# Female or Male Fertility Motivation? Which One Determines the Number of Children? (A Comparative Study)

#### **Abstract**

**Background:** In the last three decades, childbearing in Iran has decreased more than many countries in the world. The aim of this study was to explore the fertility motivation of Working women and their husbands and discover which one determines the number of children. **Materials and Methods:** This correlational study was conducted on 540 employed, married women and their husbands (270 couples) living in Mashhad, Iran, during 2017–2018. The participants were selected through multistage cluster sampling. Then, a random number table was used. Subsequently, questionnaires were distributed and completed at home, and collected after 24 h. Data were collected using a demographic characteristics form and the Childbearing Questionnaire (CBQ). **Results:** The mean(SD) positive motivation scores of men and women differed significantly [92.77 (13.04) Vs. 92.22 (13.51) df = 4; p = 0.001;]. The mean (SD) negative motivation scores of men and women also differed significantly 55.42 (10.94) Vs. 56.78 (10.57) df = 4; p = 0.001;]. **Conclusions:** According to the scores obtained for the positive and negative fertility motivations of working women and their husbands, women were more in favor of having children and had an ambivalent motivation to bear children. Moreover, the working women's spouses were more indifferent to fertility. The results of this study can help reproductive health policymakers in childbearing.

**Keywords:** Delayed childbearing, fertility, Iran, motivation, working women

## Introduction

Fertility has always been an important concept in the mind of the Iranian people and many other nations. People's eagerness and intention to have children is one of the most important components in the development of societies.[1] Childbearing is considered an axis for the sustainable development of underdeveloped and, especially, developing countries. Considerable changes across the world during recent years have resulted in a decrease in the rate of fertility.[2] The reduced rate of fertility around the world can be attributed to families' higher costs of living, higher age of marriage, economic problems, one child policy, a lower motivation to have children, etc.[3] Since 2016, Iran has experienced the crisis of severely decreased fertility and population. One of the most important indices for population, the growth rate, has been on a decreasing trend in Iran in the 2010's.[4]

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

For reprints contact: WKHLRPMedknow reprints@wolterskluwer.com

According to researches, childbearing in Iran reduced to 1,196000 cases in 2019. This descending trend, along with the unimplemented regulations regarding population increase and infertility treatment subsidization, and the general population policies will be challenging for Iran in future decades. A lower motivation for childbearing is associated with consequences such as lacking or decreased economic growth or development, population aging and lack of happiness, social vulnerabilities, disrupted socialization and communications of children in under populated families, the mental and psychological problems of the future generation, higher health care costs of the elderly, a weaker national defense force, and decreased youth population and, even, human extinction.[5]

Motivation is an internal force that stimulates one's certain behavior. Childbearing is a willful act in which motivation plays a direct role. Sociologists and behaviorists have referred to the role of

How to cite this article: Rajati R, Khadivzade T, Esmaeili H, Danesh F. Female or male fertility motivation? Which one determines the number of children? (A comparative study). Iran J Nurs Midwifery Res 2023;28:144-9.

**Submitted:** 22-May-2021. **Revised:** 11-Sep-2022. **Accepted:** 13-Sep-2022. **Published:** 14-Apr-2023.

# Reihane Rajati<sup>1</sup>, Talat Khadivzade<sup>2</sup>, Habibollah Esmaeili<sup>3</sup>, Fereshte Danesh<sup>4</sup>

<sup>1</sup>MSc Student of Counseling in Midwifery, Department of Midwifery, Faculty of Nursing and Midwifery, Mashhad University of Medical Sciences, Mashhad, Iran, <sup>2</sup>Department of Midwifery, Faculty of Nursing and Midwifery, Mashhad University Medical of Medical Sciences, Mashhad, Iran, <sup>3</sup>Social Determinants of Health Research Center, Mashhad University of Medical Science, Mashhad, Iran, <sup>4</sup>MSc in Clinical Psychology, Mashhad University of Medical Sciences, Mashhad,

Address for correspondence:
Dr. Talat Khadivzade,
Department of Midwifery,
Faculty of Nursing and
Midwifery, Mashhad
University Medical of Medical
Sciences, Mashhad, Iran.
E-mail: Khadivzadet@mums.
ac.ir



motivations in explaining human behavior. [6] Today, Iranian couples' thoughts and attitudes regarding childbearing has changed. [7] It is said that fertility motivation has two components; one results in spouse selection and sexualized behavior, and the other leads to the keeping and raising of children. [8] Researchers suggested that people have different levels of fertility motivations, meaning personal reasons for having children. [9]

Mansourain and Khoshnevis have reported that the parents' insistence on a certain sex for their future children is one factor that influences their desire for fertility.[10] Khadivzade et al.[11] have suggested that the spouses' interactions, conditions and circumstances, their family interactions, and background factors such as religiosity determine their preferences and motivations for fertility. Piltan and Rahmanian have indicated that the most important factor is the spouses' fertility motivation and that the current problem and major concern of policymakers is change in spouses' ideals, desires, and motivations.[12] The development of modern family patterns has been accompanied by dramatic changes in gender relations, also known as the gender revolution. Women have entered the public sphere.[13] Interestingly, around 1985, male and female unemployment caused a sharp decline in fertility, but in later years and around 2006, this relationship changed so that working women gave birth to fewer children.[14]

Studies also show a negative relationship between women's employment and fertility.[15-17] Most researches on modern demographic trends, especially fertility and related topics, and changes in norms and gender relations have focused on women. However, if the fertility is to be assessed, we need to also study men, and not necessarily as a member of a couple given modern partnership patterns, as well as possible gender differences in parental and other aspirations. In addition, studies have shown that men's childbearing desires and intentions influence births in couples with equal force to that of women's desires and intentions.[13] Despite the well-established role of men's fertility motivations in the rate of childbearing, to the best of our knowledge, no quantitative study has been conducted on fertility desire and childbearing in women and their spouses in Iran. Thus, the present study was conducted with the aim to explore the fertility motivation of Working women and their husbands and discover which one determines the number of children.

#### **Materials and Methods**

This correlational article is part of the thesis "The relationship between "work-family conflict" with "couples' relationship quality" and" fertility motivation" in women's employed and their spouses in Mashhad City, Iran." This correlational study included 540 married women (working at administrative-monetary, health care and treatment, education and training, and service sectors) and their spouses, who were living in Mashhad, Iran, and had 1 or 2 children between 2017 (April) and 2018 (August).

The married, working women who met the following criteria were included in the study: providing a written consent of participation, not having any incurable physical or sexual diseases, having two children, being at the reproductive age of 18-49 years, not having any psychological disorders, currently living with the husband, not having a history of drug, alcohol, or psychedelic drugs abuse, not experiencing any traumatic events during the last three months, and not having a history of divorce. The husbands' inclusion criteria were no incurable physical or sexual diseases, no psychological disorders, no history of drug, alcohol, or psychedelic drugs abuse, no experience of traumatic events during the last three months, no history of infertility, and monogamy. The samples were selected through multi-stage clustering method and included hospitals, health centers, schools, colleges, and offices. Then, a random number table was used, and after selecting the required number of samples, questionnaires were distributed and were collected after 24 h. The 75 subjects who returned incomplete questionnaires or cancelled their participation were excluded from the study. However, due to the impossibility of changing the sample size, sampling was repeated to reach the required sample size.[18] Sample size was determined based on the study by Young et al.[18] The correlation of the two quantitative variables is shown with r. As a result, we considered a larger sample for the present study, and according to the sampling method, the sample size tripled. Therefore, the final sample size was 540 people (270 couples) $-1 \le r \le +1$  and r = 0.75). The study instruments included a demographic characteristics form and the Childbearing Questionnaire (CBQ). The demographic characteristics form includes 52 questions. This form was used to measure contextual and intervention variables, the effect of which has been controlled in this study, and includes 50 closed questions and 2 open questions. This questionnaire was completed by working women. To determine the validity of the demographic information questionnaire as well as the research unit selection questionnaire, content and face validity were determined through the study of valid sources which were compiled under the supervision of the supervisor, and then, evaluated by 10 faculty members and expert professors. After considering the suggestions and reforms, the final tool was prepared and used.

The CBQ was developed by Miller in 1995 and includes 49 items. It is organized in two parts, each one with a separate score. The items are scored based on a Likert scale ranging from 1 (absolutely disagree) to 4 (absolutely agree). Therefore, each subject has two scores related to positive and negative fertility motivations. The positive motivations part includes 28 statements on 1) joys of pregnancy, birth, and infancy, 2) traditional parenthood, 3) satisfactions of childrearing, 4) feeling needed and connected, and 5) instrumental abuse of children. The minimum and maximum total score of this part is 28 and 112, respectively.

The negative motivations part includes 21 statements on 1) fears and worries of parenthood, 2) parental stress, 3) the negatives of child care, and 4) discomforts of pregnancy and childbirth. The minimum and maximum total scores of this part are 21 and 84, respectively. Miller et al.[9] merged these two parts and introduced new concepts by which individuals are grouped into four categories: 1) pronatalist: people with a positive motivations score of higher than the average score and negative motivations score of lower than average; 2) antinatalist: people with a positive motivations score of lower than the average score and a negative motivations score of higher than average; 3) ambivalent: people with positive and negative motivations scores of higher than the average score; and 4) indifferent: people with positive and negative motivations scores of lower than the average score.[19,20]

Validity of Miller Reproductive Motivation Questionnaire was assessed by Kordzanganeh et al.[21] The reliability of the CBQ was determined using Cronbach's alpha in SPSS software (version 24, IBM Corp., Armonk, NY, USA); it was 0.90 and 0.93 for women and their spouses, respectively. This questionnaire was studied and localized by Khadivzade et al.[11] After coordinating with the respective units, subjects were selected based on the study inclusion criteria. First, a list of working women living in Mashhad was obtained from the Planning and Budget Organization and Labor and Social Welfare Office. Sampling was performed in the presence of a researcher at the workplace of working women and by receiving the list of names of employees. Subjects were selected from the list using a random number table. All subjects were informed of the aim of the study. After signing a written consent to participation, they were provided with the questionnaires to fill in with their spouses.

Samples were selected through multi-stage clustering method. The clusters included 6 hospitals from 15 regions, 3 health centers from 6 regions, 10 schools from 6 regions, 5 colleges from 15 regions, and 10 offices from 20 regions. A random number table was used, and after obtaining the required number of samples, questionnaires were distributed and were collected after 24 h.

The gathered data were coded and imported into the computer, and after ensuring their correctness, were analyzed in SPSS software. The normal distribution of data was determined using Kolmogorov-Smirnov test. Parametric statistical tests were used for normally distributed data, and non-parametric tests were used for non-normally distributed data. Demographic and personal information are presented as average, standard deviation, and frequency [Table 1]. The Pearson correlation coefficient was used to determine the correlation between Miller's fertility motivations and independent *t* test was used to compare the means of the main variables.

Table 1: Personal characteristics of working women and their spouses

Education         5 (1.90)         16 (5.91)           Middle school         13 (4.80)         33 (1.92)           High school         53 (19.60)         54 (20.00)           Higher education         196 (72.62)         166 (61.52)           Other         3 (1.11)         1 (0.40)           Second job         Yes         22 (8.13)         29 (10.70)           No         248 (91.90)         240 (89.32)           Job category         Education and training         85 (36.51)         26 (9.61)           Health care         72 (26.70)         22 (8.10)           Administration & finance         37 (13.72)         50 (21.50)           Services         23 (8.53)         58 (21.55)           Self-employment         53 (19.60)         113 (42.20)	their spouses				
Education         5 (1.90)         16 (5.91)           Middle school         13 (4.80)         33 (1.92)           High school         53 (19.60)         54 (20.00)           Higher education         196 (72.62)         166 (61.52)           Other         3 (1.11)         1 (0.40)           Second job         Yes         22 (8.13)         29 (10.70)           No         248 (91.90)         240 (89.32)           Job category         Education and training         85 (36.51)         26 (9.61)           Health care         72 (26.70)         22 (8.10)           Administration & finance         37 (13.72)         50 (21.50)           Services         23 (8.53)         58 (21.55)           Self-employment         53 (19.60)         113 (42.20)	Variables	Working	Women's		
Elementary       5 (1.90)       16 (5.91)         Middle school       13 (4.80)       33 (1.92)         High school       53 (19.60)       54 (20.00)         Higher education       196 (72.62)       166 (61.52)         Other       3 (1.11)       1 (0.40)         Second job       22 (8.13)       29 (10.70)         No       248 (91.90)       240 (89.32)         Job category       Education and training       85 (36.51)       26 (9.61)         Health care       72 (26.70)       22 (8.10)         Administration & finance       37 (13.72)       50 (21.50)         Services       23 (8.53)       58 (21.55)         Self-employment       53 (19.60)       113 (42.20)		women <i>n</i> (%)	husbands n (%)		
Middle school       13 (4.80)       33 (1.92)         High school       53 (19.60)       54 (20.00)         Higher education       196 (72.62)       166 (61.52)         Other       3 (1.11)       1 (0.40)         Second job       22 (8.13)       29 (10.70)         No       248 (91.90)       240 (89.32)         Job category       Education and training       85 (36.51)       26 (9.61)         Health care       72 (26.70)       22 (8.10)         Administration & finance       37 (13.72)       50 (21.50)         Services       23 (8.53)       58 (21.55)         Self-employment       53 (19.60)       113 (42.20)	Education				
High school       53 (19.60)       54 (20.00)         Higher education       196 (72.62)       166 (61.52)         Other       3 (1.11)       1 (0.40)         Second job         Yes       22 (8.13)       29 (10.70)         No       248 (91.90)       240 (89.32)         Job category       Education and training       85 (36.51)       26 (9.61)         Health care       72 (26.70)       22 (8.10)         Administration & finance       37 (13.72)       50 (21.50)         Services       23 (8.53)       58 (21.55)         Self-employment       53 (19.60)       113 (42.20)	Elementary		16 (5.91)		
Higher education         196 (72.62)         166 (61.52)           Other         3 (1.11)         1 (0.40)           Second job         22 (8.13)         29 (10.70)           No         248 (91.90)         240 (89.32)           Job category         Education and training         85 (36.51)         26 (9.61)           Health care         72 (26.70)         22 (8.10)           Administration & finance         37 (13.72)         50 (21.50)           Services         23 (8.53)         58 (21.55)           Self-employment         53 (19.60)         113 (42.20)	Middle school				
Other         3 (1.11)         1 (0.40)           Second job         Yes         22 (8.13)         29 (10.70)           No         248 (91.90)         240 (89.32)           Job category         Education and training         85 (36.51)         26 (9.61)           Health care         72 (26.70)         22 (8.10)           Administration & finance         37 (13.72)         50 (21.50)           Services         23 (8.53)         58 (21.55)           Self-employment         53 (19.60)         113 (42.20)	C				
Second job       22 (8.13)       29 (10.70)         No       248 (91.90)       240 (89.32)         Job category       Education and training       85 (36.51)       26 (9.61)         Health care       72 (26.70)       22 (8.10)         Administration & finance       37 (13.72)       50 (21.50)         Services       23 (8.53)       58 (21.55)         Self-employment       53 (19.60)       113 (42.20)	Higher education	196 (72.62)	166 (61.52)		
Yes         22 (8.13)         29 (10.70)           No         248 (91.90)         240 (89.32)           Job category         Education and training         85 (36.51)         26 (9.61)           Health care         72 (26.70)         22 (8.10)           Administration & finance         37 (13.72)         50 (21.50)           Services         23 (8.53)         58 (21.55)           Self-employment         53 (19.60)         113 (42.20)	Other	3 (1.11)	1 (0.40)		
No       248 (91.90)       240 (89.32)         Job category       Education and training       85 (36.51)       26 (9.61)         Health care       72 (26.70)       22 (8.10)         Administration & finance       37 (13.72)       50 (21.50)         Services       23 (8.53)       58 (21.55)         Self-employment       53 (19.60)       113 (42.20)	Second job				
Job category       85 (36.51)       26 (9.61)         Education and training       85 (36.51)       26 (9.61)         Health care       72 (26.70)       22 (8.10)         Administration & finance       37 (13.72)       50 (21.50)         Services       23 (8.53)       58 (21.55)         Self-employment       53 (19.60)       113 (42.20)	Yes				
Education and training       85 (36.51)       26 (9.61)         Health care       72 (26.70)       22 (8.10)         Administration & finance       37 (13.72)       50 (21.50)         Services       23 (8.53)       58 (21.55)         Self-employment       53 (19.60)       113 (42.20)	No	248 (91.90)	240 (89.32)		
Health care       72 (26.70)       22 (8.10)         Administration & finance       37 (13.72)       50 (21.50)         Services       23 (8.53)       58 (21.55)         Self-employment       53 (19.60)       113 (42.20)					
Administration & finance       37 (13.72)       50 (21.50)         Services       23 (8.53)       58 (21.55)         Self-employment       53 (19.60)       113 (42.20)	Education and training				
Services         23 (8.53)         58 (21.55)           Self-employment         53 (19.60)         113 (42.20)	Health care	72 (26.70)			
Self-employment 53 (19.60) 113 (42.20)	Administration & finance	37 (13.72)	50 (21.50)		
	Services	23 (8.53)	58 (21.55)		
Type of employment	Self-employment	53 (19.60)	113 (42.20)		
Type of employment	Type of employment				
Permanent 79 (29.30) 59 (21.90)	Permanent	79 (29.30)	59 (21.90)		
Contractual 17 (6.33) 28 (10.41)	Contractual	17 (6.33)	28 (10.41)		
Term (fixed) 134 (49.61) 93 (34.42)	Term (fixed)	134 (49.61)	93 (34.42)		
Other 40 (14.82) 89 (33.00)	Other	40 (14.82)	89 (33.00)		
Working shift	Working shift				
Morning 176 (65.22) 137 (50.72)	Morning	176 (65.22)	137 (50.72)		
Evening 11 (4.11) 2 (0.70)	Evening	11 (4.11)	2 (0.70)		
Night 3 (1.11) 1 (0.44)	Night	3 (1.11)	1 (0.44)		
Rotational 80 (29.64) 129 (47.80)	Rotational	80 (29.64)	129 (47.80)		
Kind of marriage	Kind of marriage				
Family 79 (29.31)	Family	79 (29.31)			
Forced 5 (1.90)	Forced	5 (1.90)			
By representative 154 (57.00)	By representative	154 (57.00)			
Social networks 18 (6.71)	Social networks	18 (6.71)			
Other 14 (5.21)	Other	14 (5.21)			
Income level	Income level				
Less than enough 86 (31.90)	Less than enough	86 (31.90)			
Enough 176 (65.20)	Enough	176 (65.20)			
More than enough 8 (30.00)	More than enough				
Current number of children	Current number of children				
None 38 (14.11)	None	38 (14.11)			
1 107 (39.60)	1	107 (39.60)			
2 125 (46.32)	2	125 (46.32)			
Failed pregnancy	Failed pregnancy				
Yes 63 (23.30)		63 (23.30)			
No 207 (76.70)	No				
Unwanted pregnancy	Unwanted pregnancy				
Yes 42 (15.60)		42 (15.60)			
No 228 (84.42)	No	228 (84.42)			
Type of 1st childbirth	Type of 1st childbirth				
Natural 125 (46.32)		125 (46.32)			
Cesarean 107 (39.61)	Cesarean				
Type of 2 <sup>nd</sup> childbirth	Type of 2 <sup>nd</sup> childbirth	. ,			
Natural 63 (23.30)		63 (23.30)			
Cesarean 62 (23.00)	Cesarean				

Contd...

Table 1: Contd				
Variables	Working	Women's		
	women $n$ (%)	husbands n (%)		
Access to kindergarten at				
workplace				
Yes	59 (21.90)			
No	185 (68.50)			
Access to assistance at home	;			
Yes	136 (50.41)			
No	140 (51.90)			

#### **Ethical considerations**

At the beginning of the study, the objectives of the study were explained to the couples, and all the participants signed a written informed consent form. The ethics committee of Mashhad University of Medical Sciences issued a license for this study and the School of Nursing and Midwifery of this university provided an introduction letter (Number: IR.MUMS.REC.1396.84). The couples were assured of the confidentiality of the collected data and were informed of the right to refuse participation in the study or withdraw at any time from the study with no consequences.

#### Results

In total, 540 subjects (270 couples) including 270 women [mean (SD) age: 34.46 (6.61) years] and 270 men [mean (SD) age: 38.15 (6.97) years] participated in this study. Age at marriage in women was 22.61 (4.46) years and in men 22.49 (4.79) years. Occupational experience in women was 9.08 (7.51) years and in men was 13.57 (7.90) years. Weekly working hours in women was 43.4 (17.28) h and in men was 41.57 (23.84) h. The other demographic information of the participants are presented in Table 1. The data on the working women are presented in Table 2.

The couples' income level was enough to make a living (65.20%). Moreover, most of the couples had currently one (39.60%) or two (76.70%) children. Almost half of the working women (50.0%) were benefiting from 113 h of their spouse's assistance (43.70%), 10 h of their mother's assistance (3.70%), 3 h of their sister's or nanny's assistance (1.10%), and 2 h of other peoples' assistance (0.70%) on a weekly basis; 4 women did not respond to this question. Some women (28.5%) had independent children who were capable of self-care and 4 women provided no answer to this question. Of the subjects, 47.40% stated that their desired number of children is two. The working women reported that the most important problems of childbearing are related to economic problems (50.40%) and women's job status (15.60%). In addition, 6.30% suggested that delayed age of marriage influenced the reduced rate of fertility.

The current number of children showed a significant positive correlation with the working women's age (r = 0.44; p = 0.001), the spouse's age (r = 0.45; p = 0.001),

duration of marital life (r = 0.60; p = 0.020), occupational experience (r = 0.32; p = 0.001), and the spouse's occupational experience (r = 0.32; p = 0.001), and a significant negative correlation with the working women's age at marriage (p = 0.090; r = -0.16), the spouse's age at marriage (r = -0.14; p = 0.140), and women's and their spouses' working hours per week (rw = 0.23; p = 0.001; rm = 0.12). The desired number of children only showed a significant relationship with the spouse's age (r = 0.13; p = 0.030). These results were obtained using Spearman's correlation.

The subjects' highest and lowest scores in positive fertility motivations are 112 and 28, respectively [Table 3]. There was a significant difference between women and men in terms of positive motivations (p = 0.001). Statistical analysis indicated a significant relationship between the couples' positive motivations and their current number of children (p = 0.008) and total number of children (p = 0.008). One standard deviation added to the positive motivations score would increase the couples' current and total number of children by 0.2 and 0.22 units. Moreover, the number of pregnancies and access to assistance at home would predict the working women's positive fertility motivations (p = 0.005). It may be interpreted that one standard deviation added to the score of having access to assistance at home would increase the women's positive motivations to pregnancy by 0.15 units. Furthermore, one standard deviation added to the number of pregnancies would increase the women's positive motivations for fertility by 0.17 units.

The subjects' highest and lowest scores in negative fertility motivations were 165 and zero, respectively [Table 4]. There was a significant difference between women and men in terms of negative fertility motivations (p = 0.001). Return to work after 1st childbirth significantly predicted working women's negative fertility motivations (p = 0.03). It may be said that one standard deviation added to this score would increase the woman negative fertility motivations by 0.14 units.

The results showed that among the 270 working women, 78, 56, 77, and 59 women were pronatalist, antinatalist, ambivalent, and indifferent to fertility, respectively. In addition, of the 270 husbands who participated in the study, 66, 66, 64, and 74 men were pronatalist, antinatalist, ambivalent, and indifferent to fertility, respectively.

## **Discussion**

This research was conducted to determine whether it is the female or male fertility motivations that influence the number of children of working women and their husbands living in Mashhad. The subjects' positive fertility motivations showed a significant relationship with the current number of children, desired number of children, access to assistance at home, and number of pregnancies. The results of this study show a significant difference between positive motivations in couples with childbearing desire and the number of children, which is consistent with the study by Miller *et al.*<sup>[9]</sup> in America. In addition, a study reported that with increase in positive fertility motivations, the number of desired children increased.<sup>[7]</sup> The results of a research in Iran are consistent with the present study, which can be due to the similar cultural contexts of these studies.<sup>[22]</sup>

In addition, researchers showed that childbearing is affected by various factors, including the participation of couples in household chores, which is consistent with the results of this study. According to the results of these studies, it can be concluded that one of the factors that can strengthen positive fertility motivation is having help with household chores.<sup>[7]</sup>

In this study, no correlation was observed between positive fertility motivation and the interval between marriage and the birth of the first child. A study conducted in Iran in 2013 indicated that most couples tend to prolong the duration

**Table 2: Personal characteristics of working women** 

Variables	Working women	
	Mean (SD)	
Number of pregnancies	1.61 (0.92)	
Number of children	1.34 (0.72)	
Duration from marriage to pregnancy (years)	2.41 (1.85)	
Age difference of children (years)	4.42 (2.91)	
First child's age (years)	9.66 (6.72)	
Second child's age (years)	7.88 (6.68)	
Time to return to work after 1 <sup>st</sup> childbirth (months)	7.37 (7.41)	
Time to return to work after 2 <sup>nd</sup> childbirth (months)	7.36 (7.47)	
Desired number of children	2.79 (1.32)	
Duration of marital life (months)	134.30 (81.06)	

between marriage and the first childbirth. The difference in the results of these studies could be due to the difference in the age of the participants.<sup>[23]</sup>

The results of our study showed that negative fertility motivation was only significantly associated with returning to work after the first delivery. However, the study by Miller *et al.*, <sup>[9]</sup> which was a comparative quantitative study, showed that with increase in negative fertility motivations, couples' desire to have children and the number of desired children decreased and the duration between the births of the children increased. This inconsistency between the results of these two studies can be due to cultural and social differences; it seems that couples' desire for childbearing and fertility motivations are influenced by personal motivations, social interactions, and traditional thinking. Even if there is a negative motivation, due to social and psychological pressure from those around them, couples prefer to have a certain number of children.

One of the strengths of this study is that it was performed for the first time in Iran, and it is one of the few studies in the world that has quantitatively assessed the issue of fertility motivations in working women and their husbands. This study may be a basis for future researches on childbearing constraints and men's role in fertility. A limitation of this study was that it was conducted among the working women living in Mashhad and their husbands. To obtain more accurate results for planning healthcare programs, it is recommended that this study be conducted across a wider area, in different cities and different groups of women and their spouses. Furthermore, it is recommended that future researches explore the effects of the couples' relationship on their motivation to have children.

## Conclusion

This study was conducted to examine the fertility motivations of working women and their husbands

Table 3: Subjects' mean scores of positive fertility motivations				
Variables	Working women Mean (SD)	Working women's husbands Mean (SD)	p	
Positive fertility motivation	92.77 (13.04)	92.22 (13.51)	0.642*	
Joys of pregnancy, birth, and childhood	20.72 (3.84)	20.43 (3.46)	0.050*	
Traditional parenthood	18.77 (4.11)	19.22 (3.80)	0.166*	
Satisfactions of childrearing	21.25 (2.90)	20.46 (3.23)	0.501*	
Instrumental abuse of children	12.39 (2.61)	12.65 (2.34)	0.501*	
Feeling needed and connected	16.58 (2.80)	16.19 (3.08)	0.405*	

Table 4: The subjects' Mean (SD) scores of negative fertility motivations				
Variables	Working women Mean (SD)	Working women's husbands Mean (SD)	p	
Negative fertility motivation	55.42 (10.94)	56.78 (10.57)	0.581	
Parental stress	8.45 (2.92)	90.39 (2.89)	0.556	
Fear and worries of parenthood	17.22 (3.80)	17.45 (3.37)	0.050	
Negatives of child care	20.88 (5.02)	21.33 (4.95)	0.124	
Discomforts of pregnancy and childbirth	5.67 (1.74)	5.50 (1.57)	0.073	

\*Mean (SD)

and showed that positive fertility motivations could be associated with increase in the number of children. In Iran, one of the reasons for negative fertility motivations is returning to work after childbirth, which is expected to reduce the concern of caring for women on leave; hiring a babysitter or setting up a daycare center at work can be a solution. The results of this study can help reproductive health policymakers in childbearing.

# Acknowledgements

We would like to thank all those who participate in this study.

# Financial support and sponsorship

Mashhad University of Medical Sciences

#### **Conflicts of interest**

Nothing to declare.

# References

- Seyedtabib M, Moghimbeigi A, Mahmoudi M, Majdzadeh R, Mahjub H. Pattern and determinant factors of birth intervals among Iranian women: A semi-parametric multilevel survival model. J Biosoc Sci 2020;52:534-46.
- Jonas K, Crutzen R, Krumeich A, Roman N, van den Borne B, Reddy P. Healthcare workers' beliefs, motivations and behaviours affecting adequate provision of sexual and reproductive healthcare services to adolescents in Cape Town, South Africa: A qualitative study. BMC Health Serv Res 2018;18:109. doi: 10.1186/s12913-018-2917-0.
- Astrachan JH, Binz Astrachan C, Campopiano G, Baù M. Values, spirituality and religion: Family business and the roots of sustainable ethical behavior. J Busin Ethics 2020;163:637-45.
- Naz MSG, Ozgoli G, Sayehmiri K. Prevalence of infertility in Iran: A systematic review and meta-analysis. Urol J 2020;17:338-45.
- Duvander A-Z, Fahlén S, Brandén M, Ohlsson-Wijk S. Who makes the decision to have children? Couples' childbearing intentions and actual childbearing. Adv Life Course Res 2020;43:100286.
- Alexander KA, Perrin N, Jennings JM, Ellen J, Trent M. Childbearing motivations and desires, fertility beliefs, and contraceptive use among urban African-American adolescents and young adults with STI histories. J Urban Health 2019;96:171-80.
- Ghazanfarpour M, Arghavani E, Khadivzadeh T, Saeidi M, Kareshki H, Irani M, et al. Childbearing motivation in Iranian engaged couples: A structural equation model. Int J Pediatr 2018;6:7563-8.
- Mynarska M, Rytel J. Fertility desires of childless poles: Which childbearing motives matter for men and women? J Fam Issues 2020;41:7-32.

- Miller WB, Jones J, Pasta DJ. An implicit ambivalence-indifference dimension of childbearing desires in the National Survey of Family Growth. Demographic Res 2016;34:203-42.
- McCool-Myers M, Theurich M, Zuelke A, Knuettel H, Apfelbacher C. Predictors of female sexual dysfunction: A systematic review and qualitative analysis through gender inequality paradigms. BMC Women Health 2018;18:108. doi: 10.1186/s12905-018-0602-4.
- Khadivzade T, Arghavani E. Religious beliefs and fertility preferences among engaged couples, referring to premarital counseling centers of Mashhad, Iran. J Midwifery Reprod Health 2014;2:238-45.
- Piltan F, Rahmanian M. Sociological study of factors affecting willingness to childbearing women and married men (Case study: Women and men 52 to 52 years old in Jahrom). Soc Dev Stud 2015;7:121-34.
- Okun BS, Raz-Yurovich L. Housework, gender role attitudes, and couples' fertility intentions: Reconsidering men's roles in gender theories of family change. Populat Dev Rev 2019;1:169-96.
- Abasi Z, Keshavarz Z, Abbasi-Shavazi MJ, Ebadi A, Esmaily H, Poorbarat S. Comparative study of reproductive behaviors in two ethnicities of fars and Turkmen in North Khorasan, Iran. J Midwifery Reprod Health 2022;10:3109-18.
- Tonekaew P, Choiejit R. The short run and long run relationship among fertility and female labor force participation rate and childcare availability. J Busin Econ Communic 2022;17:99-118.
- Desai A, Singh R, Bhatt S. Alignment of role spaces of women to achieve work-home equilibrium? A timeline study In India. J Positi Sch Psychol 2022;6:6849-74.
- 17. Alderotti G. Female employment and first childbirth in Italy: What news? Genus 2022;78:1-19.
- Young M, Milkie MA, Schieman S. Mother-father parity in work-family conflict? The importance of selection effects and nonresponse bias. Social Forces. 2022. doi: 10.1093/sf/soac015.
- Langher V, Fedele F, Caputo A, Marchini F, Aragona C. Extreme desire for motherhood: Analysis of narratives from women undergoing assisted reproductive technology (ART). Eur J Psychol 2019;15:292-311.
- Miller WB, Millstein SG, Pasta DJ. The measurement of childbearing motivation in couples considering the use of assisted reproductive technology. Biodemogr Social Biol 2008;54:8-32.
- Kordzanganeh J, Mohamadian H. Psychometric assessment of the validity of the Iranian version of attitude toward fertility and childbearing inventory in women without a history of pregnancy in the South of Iran. J Sch Public Health Instit Public Health Res 2019:17:83-94.
- 22. Arasteh A, Akbariyan A, Asadi F. Comparing factors influencing fertility desire among urban and rural families referring to healthcare centers in Ferdows, Iran, in 2020. Int J Epidemiol Res 2022:9:107-12.
- Khadivzadeh T, Roudsari RL, Bahrami M, Taghipour A, Shavazi JA. The influence of social network on couples' intention to have the first child. Iran J Reprod Med 2013;11:209-18.