Career or educational aspirations? Low fertility intentions and high contraceptive intentions among prospective brides in Tehran, Iran

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Abstract

This study aims to examine whether women's aspiration for advancing education and having a career after marriage, are associated with their fertility intention. This is based on the first phase of the Tehran Single Child Intention Study (TSCIS) conducted in July and August 2012 , in a representative sample of men and women attended premarital compulsory courses in Tehran (448 women were considered here). Nearly, 40% reported educational aspiration and 73.8% reported career aspiration after marriage. Multivariate analysis indicated that currently employed women who intended to work after marriage had a significantly lower fertility intension, compared to women having no intention to work after marriage irrespective to their current employment status (Beta coefficient=0.17, P<0.001), adjusting for age and education. Policy implications: The government should provide flexible and part-time careers for women to help them to fulfill their preferred number of children (i.e., two children), while being active economically.

Introduction & Aims: Iran's fertility rate has experienced a remarkable decline over the past decades (Statistical Centre of Iran, 2000). Currently, the total fertility rate in the majority of provinces of Iran has reached below the replacement level. In fact, the total fertility rate is estimated at 1.6 children for the country and the rate in six provinces has dropped below 1.5, including Tehran (Erfani, 2013). Even recent studies have shown a below replacement ideal fertility and intended fertility for new marriage cohorts in Tehran (khalajabadi Farahani, 2012, khalajabadi Farahani, 2013, Erfani, 2012,). Hence, persistent decline in fertility and intended fertility concerned Iranian leaders and policymakers, as it can lead to ageing population, lower labor force capital and population size. As a result, Supreme Council of Cultural Revolution recently passed a list of pro-natalist family polices which were sent to the Parliament and the Government as a Bill for their approval (SCCR, 2012).

There are important debates regarding responsible factors for the persistent low fertility in the country. Some argue that it is due to continued provision of public family planning services, which began in 1989. As a response to low fertility, this group of people believes that the existing family planning program should be curbed (Erfani, 2013). Others believe that the fertility decline can be the result of family transformation in Iran (Rezaie, Partoie, and Sadeghi,

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2008), where women in the family have now greater propensity to continue education and participate in labor force market.

Over the past decades, educational advancement among Iranian women has increased. Recent evidence shows that female- male ratio among university students increased from 52% in 1998 to about 62% in 2001 (Abdollahyan, 2004). Erfani (2014) also reported that the proportion of young cohorts of married women in Tehran (those who married between 2000-2008) who experienced an educational advancement of one to two years after marriage is two times greater than that of those who married before 1990 (10.5% vs. 5.5%). This means that not only education level of women before marriage is on the rise, their educational aspiration and advancement after marriage is also increasingly acceptable. So, this leads to a greater demand for labor force participation among highly educated women.

The literature documenting factors associated with low fertility in Iran has focused largely on the influence of socio-economic factors, women's empowerment (Erfani 2014), and the family planning program (Erfani and McQuilan, 2008), whereas little is known about the role of educational and career aspiration as driving forces behind high contraceptive use and low intention to have children. This study aims to bridge this gap by examining whether and to what extent women's aspiration for empowerment, measured by advancing education and having a career after marriage, are associated with their intention to use a contraceptive method and to have few children. In particular, this study will address the following questions:

1) Does women's current education level and their aspiration for advancing education after marriage are related to the use of effective contraceptive method and fertility intentions?
2) Does current women's employment status and their aspiration for having a job after marriage are associated with the use of effective contraceptive methods and fertility intentions?

Theoretical consideration:

It is assumed that women who are better educated or intended to continue their education, particularly at postgraduate level, are prone to intending to have few children. Similarly, employed women and unemployed ones, who intend to work after marriage, are more likely to limit their births or tend to have a lower fertility intention. Age is considered as a confounding factor which is both associated with fertility intentions and educational and career aspirations.

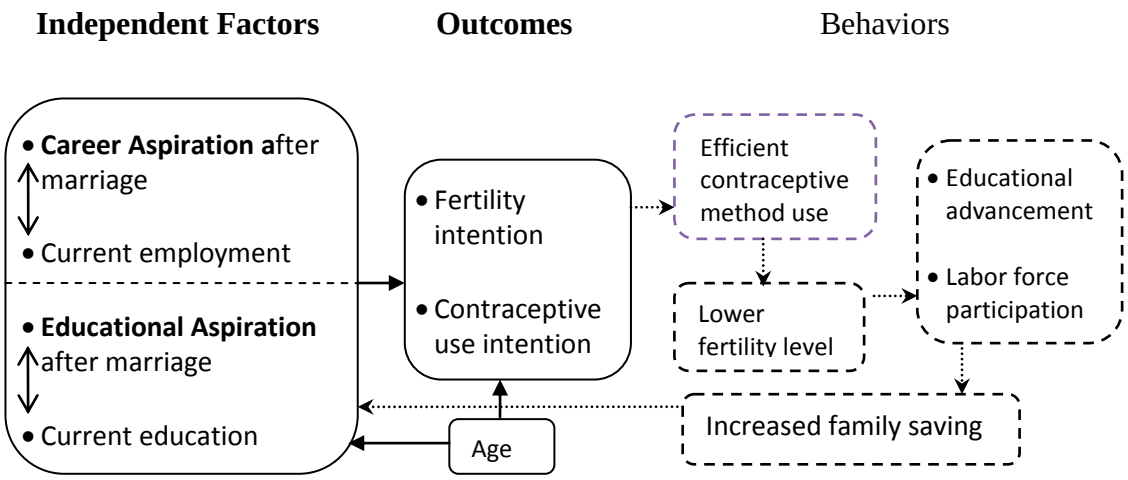

Figure 1. Conceptual framework

Figure 1 is a pictorial illustration of how women's aspiration for advancing education and having a job after marriage are linked to their fertility intentions and the use of contraceptive method.

Methodology

Data: This paper is based on the data from the first phase of the Tehran Single Child Intention Study (TSCIS) which was conducted in July and August 2012 (Khalajabadi Farahani, 2012). The survey is a mix method study conducted among a representative sample of men and women who attended in premarital screening reproductive health programs and family planning courses in Tehran. The study population was young cohorts of prospective couples, namely men and women who were about to register their marriage in Tehran. Out of this population of young prospective couples, 871 men and women were selected based on a two -stage random cluster sampling. A self- administered anonymous questionnaire was developed to collect data from the selected samples. A pilot survey was conducted to evaluate the validity and reliability of the questionnaire before launching the survey. Since this study focuses on women, the sample for this paper is limited to 448 women out of the total sample of women and men, and hence men are excluded from the study.

Methods: In this paper, dependent variables are *fertility intentions*, measured by "intended fertility", representing the intended number of children over the life-course, and "intention to use a contraceptive method", referring to the intention to use any contraceptive method after marriage. Independent variables consist of current education, aspiration[3] for continuing education after marriage, current employment status and the intention to work after marriage.

Since the majority of studies linking fertility and reproductive health outcome to women's non-reproductive activities are cross-sectional, a causal inference is difficult to be established.

[3] Propensity to continue education in this paper refers to "respondent's serious decision to continue education after marriage" which has been estimated according to the responses to the question" Do you have serious decision to continue education after marriage?", responses comprised of yes, no and not sure.

However, this study uses an innovative methodology to some extent resolve this limitation. First, the study sample includes "prospective brides" who were at the onset of getting officially married and starting a common life. Therefore, their fertility and contraceptive intentions, measured at the interview, are largely influenced by their educational and career aspirations rather than by the number of children that they do not have yet at the time of the survey. Second, it has been well established that aspiration is the driving force behind intention and intention is in turn the immediate predictor of a planned behavior (Ajzen, 2005; Ajzen and Fishbein, 1980). In our study, we considered educational and career aspirations after marriage as driving forces behind individuals' fertility intention which is in turn actualized by one's contraceptive intention and behavior. That is, a prospective bride who intends to work or advance her education after marriage is more likely to postpone childbearing and to have few children, and hence she will be more likely to intend to use more effective contraceptive method. The association between aspirations for labor participation and educational advancement and fertility and contraceptive intentions is illustrated in Figure 1.

Some Preliminary Findings: Mean age of women was 25.18 years (SD=4.21) and mean years of schooling was 14 years. About 32% of women had a high school diploma (12 years of education) and 24% had an undergraduate university degree. Nearly, 40% of women had an intention to continue their education and the majority of women were uncertain (30.8%). From those who had an aspiration for advancing their education after marriage, 75% aspired for master and doctoral degree. In terms of employment, about 19% of women were employed fulltime and nearly 25% were in part-time jobs, a quarter (25%) were housewife or unemployed, nearly, and 28% were university students or/and employed at the same time. Interestingly, 73.8% of women had a career aspiration after marriage, where 17.1% intended to work fulltime and 56.7% intended to work part-time after marriage. The average desired number of children for women was well below replacement level (1.60 children, SD=0.70). The mean number of intended children among unemployed (1.74) and students (1.70) was significantly greater than the one among fulltime employed women (1.47) and part-time employed women (1.45) ($p<0.05$). The average number of intended children for women with career aspiration after marriage was significantly lower than the number for women without any career aspiration (1.55 vs. 1.75, $P<0.05$). However, the average number of intended children among women who intended to work fulltime after marriage was not significantly different from the mean number among those with an intention for part-time career. Although, the mean number of desired fertility was significantly greater among women with less than 12 years of education (2.06), compared to those with more than 16 years of education (1.62) ($p<0.05$), educational aspiration was not significantly associated with number of intended fertility.

The results of multivariate analysis indicate that currently employed women who intend to work after marriage have a significantly lower desire for having children, compared to women having no intention to work after marriage irrespective to their current employment status (Beta coefficient=0.17, $P<0.001$), while adjusting for age and educational level.

Consistent with these results, desire and intention for using an effective contraceptive method immediately after marriage are also significantly associated with career aspiration after marriage. For instance, 52% of women who want to work after marriage intends to use the condoms after marriage, whereas this proportion is lower (14%) among those who do not want to work after marriage. The intention to use a traditional contraceptive method (e.g., withdrawal) or no method after marriage was significantly higher among women having no career propensity after marriage, compared with those having a career aspiration (38% vs. 16.3%, for traditional methods, and 14% vs. 6%, for no method, respectively, $p<0.001$). Similar findings are observed with regard to intended contraceptive method use and educational aspiration after marriage, although the strength of the relationship is marginal. Results show that women desiring to advance their education after marriage intend to use modern rather than traditional contraceptive methods after marriage, compared to those without an educational attainment (50.5% vs. 36.4%, $p=0.05$). The intention to use no contraceptive method or a traditional method is significantly greater among women with no educational aspiration after marriage, compared with women having an educational aspiration.

Table 1. Percentage distribution of prospective young married women by fertility and contraceptive intentions, according to selected socio-economic and demographic covariates

Covariates	**N**	**Intended fertility (Intended number of children)**		**N**	**Intended Contraceptive Method Use after marriage (%)**				
		Mean(SD)	**p**		**None**	**pills**	**Condom**	**Withdrawal**	**P-value**
Age			NS						NS
<23	88	1.61(0.069)		87	10.3	26.4	37.9	25.3	
23-27	101	1.66(0.620)		83	3.6	28.9	51.8	15.7	
>27	91	1.52(0.825)		82	13.4	19.5	42.7	24.4	
Current Education			0.018						0.008
<12 Years	17	2.06(1.18)		25	8.0	16.0	28.0	48.0	
12-16 Years	212	1.56(0.654)		182	10.4	26.9	42.9	19.8	
>16 Years	47	1.62(0.688)		39	2.6	23.1	61.5	12.8	
Having Educational aspiration after marriage			NS						0.059
Yes	177	1.59(0.699)		102	6.9	25.5	52.9	14.7	
No	133	1.74(0.778)		75	12.0	29.7	37.3	28.0	
Uncertain*	138	1.49(0.623)		-	-	-	-	-	
Employment status			0.028						0.000
Employed fulltime	54	1.47(0.788)		53	9.4	22.6	43.4	24.5	
Employed –part-time	76	1.45(0.704)		62	12.9	16.1	56.5	14.5	
Student/ & employed	73	1.70(0.601)		71	4.2	29.6	53.5	12.7	
housewife	63	1.74(0.727)		56	10.7	30.4	19.6	39.3	
Having employment aspiration after marriage			0.04						<0.001
Yes (full-time or part-time)	195	1.55(0.709)		171	5.8	23.4	53.8	17.0	
No	60	1.75(0.582)		47	14.9	29.8	14.9	40.4	
Total	254								

Note: NS denotes "not significant". Due to missing values, the sample size employed for this table was 254.*those who were uncertain about their intention for continuing education after marriage were excluded from the analysis in this Table.

Table 1 Multivariate analysis of factors affecting the intention of new brides to have more than one child, Tehran, Iran.

Covariates	Intended fertility (=>2 children vs. =< one child)					
	Crude Odds Ratio	p-value	95% C.I. for Exp (B)	Adjusted Odds ratio Exp(B)	p-value	95% C.I. for Exp (B)
Age						
<23	1.66	0.09	0.92-2.99	2.19	0.129	0.80-6.02
23-27	2.10	0.01	1.18-3.74	5.05	0.001	1.96-13.03
>27 (Ref.)				1.00	0.003	
Current Education						
<12 Years (ref.)	1.00			1.00	0.072	
12-16 Years	0.649	0.106	0.38-1.09	0.75	0.495	0.32-1.73
>16 Years	0.973	0.936	0.49-1.91	2.82	0.130	0.74-10.76
Aspiration for education after marriage	1.59	0.131	0.871-2.89	0.58	0.228	0.24-1.41
Yes	1.00			1.00		
No (Ref.)						
Employment status						
Employed fulltime	0.36	0.008	0.17-0.76	2.71	0.168	0.65-11.20
Employed –part-time	0.33	0.002	0.17-0.66	1.44	0.576	0.40-5.26
Student/ or employed	0.86	0.680	0.43-1.74	2.64	0.151	0.70-9.90
Unemployed/housewife(Ref.)	1.00	0.001		1.00		
Aspiration for employment after marriage						
Yes (full-time or part-time)	0.318	0.000	0.168-0.602	0.252	0.043	0.066-0.957
No(Ref.)	1.00			1.00		
Total				3.05	0.140	

Cox & Snell R-square: 0.170, Nagelkerke R Square: 0.228

Multivariate analysis of educational and career aspiration in the above table shows that women who are aged 23-27 years have significantly greater intention of having 2 children or more than women who are older. Hence age is a determinant factor of fertility intention among new brides in Tehran. Moreover, women's aspiration for career, either fulltime or part-time is a significant determinant for fertility intention. So as those women who intended to work after marriage are less likely to have intention for two children or more.

Policy implications: The results of this study indicate that in Tehran, a city with a below replacement fertility level, women's employment and economic prosperity rather than educational advancement are more likely to compete with their childbearing decision.

Other results from the survey show that in general women more than men prefer having two children in their life course (52% vs. 42%). At the same time a considerable proportion of

prospective brides reported the willingness to work after marriage, although mostly part-time. This finding suggests that in response to low fertility in the country, the government should not prevent women, particularly educated ones, from getting involved in the labor market after marriage. Instead, providing flexible and *part-time* careers for women would help them to fulfill their preferred number of children (i.e., two children), while being active economically. Other results suggest that the desire to work more than the intention to advance education after marriage is associated with lower fertility intentions. Hence, advancing education after marriage is less likely to be a responsible factor for a lower fertility intention and the intention to use a contraceptive method. Therefore, pro-natalist population policies need to work further toward balancing women's roles in work and family life.

The findings of this study raise questions for further study. To what extent, in Tehran where a large portion of married women are unemployed, the labor market has the capacity to recruit women who intend to work after marriage? If these women are employed after marriage, will their income generation and saving behavior have economic consequences at macro level, compared to the scenario in which they will mostly stay at home and bear a greater number of children? In an independent study, these questions need to be addressed.

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