

An Analysis of Social Value Priorities Affecting Low Fertility Rate and Suggestions for Maintaining Industrial Manpower in South Korea

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저출산에 영향을 미치는 한국의 사회적 가치 우선순위 분석과 산업인력 유지에 대한 제언

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Abstract The purpose of this study is to analyze the public's consciousness that affects South Korea's low birth rate phenomenon by applying the result of a survey on "What Makes Life Meaningful?" conducted by the Pew Research Center on 18,850 adults from 17 advanced countries in 2021. The results of the Pew Research Center survey indicated that Korea exhibited distinct sociopsychological tendencies compared to other countries. South Korean respondents were the only ones among the 17 countries surveyed who chose 'Material well-being' as the most important aspect of life. Furthermore, Korean respondents tended to select only one option even though the survey allowed for multiple choices. These distinctive characteristics of Korean respondents, such as a strong focus on materialism and a single-minded approach to life values, are analyzed as factors potentially connected to the phenomenon of low birth rates. This paper explains the prioritization of life values and the bias towards single-choice behavior that exists in Korean society and analyzes the correlation between low birth rates and these societal characteristics alongside previous research cases. In the conclusion, recommendations were made for maintaining sustainable industrial competitiveness. These recommendations included promoting humanities research that allows for diverse forms of population composition and the pursuit of various life goals. Additionally, it suggested the implementation of technician immigration policies aligned with these objectives. In terms of skilled labor immigration, the paper proposed a policy to increase the issuance of visas for skilled foreign workers from the current 35,000 in 2023 to 185,000, addressing the shortage in the industrial sector.

요약 이 연구는 2021년 Pew Research Center가 17개국 선진국의 성인 18,850명을 대상으로 조사한 "인생을 의미 있게 만드는 가치"에 대한 설문 결과에 대입하여 한국의 저출산 현상에 영향을 미치는 대중의 의식을 해석하고자 하는 것에 그 목적이 있다. 이 Pew Research Center 조사 결과에서 한국 응답자들은 조사대상 17개국 가운데 유일하게 제일 많은 비중으로 '물질적 풍요'를 가장 인생에서 중요한 가치라고 응답했다. 그리고 한국의 응답자들은 다중선택이 가능한 설문이 있음에도 오직 하나의 보기만 선택하는 강한 경향을 나타냈다. 한국의 '물질추구 성향', '한곳에 편중된 인생가치 지향점' 등이 사회적 소멸로 연결될 수 있는 저출산 현상으로 나타난 것으로 해석된다. 이 논문은 세계적 최저 출산율을 겪고 있는 한국사회의 삶 가치 우선순위와 단일선택 편중성을 설명하면서 저출산과 이들 사회적 특징 영역들 사이의 연관성을 기존 연구사례들과 함께 분석하였다. 결론부에서는 지속 가능한 산업 경쟁력 유지를 위한 제언으로 인구 구성의 다양한 형태와 여러 가지 삶의 가치를 추구할 수 있는 인문학적 연구 지원과 확산 그리고 이와 연계한 기술이민 정책을 제시하였다. 기술이민에 대해서는 2023년 기준 3만 5천명 외국인 숙련공 비자 발급을 산업현장 미충원 인원인 18만 5천명까지 확대하는 정책을 제안하였다.

Keywords : Fertility Rate, Social Value, Life Purpose, Material Well-being, Industrial Manpower

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1. Introduction

The purpose of this paper is to examine the correlation between the unique social values prioritized by South Koreans and the low birth rate phenomenon. The Pew Research Center conducted a survey titled “What Makes Life Meaningful?” on 18,850 adults from 17 advanced countries in 2021. Korean respondents included in this survey exhibited distinctive characteristics by providing the highest or lowest responses in several categories among the surveyed countries. From these responses, two uniquely prominent ‘material pursuit tendencies’ and a ‘single-value orientation’ were observed. Another unique phenomenon in Korea is its extremely low fertility rate. Therefore, this paper aims to analyze the correlation between the unique values regarding life found among Korean respondents in the Pew Research Center’s survey results and the distinct societal phenomenon of South Korea, which is the low fertility rate.

2. Research Background

The paper begins by discussing the extremely low fertility rate in South Korea as reported by the Korean government's Statistics in 2021, which was the lowest in the world at 0.81 children per woman. This rate is about half the average fertility rate of 1.58 among OECD countries. Even in 2023, Korea's birth rate is threatened to be below the level of 0.7. The commonly cited reason for this severe low birth rate in public opinion surveys is the lack of economic and temporal flexibility. However, this claim that the decrease in fertility is directly tied to economic and temporal constraints seems weakly grounded when compared with economic indicators of prosperity. As an example, it is not that China became a low birthrate country with a total fertility rate of 1.1 in 2022 due to being

economically less prosperous than before the period of reform and opening up.

In the last research paper of S. J. Lee (2017), an analysis of disposable income, unemployment rates, working hours, and sleep duration across the major 18 OECD countries demonstrated that there is no significant relationship between economic and temporal flexibility and birth rates. As shown in the example represented in this research, countries with lower economic and time flexibility, like Mexico, had fertility rates of 2.0 or higher, while countries like Germany, with higher disposable income and shorter working hours, still couldn't avoid lower fertility rates. This 2017 study concluded that rather than economic and time flexibility, factors such as group consciousness like religion might be related to fertility rates[1]. However, this 2017 study had limitations as it stayed within the assumption that the cause of fertility rate differences could be attributed to factors like group consciousness such as religion.

Table 1. Fertility Rates of Jewish Population in the United States based on Religious Tendencies

Religious Sect	Fertility Rates
Ultra-Orthodox	6.72
Modern Orthodox	3.39
Conservative	1.74
Reform	1.36
Secular	1.29

Therefore, this paper aims to delve more specifically into the relationship between group consciousness and fertility rates, which was hypothesized in the 2017 study. This research begins with the hypothesis that a nation's birth rate is more influenced by the collective consciousness structure in terms of ‘what they prioritize as important in life’ than economic and temporal flexibility indicators. An example of the collective consciousness structure presented in the 2017 study was the birth rate among American Jews

based on religious inclinations, which allowed for quantifying religious intensity like Table 1[2].

In the 2017 study, there was a limitation in using religious orientation as an inferred measure of collective consciousness. However, in this paper, a more detailed analysis was possible by subdividing 17 different aspects of group consciousness surveyed by the Pew Research Center in 2021.

3. Literature Review

Previous studies on the causes of low fertility have focused on key themes such as ‘social inequality’, ‘competition’, and ‘economic uncertainty’.

Research addressing social inequality includes Gustav Feichtinger's study, “A Bifurcation Analysis of Gender Equality and Fertility”(2017)[3]. In this paper, the author challenged the prevailing notion that recent gender egalitarianism leads to a decrease in fertility rates. The study analyzed how institutional changes, such as the expansion of childcare facilities and paternity leave, as well as shifts in norms and values, such as gender equity in the distribution of domestic work, were contributing to a resurgence in fertility rates in economically advanced countries. This study concluded that institutional efforts to reduce social inequality have led to an increase in fertility rates.

The correlation between competition and fertility rates was demonstrated in Osea Giuntella's study, “Globalization, Fertility, and Marital Behavior in a Lowest-Low Fertility Setting”(2022) focusing on the case of Germany[4]. This research found that exposure to greater import competition from Eastern Europe led to worse labor market outcomes and lower fertility rates. In contrast, workers in industries that benefited from increased exports had better employment prospects and higher fertility. This paper analyzed how groups exposed

to intense competition due to globalization influence their decisions on whether to reproduce the next generation based on the outcomes of that competition.

The hypothesis that economic uncertainty about the future affects declining fertility rates has been supported by the research of Giray Gozgor and Daniel Schneider. In Giray Gozgor's paper titled “Economic Uncertainty and Fertility” (2021) the results of a study involving 126 countries from 1996 to 2017 confirmed that income uncertainty simultaneously reduced both consumption and fertility rates while increasing ‘the precautionary motive for saving’[5]. In addition, Daniel Schneider, in his study “The Great Recession, Fertility, and Uncertainty: Evidence From the United States”(2015) analyzed unemployment rates and foreclosures during economic downturns and concluded that declining fertility rates were a result of increased economic hardship and economic uncertainty[6].

The studies reviewed above, which focused on ‘social inequality’, ‘competition’, and ‘economic uncertainty’ have shown that these factors impact low fertility rates. These studies have consistently concluded that individuals facing adverse conditions make choices to forgo childbirth as a precaution for an uncertain future.

However, these studies have not extensively explored the mindset and values held by these individuals or their priorities in life. Therefore, this research aims to analyze the mentality and values pursued by the population in a state of instability and their connection to the issue of low fertility.

4. Research Design

The methodology of this study involves interpreting the correlation between the life orientations of respondents and the birth rate of surveyed countries by combining the results of

Table 2. Material well-being as South Koreans' The First Important Condition of Life's meaning and Fertility Rates by Country

	Fertility rate	① 1st choice	2nd choice	3rd choice	4th choice
Australia	1.7	Family	Occupation	Friends	Material well-being
New Zealand	1.64	Family	Occupation	Friends	Material well-being
Sweden	1.67	Family	Occupation	Friends	M. well-being Health
France	1.8	Family	Occupation	Health	Material well-being
Greece	1.43	Family	Occupation	Health	Friends
Germany	1.58	Family	Occupation	Health	M. well-being General Positive
Canada	1.43	Family	Occupation	Material well-being	Friends
Singapore	1.12	Family	Occupation	Society	Material well-being
Italy	1.25	Family	Occupation	Material well-being	Health
Netherlands	1.62	Family	Material well-being	Health	Friends
Belgium	1.6	Family	Material well-being	Occupation	Health
Japan	1.3	Family	Material well-being	Occupation	Health
UK	1.53	Family	Friends	Hobbies	Occupation
U.S	1.66	Family	Friends	Material well-being	Occupation
Spain	1.19	Health	Material well-being	Occupation	Family
② South Korea	0.81	Material well-being	Health	Family	General Positive
Taiwan	0.98	Society	Material well-being	Family	Freedom

4.1 First Data: "What Makes Life Meaningful?" based on P.R.C Survey, 2021

4.2 Second Data: Fertility Rate based on OECD Data Base, 2021

these two distinct researches. The data for both areas are provided in the following sections, 4.1 and 4.2.

4.1 First Data: "What Makes Life Meaningful?" based on P.R.C's Survey, 2021

The first set of analyzed data goes beyond the example of religious-oriented collective consciousness of the 2017 paper and encompasses the research results of 17 distinct facets of collective consciousness about diverse life values surveyed by the Pew Research Center in 2021. The Pew Research Center conducted a survey titled "What Makes Life Meaningful?" targeting 18,850 adults from 17 advanced countries. The items included in this survey are as follows: Family and children, Occupation and career, Material well-being, Friends and community, Physical and mental health, Society and institution, Freedom and independence,

Hobbies and recreation, Education and learning, Nature and the outdoor, Romantic partner, Service and engagement, Travel and new experiences, Retirement, Spirituality, Faith and religion, Pets. There are a total of 17 items listed above[7].

4.2 Second Data: Fertility Rate based on OECD Data Base, 2021

The second set of data pertains to the fertility rate of countries that participated in the first data 4.1. These countries include Austria, New Zealand, Greece, United States, United Kingdom, Sweden, Italy, Canada, Netherlands, Belgium, Spain, France, Germany, Singapore, Japan, South Korea, and Taiwan, totaling 17 countries. The fertility rates for these countries were based on the 2021 OECD database(data.oecd.org)[8]. And the fertility rate for Singapore, which was missing from the OECD Fertility rates, was

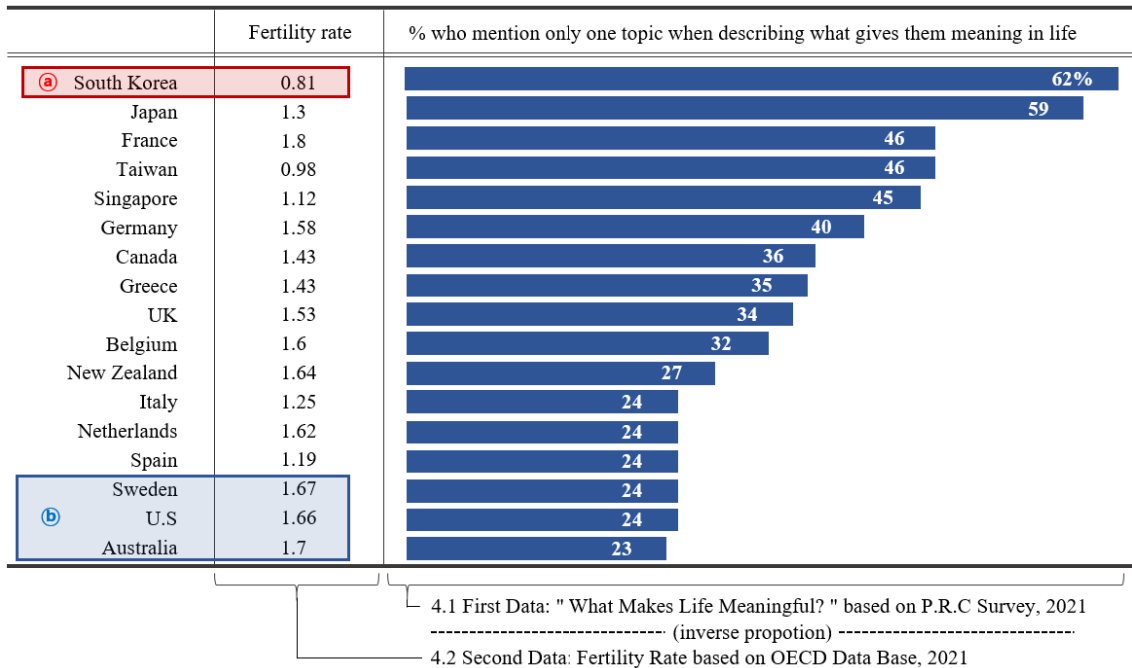


Fig. 1. 'Single-Choice' Response Ratio among S. Korean Respondents and Fertility Rates

referenced from Statista(www.statista.com)[9]. In this study, the responses to the question “What Makes Life Meaningful?” were analyzed and compared with the fertility rates of surveyed countries, including South Korea, in order to find prevailing common patterns in the public consciousness among low birth rate countries.

5. Data Association and Analysis

Pew Research Center's 2021 survey titled “What Makes Life Meaningful?” reveals, as seen in Table 2 ⑥, that a total of 14 countries chose ‘family’ as the most important value in life. In response to the fundamental question, South Korea uniquely prioritized ‘Material well-being’ as the topmost important value in life. The value of family ranked third in importance in Korea. Among the countries where the value of family is ranked third, similar to South Korea, is Taiwan. And Spain's ranking for family value fell outside

of the top three, taking the fourth position. A common factor among these countries is that they are all characterized as extremely low fertility countries with an average birth rate of 1.2 or lower. Excluding the city-state of Singapore, the commonality among South Korea, Spain, and Taiwan with fertility rates of 1.2 or lower is that they prioritize the value of ‘Material well-being’ over family values. In particular, as shown in Table 2 ①, South Korea, with the lowest fertility rate of 0.81 among the surveyed countries, is the only nation where the value of ‘Material well-being’ occupies the topmost position. This result suggests that respondents in Korea perceive that family formation is not possible without the prerequisite of ‘Material well-being’, which they consider as their foremost value. In the case of Taiwan, the other country with a birth rate below 1.0, the fact that ‘Freedom’ occupies the 4th rank reflects that the top-ranked value ‘Society’ is also likely a result of the increasing threat from China.

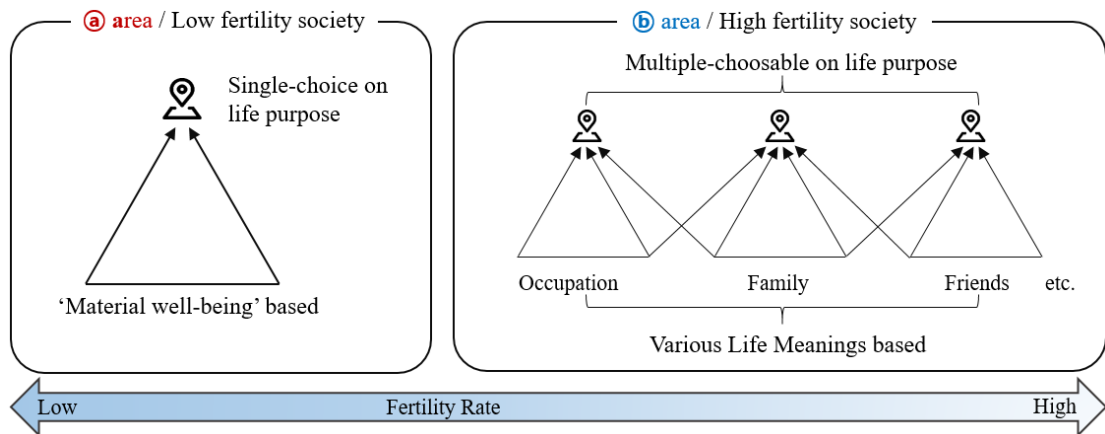


Fig. 2. A Comparison 'Material Well-being Priority based Single-goal Society' with 'Diverse Values based Multi-goal Society'

Furthermore, another characteristic identified from Korean respondents during Pew Research Center's survey process is their tendency toward 'single-choice' behavior. This survey was conducted in a multiple-choice format, allowing 17 countries's respondents to choose multiple items out of 17 questions. Fig. 1. presents the degree of predominant inclination of respondents in each country towards either having multiple life goals or a singular life goal.

As seen in Fig. 1. ③, Korean respondents exhibited a high level of single-choice behavior in the multiple-choice survey format, with 62% selecting only one option. By comparing the data 4.2 on fertility rates and the percentage of single-choice responses data 4.1, it becomes evident that these two figures are inversely proportional. Among the majority of 17 countries (excluding France, Italy, and Spain), higher fertility rates were observed in countries where respondents had the option to choose multiple life values. As the responses approached the multiple-choice region in Fig. 1 ④, the fertility rates tended to be higher in most countries. This phenomenon is inferred to be a result from the tendency of respondents who recognize the diversity of life values to believe that they can provide a more positive future for next generations.

6. Finding

The fact that 'Material well-being' ranked first as a condition for a meaningful life in Table 2. and another unique characteristic of South Korean respondents identified in Fig. 1, where they tend to choose only one answer, can be comprehensively analyzed in correlation with fertility rates, as illustrated in Fig. 2.

Fig. 2. ③ area represents countries where 'Material well-being' is the predominant foundation and life goals are concentrated in one place. Among the surveyed countries, South Korea (0.81) and Taiwan (0.98) are the only countries with fertility rates below 1.0 that fall within this area ③. The commonality between these two nations is that the value of 'Material well-being' takes precedence over 'Family' values. Fig. 2. ④ area represents countries where the meaning of life is based on various values and where life goals can be pursued through diverse options. This area resembles a landscape with many reachable peaks, indicating that individuals can achieve and derive satisfaction from their life goals regardless of which path they choose, thereby experiencing fewer feelings of life failure. There are always alternative purposes for them to succeed even if they fail in

one goal. Hence, these countries exhibit higher fertility rates due to the structure where societal members feel less burdened by the fear of life's failures and are more open to pursuing generational reproduction.

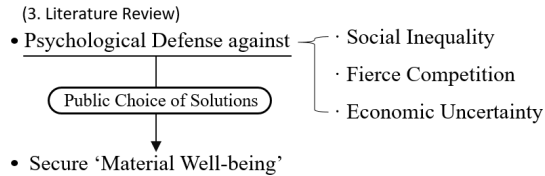


Fig. 3. Relevance of Conclusions to Previous Studies

The reason for the fixation on 'Material well-being' is estimated to be linked to previous research findings as shown in Fig. 3. In Chapter 3, the causes of low birth rates were identified as 'social inequality', 'competition', and 'economic uncertainty'. The public's anxiety stemming from these factors has led them to seek solutions, and the public's choice has been 'Material well-being'. It is interpreted that the public seeks to reduce the anxiety arising from inequality, competition, and an uncertain future by securing 'Material well-being'. Furthermore, it can be observed that the birth rate has decreased as a consequence of the energy consumption required to ensure 'Material well-being'.

7. Conclusion

This study examined two main aspects. First, it explored the differences in fertility rates between societies where life values are composed of humanistic factors such as family, career, and friendships, and societies where 'Material well-being' is prioritized. Second, it investigated the relationship between fertility rate differences arising from the singularity and multiplicity of life value goal choices. By integrating these two phenomena, the following interpretations can be made:

- ① The fertility rate in countries where 'Material well-being' is prioritized over family values tends to be lower.
- ② The sole country(South Korea) where 'Material well-being' is considered the top life value is also the country with the lowest fertility rate.
- ③ When life meanings can be diversified in their choices, the area for achieving life satisfaction expands, leading to higher potential for generational reproduction.
- ④ Conversely, when the scope for giving meaning to life is narrow, the area perceived as life failures expands, potentially constraining generational reproduction.

The comprehensive interpretation of the extreme low fertility phenomenon in South Korea can be derived from the four conclusions outlined in this study like followings; Koreans prioritize 'Material well-being' as their foremost value, considering it a foundational prerequisite for other familial and societal values. The fact that Koreans concentrate the highest proportion on a singular value choice, 'Material well-being', indicates that it is regarded as a significant prerequisite for the establishment of all other values. Consequently, Koreans who perceive 'Material well-being' as the sole value of life and fail to achieve this single purpose easily experience feelings of defeat in life. This phenomenon contributes to the formation of a reluctance to pass on such a sense of failure to next generations, which is reflected in the low fertility rate.

In a society with a single-goal-oriented pyramid structure, it produces a minority of winners while generating a majority of losers. Such a societal structure that generates a great deal of feelings of defeat is unsustainable.

This extreme low fertility phenomenon will continue to negatively impact the industrial economy while scarcity of the industrial workforce is currently being mitigated by attracting foreign

labor. However, if South Korea's economic situation deteriorates further, foreign labor will eventually leave. Therefore, in order to sustain the industrial competitiveness, South Korean society needs to recognize various forms and values of life, striving for ethnic diversity in the population composition. Additionally, beyond Material well-being, there is a need for national-level support for humanities research and education focused on enhancing diverse life values such as family, friends, nature, and hobbies, as demonstrated by countries with higher birth rates.

As a specific recommendation for the industrial sector, as of 2023, it is crucial to significantly increase the visa issuance quota for skilled foreign workers beyond the current level 35,000. Considering that as of 2022, there was a shortage of 185,000 workers in the Korean industrial sector, this expansion should be more than five times the current quota. Furthermore, considering that the natural population decrease in Korea was 120,000 in 2022, the policies aimed at attracting and providing support for the settlement of skilled foreign workers should be urgently implemented.

This paper has a limitation in that it leaned towards subjective interpretations without utilizing quantitative methodologies, despite addressing numerical data such as birth rates and selectivity. In lieu of these shortcomings, it has enhanced the qualitative methodological value through comparative analysis with previous research cases. Subsequent research following this paper aim to explore how Korean society can move beyond 'Material well-being' and progress towards recognizing the diversity of life perspectives, embracing a wider range of humanistic values.

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