

## Religion, ethnicity and fertility behavior in Fars Province of Iran

Afshan Javadi<sup>1</sup>, Aliyar Ahmadi<sup>2</sup>

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### Abstract

**Introduction:** Fertility as one of the main parameters of demographic change is affected by economic, social and cultural factors. Among these influential factors the interaction of religion and ethnicity plays an important role. This study aim at investigating the differences in fertility behavior of Sunnis and Shias, as different religious groups, and different ethnic groups of Turk, Lur, Arab and Persian in Fars province, 2015.

**Data & Method:** This cross-sectional study was conducted in rural areas of Fars province. The sample of study includes 1535 married women (Sunni-Persians (204), Shia-Persians (485), Shia-Turks (217), Shia-Lurs (194), Shia- Arabs (200), and nomads (235)).

The subjects were selected by classified cluster sampling. Interviews were carried out in order to obtain demographic data, fertility history and ideals of childbearing.

Data processing was performed using Descriptive statistics, and inferential statistics including Correlation and One-Way ANOVA.

**Results:** The results indicate that the mean age of women in Sunni and Shia groups, is 32.7 and 32.9 respectively. The mean age of women from different ethnic groups of Lur, Arab and Turk is 32.4, 31.5 and 33.9 respectively.

The highest mean of desired fertility is in Sunnis ( $3.4 \pm 0.8$ ) and nomads ( $3.02 \pm 1.1$ ).

Based on the results of the study, there is a significant and negative correlation between desired fertility and variables of woman`s age at marriage and age at the birth of the first child (except in Arab ethnic groups) ( $p < 0.05$ ). One-way analysis of variance indicates that there is a significant difference among educational groups in terms of desired fertility (except Arabs) ( $p < 0.05$ ), but there is no significant effect of financial level on desired fertility (except Lur ethnic) ( $P > 0.05$ ).

**Conclusion:** In this study, ethnicity, religion and being in nomadic context have been influential in determining fertility behavior. These results could play important roles in population policy making.

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<sup>1</sup> M. A in Demography, Shiraz University of Medical Sciences, Iran  
E-mail: javadiaf@sums.ac.ir

<sup>2</sup> Assistant Professor of Demography, Department of Sociology and Social Planning, Shiraz University, Iran

## **Introduction**

Fertility is one of the most important components of demographic studies affecting almost all aspects of human life. Fertility is not free from biological and social or environmental factors (Asghar et al. 2014). Fertility rates differ considerably across both countries and time. The differences in fertility rates are driven by both socio-economic and institutional factors (Stichnoth & Yeter, 2013).

Over the past quarter century fertility has declined rapidly in many developing countries. Projections typically assume that this trend will continue until the replacement level is reached (Bongaarts, 2008).

Over the past four decades, Iran has experienced several different policies on population control, and finally from 1985, the greatest and quickest decline in fertility occurred because of the government's population control programs (Shirzad, 2015).

The census results and statistics indicated a drop in total fertility rate from 7.7 children per woman in 1966 to 2.17 and 1.8 children in 2000 and 2006, respectively. Currently, the fertility rate in Iran is estimated at 1.6 births per woman (khadivzade & Argahvani, 2014).

The fertility rate of any population is always influenced by various factors, directly or indirectly. The degree of influence of these factors on fertility may differ from population to population or from society to society (Asghar et al. 2014).

Fertility is the most important variable affecting population growth rate. It is affected by cultural values and norms in a society (Khadivzade & Argahvani, 2014).

Fertility rates differ significantly between different countries due to various economic, social, political and cultural factors. A multi-cultural society is therefore likely to show a variety of fertility behavior (Dubuc, 2009).

In population studies, little attention has been paid to religious beliefs as an influential factor leading to fertility changes. Religion is a structured system of designed approaches and beliefs which facilitate spiritual development. Religion as a cultural

factor affects fertility through influencing various norms associated with family size, number of children, marriage age, and other intermediate variables (Khadivzade & Argahvani, 2014).

Religious affiliation as a determinant of demographic behavior is receiving renewed attention in demography. Interest in the role of cultural factors in affecting fertility and a specific concern with the role of Islam in many developing countries have helped re-invigorate research on the role of religion (McQuillan , 2004).

Fertility differences have also been reported between religious communities in Western Countries, including Austria, part of Europe and USA. How these factors combine and interplay to contribute to fertility is of considerable debate and interest (Dubuc, 2009).

Other studies have shown that religious affiliations do not affect Family Planning and that the differentials that occur across religious groups are as a result of the differences in the socio-economic and demographic characteristics within the groups (Bakibinga, 2016).

Waleola (2009) found that religions and ethic differences have more impact than economic ones (Akintunde et al. 2013). Adsera (2004) found that in Spain according to the 1985 Spanish Fertility Survey (SFS) Family size was similar among practicing and non-practicing Catholics. A decade and a half later, according to the 1999 SFS, practicing Catholics portrayed significantly higher fertility than others. In the context of lower church participation, religiosity acquired a more relevant meaning for demographic behavior. The small group of conservative Protestants and Muslims had the highest fertility in Spain (Frejka, 2008).

In Bangladesh, Muslims women are more likely to have preference to a very large family than Hindu women and 41 percent of the former as against 33 percent of the latter opted for a family size of seven in number (Akintunde et al. 2013).

Abassi-Shavazi studied fertility tendencies in four provinces of Iran and showed that religion could significantly affect fertility rate in any region (Abbasi-Shavazi et al. 2009).

Past research has made it clear that norms about teen pregnancy vary in the U.S. population. Based on previous literature, three factors appear to be particularly important in understanding this variation: race/ethnicity, socioeconomic status (SES), and religion (Mollborn et al. 2011).

Ethnicity occupies a central position in fertility studies in multiethnic societies since it provides a context for fertility behavior. Abassi-Shavazi showed that ethnic-fertility differentials reduce substantially after controlling for selected socio-demographic characteristics particularly for education, and thus convergence of fertility behavior of ethnic groups was observed by the authors. Nonetheless, this was only a partial convergence and some of the ethnic differences in fertility remain unexplained. The remaining differences can be explained by proximate determinates of fertility among the ethnic groups, on the one hand, and particular culture, social history, values, customs and beliefs prevalent among the ethnic groups, on the other (Abbasi & Sadeghi, 2006).

## **Data and Method**

This cross-sectional study was conducted in rural areas of Fars province. The sample of study includes 1535 married women (Sunni-Persians (204), Shia-Persians (485), Shia-Turks (217), Shia-Lurs (194), Shia- Arabs (200), and nomads (235)).

The subjects were selected by classified cluster sampling. Interviews were carried out in order to obtain demographic data, fertility history and ideals of childbearing.

Data processing was performed using Descriptive statistics, and inferential statistics including Correlation and One-Way ANOVA.

## Results

The results indicate that the mean age of women in Sunni and Shia groups, is 32.7 and 32.9 respectively. The mean age of women from different ethnic groups of Lur, Arab and Turk is 32.4, 31.5 and 33.9 respectively. The highest mean age at marriage is in nomadic context ( $21.3 \pm 4.7$ ), almost similar to Lurs and Turks ( $21.2 \pm 4.5$ ). Mean number of children in nomads and among Sunni people is 2.3. The highest mean of desired fertility is in Sunnis ( $3.4 \pm 0.8$ ) and nomads ( $3.02 \pm 1.1$ ). In educational level, nomads and Turks has highest percentage in uneducated and elementary groups, 74% and 61.6% respectively (Table 1 & 2).

In comparison between Sunnis and Shias, mean number of children and desired fertility is higher among Sunnis than Shias. The highest mean number of children exists in Turk ethnic groups compared with other ones.

Based on the results of the study, there is a significant and negative correlation between desired fertility and women's age at marriage and age at the birth of the first child (except in Arab ethnic groups) ( $p < 0.05$ ). There is a significant and positive correlation between desired fertility and number of children in all groups ( $p < 0.05$ ). In addition a significant and positive correlation exists between desired fertility and number of children (except in Sunni and Turk groups) ( $p < 0.05$ ). One-way analysis of variance indicates that there is a significant difference among educational groups in terms of desired fertility (except Arabs) ( $p < 0.05$ ), but there is no significant correlation between economic status and desired fertility (except Lur ethnic) ( $P > 0.05$ ) (Table 1-3)

## Conclusion

As stated, the differences of fertility in terms of socio-economic factors are well documented especially in terms of religion affiliation of people and they belong to. However the trends of TFR suggest convergence in reproductive behavior across ethnic and religious groups. The differences which remain are mostly due to socio-economic differences of religious and ethnic groups. This work attempted to

understand the intersection of religion and cultural background on fertility. The study of Fertility and childbearing behavior may also help to better understand how multi-cultural societies interact.

**Table1:** Demographic characteristics and Fertility differences by ethnicity and religion

Variables		Sunni Persians	Shia Persians	Shia Lurs	Shia Arabs	Shia Turks
Frequency % (n)		15.7(204)	37.3(485)	14.9(194)	15.4(200)	16.7(217)
Mean (SD) of Woman's age		32.7±7.3	32.9±7.1	32.4±6.9	31.5±7.3	33.9±6.8
Mean(SD) of Man's age		37.7±7.3	38.3±7.8	37.1±7.2	36.3±8.8	38.2±7.5
Woman's age at marriage (%)	<=18	33.2	42.7	29.8	42.6	29.2
	19-24	53.5	42.1	48.2	46.2	49.1
	25+	13.4	15.1	22	11.2	21.7
Mean (SD) of Woman's age at marriage		20.5±4.05	19.9±4.4	21.2±4.5	19.8±4.4	21.2±4.5
Number of children (%)	0	6.4	8.9	12.9	10.1	6
	1-2	52.0	62.3	61.3	59.3	62.2
	3-4	34.8	27.2	22.7	24.1	24.9
	5+	6.9	1.6	3.1	6.5	6.9
Mean (SD) of Number of children		2.3±1.3	1.9±1.1	1.8±1.3	2.09±1.4	2.2± 1.2
Desired fertility (%)	0	0	0.2	0	0	0
	1-2	14.8	47.5	47.6	37.8	37.9
	3-4	75.9	49.8	49.2	55.4	53.7
	5+	9.4	2.5	3.1	6.7	8.4
Mean (SD) of desired fertility		3.4±0.8	2.6±0.8	2.7±0.9	2.9±1.02	2.9±1.01
Age at the birth of first child (%)	<=18	14.1	27	14.3	21.9	15.2
	19-24	61.8	50.2	51.8	55.6	52.5
	25+	24.1	22.7	33.9	22.5	32.4
Mean (SD) of Age at the birth of first child		22.2±3.9	21.5±4.4	22.9±4.5	21.6±3.9	22.7±4.2
Ideal age for having the first birth (%)	<=18	11.8	8.3	12	11.6	9.2
	19-24	74.5	70.0	68.2	79.4	72.8
	25+	13.7	21.7	19.8	9.0	18.0
Mean (SD) of ideal age for having the first birth		20.9±2.1	21.5±2.8	21.3±2.61	20.6±2.6	21.1±2.3
Ideal of childbearing interval (%)	1-2	4.5	6.4	12.0	4	9.2
	2-3	38.7	42.8	41.7	37.9	42.4
	3-5	50.8	40.3	34.9	47.0	35.9
	5+	6.0	10.4	11.5	11.1	12.4
Educational level (%)	Uneducated and elementary	49.0	29.3	29.9	53.5	61.6
	High school	44.6	59.6	55.2	41.0	31.0
	university	6.4	11.1	14.9	5.5	7.4

**Table2:** Demographic characteristics and fertility differences among Rural and Nomads women

variables		Rural	Nomads
Frequency % (n)		82.4(1102)	17.6(235)
Mean (SD) of Woman's age		32.7 ±7.1	32.7±7.4
Mean (SD) of Man's age		37.7±7.8	37.9±8.9
Woman`s age at marriage (%)	<=18	37.2	30.7
	19-24	46.6	45.2
	25+	16.3	24.1
Mean (SD) of Woman`s age at marriage (%)		20.4±4.5	21.3±4.7
Number of children (%)	0	9.2	8.1
	1-2	61.6	53.6
	3-4	25.4	28.9
	5+	3.8	9.4
Mean (SD) of Number of children		2.02±1.2	2.3±1.5
Desired fertility (%)	0	0.1	0
	1-2	43.8	39.1
	3-4	51.6	51.5
	5+	4.5	9.4
Mean (SD) of desired fertility		2.7±0.95	3.02±1.1
Age at the birth of first child (%)	<=18	21.5	15.8
	19-24	51.9	54
	25+	26.6	30.2
Mean (SD) of Age at the birth of first child		22.05±4.3	22.6±4.3
Ideal (SD) age for having the first birth (%)	<=18	9.7	11.5
	19-24	72.1	62
	25+	18.2	26.5
Mean (SD) of ideal age for having the first birth		21.2±2.6	21.6±3.2
Ideal of childbearing interval (%)	1-2	7.5	6.9
	2-3	41.7	47.6
	3-5	39.7	35.2
	5+	11.2	10.3
Educational level (%)	Uneducated and elementary	40.2	74
	High school	49.8	23.8
	university	10.0	2.1

**Table 3:** Results of correlations analysis of independent variables and desired fertility by ethnicity and religion

Independent variable	Sunni Persians		Shia Persians		Shia Lurs		Shia Arabs		Shia Turks	
	R	Sig.	R	Sig.	R	Sig.	R	Sig.	R	Sig.
woman`s age at marriage	-.176*	.012	-.244**	.000	-.265**	.000	-.078	.282	-.225**	.001
age at the birth of first child	-.245**	.001	-.232**	.000	-.240**	.002	-.135	.076	-.297**	.000
actual number of children	.635**	.000	.655**	.000	.683**	.000	.728**	.000	.689**	.000
Ideal age for having the first birth	-.348**	.000	-.229**	.000	-.092	.205	-.171*	.018	-.137*	.046
Number of parent`s children	.049	.493	.190**	.000	.170*	.020	.151*	.037	.147	.032

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

**Table 4:** Results of One-way ANOVA analysis of independent variables and desired Fertility by ethnicity and religion of Fars province, Iran

Independent variable	Sunni Persians		Shia Persians		Shia Lurs		Shia Arabs		Shia Turks	
	F	Sig.	F	Sig.	F	Sig.	F	Sig.	F	Sig.
Woman`s Educational level	18.93	.000	23.36	.000	13.08	.000	19.22	.000	7.09	.001
Man`s Educational level	7.24	.001	6.11	.002	6.27	.002	1.86	.157	12.83	.000
Financial situation	1.77	.106	.722	.632	2.28	.038	1.90	.095	.400	.848
Number of children desired at the beginning of the marriage	9.34	.000	22.35	.000	9.89	.000	10.37	.000	7.59	.000
Ideal of childbearing interval	4.66	.004	1.67	.171	1.701	.168	3.02	.031	4.08	.008

**Table 5:** Results of correlations analysis of independent variables and desired fertility Among rural and nomads women of Fars province, Iran

Independent variable	Rural		Nomads	
	R	Sig.	R	Sig.
Woman`s age at marriage	-0.199	0.000	-0.232	0.000
Age at the birth of first child	-0.218	0.000	-0.359	0.000
Actual number of children	0.68**	0.000	0.8**	0.000
Ideal age for having the first birth	-0.188**	0.000	-0.173**	0.000
Number of parent`s children	0.185**	0.000	0.286**	0.000

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).



**Table 6:** Results of One-way ANOVA analysis of independent variables and desired Fertility Among rural and nomads women of Fars province, Iran

Independent variable	Rural		Nomads	
	F	Sig.	F	Sig.
Woman's Educational level	70.782	0.000	12.577	0.000
Man's Educational level	24.5	0.000	9.6	0.000
Financial situation	1.64	0.119	1.61	0.171
Number of desired children at the beginning of the marriage	112.0	0.000	26.8	0.000
Ideal of childbearing interval	6.7	0.000	5.3	0.001

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