
The Relationship between Sex-ratio and Marital Behavior

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According to statistics with reliable data, the biological sex-ratio at birth for most parts of the world is very stable, remaining between 105 and 106 boys per 100 girls. However, according to the reported sex-ratio at birth in Korea, the number of boys has been increasing since 1970. With the rapidly increasing sex-ratio at birth, there will be a constant shortage of females in the future. Therefore, this paper considers the practical issue of the effect of sex-ratio on family structure. Specifically, how will the surplus of men affect the marriage market as well as marriage behavior and marital instability?

With the weighted sex-ratio method, this paper suggests that not only is there is a positive relationship between the proportion of female marriages and the sex-ratio, but there is also a significant positive relationship for the younger (20~24) and older (35~39) female age groups. This aspect is also appropriate for the male marriage behavior. Therefore, from the policy makers' point of view, they will have to recognize that ignoring the high sex-ratio at birth problem will result in greater marriage instability in the future.

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1. INTRODUCTION

With the current high sex-ratio at birth problem, there will be a constant shortage of females in the future. Therefore, it is necessary to consider the practical issue of the effect of sex-ratio on family structure. Specifically, how will the surplus of men affect the marriage market as well as marriage behavior and marital instability?

Theoretically, Becker (1973, 1974) suggested a positive relationship between sex-ratio and the female's incentive to marry based on the analysis of gains from marriage. After Becker's (1973, 1974) two pioneering papers, Freiden's (1974) empirical study proved that the proportion of female marriage is positively related to the ratio of men to women using the U.S. cross-sectional data(1964). Later, Withers (1979) also proposed a positive relationship between sex-ratio and gains from marriage. More recently, Fossett and Kiecolt (1991, 1993) compared women's incentive to marry with that of men, showing that the women's incentive for marriage is much stronger than that of men in absolute value.

Regarding the divorce problem, many previous studies tried to explain the relationship between the dissolution of marriage and marriage age. For example, one of the earlier studies (Becker, Landes, and Michael, 1977) investigated this relationship and provided the U-shaped dissolution curve. In other words, its findings suggested the higher possibility of dissolution of marriage with much younger or much older marriages. For the early marriage, most empirical studies found that the relationship between the early marriage and the dissolution of marriage is positive and significant (Lee, 1977;

Sander, 1993; Weishaus & Dorothy, 1988). In addition to early marriage, there has been almost no contradiction to support the positive relationship for the late marriage except for the empirical study by Booth and Edwards (1985).

However, concerning the relationship between sex-ratio and the incentive for marriage, most previous literature made an important error in measuring the ratio of men to women. Statistically, there have been four or five years in male age difference corresponding to female marriage age, assuming that men will choose their wives from a pool of women of four or five years younger. For instance, the sex-ratio of husbands aged 24~28 is the number of men aged 24~28 divided into the number of women aged 20~24. When the sex-ratio is measured based on the mean difference of marriage age between men and women, it might give wrong empirical results for the following two reasons: First, the marriage of men is not exactly matched by a corresponding female group. Much greater proportions of the marriage of men aged 24~28 can occur outside the corresponding women aged 20~24. Second, the common marriage behavior strongly indicated that the mean difference of marriage age is less significant with the increase of female age. Moreover, the variance of men's age increases with the increase of women's age (Withers, 1979).

In addition to the above problem, the previous studies had difficulty in finding out the appropriate data of female status for explaining female marriage behavior. To observe the negative relationship between female earning power and the incentive of female marriage, previous literature included the median female wage as an independent variable. However, most previous empirical results did

not strongly support the negative relationship for all age groups because it is not proper to adopt the median female wage to younger or older females (Freiden, 1974; Withers, 1979).

In recognizing the weakness of previous studies, this paper investigates two main facts: First, while the marriage rate has been decreasing in the countries with economic development, the marriage rate has not dropped significantly and has actually maintained a high level in South Korea. Thus, this study analyzes how the sex-ratio affects the current high marriage rate. Second, to examine the current increase in the dissolution of marriage this research focuses on the relationship between the early or later marriage and sex-ratio. In particular, in this study, the early or late marriage is emphasized by sex-ratio rather than family matters. To achieve these goals, this paper is divided into four major sections: (a) data analysis, (b) estimation method, (c) empirical results, and (d) summary and conclusions.

2. DATA ANALYSIS

In the previous studies, many variables were considered to describe marriage behavior. They can be categorized into economic and demographic variables. With economic development, there has been a significant change in economic variables that are becoming important for analyzing marriage behavior. In particular, the unemployment rate and female earning power have often been used in the previous literature to characterize marriage behavior. With the high opportunity cost, female earnings will reduce the incentive of female marriage.

The empirical studies have specifically shown that the proportion of female marriage is negatively related to the ratio of women's to men's wage (Becker, 1973, 1974; Ermisch, 1981; Fossett & Kiecolt, 1993; Freiden, 1974; Withers, 1979). Moreover, from the perspective of the unemployment rate, the negative relationship is suggested with the proportion of marriage. The statistical test results have especially supported the negative relationship between the unemployment rate and the proportion of marriage (Cooney & Hogan, 1991; South, 1985).

Socio-culturally, numerous variables such as individualism, education, race, public assistance, and divorce laws influence marriage behavior. Among those variables, it is clear that individualism is negatively related to the proportion of marriage (Fossett & Kiecolt, 1991; Trovato, 1988) and the proportion of marriage increases as divorce becomes easier (Ermisch, 1981; Freiden, 1974).

In addition to the above variables, it is widely believed that the impact of child mortality on the marriage age is negatively related (Casterline, 1980; Hermalin, 1975). The child mortality rate has been decreasing with economic development, which has been an evident trend since the 1970s. From the previous research, the influence of child mortality on the incentive of marriage has been recognized and confined to the negative relationship between child mortality rate and proportion of female marriage rate for the younger age groups (Chaudhary, 1987).

In certain variables (e.g., education) with ambiguous results and high correlation between wage and employment, the data are listed as follows:

ASFMR_j = Age specific female marriage rate: The data set consists of five-year female age groupings such that

$j=15\sim 19, 20\sim 24, 25\sim 29, 30\sim 34,$ and $35\sim 39$. Here, the female marriage rate for each age group is calculated by the number of married females divided into the total number of females in each age group.

ASMMR_i = Age specific male marriage rate: To calculate the male marriage rate, it is necessary to consider the mean difference of marriage age because there have been four or five years male age difference corresponding to female marriage age (See Table 1). Therefore, the male marriage rate is calculated by the number of married men divided into the total number of men in each age group $i=20\sim 24, 25\sim 29, 30\sim 34, 35\sim 39,$ and $40\sim 44$.

Table 1. Mean Age at First Marriage

Male	Female
27.1	23.3
27.4	23.6
27.3	24.1
27.8	24.8
28.6	25.5

Note: The data available from the *Social Indicators in Korea*.

ASSR = Age specific sex ratio: To measure the age specific sex ratio, the number of males is divided into the corresponding number of females. For example, the age specific sex ratio corresponding to the female aged $15\sim 19$ is the ratio of the number of males aged $20\sim 24$ to the number of females aged $15\sim 19$.

WSR = Weighted sex ratio: As mentioned in the previous section, there are some difficulties in using the age specific sex ratio for the marriage behavior analysis. With this in mind, the newly developed method, originally developed by Fossett and Kiecolt (1991: 946), is adopted in this paper: “ $100 \cdot M_i / \sum \omega_j F_j$ for men, or $100 \cdot \sum \omega_j M_j / F_i$ for women, where i denotes the age-sex group of interest, j denotes the age groups of ‘suitable’ potential mates, and ω is a vector of weights that sum to 1.00”.

TWR = Total wage ratio: The average real wage ratio of female’s to male’s wage excluding overtime payment¹⁾.

ASWR = Age specific wage ratio: In recognizing that the average total wage ratio might be irrelevant to the younger or older age group, the age specific wage ratio is used in this paper. Here, the age specific wage ratio is the women’s to men’s wage for each corresponding age group, and these data are only available from 1976 to 1993¹⁾.

PFC = Most previous studies indicated that Catholics have been less likely to divorce (Freiden, 1974; McCarthy, 1979). Therefore, without any legislation against divorce, the rapid rise in percentage of the Catholic population is used to represent the inverse of divorce. The percentage of female Catholic population is the number of female Catholics divided into the total number of female population²⁾.

1) Τησ ωαγε ρατε δατα αρε απαιλαβλε φρομ τησ *Year Book οφ Λαβορ Στατιστιχοσ*.

2) Percentage of Catholic population data are available from the *Statistics of*

PMC = Percentage of male Catholics: The number of male Catholics divided into the total number of male population²⁾.

IMR = Infant mortality rate: The number of child infant deaths under one year old per 1000 children per year³⁾.

3. ESTIMATION METHOD

Recognizing the age specific wage ratio data only available from 1976, the estimation methods of marriage behavior for male and female are summarized and represented in Table 2 and Table 3.

Table 2. Model for Female

Model (Female)	Period
$ASFMR_{jt} = \alpha_j + \beta_j ASSR_{jt-1} + \nu_j TWR_t + \delta_j PFC_t + \tau_j IMR_t + \epsilon_{jt}$	1970~1993
$ASFMR_{jt} = \alpha_j + \beta_j WSR_{jt-1} + \nu_j TWR_t + \delta_j PFC_t + \tau_j IMR_t + \epsilon_{jt}$	1970~1993
$ASFMR_{jt} = \alpha_j + \beta_j ASSR_{jt-1} + \nu_j ASWR_t + \delta_j PFC_t + \tau_j IMR_t + \epsilon_{jt}$	1976~1993
$ASFMR_{jt} = \alpha_j + \beta_j WSR_{jt-1} + \nu_j ASWR_t + \delta_j PFC_t + \tau_j IMR_t + \epsilon_{jt}$	1976~1993

Note: where $j = 15\sim 19, 20\sim 24, 25\sim 29, 30\sim 34, \text{ and } 35\sim 39$.

Table 3. Model for Male

Model (Male)	Period
$ASMMR_{it} = \alpha_i + \beta_i ASSR_{it-1} + \nu_i TWR_t + \delta_i PMC_t + \tau_i IMR_t + \epsilon_{it}$	1970~1993
$ASMMR_{it} = \alpha_i + \beta_i WSR_{it-1} + \nu_i TWR_t + \delta_i PMC_t + \tau_i IMR_t + \epsilon_{it}$	1970~1993
$ASMMR_{it} = \alpha_i + \beta_i ASSR_{it-1} + \nu_i ASWR_t + \delta_i PMC_t + \tau_i IMR_t + \epsilon_{it}$	1976~1993
$ASMMR_{it} = \alpha_i + \beta_i WSR_{it-1} + \nu_i ASWR_t + \delta_i PMC_t + \tau_i IMR_t + \epsilon_{it}$	1976~1993

Note: where $I = 20\sim 24, 25\sim 29, 30\sim 34, 35\sim 39, \text{ and } 40\sim 44$.

the Catholic Church in Korea.

3) Infant mortality rate data are available from the *Annual Report on Vital Statistics*(NSO, 1980, 1985, 1990, and 1994).

To acquire the most efficient estimates for each regression, the Durbin-Watson and White tests were performed in the presence of autocorrelation and heteroskedasticity. As indicated previously by many researchers (Greene, 1993; Johnston, 1984), the heteroskedasticity problem did not occur with the available time-series data for each regression. Next, to determine the existence of autocorrelation, the Durbin-Watson test was conducted with null hypothesis of no autocorrelation for each regression.

Here, the test results strongly indicate that the null hypothesis of no autocorrelation can not be rejected. In other words, the test results strongly accept the null hypothesis of no autocorrelation except for a few cases where the test results yield inconclusive Durbin-Watson value. The inconclusive Durbin-Watson test results are considered the same as a rejection of the null hypothesis of no autocorrelation because the consequence of ignoring the autocorrelation can present a bias problem with the ordinary least square estimates (OLS). To examine the inconclusive Durbin-Watson test results in detail, the periodogram was used to know whether or not the observations are independent and identically distributed random variables.⁴⁾ Based on the above discussions, the OLS was used for the regression analysis.

4) Two different White-noise tests are performed: (a) Fisher's test designed to detect a single periodic component, (b) Bartlett and Durbin's test, a kind of goodness of fit test for uniformity. The test results strongly support the Durbin-Watson test results because the two tests also accept the null hypothesis of White-noise.

4. EMPIRICAL RESULTS

The empirical results are reported separately for females (See Tables 5, 6, 7, and 8) and males (See Tables 9, 10, 11, and 12). The major findings are as follows:

1. As shown tables 5, 6, 7, and 8, each table shows a positive relationship between the ratio of men to women and the proportion of female marriage. With more available male mates in the marriage market, females have a higher propensity to marry. Regarding the above facts, previous studies suggested that women's inclination to marry is strongly influenced by economic reasons(Becker, 1973, 1974; Becker, Landes, & Michael, 1977). It is easier for a female to find a male mate who can maximize her well-being through marriage than to remain single(Becker, 1973, 1974). These results support that female marriage is strongly associated with financial incentives.
2. Not only is there a positive relationship between the proportion of female marriages and the ratio of men to women, but there is also a significant positive relationship for the younger(20~24) and older(35~39) female age groups.
3. The positive relationship between sex-ratio and proportion of female marriage is no longer true for the female aged 30~34. There is a negative relationship between sex-ratio and the proportion of marriages among females aged 30~34. The negative relationship might be explained by the opportunity cost of the female who is currently in the labor force. Working females aged 30~34 will be reluctant to give up their careers for marriage

with high opportunity cost. This strong incentive to postpone their marriage could be one of the explanations for the negative relationship between sex-ratio and proportion of female marriage aged 30~34. Moreover, with this age group (30~34) compared to other age groups, the higher divorce rate can be marked as an important factor for the negative relationship (See Table 4). Thus, the sex-ratio seems to be irrelevant to the female marriage behavior of age 30~34.

Table 4. Number of Female Divorces by Different Age Groups

Year \ Age	20~24	25~29	30~34	35~39	40~44
1990	4,254	12,349	12,381	7,042	3,489
1991	4,122	11,508	13,719	8,099	3,775
1992	4,052	11,630	14,482	9,204	4,212
1993	3,402	10,402	13,907	9,839	4,634

Note: The data available from the *Annual Report on Vital Statistics*.

4. Traditionally, in the Confucian countries such as Korea and China, women have had almost no chance of participating in market activities. Since there has been no market for spousal labor, married women have been specialized to childbearing and other domestic activities. But, with fast economic development, women's earning power has been increasing and in the market, the value of time has been recognized as one of the factors affecting female marriage behavior. As expected, the ratio of female's to male's wage is negatively related to the proportion of female marriage.
5. In addition to the negative relationship between proportion of female marriage and ratio of women's to men's wage, the

empirical findings suggest that the proportion of female marriage is very sensitive to the female's earning power. This finding is more clear when the age specific wage ratio variable is included in the regression as an independent variable.

6. The relationship between the proportion of younger female marriage (15~19) and the age specific wage ratio is positive and significant. The reason seems to be related to the high proportion of illegal marriages occurring in the younger age group. These younger couples would have living difficulties without any financial support from their parents so they are eventually constrained by income.
7. As the female Catholic population increases, there are strong incentives for females not to enter the marriage market at younger ages. This result seems to indicate that women, influenced by their Catholic belief, have high values in the marriage market because they are more possibly bound by a formal marriage, instead of living together informally. But, for the other age groups, the empirical findings suggest the positive relationship between the proportion of female marriage and the percentage of female Catholic population.
8. The decreasing child mortality rate commonly suggests a negative effect on the proportion of female marriage for the younger(20~24) age group. But, lower levels of child mortality seems to be resulted in strong propensity to marriage with higher ages at marriage.
9. The empirical analysis of male marriage behavior (See Tables 9, 10, 11, and 12) demonstrates that the male Catholic and infant

mortality rate have similar results to the female marriage behavior.

10. A noticeable result from the male marriage behavior is that there is a positive relationship between the ratio of men to women and the proportion of male marriage. This remarkable result, contradictory to the previous studies, highly suggests that men also have strong incentives to marry when there is a female "shortage". It means that men have strong incentives to marry regardless of the number of female marriage partners because the continuity of family name is overwhelmingly the most important factor for the men when they marry in Confucian countries such as Korea and China.
11. Male marriage behavior also suggests that the positive relationship between the proportion of male marriage and sex-ratio is significant for the younger and older age groups.
12. The negative relationship between the ratio of women's to men's wage demonstrates that men's marriage behavior is not strongly related to the economic incentives. This result implies that men still want to marry women who can devote more of their time to childbearing and other domestic activities. In other words, men believe that the gains from marriage are less when women work more which causes men to work less in order to take care of the household.

5. SUMMARY AND CONCLUSION

This research suggests areas of interest to economists and demographers concerned with the consequences of socioeconomic change associated with the sex-ratio problem.

First, as indicated in the previous section, the relationship between the ratio of men to women and the proportion of female marriage shows a positive relationship. Thus, from the policy makers' point of view, they have to recognize that to counter the current stable and high marriage rate, the sex-ratio must be interpreted as one of the essential variables.

Second, not only is there a positive relationship between the proportion of female marriages and sex-ratio, but there is also a significant positive relationship for the younger (20~24) and older (35~39) female age groups. The recommendation is also appropriate to the male marriage behavior. Therefore, ignoring the problem of high sex-ratio at birth will result in greater marriage instability in the future.

Third, the above problems will grow with an increasing "shortage" of females in the future. This study suggests that the problems cannot be solved automatically, but the solution might be achieved by giving greater attention to the current problem of high sex-ratio at birth.

Due to the difficulty of acquiring the divorce data, this empirical analysis has both merits and shortcomings for the marriage behavior analysis in terms of sex-ratio. However, it is hoped that this study will encourage other researchers to examine and develop the analysis of sex-ratio and marriage linkage, and deliver more detailed insights into divorce behavior.

Table 5. Female Marriage Behavior (1970~1993) by Using the Equation¹⁾

AGE	ASSR	TWR	PFC	IMR	R2
15~19	0.013 (0.070)	0.982*** (0.192)	-6.213*** (0.595)	0.364 (0.663)	0.9712
20~24	0.520*** (0.200)	-1.641* (1.037)	-2.476 (2.237)	1.618 (1.828)	0.7700
25~29	0.186 (0.466)	-0.786 (1.196)	7.098*** (2.766)	-3.635 (3.127)	0.6853
30~34	-0.076** (0.031)	-0.188* (0.117)	1.319*** (0.301)	-0.968** (0.385)	0.7796
35~39	0.003 (0.019)	-0.103** (0.053)	0.546*** (0.145)	0.014 (0.156)	0.7240

Note: 1) $ASFMR_{jt} = \alpha_j + \beta_j ASSR_{jt-1} + \nu_j TWR_t + \delta_j PFC_t + \tau_j IMR_t + \epsilon_{jt}$
 2) Superscripts ***, **, and * denote significance at 1%, 5%, and 10% respectively. The second row in a cell is the standard error.

Table 6. Female Marriage Behavior (1970~1993) by Using the Equation¹⁾

AGE	WSR	TWR	PFC	IMR	R2
15~19	0.031 (0.048)	0.955*** (0.194)	-6.345*** (0.589)	0.102 (0.696)	0.9718
20~24	0 ^{.17} 7*** (0.040)	-1.711** (0.736)	-0.842 (1.877)	0.415 (1.551)	0.8443
25~29	0.283 (0.470)	-1.246 (0.834)	7 ^{.98} 7*** (2.149)	-1.918 (2.407)	0.6886
30~34	-0.062* (0.040)	-0.498** (0.212)	1 ^{.97} 7*** (0.498)	-0.392 (0.312)	0.7405
35~39	0.006 (0.004)	-0.156** (0.065)	0.741*** (0.192)	0.052 (0.126)	0.7469

Note: 1) $ASFMR_{jt} = \alpha_j + \beta_j WSR_{jt-1} + \nu_j TWR_t + \delta_j PFC_t + \tau_j IMR_t + \epsilon_{jt}$
 2) Superscripts ***, **, and * denote significance at 1%, 5%, and 10% respectively. The second row in a cell is the standard error.

Table 7. Female Marriage Behavior (1976~1993) by Using the Equation¹⁾

AGE	ASSR	ASWR	PFC	IMR	R2
15~19	0.091 (0.066)	0.221* (0.120)	-3.392*** (0.315)	-0.338 (0.576)	0.9656
20~24	0.154** (0.190)	-1.147* (0.752)	-5.522*** (1.003)	0.847 (1.710)	0.7692
25~29	0.723** (0.283)	-2.990*** (0.606)	8.966*** (1.154)	-7.547*** (2.186)	0.8702
30~34	-0.023 (0.063)	-0.031 (0.176)	0.711 (0.860)	-0.480** (0.408)	0.7896
35~39	0.037* (0.015)	-0.101** (0.043)	0.405** (0.154)	-0.315** (0.132)	0.7484

Note: 1) $ASFMR_{jt} = \alpha_j + \beta_j ASSR_{jt-1} + \nu_j ASWR_{jt} + \delta_j PFC_{jt} + \tau_j IMR_{jt} + \epsilon_{jt}$

2) Superscripts ***, **, and * denote significance at 1%, 5%, and 10% respectively. The second row in a cell is the standard error.

Table 8. Female Marriage Behavior (1976~1993) by Using the Equation¹⁾

AGE	WSR	ASWR	PFC	IMR	R2
15~19	0.039 (0.048)	0.203* (0.125)	-3.348*** (0.443)	-0.164 (0.659)	0.9622
20~24	0.007* (0.046)	-0.631** (0.684)	-4.966*** (0.740)	0.765 (1.769)	0.7990
25~29	0.032 (0.599)	-2.583** (1.050)	7.252*** (1.734)	-3.243* (1.890)	0.8851
30~34	-0.041* (0.036)	-0.050** (0.170)	0.493 (0.699)	-0.915 (0.476)	0.6377
35~39	0.006* (0.004)	-0.019** (0.064)	0.254 (0.243)	-0.250* (0.145)	0.7911

Note: 1) $ASFMR_{jt} = \alpha_j + \beta_j WSR_{jt-1} + \nu_j ASWR_{jt} + \delta_j PFC_{jt} + \tau_j IMR_{jt} + \epsilon_{jt}$

2) Superscripts ***, **, and * denote significance at 1%, 5%, and 10% respectively. The second row in a cell is the standard error.

Table 9. Male Marriage Behavior (1970~1993) by Using the Equation¹⁾

AGE	ASSR	TWR	PMC	IMR	R2
20~24	0.114** (0.072)	0.207 (0.186)	-7.180*** (1.011)	0.352 (0.580)	0.9589
25~29	0.425** (0.232)	-3.594*** (1.060)	5.117 (3.808)	-2.247 (1.915)	0.7472
30~34	0.389 (0.457)	-1.109 (1.071)	5.131 (4.028)	-2.676 (2.758)	0.2423
35~39	0.109** (0.050)	-0.201 (0.133)	1.420** (0.534)	-0.304 (0.309)	0.3760
40~44	0.063*** (0.019)	0.111* (0.058)	-0.374* (0.243)	-0.133 (0.153)	0.4653

Note: 1) $ASMMR_{it} = \alpha_i + \beta_i ASSR_{it-1} + \gamma_i TWR_{it} + \delta_i PMC_{it} + \tau_i IMR_{it} + \epsilon_{it}$

2) Superscripts ***, **, and * denote significance at 1%, 5%, and 10% respectively. The second row in a cell is the standard error.

Table 10. Male Marriage Behavior (1970~1993) by Using the Equation¹⁾

AGE	WSR	TWR	PMC	IMR	R2
20~24	0.467 (0.365)	0.072 (0.199)	-6.395*** (0.918)	0.340 (0.776)	0.9541
25~29	0.722*** (0.213)	-1.802*** (0.601)	2.708 (2.619)	-2.372* (1.558)	0.8145
30~34	0.496 (0.495)	-1.666 (1.412)	7.322 (5.282)	-3.134 (2.265)	0.2529
35~39	0.075*** (0.028)	-0.469*** (0.133)	2.228*** (0.604)	-0.523* (0.306)	0.4297
40~44	0.154** (0.074)	0.143 (0.088)	-0.517* (0.367)	-0.035 (0.172)	0.3175

Note: 1) $ASMMR_{it} = \alpha_i + \beta_i WSR_{it-1} + \gamma_i TWR_{it} + \delta_i PMC_{it} + \tau_i IMR_{it} + \epsilon_{it}$

2) Superscripts ***, **, and * denote significance at 1%, 5%, and 10% respectively. The second row in a cell is the standard error.

Table 11. Male Marriage Behavior (1976~1993) by Using the Equation¹⁾

AGE	ASSR	TWR	PMC	IMR	R2
20~24	0.229** (0.091)	0.149 (0.197)	-6.481 (0.646)	0.217 (0.622)	0.9598
25~29	0.022 (0.185)	-1.174 (0.968)	-7.952*** (1.766)	-0.809 (1.728)	0.8841
30~34	0.429 (0.431)	-1.005 (0.634)	5.499 (5.109)	-4.489 (2.821)	0.6932
35~39	-0.068* (0.050)	-0.250*** (0.133)	0.666 (0.534)	-1.005*** (0.309)	0.6847
40~44	0.047* (0.028)	-0.035 (0.073)	0.296 (0.301)	-0.199 (0.185)	0.4943

Note: 1) $ASMMR_{it} = \alpha_i + \beta_i ASSR_{it-1} + \nu_i ASWR_{it} + \delta_i PMC_t + \tau_i IMR_t + \epsilon_{it}$

2) Superscripts ***, **, and * denote significance at 1%, 5%, and 10% respectively. The second row in a cell is the standard error.

Table 12. Male Marriage Behavior (1976~1993) by Using the Equation¹⁾

AGE	WSR	TWR	PMC	IMR	R2
20~24	1.084** (0.512)	0.041 (0.188)	-6.715*** (0.840)	-0.145 (0.828)	0.9556
25~29	0.412* (0.265)	-0.749 (0.631)	-11.37*** (2.666)	-1.506 (1.474)	0.9021
30~34	0.113 (0.294)	-1.115* (0.671)	7.765 (4.611)	-7.501*** (2.658)	0.6990
35~39	-0.007 (0.028)	-0.243* (0.140)	0.998 (0.865)	-0.932*** (0.252)	0.7110
40~44	0.117* (0.074)	-0.034 (0.080)	0.029 (0.281)	-0.146 (0.169)	0.4778

Note: 1) $ASMMR_{it} = \alpha_i + \beta_i WSR_{it-1} + \nu_i ASWR_{it} + \delta_i PMC_t + \tau_i IMR_t + \epsilon_{it}$

2) Superscripts ***, **, and * denote significance at 1%, 5%, and 10% respectively. The second row in a cell is the standard error.

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요 약

性比와 結婚不均衡에 관한 研究

金 珍 洙

男兒選好思想에 따른 社會 構造的 病弊의 가장 本質的인 문제는 男女 構成員性比의 不均衡에서 제기되는 結婚樣態의 變化일 것이다. 이러한 관점에서 본 論文은 男女 性比의 構造的 變化가 結婚에 미치는 영향에 대해서 考察해 보았다. 특히 본 論文은 男女 性比를 측정함에 있어서 Weighted Sex-ratio를 사용하여 男女 性比의 不均衡에서 派生될 수 있는 結婚의 樣態에 관하여 보다 더 精確한 結論을 提示하고자 하였다. 본 論文의 研究結果를 要約하면 다음과 같다.

첫째, 男性의 비율이 높아질수록 女性의 結婚率이 증가함을 보여주고 있다. 이러한 현상은 男性의 비율이 높아짐에 따라서 女性이 結婚과 동시에 누릴 수 있는 經濟的인 豐饒의 기회가 증가하기 때문인 것으로 보여진다. 특히 이 경향은 女性의 結婚年齡層이 낮거나 또는 높을수록 두드러지게 나타나고 있다.

둘째, 男性의 비율이 높아질수록 男性의 結婚慾求 역시 강하게 나타나고 있다. 이 현상은 女性의 경우와 같이 男性의 結婚 年齡層이 낮거나 또는 높을수록 증가하는 것으로 나타나고 있다. 따라서 본 論文의 研究結果에 의하면 현재의 男女出生性比의 奇現象은 早婚이나 晚婚의 증가를 초래할 수 있으며, 궁극적으로는 심각한 結婚 不均衡의 사태 즉, 離婚率의 증가를 誘發할 수 있음을 보여주고 있다.

끝으로, 이 論文은 男兒選好思想을 근절시킬 수 있는 國家的인 次元에서의 體系的이고 長期的인 政策의 開發이 시급함을 示唆해 주고 있다.