire to have children. Stay-at-home mothers may rely more heavily on their children for emotional support in later life (11). However, shifts have been observed, such as the relationship between women’s employment and fertility. Full-time employment, particularly for childless women, is considered a key factor in the decision to have children (13, 20). At the same time, contemporary challenges in obtaining and maintaining employment may lead women to postpone childbearing (21). This may stem from concerns that childbearing could restrict their future career prospects, leading them to link employment and fertility decisions and approach both with a forward-looking mindset. Furthermore, the incompatibility between work and family life, the instability of employment contracts, and high unemployment pressure are additional factors that may encourage women to delay childbearing until they achieve stable employment (21). Childbearing decisions appear to be strongly influenced by women’s employment status and concerns related to job security and the conflict between work and family roles. This highlights the importance of supportive policies that facilitate better work–family balance.

One key factor influencing childbearing intentions among married working women is government support for childcare, with marital satisfaction mediating this relationship (22). Inflexible labor markets also contribute to reluctance in pursuing pregnancy, as many women fear losing job opportunities after childbirth (23). Moreover, the pressure to leave employment for childrearing reflects broader institutional barriers. In societies where women must choose between work and family, persistently low fertility rates are often observed

(24). In conclusion, inadequate job conditions and lack of adequate governmental support can significantly reduce the childbearing intentions of married working women, especially when employment and family life are perceived as conflicting choices.

Our findings indicate that the number of existing children is a significant factor influencing women’s childbearing intentions. These factors include family income, the time parents devote to their children, the quality of childrearing, and other family variables (25). In line with this, Günther et al showed that desired and actual fertility closely align, with each desired child often leading to one additional birth (26). Rajati et al also found a significant link between couples’ positive motivations and their current and total number of children (27). Conversely, large-scale surveys in Iran found that, with each additional child, the desire to have more children decreased. One study reported that each additional child was associated with a 2.23-fold increase in the likelihood of not wanting more children (28), and several large-scale surveys in Iran have reported that as the number of existing children increases, couples are significantly more likely to stop childbearing, with a large proportion of couples with two or more children indicating that they do not intend to have additional children in the future (29). In a longitudinal study in the US, children born to mothers who were denied abortions had poorer developmental outcomes and greater household economic hardship than those whose mothers received abortions (30). This underscores the importance of reproductive decision-making on both maternal and child well-being. In conclusion, the number of children already present decisively shapes women’s childbearing decisions. As the number of children increases, the desire for additional children declines, influenced by personal preferences and socio-economic constraints. These dynamics highlight the need for supportive policies that align with women’s reproductive intentions and promote

**Table 3.** Simple and multiple linear regression on the subscale of positive and negative Miller's Childbearing Questionnaire (CBQ) with the characteristics of women and their spouses, (N=301), Mashhad, 2023

Characteristics	Positive motivations									
	Joys of pregnancy, birth, and infancy		Traditional parenthood		Satisfaction with childrearing parenting		Feeling needed and connected		Instrumental values of children	
	Crude $\beta$ * (P value)	Adjusted $\beta$ ** (P value)	Crude $\beta$ (P value)	Adjusted $\beta$ (P value)	Crude $\beta$ (P value)	Adjusted $\beta$ (P value)	Crude $\beta$ (P value)	Adjusted $\beta$ (P value)	Crude $\beta$ (P value)	Adjusted $\beta$ (P value)
<b>Characteristics of women</b>										
<b>Age</b>	0.05 (0.06)	0.03 (0.37)	0.03 (0.30)	-	0.03 (0.23)	-	0.03 (0.28)	-	0.05 (0.24)	-
<b>Level of education</b>										
Below high-school diploma	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref	Ref	Ref	-
High-school diploma	2.19 (0.03)	2.25 (0.02)	1.81 (0.15)	1.54 (0.21)	2.37 (0.01)	2.20 (0.02)	2.08 (0.03)	1.78 (0.06)	0.46 (0.79)	-
Bachelor's degree	2.25 (0.02)	2.74 (0.004)	1.12 (0.35)	1.50 (0.21)	2.32 (0.01)	2.59 (0.004)	2.02 (0.02)	2.01 (0.03)	0.21 (0.89)	-
Master's degree	2.26 (0.02)	2.84 (0.005)	1.47 (0.25)	1.94 (0.13)	2.33 (0.02)	2.67 (0.005)	2.23 (0.02)	2.27 (0.02)	1.46 (0.41)	-
PhD	3.39 (0.006)	4.78 (0.001)	0.91 (0.56)	2.07 (0.19)	2.83 (0.02)	3.64 (0.003)	2.23 (0.06)	2.67 (0.03)	0.11 (0.95)	-
<b>Job</b>										
Homemaker	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref	Ref	Ref	Ref
Government employee	-0.92 (0.02)	-0.99 (0.02)	-0.92 (0.02)	-1.79 (0.001)	-1.17 (0.003)	-1.42 (0.001)	-0.78 (0.04)	-1.00 (0.01)	-1.84 (0.01)	-2.04 (0.005)
Self-employed	-1.42 (0.03)	-1.71 (0.009)	-1.42 (0.03)	-2.48 (0.002)	-1.06 (0.08)	-1.30 (0.04)	-1.33 (0.03)	-1.56 (0.01)	-1.44 (0.20)	-1.51 (0.17)
<b>Characteristics of men</b>										
<b>Age</b>	0.02 (0.52)	-	0.009 (0.78)	-	-0.0009 (0.97)	-	-0.01 (0.57)	-	0.002 (0.96)	-
<b>Level of education</b>										
Below high-school diploma	Ref.	-	Ref.	-	Ref.	-	Ref	-	Ref	-
High-school diploma	-0.11 (0.85)	-	-0.56 (0.49)	-	-0.06 (0.91)	-	0.28 (0.64)	-	0.41 (0.71)	-
Bachelor's degree	0.46 (0.44)	-	-0.29 (0.70)	-	0.42 (0.47)	-	0.49 (0.39)	-	0.17 (0.86)	-
Master's degree	0.16 (0.81)	-	-0.39 (0.63)	-	0.30 (0.64)	-	0.16 (0.80)	-	-0.09 (0.93)	-
PhD	0.49 (0.54)	-	0.29 (0.77)	-	0.33 (0.67)	-	0.56 (0.45)	-	-1.11 (0.43)	-
<b>Job</b>										
Government employee	Ref.	-	Ref.	-	Ref.	-	Ref	-	Ref	-
Self-employed	0.24 (0.49)	-	0.33 (0.45)	-	0.05 (0.87)	-	0.13 (0.69)	-	0.23 (0.71)	-

Table 3. Continued

Characteristics	Positive motivations									
	Joys of pregnancy, birth, and infancy		Traditional parenthood		Satisfaction with childrearing parenting		Feeling needed and connected		Instrumental values of children	
	Crude $\beta$ * ( <i>P</i> value)	Adjusted $\beta$ ** ( <i>P</i> value)	Crude $\beta$ ( <i>P</i> value)	Adjusted $\beta$ ( <i>P</i> value)	Crude $\beta$ ( <i>P</i> value)	Adjusted $\beta$ ( <i>P</i> value)	Crude $\beta$ ( <i>P</i> value)	Adjusted $\beta$ ( <i>P</i> value)	Crude $\beta$ ( <i>P</i> value)	Adjusted $\beta$ ( <i>P</i> value)
<b>Other characteristics</b>										
<b>Household income level</b>										
Less than 30 million IRR (<\$71)	Ref.	Ref.	Ref.	-	Ref.	-	Ref	Ref	Ref	-
30 to 50 million IRR (\$71 to \$118)	-1.29 (0.20)	-1.86 (0.06)	0.50 (0.69)	-	-0.18 (0.86)	-	0.27 (0.78)	0.27 (0.78)	1.59 (0.37)	-
50 to 100 million IRR \$118 to \$236)	-0.78 (0.41)	-1.41 (0.13)	-0.34 (0.77)	-	-0.06 (0.94)	-	-0.36 (0.68)	-0.36 (0.68)	-0.26 (0.87)	-
More than 100 million IRR (>\$236)	-1.39 (0.14)	-2.18 (0.03)	-1.03 (0.39)	-	-0.57 (0.54)	-	-0.62 (0.49)	-0.62 (0.49)	-1.00 (0.55)	-
<b>Age at marriage</b>										
Less than 18 years old	Ref.	-	Ref.	Ref.	Ref.	-	Ref	Ref	Ref	-
18 to 30 years old	0.11 (0.79)	-	-0.06 (0.91)	0.07 (0.89)	0.20 (0.63)	-	0.54 (0.19)	0.54 (0.19)	0.60 (0.43)	-
More than 30 years old	-1.07 (0.27)	-	-1.91 (0.12)	-1.84 (0.13)	-1.15 (0.23)	-	-0.61 (0.52)	-0.61 (0.52)	-1.22 (0.48)	-
<b>Duration of marriage</b>										
Less than 5 years	Ref.	Ref.	Ref.	-	Ref.	-	Ref	Ref	Ref	-
5 to 10 years	0.55 (0.41)	0.41 (0.60)	-0.08 (0.92)	-	0.19 (0.77)	-	0.27 (0.68)	0.27 (0.68)	0.31 (0.79)	-
More than 10 years	1.27 (0.04)	0.91 (0.31)	0.81 (0.29)	-	0.46 (0.44)	-	0.31 (0.59)	0.31 (0.59)	0.59 (0.59)	-
<b>Number of children</b>										
0	Ref.	Ref.	Ref.	-	Ref.	-	Ref	Ref	Ref	Ref
1	0.47 (0.54)	0.08 (0.92)	-1.07 (0.27)	-	-0.25 (0.73)	-	0.01 (0.98)	0.01 (0.98)	-0.58 (0.66)	-0.87 (0.52)
2	0.84 (0.22)	0.24 (0.77)	-0.32 (0.71)	-	-0.18 (0.78)	-	0.24 (0.71)	0.24 (0.71)	-1.34 (0.27)	-1.48 (0.21)
3	0.97 (0.17)	0.006 (0.99)	0.08 (0.93)	-	0.01 (0.98)	-	0.26 (0.70)	0.26 (0.70)	-1.40 (0.27)	-1.84 (0.14)
≥4	1.10 (0.16)	0.34 (0.72)	0.78 (0.43)	-	0.93 (0.23)	-	0.28 (0.72)	0.28 (0.72)	-2.61 (0.06)	-3.03 (0.03)

Table 3. Continued

Characteristics	Negative motivations					
	Fears and worries of parenthood		Parental stress		Negatives of childcare	
	Crude $\beta$ (P value)*	Adjusted $\beta$ (P value)**	Crude $\beta$ (P value)	Adjusted $\beta$ (P value)	Crude $\beta$ (P value)	Adjusted $\beta$ (P value)
<b>Characteristics of women</b>						
<b>Age</b>	-0.41(0.23)	-	-0.06 (0.10)	-0.05 (0.27)	0.007 (0.71)	-
<b>Level of education</b>						
Below high-school diploma	Ref.	Ref.	Ref.	-	Ref.	-
High-school diploma	-1.29 (0.35)	-1.13 (0.42)	-1.53 (0.32)	-	-0.95 (0.21)	-
Bachelor's degree	-1.05 (0.42)	-0.83 (0.54)	-1.14 (0.43)	-	-0.50 (0.49)	-
Master's degree	-0.74 (0.59)	-0.58 (0.69)	0.26 (0.86)	-	-0.14 (0.85)	-
PhD	-2.93 (0.09)	-2.76 (0.12)	-2.20 (0.25)	-	-0.87 (0.35)	-
<b>Job</b>						
Homemaker	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
Government employee	-0.73 (0.19)	-0.83 (0.17)	1.25 (0.05)	0.83 (0.24)	0.79 (0.01)	0.44 (0.20)
Self-employed	-0.33 (0.71)	-0.27 (0.77)	1.41 (0.16)	1.51 (0.13)	0.72 (0.14)	0.77 (0.12)
<b>Characteristics of men</b>						
<b>Age</b>	-0.03 (0.38)	-	-0.02 (0.59)	-	0.02 (0.22)	-
<b>Level of education</b>						
Below high-school diploma	Ref.	Ref.	Ref.	-	Ref.	-
High-school diploma	-1.29 (0.35)	-1.13 (0.42)	-1.53 (0.32)	-	-0.95 (0.21)	-
Bachelor's degree	-1.05 (0.42)	-0.83 (0.54)	-1.14 (0.43)	-	-0.50 (0.49)	-
Master's degree	-0.74 (0.59)	-0.58 (0.69)	0.26 (0.86)	-	-0.14 (0.85)	-
PhD	-2.93 (0.09)	-2.76 (0.12)	-2.20 (0.25)	-	-0.87 (0.35)	-
<b>Job</b>						
Government employee	Ref.	-	Ref.	-	Ref.	Ref.
Self-employed	-0.15 (0.75)	-	0.03 (0.96)	-	-0.44 (0.10)	-0.24 (0.37)

Table 3. Continued

Characteristics	Negative motivations					
	Fears and worries of parenthood		Parental stress		Negatives of childcare	
	Crude $\beta$ ( <i>P</i> value)*	Adjusted $\beta$ ( <i>P</i> value)**	Crude $\beta$ ( <i>P</i> value)	Adjusted $\beta$ ( <i>P</i> value)	Crude $\beta$ ( <i>P</i> value)	Adjusted $\beta$ ( <i>P</i> value)
<b>Other characteristics</b>						
<b>Household income level</b>						
Less than 30 million IRR (<\$71)	Ref.	-	Ref.	Ref.	Ref.	Ref.
30 to 50 million IRR (\$71 to \$118)	1.65 (0.23)	-	2.15 (0.17)	2.58 (0.10)	0.84 (0.28)	1.06 (0.17)
50 to 100 million IRR (\$118 to \$236)	0.61 (0.63)	-	1.93 (0.20)	1.87 (0.21)	0.60 (0.41)	0.66 (0.37)
More than 100 million IRR (>\$236)	0.11 (0.93)	-	2.74 (0.07)	2.49 (0.10)	1.20 (0.09)	1.08 (0.15)
<b>Age at marriage</b>						
Less than 18 years old	Ref.	Ref.	Ref.	-	Ref.	Ref.
18 to 30 years old	-0.05 (0.92)	0.19 (0.76)	-0.07 (0.92)	-	0.29 (0.38)	0.06 (0.84)
More than 30 years old	-2.41 (0.08)	-2.69 (0.06)	1.05 (0.50)	-	1.53 (0.05)	1.14 (0.14)
<b>Duration of marriage</b>						
Less than 5 years	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
5 to 10 years	-1.72 (0.07)	-1.63 (0.15)	-0.83 (0.44)	-1.04 (0.41)	-0.75 (0.15)	-0.89 (0.14)
More than 10 years	-0.99 (0.24)	-0.75 (0.51)	-1.67 (0.09)	-0.76 (0.59)	-0.99 (0.04)	-0.98 (0.12)
<b>Number of children</b>						
0	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
1	-1.09 (0.31)	-0.87 (0.47)	0.94 (0.43)	1.56 (0.24)	-0.02 (0.96)	0.62 (0.34)
2	-0.84 (0.37)	-0.73 (0.54)	0.33 (0.75)	1.17 (0.38)	-0.11 (0.83)	0.59 (0.37)
3	-0.96 (0.33)	-1.01 (0.42)	-1.55 (0.16)	-0.58 (0.67)	-0.62 (0.26)	0.21 (0.76)
≥4	-2.00 (0.07)	-2.21 (0.10)	-2.03 (0.09)	-1.03 (0.48)	-1.38 (0.02)	-0.54 (0.45)

\* Simple linear regression coefficient \*\*Multiple linear regression coefficient  
The reference category (Ref) was considered for each categorical variable.

family well-being.

This study has several limitations that should be considered. First, the cross-sectional design prevents establishing causal relationships between women's characteristics and childbearing motivation. Second, participants were recruited using convenience sampling and only from Mashhad, which may limit the generalizability of the findings to other regions or populations in Iran. Third, data on fertility motivation and other characteristics were self-reported, which may introduce recall bias or social desirability bias. Finally, online data collection via social networks may have excluded women without access to smartphones or the internet, potentially affecting the sample's representativeness.

### Conclusion

This study highlights that declining fertility in Iran is influenced by multiple interconnected factors, including job conditions, number of existing children, socio-economic constraints, and personal preferences. Women's decisions to delay or limit childbearing reflect complex trade-offs between career, family responsibilities, and financial considerations. To address the ongoing population decline, policymakers should implement supportive measures such as childcare support, flexible employment policies, and targeted educational programs that align with women's reproductive goals. A comprehensive, culturally sensitive approach is essential to promote sustainable population growth and improve family well-being in Iran.

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### Competing Interests

There is no conflict of interest to declare

### Consent for Publication

Not applicable.

### Data Availability

Data are available upon reasonable request

### Ethical Approval

This study was approved by the Ethics Committee of Mashhad University of Medical Sciences (IR.MUMS.FHMPM.REC.1401.133) after obtaining the required permit for the research. The participants provided written informed consent and were assured of confidentiality. All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional research committee, as outlined in the 1964 Helsinki Declaration.

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