Tehran's second demographic transition, yes or no

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Abstract: This article is adapted from a research to examine the manifestation of second demographic transition. The sights of demographic transition have been engaged in increasing age at marriage, the increasing use of contraception, change in family structure, increase of non-nuptial birth and agreement units as the manifestation of the second demographic transition. The population change and its impact on population policy of societies is of the most important issues which should be put under serious study in the developed and developing countries including Iran, and the changes of fertility is one of the issues that lack of attention on can have bad effect on society in future. According to the population transition theory after passing the transition (High fertility, low morality), countries come to the terms that both fertility and morality would be balanced. In the late nineteen century many French scholars remembered the significant changes which had been occurred during the population transition in the county. These changes were discussed/ considered by Van de Kaa and Lesthaeghe later.

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The research of the manifestation of Tehran's second demographic transition

This article is adapted from a research to examine the manifestation of second demographic transition. The sights of demographic transition have been engaged in increasing age at marriage, the increasing use of contraception, change in family structure, increase of non-nuptial birth and agreement units as the manifestation of the second demographic transition. The theoretical framework of the research is based on the concepts of the second transition especially Van de Kaa's viewpoint and the variables of research hypothesis also aimed to examine the relationships which have been defined in the analytic platform of the second population transition. Statistic society included the married women of second and eighteenth areas of Tehran. The statistic sample size estimated with respect to the effect of sample plan based on a random equal to 384 units. The measurement research and data collection procedures of interview are structured. The results of data analysis and also the hypothesis testing indicating that the important manifestation of population transition in Tehran confirmed statically such as average increase at age in the first marriage, the increase of gap between marriage and motherhood, increase of separation, and tendency to devorse of the rate of obligatory marriage but the age, look, and behavioral differences among residing women of more developed and less developed areas of Tehran is not significant. The research findings emphasized on the appropriate population policy in line with making appropriate measures to reduce the effect of abuse of the second population transition such as increasing vulnerable women and children.

Posing the question

The population change and its impact on population policy of societies is of the most important issues which should be put under serious study in the developed and developing countries including Iran, and the changes of fertility is one of the issues that lack of attention on can have bad effect on society in future. According to the population transition theory after passing the transition (High fertility, low morality), countries come to the terms that both fertility and morality would be balanced. In the late nineteen century many French scholars remembered the significant changes which had been occurred during the population transition in the county. These changes were discussed/ considered by Van de Kaa and Lesthaeghe later. According to Van de Kaa and Lesthaeghe, balance of fertility and morality was impermanent in the level of substitution/succession. Finally countries that achieved level of development after passing the first population transition would experience the fertility below succession level that the experience itself has been attending to the essential changes in the level of society, family, and fertility.(Lesthaeghe and Van de Kaa, 1986).

Our country was not exceptional from global cause as experienced the economic and cultural changes, according to survey in 1385 the total rate of fertility (2/1) has been reached to the level of substitution, it has been a few years since then it should be reached the below of substitution level with the total rate of fertility about 1/9-2.(Saraee1389).

The important point is that all groups of our society are not effected equally by changes in western society. Therefore, these changes have not equal effect in the nature of Iranian family in all groups, such as, increasing age at marriage, increased tendency to celibacy, changing attitudes, increased family conflicts and divorce, decrease of moral compatibility and the weakness of family effectiveness in regulating sexual behavior, care and support, supervision and control, mental peace creation and satisfaction of emotional needs, socialization and moral education are the important problems of family in society.

The second population manifestation will be studied due to answer these questions, 1-whether Iran has been entered the population transition phase or not? And whether the second population transition circumstances have been settled in Iran or not?

The background of research and theoretical facts

In many countries some inquisitions have been done relating to the research which would be mentioned one by one and finally it has been considered to the development of theoretical facts and to the difference of present research with sum up the research background.

-Lesthaeghe (1995) the second population transition in the western countries (Lesthaeghe, 1995:17).

-Solsona (1997), the second population transition from sexual/generic viewpoint.

-Van de Kaa (2002) his study as the contemplation/thought of second population transition in the industrial countries.

-Lesthaeghe and Neidert (2006) second population transition in the U.S. (Lesthaeghe and Neidret, 2006:669).

-Hasan Saraee (1376) the first population transition of Iran.

-Hasan Saraee (1389) second population transition with glance in Iran.

-Abbas Shavazi and Asgari Nadoushan (1384) family changes and fertility decrease in Iran.

The present research has made in Iran for the first time and the existing researches in the areas are more in form of statistics and the articles which have been compiled by university professors.

This is while the severe and continuous decrease in population in other countries of the world has caused many studies to be carried out about this issue.

The findings gotten from most of these researches reveal the entrance or remaining in the threshold of the second population transition by developed and industrial societies.

However, the studies carried out indicating that despite maintaining their traditional behavior of fertility in some countries such as Russia population decrease is being experienced non-periodically. While, in some European countries, population decrease is more specific and fixed. The studies carried out in our country support that Iran is in a situation similar to Russia (with considering not the age pyramid and economic and social situation) and despite the protection of relative values and traditional belief, Iran is experiencing the reduction of fertility and entering the second population transition.

-Theoretical facts

During the nineteen century, after first transition and changes in fertility and mortality level/ areas French researchers found out the reduction /decrease of marital fertility rate and the number of children by the observation of some changes in families. This is what later has called population revolution. Dumont is one of the researchers who discusses the increase of social mobility following the reduction of fertility rate in his studies.

Bungart mentioned in his article: the decrease of fertility will be adjusted to the decrease of mortality by people gradually because the old balance of population has ruined and new balance has been created with low level fertility and mortality. And if fertility rate stays at a low level in future, the size of population would be reduced rapidly.

After the studies, the concept /sense of the second population transition in developed and industrial countries and with the fertility under substitution level discussed and used by Van de Kaa (1986) and Lesthaeghe (1998) for the first time.

The concept /sense enacted to explain the population changes in the western country after 1950 and its first signs observed with the increase of divorce rate specially in the United State and Scandinavian countries.(Lesthaeghe et al, 2006:3).

In this condition the rate of mortality was more than birth and senility increased, the number of women decreased in gestational age, and fertility reached under the substitution level.

Continuity of fertility decrease and its impact on age structure caused the decrease of labor force in this condition until they forced to remove / rectify their labor shortage from the south Europe, Turkey, and Morocco. Therefore, a new wave of emigration was created in Europe.

After these changes Lesthaeghe and Van de Kaa used the meaning / concept of second population transition as the framework the explain the significant /sizeable changes of the family and also the changes caused by the sudden and numerous reduction of fertility in west Europe in 1960s. (Van de kaa 2002:5).

Phases of second population transition

Lesthaeghe determines three phases in second population transition as it has been occurred in central Europe.

The first phase is between 1955 to1970 included three elements. 1-there are some factors that speed up the increase of divorce process. 2- The population explosion has ended, marriage duration has reduced and fertility had perceptible reduction in all ages in due to the revolution in contraception device/tools especially new hormonal contraception and also revival of IUD. 3-reduction in marriage age which had begin between 1880-1920 pulled in and the percentage of married people under 25-year-old can be observed significantly.

The second phase which is between 1970-1985 shacking up before marriage increase in many European areas, and the high percentage of shaking up to compensate the decrease in marriage rate. Also nonmarital (illegitimacy) fertility increased out of matrimony/marriage units.

The third phase occurred from mid-1890 onwards and determined in its higher level with the increased divorce rate, and it emphasized/ caused the decrease of remarriage either for divorced or widows persons, and living in isolation after marriage substituted the marriage as new aspect of life which has effect on fertility after thirty-year-old. Almost all western countries (non all of them) have been reached this phase and the Mediterranean countries are in the second phase (Solsona 1997:172).

Lesthaeghe also expresses some of the influential characteristics on fertility behavior of the phase as follows:

1- Education improvement and economic independence of women. 2- an increase in economic aspiration and consumerism which follows by the increase in women's employment as that of men. 3- an increase in men's and women's investment for developing a job and a competition which is created between them in terms of career. 4- enhancement of materialist ideas and post attitudes. moral independence and free choice. 5- Greater emphasis on quality of life especially more importance on leisure time. 6- an increase in divorce (Lesthaehge 1980:532).

According to Solsona, second population transition considers the changes in sexual relations as a conceptual framework and discusses the important changes which occur in family under this title. In family relationships there are some negotiations and talks behind any decision about having or not having children, marring or not marring in which individuals expectations (men and women) and their bargaining power seems to be important. In second population transition there have been made significant changes in family relationships, and the mutual bargaining power has been shared equally. As women being free from the patriarchal domination caused their decisionmaking power increases the matters relating to family formation and marriage (Solsona 1997:175).

The theoretical framework of research

It's dead clear that the existing theories proceed to examine and analyze the existing phenomenon of the society from a specific window each and none of them can submit a comprehensive explanation of social issues.

Among different theories, Solsona's theory emphasizes more on the power structure in the family and that of the Lestaq's on divorce phenomena and preventing the fertility and improving the means of contraception. It seems Van deKaa's theory is more comprehensive compared to the rival's theories from the aspect of having more explaining variables especially in the family's area. Therefore this theory is used to compile the theoretical model.

According to Van deKaa's theory, the most emphasis is on modernization impact (urbanization, medical advances, education, etc.) in the first demographic transition but the emphasis has been on the family changes and the complete control of fertility and the lack of couples' incentive to have a baby and also postponing the act of delivering a baby which caused the fertility to reach below the level of replacement.

In the second demographic transition, in addition to the impact that technological innovations have on fertility (in contraceptive methods and surgery), a more important change has occurred in people's thoughts and beliefs about fertility and the emphasis on people's individual value and isolation has played a significant role in decreasing fertility. In the second demographic transition, both fertility and death take the normative influence from the society's industrialization. The results of these changes are the change in value systems, individual's freedom and people's right to choose (Van deKaa, 2006:62).

According to Van deKaa's theory, some variables such as a decrease in marriage rate and avoiding compulsory marriages, an increase in women's age in the first marriage, an increase in separation and divorce rate, delayed childbearing from marriage and an increase in mother's age in the first marriage till the mother's age in the first child birth, tendency to certain childlessness, a decrease in unwanted fertilities and planning for childbearing using modern means of contraception and attempted abortion are some of the manifestations to enter the second demographic transition stage. According to this, we have tried to use Van deKaa's theory in the present study due to engagement of more extensive variables and approaching to studying area more. We have also tried to consider some of the mentioned manifestations of the second transition in this evaluated theory about Tehran.

The hypotheses of the research

- The number of compulsory marriages (having the authority to choose the appropriate mate or not) in areas 2 and 18 is different in terms of statistics. - There's been a significant difference between the rate of tendency to divorce in Tehran's areas 2 and 18 in the past few years.

- The difference between women's age in their first marriage is significant due to more facilitated areas and less advanced ones in Tehran.

- The mother's age gap in her first marriage compared to the mother's age in her first child birth is different in Tehran's 2^{nd} and 18^{th} areas.

- It seems that attempted abortion rate is in a different level in Tehran's 2^{nd} and 18^{th} areas.

The research methodology

The methods to research tools and collect data

Research method is gauging and the data from structured interview and a questionnaire with structured interview technique is used in order to gather data

- Statistical society, sample volume, and the method to sample the statistical society include the total of married women whose marriage age has passed over 5 years and are the residents of Tehran's 2^{nd} and 18^{th} areas.

Women population in the 2^{nd} area is 303432 and in the 18^{th} , 153187. The sample volume is determined to be 384 people using Kokran's formula, 255 individuals of whom are from the 2^{nd} area and 129 individuals from the 18^{th} . Sampling method is plausible and racemose sampling method is multi – phased and coincidental.

Lasting or reliance and justification or credit of the tools to collect data

In the current study, a pre-test is used in order to solve insufficiencies and ambiguities of the questionnaire. Validity analysis of some has been also done according to internal permanence using "Kron Bach's" Alfa validity analysis. Moreover, when examining the lasting of the tools which gather data, the "test - retest" method and Spearman's statistic were used. In order to measure the credit, first the designed questionnaire was submitted to connoisseurs so that they could comment on issues including the questions intelligibility, comprehensibility and considering all the index aspects, the questions strength, a logical relation between them and also the harmony of designed remarks in terms of convergence or any other index.

Describing the research variables

In the current research, 66 percent of the women in the 2^{nd} area and 34 percent in the 18^{th} have been under investigation. The average age of these women is 37 and most of them are between 30-34 years old. Most of these women have gotten married when 20-24 and the age average of marriage has been 21 in the 1^{st} time. Most of these women have been literate and more than half of them are academically educated. These women's job condition is appropriate since more than half of them are working. In terms of outcome, these women are considered to be in the average row. Their pregnancy condition revealed that the majority (80%) have experienced pregnancy. These women's age average has been 23. About 77 percent of the women under investigation have children. The examinations showed that 77% of the people who don't have children utilize the means of contraception. This condition for the women who have children has been 52% before bearing a child. The women keep on using the means of contraception after bearing a child and nearly the majority (81%) takes advantages of these kinds of tools. The examination of the means utilized to prevent pregnancy revealed that most women take contraceptive pills. These women nearly equally have called "the delay and unwillingness to get pregnant" their incentives to use the means of contraception. To examine the years of postponing pregnancy after marriage showed most of these women postpone their pregnancy between 1 to 6 years after marriage. The average of these years has been 3. Investigating the number of children belonging to the women under examination revealed that more than half of these women have one or two children and nearly one fourth (a quarter) have no child. The number of children over 3 years old is 6 percent. The examination of tendency to certain childlessness showed that most women have a little tendency to it and nearly 13% expressed their tendency. Women's tendency to abortion was often average. The examination of unwanted pregnancies revealed that nearly 10% had this experience and among these, more than half of them have attempted abortion. The result of the respondents' tendency to divorce showed that nearly half of them have been willing to. The examination of the compulsory marriages condition reveals that the majority have reported the obligation in marriage less. Only 12% have considered this issue in high level in their marriage.

The total condition of variables under examination in two Tehran's downtown area (18^{th}) and uptown area (2^{nd}) (describing):

To examine the age condition of respondents in these two areas showed that most of the women inhabiting the 2nd area are in two age groups 25- 29 and 30- 34 and the women living in the 18th area are in age groups of 30- 34 and 35- 39. Women's age condition when getting married revealed that 62% of the ones inhabiting the 2nd area are between 20 and 24 years old when getting married. The women residing in the 18th area include 38% of this age category and the women living in the 2nd area, 62%. The women inhabiting the 18th area have gotten married more when they were 15 to 19 years old in comparison to those in the 2nd. The examination of respondents' literacy condition showed that more than 97% of the

women inhabiting the 2nd area are literate and less than 3% were illiterate. Examining the same conditions in the 18th area also showed 96% of the respondents were literate and about 4% were illiterate. The conclusions drawn from the job condition revealed that 65.6% of the women residing in the 2^{nd} area were working, while most of the women inhabiting the 18th area were housewives. 41% of women's first pregnancy age living in the 2^{nd} area was between 25 and 29, while 40% was between 20- 24 in the 18th area. No respondent over 35 was pregnant in the 2nd area. The comparative examination of the number of the children in the 2nd area showed that both areas are somehow the same due to the number of children. The amplitude in the number of the children is related to one or two children. The examination of income condition showed more than half of the people in the 2^{nd} area (50%) are in the average group and more than half of the respondents in the 18th area are placed in a low category in terms of income. The examination of the age average when getting married in both areas showed that the averages are nearly the same in both areas. Women's education condition in both areas revealed the level of educated women in the 2nd area is higher than that of the 18^{th} . The job condition also showed the women in the 2^{nd} area have more careers compared to those in the 18^{th} . Therefore, the income of the women inhabiting in the 2^{nd} area is higher.

The result of hypothesis examination:

The examination of the number of compulsory marriages between Tehran's 2^{nd} and 18^{th} areas

Van de Kaa has considered compulsory marriages in his theory. This issue is in influenced by the changes created in life relations specially women's freedom from patriarchy system which is followed by the increase of decision- making power. This is apparently seen in our country considering the changes occurred in the society specially girls' education development.

Table 1: The results from Mon Vitni's test and kolmogorov to examine the difference of compulsory marriages averages in Tehran's 2nd and 18th areas.

Amount	Statistics
12179.5	Mon Vitni
1.587	Kolmogorov
0.000	Implication level

The conclusions drawn from Mon Vitni's test and Kolmogorov reveal that there's 95 % statistical implication difference among the women in the 2^{nd} and 18^{th} areas in certainty level in terms of the marriages which are compulsory. That's because the concluded sig (0.000) is less than (0.05). Therefore the rate of compulsory marriages among the respondents of the 2^{nd} area has been much much less than that of

the 18th. 69% of the marriages in the 2nd area has been compulsory in a low level. However, this amount has been 52% which is less than that of the 2^{nd} . On the contrary, the resulted data shows this difference that the compulsory marriages in the 2^{nd} area (9%) in a high level is less than that of the 18th (20%). The concluded averages in these two areas also confirm this. Compulsory marriages average in the 2nd area is 175 and in the 18th, 222. In other words, the relations from compulsory mood in the 2nd area are toward freedom in the marriage relations. Therefore, some considerable changes have been seen in the rate of compulsory marriages of both areas. This issue is related to a difference in women's education level of the 2nd area and also an increase in their individualism and working in comparison with the women in the 18th area. As a whole, considering these data, one can phrase that the research hypothesis saying "there's a difference between the compulsory marriages rate in the 2nd and the 18th areas" is confirmed.

The examination of the hypothesis to research the divorce tendency in Tehran's 2^{nd} and 18^{th} areas

The tendency to divorce in the 2nd population transition is of very important issues that Van DeKaa has considered in his theory. This is affected by factors such as an increase in sexual relations out of family framework, a decrease in marital emotions, etc. This phenomenon is also observed in our country noting numerous cultural and social factors including relatives' system weakening, a decrease in divorce awkwardness, women's financial independence, etc.

Table 2: the results concluded from Man Vitni's test to examine the difference between divorce tendency averages in Tehran's 2nd and 18th areas

Statistics	Amounts
Man Vitni	14471
Implication level	0.044

The results concluded from Man Vitni's test reveal that in terms of the amount of tendency to divorce, there's 95 percent implication level difference among the women in the 2^{nd} and 18^{th} areas in certainty level.

That's because the concluded sig (0.044%) is less than 0.05.

Therefore the amount of tendency to divorce among the respondents in the 2^{nd} area is much more than that of the 18^{th} . Most respondents in the 2^{nd} area (44%) have a lot of tendency to divorce, while the amount of tendency to this phenomenon is in average limit (42%) in the 18^{th} area. The concluded averages in the two areas also confirm this difference. The tendency to divorce average in the 18^{th} area is 177 and the 18^{th} , 200. Therefore there is a considerable difference in tendency to divorce in both areas. This issue is related to financial independence difference, considerable decrease in divorce awkwardness, individualism, etc. of the women in the 2^{nd} area compared to the ones in the 18^{th} . All in all, noting the collected data, one can say that the research hypothesis "there is a difference between the two areas in terms of the amount of tendency to divorce" is confirmed.

Hypothesis examination of women's age comparison when marrying in Tehran's 2nd and 18th areas

Marriage age increase in the 2nd demographic transition theory includes significant issues which have been considered in Van de Kaa's theory. In his view point, the increase in marriage age is influenced by different factors including pre- marriage sleeping, etc. However, this phenomenon is to a great extent influenced by men's economic weakness, unemployment, and not having the ability to afford to make a home and also ladies' tendency to educate in our country which has caused an increase in marriage age to a great extent.

The "shack- up" discussion to which Van de Kaa points out is in low level in Iran these days. This issue is of course observed in other phenomena such as a girl and a boy's emotional emotions out of parents' control to a great extent.

Table 3: the conclusions drawn from Mon Vitni's test to examine the difference in women's age average when marrying in Tehran's 2nd and 18th areas

Statistics	Amount	
Kolmogorov	1.257	
Implication level	0.085	

The conclusions drawn from Kolmogorov test reveal that there is not a considerable statistical difference between the women in the 2nd and the 18th areas in terms of certainty level of 95% due to marriage age averages. This is because the concluded sig (0.085) is more than 0.05. More than 62% of the women inhabiting the 2nd area have gotten married when 20- 24 years old. This is while most of the women residing in the 18th area had gotten married when 20- 24 and 15- 19 years old. The fewest percentage of marriages in the 2nd area belongs to the women who are 35 years old or more (12%) and to the age group less than 14 years (1.5%). The averages concluded from both areas also confirm the lack of difference. Women's age average in the 18th area when marrying is 195 and it's 191 in the 2nd. Therefore, there is not any remarkable difference in aging in both areas when marrying. It can be mentioned that the factors that increase the age of marriage is various in different areas. An increase in a girl and boy's relations, an

increase in tendency to develop education in academic levels, in the 2^{nd} area and economic reasons such as unemployment in the 18^{th} are the causes of the issue mentioned above. All in all, due to the collected data, we can express that the research hypothesis saying "there's a difference in terns of women's age in the 2^{nd} and 18^{th} areas when marrying", is not confirmed.

To examine the hypothesis of researching the mother's age gap in the 1^{st} marriage to the mother's age in her 1^{st} child birth in Tehran's 2^{nd} and 18^{th} areas

Table 4: the conclusions drawn from Mon Vitni's test to examine the difference between mother's age gap averages in the first marriage to mother's age in her 1st child birth in Tehran's 2nd and 18th areas

Statistics	Amount
Mon Vitni	8687.5
Implication level	0.612

Another feature of the 2nd demographic transition based on Van de Kaa's theory is "the increase in marriage period until the birth of the 1st child". Because of women's tendency toward education and entering labor market and prioritizing child bearing after education and labor in the recent years in our country, we've seen the postponement of pregnancy after marriage during the first few years of married life of the couples. This issue is more common in a metropolitan city such as Tehran, hence considered this implication of Van de Kaa's theory in Tehran's two areas in the current study.

Due to the survey carried out among the women inhabiting the 2nd and 18th areas, there's not any considerable statistical implicating difference in 95% of certainty level due to mother's age gap in the 1st marriage until the mother's age in the 1st child birth. That's because the concluded sig (612%) is more than (0.05%). The most percentage of individuals in both areas between less than 5 years and the least percentage of more than 10 years old have postponed their pregnancies. As it is apparent, there can be no considerable difference among the women inhabiting these two areas in terms of the existing percentages. The concluded averages in the two areas also confirm the lack of difference. The difference average of these two events in the 18^{th} area is 141 and in the 2^{nd} , 145. As a result, the research hypothesis saying "there's a considerable difference between the mother's age gap in the 1st marriage and the mother's age in the 1st child birth" isn't confirmed. Hence, there's no considerable difference between the two areas and most women have postponed their pregnancies for 5 years, top. The hypothesis examination of surveying the tendency to the certain childlessness in Tehran's 2^{nd} and 18^{th} areas. According to Van de Kaa's theory, there's more emphasis on the modernization (city dwelling, medical

developments, education, etc.) impact on the society in the 1st demographic transition, the emphasis is on the family's changes, the complete control of pregnancy and the partners' lack of motivation to have a child, etc. which caused pregnancy to get below substitution level. In this demographic transition, a more important change has occurred in addition to the impact the technological initiatives (in survey and contraception) have on pregnancy and that change has been about the pregnancy in the society individual's minds and thoughts. An emphasis on individuals' values and their isolationism plays a significant role in decreasing pregnancy and a tendency to a certain childlessness in this term.

Table 5: the conclusion drawn from Mon Vitni's test to examine the difference of the averages for tendency to certain childlessness in Tehran's 2^{nd} and 18^{th} areas.

Statistics	Amount
Man Vitni	16067.5
Implication level	0.697

The results of this test show there's not any considerable difference in 95% of certainty level among the women in the 2^{nd} and 18^{th} areas in terms of the amount of tendency to certain childlessness. That's because the concluded sig (0.697) is more than 0.05.

The variable in Tehran's two areas is in a low level and a little percentage (4.7% in the 2^{nd} area, 3.1 in the 18^{th}) had a severe tendency to childlessness. This itself shows the governance of tradition and traditional values on Iranian families and the awkwardness of childlessness among people that prevents the increase in tendency to the certain childlessness. The averages concluded in both areas also confirm the lack of difference. The average for tendency to certain childlessness in the 18^{th} area is 195 and in the 2^{nd} , 191. To sum up, according to the data compiled, we can express that the study hypothesis saying "there's a considerable difference in the 2^{nd} and 18^{th} areas in terms of tendency to certain childlessness", is not confirmed.

Table 6: the conclusions drawn from Kay Square's test to examine the difference among the averages to apply new tools to prevent pregnancy in Tehran's 2^{nd} and 18^{th} areas.

Statistics	Amount
Pierre Suny Kay Square function	X2=28.121
Implication level	Sig = 0.000

The increase in applying new tools to avoid pregnancy is another feature of the second demographic transition that Van de Kaa has considered in his theory. In recent years of a change in contraception tools, a wonderful change has occurred in the arena of the tools to prevent pregnancy to create age gaps and postponing pregnancy.

Utilizing these tools more day by day, their higher efficiency and the ease of access to them have let bearing children postponement and kept this as one of the family's rights. The concluded data show about 91% of the respondents in the 2nd area utilize the means of contraception, while around 69% apply these apparatuses in the 18th area. This issue is affected by different factors such as higher awareness level and knowledge of the 2^{nd} area's women, better economic condition of the women in this area to provide various means of contraception, etc. Noticing the mentioned percentages, there's a considerable difference in both areas in terms of the times of utilizing the means of contraception. In order to test this hypothesis, Kay Square's statistic with certainty level of 95% has been used. Noting the fact that the resulted sig is less than 0.05, we can judge the difference between 2 areas accepted by 5% error, hence the study hypothesis saying "there's a considerable difference in both areas $(2^{nd} \text{ and } 18^{th})$ in terms of the times of utilizing new means of pregnancy contraception", is confirmed.

The hypothesis examination: comparison between tendency to abortion in Tehran's 2^{nd} and 18^{th} areas.

Table 7: the conclusions drawn from Kolmogorov test to examine the averages difference for tendency to abortion in Tehran's 2nd and 18th areas

Statistics	Amount
Kolmogorov	1.448
Implication level	0.030

According to Van de Kaa's theory, the increase in attempted abortion is one of the features of the 2^{nd} demographic transition. Since the direct measurement of this implication in Iran's society and Tehran is nearly impossible considering the social awkwardness of this phenomenon, we made our decision to research about the "tendency rate" to this phenomenon in Tehran's 2nd and 18th areas. The conclusions drawn from Kolmogorov test reveals that there's a considerable statistical difference in terms of tendency to abortion in 95% of certainty level among the women of the 2^{nd} and 18^{th} areas. That's because the concluded sig (0.030) is less than (0.05). The averages gotten from both areas also confirm this. The tendency to abortion in the 18^{th} area is 187 and in the 2^{nd} , 195. To sum up, according to the compiled data, we can express that the study hypothesis saying "there's a considerable difference in the 2nd and 18th areas due to tendency to abortion" is confirmed.

Examination of the condition of the 2nd demographic transition manifestations in Tehran

In this study, variables such as a decrease in marriage rate and avoiding a compulsory marriage, an increase in women's age in the 1st marriage, an increase in separation and divorce rate, postponement in bearing children due to marriage and an increase in the mother's age gap in the 1st marriage to the mother's age in the 1st child birth, tendency to certain childlessness, a decrease in unwanted pregnancies and

planning for child bearing using new tools to avoid pregnancy, women's income rate and attempted abortion, have been measured in Tehran as manifestations of the 2^{nd} demographic transition using Van de Kaa's theory. According to these variables, we can judge on whether our country (case: Tehran) has entered the 2^{nd} demographic transition phase or not!

Table 8: T test results to examine the difference between the examined variables' averages (the 2^{nd} transition manifestation)

	T rate	Freedom rate	Implication level	Average	Results
Compulsory marriages	13.368	380	0.000	2.31	confirmed
Tendency to abortion	-2.221	383	0.027	2.91	failed
Tendency to divorce	6.176	383	0.000	3.32	confirmed
Tendency to childlessness	-15.649	383	0.000	2.07	failed
Marriage gap until the 1 st child	-26.424	286	0.000	1.92	failed
The 1 st pregnancy age	-14.193	304	0.000	2.33	failed
Marriage age	-1.468	382	0.143	2.94	The lack of implication

According to the results from doing the test, we can express Tehran has not completely entered the 2nd demographic transition, but it has entered the transition in some aspects, as in most of the variables under study, their average was less than middle and we only see an increase in two variables: Tendency to divorce (3.32) and a decrease in compulsory marriage rate (2.31) and in other variables such as childlessness, marriage age, etc. We don't see posed increases in Van de Kaa's theories.

Drawing conclusions:

In this research, we have collected and analyzed data from 374 of Tehran's women according to the patterns and the implications of the demographic transition using the measurement research method and structural interview way.

This point has been stressed on in new demographic theories that the societies transition was formed by modernity to postmodern by questioning the modernity implications and a change in the individuals' view toward existence. By challenging cause- effect post narratives of modernity and getting over Hoists' categories specially wisdom, perception, experience, and sense, post modern emphasizes on a new meaningful world in which the meaning of choices and option has got an identity and institutional nature and are not interpreted in the theory of supply and demand and rational choice.

Wisdom tethering for human's actions was considered as an appropriate behavior toward the facts and inner conscience of the person. Talking about wisdom was likened wisdom more in modernity period and rationality meaning obtaining the maximum financial interests was diminished by the minimum expenses. In fact, Benthamite doctrine which defined the logical actions for gaining the maximum enjoyment and shunning the minimum pain, resulted in the growth in rational choice theories, structural necessities, and global transition not only in economy and trade behavior but in pregnancy behavior, choosing and marriage, family and divorce areas also. This even changed the concepts of premodern period such as marriage, bearing children, family according to a rational choice, analyzing the expenses and benefits, paying attention to human capital, nuclear family, and civil life.

Rationality changed into a puzzle in postmodern conditions and analyzing the logical behavior changed into a puzzle when rationality criterion was destroyed. It's whether the stability of the family rational or not family- based? The relativity of the wisdom to get rationalized and relative has been accompanied with the concepts to get cultural, local, and semantic and it doesn't have a single answer for the behaviors and the needs of the society individuals. Some concepts such as living style, agreed shack- ups, moral system, bodies, and population regime have replaced the class modern concepts, nuclear family, rationality, structures and population universalization in post- modern respectively and consider the examination of demographic behaviors valid by institutional and identity norms. Therefore, a change in individuals' ontology has caused the change in the variety of living styles, and hence, a change in interactions and sexual relations, religion, routine living patterns such as shopping, cover, nutrition, and health which are resulted from a change in the awareness level of the society individuals. A change in pregnancy behavior and entering the 2^{nd} demographic transition are expected in post- modern society in

which ontology, concepts and the behaviors of the society from a change in individuals' living style have altered.

It's quite apparent that population is a dynamic phenomenon whose persistence equals life. A 1000year perpetuation of the human population is accompanied by zenithand nadir/perigee/abyss.

The feet that the demographic transition is a global and common phenomenon or it has got local regimes and institutional consideration, has been extended in population transition theory.

The first demographic transition has been analyzed from natural pregnancy to behavioral childbearing and from the mass death rate to personal death rate under the theories such as demographic regime, unaware rationality, unwanted consequences of demographic action, implicating nature, institutional arrangements and patriotism. The 2nd demographic transition is accompanied by basic changes in society, family and pregnancy, the changes which dealt with aging in the 1st marriage, an increase in divorce rate, an increase in abortion rate, a decrease in marriage period, commonality to utilize the means of contraception, an increase in shack- ups, sexual beneficial behaviors. Pregnancy change has led to transition from natural pregnancy to behavioral one within the past half a century, especially from the mid-1360s. An increase in congeniality between urban and rural areas and a difference decrease in marriage and pregnancy indices in developed and less- developed areas across the country are of common results of the demographic transition. During the past years, Iran has seen the emergence of signs and signals of the 2nd transition in some cities and some parts of the country in decreasing pregnancy and reaching to substitution level, hence we have considered the examination of the 2nd demographic transition manifestations in two areas of the city.

In order to examine the 2^{nd} demographic transition manifestations, the quick and gradual decrease of the total rate of the pregnancy index (FTR) into substitution level, Van de Kaa's theory which considers factors such as an increase in marriage age, an increase in tendency to divorce, an increase in applying the means of contraception, a change in family structure, the cause of the transition, became the choice and hypotheses of compilation and test. The statistical society has got the women with mate in Tehran in the study. The sample volume on the basis of central limit issue in statistics and criteria of sample sufficiency among married women inhabiting Tehran's 2^{nd} and 18^{th} areas that have been married more than 5 years, were chosen. The conclusions drawn from the analysis of the data revealed that the marriage age average, the amount of education, the gap between marriage until the birth of the 1st child,

volitional abortion, and the rate of utilizing the means of contraception have been increased. Moreover, tendency rate to divorce had an increase and the compulsory marriages rate in the 2nd area compared to that of 18th has decreased. On the contrary, some other manifestations from the 2nd transition including an increase in agreed units, pregnancy out of marriage rules, and plentitude of sexual experiences before marriage weren't observed. The conclusions drawn from the dimensional analysis of data display meaningful differences. Changes scope and the difference variance in components and variables such as education, career rank, social status, demographic behavior and perception (especially pregnancy), tendency to modern demographic behaviors, is meaningful in 99% level. The comparisons with national indices also reveal the differences to be meaningful in Tehran compared to the whole country. The analysis of one way variance, couples' higher education level, entitlement and access levels, the rate of taking advantages of family planning means, marriage age average, mother's age average, divorce and abortion rates, tendency levels to divorce in the level of 999 out of 1000 were confirmed. Changes in family structure are common in the country from extensive to nuclear. During the 1380s, the number of families has increased for more 5 million since 10 million people have been added to the population. The differences between the developed and less developed areas of Tehran are meaningful in the level of 99%. Tendency to pregnancy in substitution level, unprecedented increase in divorce (more than 312 out of 1000), tendency to social promotion, aging in the 1st marriage, an increase in single child behaviors, a growing gap between marriage and mother's age, an intentional abortion. increase in and the meaningfulness of differences in the models of dimensional variance analysis all reveal the demographic transition in Tehran, hence it can be thoroughly said Tehran has not entered the 2nd demographic transition thoroughly, but transition has been confirmed in some main and basic aspects. By improving the country, it is also expected that other cities have an impressive growth in these variables such as the 2nd area of Tehran. It is also a vital necessity to plan for controlling some negative consequences such as upbringing the children of divorce and single- parent, disorders of fractured families, a decrease in abortion in insanitary environment, a reduction in the rate of sexually transmitted diseases and HIV infection.

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