The Relationship between Sex Roles and Childbearing Motivation in Fertile Women, Mashhad, North East of Iran

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ABSTRACT

Introduction: This study was conducted to determine the relationship between sex role and women's childbearing motivation.
Methods: In this study 841 married female participants lived in urban society of Mashhad were recruited based on a multistage sampling from a variety of settings. Data was gathered using Childbearing Questionnaire (CBQ) and brief form of Bem sex role questionnaire. Analyzed using Pearson correlation coefficient, multiple regression test and independent t-test.
Results: Feminine sex role was in significant relationship with positive childbearing motivation (p=.001). Masculine sex role have no relationship with both childbearing motivations. ANOVA showed a difference between the motivations in four groups of participants divided based on sex role scores. LSD test shows that positive motivation in android (p=.013) and masculine (p=.012) groups were significantly less than feminine group. Negative childbearing motivations in feminine group was less than in UN-differentiate group (p=.014).
Conclusion: Multiple regression analysis show that positive motivation was in relationship with the feminine sex role and reverse relationship with marriage age. Reproductive health policy makers and family planning counselors can apply study findings in order to plan perfect programs to direct proper fertility behaviors in the society.

Introduction

Fertility has complex and mutual relationship with mothers, children and families' health. Previous studies showed an increase in maternal and child mortality and changes in many other community health indicators along with multiple, early and late pregnancies and short distance between births (1). Fertility is not only a medical issue, but also forms the basis of population changes and influence the process of communities' development (2). Accordingly, the study of reproductive behaviors ,trends and their consequences are very important and needed in communities and must considered on the agenda of policy makers and planners constantly. Statistics indicate that, in Iran, total fertility rate has lowered from 7.7% in 1966 to the replacement level in 1998-2000 (3,4) and based on the national census, conducted in Iran, total fertility rate has lowered to 1.68 % in 2015 (5). So far, numerous studies have been conducted in the world to explain the variation trends of fertility phenomenon and related factors (6-13). From factors that influencing fertility changes in recent years in the country can be attributed to the factors such as age of marriage (8) type of relationships and

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interactions between spouses (12), women empowerment (11), media, Increasing of maternal age in the first pregnancy, increasing coverage of contraceptive use, governmental, educational and health policies, infant mortality reducing, religious authorities support, economic and social factors such as women's participation in the workforce, level of women's education, religious tendencies and religious beliefs, family income and individual factors, social norms, and attitudes related to childbearing and role of social interactions(6-16). Despite that many of these studies show the impact of various factors on fertility, the role of individual choices on childbearing is stronger than the past in many countries (17). Individual's motivations on fertility have an important role in shaping the fertility behavior and in predicting real fertility. Motivation is an internal force that causes a certain behavior in person. Positive Childbearing Motivation Includes personal reasons for wanting children and Negative Childbearing Motivation Including the reasons for not wanting children (18).

by identifying factors that influence the individual 'childbearing motivation, it may be possible to predict the fertility trends on the basis of changes in these factors and in this way, the appropriate interventions for fertility control can be designed (19).

Socio-cultural theories indicate that fertility is influenced by various factors such as gender roles, sense of satisfaction, hedonism, religion, and particular social norms and other norms (20). The word "Sex" points to biological aspects of being male or female and "gender" points to behavioral, social and psychological characteristics of men and women as feminine or masculine (21). Gender roles are defined based on a combination of social and behavioral norms, which are considered as proper social and interpersonal behaviors for women or men (22). Ericsson (1959) believed that one of the major changes during the process of growth is the formation of people's gender roles (23). Bandura (1963) believed that from the behavioral perspective, boys are encouraged to do male normative behaviors and girls are encouraged to do female normative behavior and the behavior of their same-sex parent (24).

Differences in gender roles are the result of different people's experiences in the path of their socialization. More social experiences of girls focused on motherhood in different cultures (25). In a study by Khadivzadeh (12), an important reason for delayed child bearing was being unprepared for playing maternal or paternal roles in spite of having childbearing motivation. Also, one of the most important reasons for this delay was the multiple roles of women (14). Papadimitriou study (2008) in Australia showed that in women, more feminine sex role was associated with more motivations for having a child. In that study the women's main reasons for the delay in childbearing or unwillingness to it, were the fear of losing freedom, spontaneity, and time commitments for favorite activities and their job duties. Her study suggests that participants with higher scores on masculinity valued children less positively (26).

Socio-cultural changes in recent decades affected various areas of life, such as employment, childbearing, leisure and other. Modern communication technologies with different messages have played a major role in social and cultural change, including changes in gender roles (27).

Considering dearth of research about the role of feminine and masculine traits in people's childbearing motivation and the country's economic, social and cultural developments in recent decades that affects the females' role, this study was conducted to determine the relationship between gender roles and childbearing motivations in fertile women of reproductive ages living in Mashhad urban areas in 2014-2015.

Materials and Method

In this cross-sectional study, 841 married women with age of 15-49 years old lived in Mashhad urban areas for at least recent three years were recruited based on convenient method of sampling. They were selected from 10 health centers and 5 hospitals in Mashhad in 2014-2015. All study procedures were approved by the university ethics committee and permission to conduct the study was granted. The study settings were randomly selected from the whole related lists and eligible women were recruited using convenient multi-stage sampling. After explaining the purpose of the study and explaining the confidentiality of results, participants signed the research consent form and completed research questionnaires including demographic questionnaires, Miller's (1995) Childbearing Questionnaire (CBQ)(28) and Persian version of the Bem's short form Sex-Role Inventory (BSRI) developed by Bem in 1971(29) CBQ has two subscales and measures Positive Childbearing Motivations (PCM) and Negative Childbearing Motivations (NCM). So each person acquires two mean score of Miller's Questionnaire subscales. Positive Childbearing Motivation (PCM) which is

measured by 28 items, including personal reasons that the person wants child. PCM subscales included "satisfaction of childbearing"; "feeling needed and connected"; "instrumental values of children"; "traditional parenthood"; and "joys of pregnancy, birth and infancy" (18).

Negative Childbearing Motivation (NCM) measured by the 21-items. This subscales are identified as "discomforts of pregnancy and childbirth", "fears and worries of parenthood", "negatives of child care", and "parental stress". Persian version of the short form Bem Sex-Role Inventory containing 30 questions that included two parts of feminine traits and masculine traits. In Iran its validity was checked and approved by Ali Akbari and et al (2012) (21).

Based on the scores of two parts of feminine and masculine traits of BSIR, subjects were divided into four features: dominant feminine, dominant masculine, androgynous and undifferentiated. Those who obtain the scoring above the median from feminine and scoring less than or equal the median from masculine, have a dominant feature of feminine and those who obtain the scoring above the median from masculine and scoring less than or equal to median from feminine, have a dominant feature of masculine.

Those who gain scoring above the median on both scales have androgynous traits, those who gain scoring less than or equal the median on both scales known as undifferentiated according to Bem Questionnaire Guide. In this study, participants were marked their response about each item on a rating scale, from strongly agree to strongly disagree. Data on demographic characteristics, reproductive histories and participant's childbearing intentions and behaviors were gathered by a self-report questionnaire.Data analysis was performed using SPSS 16 software.

In the case of normality, parametric statistical methods and otherwise non-parametric equivalents were used.The Pearson correlation test was used to investigate the correlation between gender roles and childbearing motivations. Multiple linear regression analysis was used to separate the effects of age, marriage age and years of education from gender role's effect. The independent t- test was used to compare the quantitative data between the two groups. One-way ANOVA and LSD tests were used for comparing three groups or more.

Results

The mean age of participants was 31.72±8.34 and the mean of marriage age was 20.16±4.14. Some 10% had primary education or less, 54.8% had secondary and high school education and 35.2% had university education. The mean of child number was 1.60±1.12. The frequency of masculine, feminine, androgynous and undifferentiated sex roles in participants were 14.5%, 15%, 35.8% and 34.7% respectively. Findings showed that scores of feminine sex role had positive significant correlation with positive childbearing motivation scores but did not have any obvious relationship with negative childbearing motivation scores. There was not any significant relationship between masculine scores with positive and negative childbearing motivation scores. Also feminine score had a significant positive correlation with the actual number of children (r=0.92, p=0.008), the ideal number of children from the women's perspective on marriage (p=0.003, r=0.104) and the ideal number of children at the time of study (p=0.001, r=0.118). Table 1 shows the correlation between the scores of positive and negative childbearing motivations sub-scales and the scores of feminine and masculine scales.

Table1. Correlation between scores of positive and negative Childbearing Motivation (and their subscales) and scores of feminine and masculine scales

The mean and median of feminity scores were 59.18±8.85 and 58 and the mean and median of masculinity scores were 54.29±8.79 and 52 respectively. The mean score of positive childbearing motivation was 95.52±13.01 and the mean score of negative childbearing motivation was 54.51±8.53. The mean score of participants' childbearing motivation based on their sex role is demonstrated in table 2.

Table 2. The mean scores of positive and negative childbearing motivation in women with feminine, masculine, androgynous and undifferentiated traits

ANOVA test shows a significant difference in the scores of positive childbearing motivation between four groups of participants that had been divided based on sex role features. L.S.D test showed that these scores in the masculine traits group are less than those in the both feminine (p=0.012) and androgynous (p=0.013) groups.

Also ANOVA shows a significant difference in the scores of negative childbearing motivation that were divided to four groups based on sex role features. The L.S.D. test showed that negative childbearing motivation in feminine traits group is significantly lower than undifferentiated traits group (p=0.014).

The ANOVA showed a significant difference in the number of wanted pregnancies that were divided into four groups based on sex traits. L.S.D. test showed that the number of wanted pregnancies in the undifferentiated group is less than the masculine traits group (p=0.035).

The number of unwanted pregnancies in groups with feminine traits (p=0.001) and masculine traits (p=0.013) were significantly higher than undifferentiated group. ANOVA showed a significant difference between four groups

in ideal child number at marriage. L.S.D. test showed that ideal child number at marriage are significantly higher in masculine (p=0.008) and feminine (p=0.017) groups than undifferentiated group, while the ideal child at the present time had no significant difference between the four groups.

The ideal distance between marriage and first child's birth from the perspective of participants showed no significant difference in four groups. But ideal distance between the first and second child from the perspective of undifferentiated women was significantly more than androgynous (p=0.001) and masculine (p=0.01) groups.

Table 3 shows that there is a significant correlation between scores of the thirteen items of the positive childbearing motivation scale and feminine sex role scores. Higher scores of feminine sex role were opposed with three items of negative childbearing motivations that was listed in Table 3.

Masculine trait scores had a significant inverse correlation with one item of negative childbearing motivation scale included" feeling guilty and inadequacy as a mother ".

Table 3. Correlation between scores of Childbearing Motivation items with the scores of feminine sex role

In order to determine variables that may be associated with positive childbearing motivation (such as level of education and marriage age), a correlation test was performed. There was no correlation between positive childbearing motivation and age (r= -.046, p=.172), marriage age (r=-.034, p=.200) and education (r=-.024, p=.274). In the next step feminine and masculine scores and all mentioned variables were included in multiple regression analysis In multiple regression analysis (table 4) positive childbearing motivation was in positive relationship with feminine subscale scores (P=0.000) and in reverse relationship with masculine subscale scores (P-0.011). There was an inverse correlation between "Negative Childbearing Motivation" and marriage age (r=.140, p=.000) and had no correlation with age (r=-.036, p=.172) and education (r=-.024, p=.274).

In the next step feminine and masculine scores and all mentioned variables were included in multiple regression analysis. In multiple regression analysis (table 5, Adjusted R Square =.023, R Square=.030) the score of NCM was not in relationship with feminine and masculine subscale scores, but it was in positive relationship with marriage age (P=0.001).

Table 4. Multiple regression analysis of factors related to PCM

Table 5. Multiple regression analysis of factors related to NCM

Discussion

This study aimed to investigate the relationship between women's trait of gender roles (that include both male and female roles) with positive and negative childbearing motivations in women. The results of this study showed that Feminine sex role was in significant relationship with positive childbearing motivation and had reverse relationship with marriage age.

Masculine sex role have no relationship with positive and negative childbearing motivations. There was a difference between the motivations in four groups of participants who were divided based on sex role scores. Positive motivation in android and masculine groups were significantly less than feminine group. Negative childbearing motivations in the feminine group was less than un-differentiate group.

As the present study showed that feminity is positively associated with "positive childbearing motivation" and there is no correlation between "negative childbearing motivation and feminity. that were consistent by Papadimitriou in 2008, Gerson in 1980, Fam in 1987 and Hanin in 1987 (26,31,32). Also, Blake (33) has argued that the feminine role encourages childrearing for the women that were in line with our findings (33). On the other hand, Miller (1981) found that gender role was strongly associated with positive childbearing motivations in women (34).

There are some other studies such as the study of Malhotra in 2012 (37), Sowell et al (35) and Warren (36) that explore the fertility-gender connection and concluded that child-bearing motivation is associated with gender role(35-37). In the present study there was no relationship between masculinity scores with positive and negative childbearing motivations that is similar to results of Papadimitriou study in 2008 in which there was no correlation between masculinity and motherhood motivation (26). The qualitative study by Papadimitriou (2008) showed that men's and women's beliefs about gender roles had no effect on their fertility (26). In this study, male and female roles were defined as being a breadwinner and a house-keeper/child-bearer, respectively. Considering the different findings of qualitative and quantitative findings of her study, in comparing these results, it can be concluded that asking these questions is not the appropriate method to determine the participants' gender beliefs. In Hoffman& Wyatt (1977) study, women who perceived themselves as possessing to a greater degree the socially desirable traits stereotypically associated with the masculine role had fewer children than women who perceived themselves as more stereotypically feminine on these traits that are inconsistent with this study findings (25). Qualitative Study by Khadivzadeh et al also showed that acceptance of roles who are traditionally defined for men and women in the family and society, is associated with higher fertility (38). In this study, feminine gender role scores has a direct and significant correlation with all subscales of positive Childbearing motivations except for the "Instrumental values of children" and also has significant negative correlation with two subscales of negative childbearing motivations including "discomfort of pregnancy and childbearing" and "Fear and worries of parenthood". The results also suggest a link between masculine gender role scores with two items of positive Childbearing be applicable

including the "desire to prove the fertility" that are consistent with findings of qualitative study of Khadivzadeh (39). This study revealed a significant positive correlation between feminity trait scores with desired number of children and ideal number of children that is in line with Davis (40) and Blake (1969) studies(33, 40).

Also Miller (1981) found that the main motivational thrust for childbearing moves from gender role, through the desired and ideal number of children that is consistent with findings of this study (34). In present study there was no correlation between positive childbearing motivation with age, age at marriage and age at first childbirth, but in the study by Isiugo-Abanihe UC age at marriage was significantly related to lower desire to childbearing and smaller actual family size(41).

This study showed that positive childbearing motivations are inversely associated with marriage age and level of education. Previous studies have investigated the relationship between level of education and positive Childbearing motivations. However, in multiple regression analysis, the effect of education was removed, but there were a direct link between the feminity scores with positive Childbearing motivations. In Papadimitriou's study age and education level had inverse association with motherhood motivation that was consistent with our results (26).

Also in studies done by Janowitz, 1976; Ryder & Westoff, 1971 Childbearing motivations have an inverse relation with age at marriage and education (30, 42). In the present study positive childbearing motivations were not associated with age whereas negative Childbearing motivations were inversely associated with it. Previous studies such as Pearce (35) and Kemkes (2003) studies showed that the motherhood's motivation was higher in older women (43, 44). In the present study negative childbearing motivations increased with increasing at marriage's age. One of the reasons for negative motivation in women who married later, may be are the broad approach of media and health care providers in order to increase public awareness of childbearing's risks at older ages. Because of limitation in sampling, the results cannot be applicable in rural places and other city of Iran.

Conclusion

The findings of this study shows the relationship between one of the important behavioral, social and psychological individual's features meant women gender role in formation of childbearing motivations that with regard to little evidence in this field, these findings added to existing knowledge about gender roles and it's relation with the childbearing motivations and help to understand its impact on fertility trends changes in Iran urban communities. Results of this study can be used by health care providers, reproductive health and family planning advisors and also by population and reproductive health planners and policy makers in the country.

Acknowledgments

Conflict of interest

No Conflicts of Interest.

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