

Analysis of the Effects of Birth Encouragement Policy according to Changes in the International Trade Environment: Focusing on Generation MZ

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Abstract

Purpose - Population is the foundation for maintaining and growing the strength of a nation, and a certain number must be maintained for the growth of the national economy. and Amidst the changing population structure where the elderly population is steadily increasing while the productive population is gradually decreasing, there is a practical need for devising solutions to overcome the low birth rate.

Design/methodology/approach - For conducting this study, data was collected from a total of 1,000 residents of Goyang city, aged 19 and above. Out of these, empirical analysis was conducted using the SPSS 29.0 statistical program on the response data of a total of 247 individuals, including 156 individuals in their 20s and 191 individuals in their 30s, who belong to the MZ generation.

Findings - The results showed that first, the awareness of the childbirth encouragement policy did not significantly affect the child-rearing environment. The perception of the importance of the childbirth encouragement policy had a positive and significant effect on the child-rearing environment. Moreover, the child-rearing environment had a positive effect on marital attitudes.

Research implications or Originality - Thus, rather than the effects of awareness through the promotion and education of national childbirth policies, it is preemptively necessary to realize substantial childbirth encouragement policies for improving the child-rearing environment.

Keywords: Economic Growth, Export Industry, Population Policy, Low Birth Rate, Productive Population

JEL Classifications: F10, J10, J13, J21, R10

I. Introduction

Population is the foundation for maintaining and growing the strength of a nation, and a certain number must be maintained for the growth of the national economy. In the past, the Republic of Korea had a very high population growth rate due to the influence of marriage and childbirth after the Korean War, increasing to about 25 million in 1960. Subsequently, the population steadily increased to about 37.4 million in 1980, about 46.1 million in 2000, about 48.5 million in 2010, about 51 million in 2015, and about 51.8 million in 2019. However, starting from 2020, the population has been consistently decreasing due to various reasons

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such as the ultra-low birth rate phenomenon and the increase in the number of deaths, and as of the end of June 2023 (based on resident registration), the total population of Korea was reported to be 51,392,745(Statistics Korea, 2023).

The total fertility rate in Korea dropped from 4.53 in 1970 to below the replacement level at 2.06 in 1983, and has continued to decline in the 2000s to 1.48 in 2000, 1.23 in 2010, and 0.78 in 2022, interpreted as a result of various issues including the increase in average income due to the expansion of women's social advancement(Kosis, 2023; Retherford, 2001), difficulties in work-family balance, decrease in the number of marriages, and the failure of low birth rate policies by the government and local governments. The simultaneous progress of low birth rate and aging is indeed deepening concerns in economic aspects such as a reduction in the productive age population and productivity. In the low-growth era, it must be acknowledged that the population will decrease, and efforts to maximize the positive aspects should also be devised.

Amidst the accelerated low birth rate problem since the 2000s, domestic toy manufacturers are facing management difficulties while foreign toy companies from China and other countries have preoccupied the domestic market. The total export amount, including vehicles, dolls, stuffed toys, metal, synthetic resins, and other toys, was \$86,483,000 based on 2021, and the total import amount, including the U.S., Japan, Hong Kong, Taiwan, China, the EU, and others, exceeds 10 times the exports at \$923,182,000(Korea Toy Industry Cooperative, 2023). The domestic toy industry, which once boasted robust competitiveness to be the world's third-largest exporter in 1990, is struggling to maintain its original business amid the development of various contents based on the IT industry such as YouTube and the low birth rate.

Moreover, Korea has been operating its economy based on the export industry. The production and import-inducing effects due to exports are contributing to economic growth, and the value-added and employment-inducing effects are also high, increasing employment. Particularly, although the research results on the effects of exports on employment are very diverse, regional exports have been analyzed to have a positive effect on employment in the analysis of export elasticity and expansion in the Incheon and Jeonbuk regions. In this situation where the elderly population is gradually increasing while the productive population is gradually decreasing due to the change in population structure, there is a practical need for devising solutions to realistically overcome the low birth rate(Choi Yong Jae, Jaehun Choi, Park Hail, 2012 ; Oh Jun-Byoung, Mijin Kim 2016). In this study, the effects of childbirth encouragement policies on the MZ generation will be analyzed to grasp the causes and diagnosis of the current low birth rate problem and propose problems and measures for the existing low birth rate problem-solving policies. To do this, firstly, it will be checked what impact the satisfaction of the MZ generation with the childbirth encouragement policy has on the child-rearing environment and marital attitude. Secondly, it will be checked what impact the perception of the child-rearing environment of the MZ generation has on marital attitude. Thirdly, it will be checked what mediating effect the child-rearing environment has when the satisfaction of the MZ generation with the childbirth encouragement policy affects marital attitude. This study, which analyzes the effects of childbirth encouragement policies on the MZ generation and sets age as a control variable, has different characteristics from existing research.

II. Theoretical Background and Literature Study

1. Causes of Low Birthrate and Future National Prospects, Overseas Cases

Analysis of the socio-economic environment in Korea reveals several reasons for the low birthrate. First, there is a change in the values Koreans place on filial piety. The traditional belief that children should take care of their parents as they age is diminishing. Most individuals over 60 are bearing their living expenses with their spouses, preferring not to live with their children, indicating a shift in perceptions related to child and parental care. Second, the increasing cost of education and child-rearing is discouraging the younger generation from having children. Challenges faced during child-rearing include a sense of burden from parental responsibilities (31.7%), financial pressure (18.8%), and concerns for the child's safety (15.6%) (Korean Population, Health, and Welfare Association, 2021). This is interpreted as a result of increased youth unemployment and a focus on career development, which is seen as a barrier to employment due to the burden of childcare. Third, individualistic views on marriage are affecting the birth rate (Jeju Women and Family Research Institute, 2022), the MZ generation is showing decreased necessity for marriage, increased divorce rates, and more open thoughts about marriage, cohabitation, childbirth, separation of life from children, and a positive attitude towards childlessness. The recent trend among the MZ generation not to consider the necessity of children when marrying and prioritizing couple-centered lifestyles contributes to this phenomenon. Fourth, the continued inequality in societal norms regarding parenting and marriage is also influencing the low birth rate. To increase the birth rate, it's essential to reduce the high domestic burden on women by expanding men's participation in childcare and implementing suitable work-family reconciliation policies.

If the low birth rate and aging population persist, Korea is predicted to have the highest elderly population by 2050. This situation will likely lead to a rigid labor market, decreased tax revenue due to low growth, unsustainable pension systems, surging national debt, lack of military resources, and local extinction. Despite the grave population cliff crisis, the government and local authorities are promoting various low birthrate and aging policies, such as improving the childcare culture environment, expanding childcare facilities, extending parental leave, increasing basic old-age pensions, and creating jobs for the elderly. However, it's been pointed out that existing policies have limitations in solving the problem (Kwon Hyuk, 2022). There is a growing consensus on the need to benchmark foreign examples absolutely.

Regarding low birth rate response policies, France, which is highly acclaimed for its effective measures, provides child allowances, family assistance, housing allowances, and more through the Family Allowance Fund (CAF, 2023), regardless of economic status. During pregnancy, all medical expenses and childbirth costs are fully covered. Free public education is available for children up to five years old. Families with two or more children receive family allowances until the children turn 20. This system enables work and childcare by providing free childcare and education. In France, crèche institutions for children aged 0 to 2 require a licensed doctor as director, and early childhood teachers must obtain a national certification through a specialized training course. The national government supervises and evaluates the quality of childcare support, and each administrative unit has a dedicated department for infants in local maternal and child health centers, responsible for certification and qualification management. École

maternelle institutions, supporting children aged 3 to 5, offer free education, and their establishment is geographically close to elementary schools with a similar training process. In an era where dual income is becoming a necessity, France allows for hiring certified nannies and secure, reliable full-time or part-time childcare, contributing to its success. This supports the research by Sung Nak-Il and Park Sun-Kwon(2012), emphasizing the need for additional reliable and high-quality childcare facilities in Korea to increase the birth rate. In contrast, the Japanese Prime Minister Kishida, announced a 'Different Dimensional Low Birth Rate Measure' on March 31st, promising comprehensive plans from pregnancy to childcare, early childhood education, and after-school programs. Specific measures include the abolition of child allowance income limits, extension of payment periods (up to high school graduation), free meals, tuition fee reductions, priority for public rental housing, and priority application of long-term fixed-rate mortgage loans for multi-child households. Despite these announcements, the Japanese government's measures have received mixed reviews, some saying they are no different from the past, while others appreciate the removal of child allowance income limits and increase in parental leave pay(こども政策担当大臣, 2023). Successful international examples like the USA (tax support), the UK (One-Stop Child Center Program), and Sweden (universal allowance support, establishment of social perception norms) suggest the importance of analyzing various national cases to develop a low birth rate solution suitable for Korean circumstances.

2. Analysis of the Effect of the Korean Government (Local Government)'s Birth Encouragement Policy

Generally, when a specific country experiences low birth rates and aging at the same time, it is expected to reduce economic productivity, potentially lowering the country's future competitiveness(Morgan, 2003). In response to the changes brought about by low birth rates and an aging population, the South Korean government proclaimed the Low Birth and Aging Society Basic Law on May 18, 2005, with the aim of enhancing national competitiveness and contributing to the improvement of the quality of life of its citizens and the continuous development of the nation. Despite significant financial and policy support, the number of newborns continues to decrease, raising questions about the effectiveness of these policies(Cho Jin-woo, 2021).

A detailed analysis of the impact of the national and local government's birth encouragement policies on child-rearing environments is needed. An analysis of the influence of national local government's birth encouragement policies on birth rates emphasized the need for various support policy projects, as only economic cost support appeared to increase birth rates(Lee Chung-hwan, Shin Jun-seob, 2013).

The research results coincide with the study on the effect of birth encouragement policy in Uiryong County, a non-metropolitan rural area(Lee Mi-ok, Myeong Sung-Jun, 2015). It was analyzed that married women generally have a higher awareness of birth encouragement policies than unmarried women, and that policies related to child care, work childcare facilities, parental leave, and maternity leave positively affect the solution to the low birth rate problem. However, further research is needed to determine whether the proposed policies are effectively implemented, as the responses are based on the assumption that the birth encouragement policies will help overall family life.

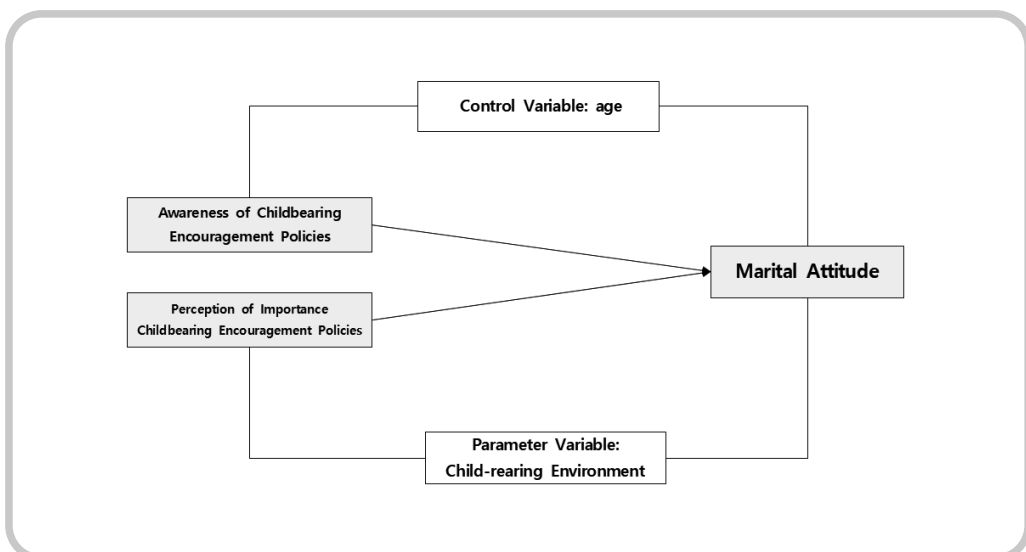
Lee Mi-Ran (2009) analyzed that the childcare fees, family childcare allowances, and child allowances supported by national funds have a positive effect on marital attitudes, while other policies do not. He also emphasized the importance of detailed examination and demand-centered policy development by the government and local governments as a positive child-rearing environment was found to increase marital attitudes. Moreover, various preceding studies have shown the desire for expanded cost support like childbirth encouragement funds, additional expansion of quality childcare facilities, and social insurance and tax support. Although the government and local governments are implementing various policies, the overall perception of the policies is low, and there is a proposed need for effective policy development, including additional cost support such as an increase in child allowances and childcare fees.

III. Research Design

1. Research Model

The research model of this study was designed to explore, first, the impact of awareness and importance of government and local government's childbearing encouragement policies on child-rearing environments through the analysis of preceding research. Second, it aimed to investigate the effect of the awareness and importance of childbearing encouragement policies on marital attitudes. Third, it sought to explore the impact of the child-rearing environment on marital attitudes. Fourth, it intended to understand the mediating role of the child-rearing environment when childbearing encouragement policies' awareness and importance affect marital attitudes. To enhance the accuracy of this study, age was designed as a control variable, and the detailed research model is as shown in Fig 1.

Fig. 1. Research Model



2. Research Hypotheses

2.1. Awareness of Childbearing Encouragement Policies, Perception of Importance and Child-rearing Environment, and Marital Attitude

Research related to the awareness of childbearing encouragement policies showed that married women have a higher overall awareness of childbearing encouragement policies compared to unmarried women. It was analyzed that policies such as child care, workplace childcare facilities operation, parental leave, and maternity leave have a positive impact on the child-rearing environment and solving low birth rate issues (Nowon, Sangho Moon, 2010). The research hypotheses set based on this are as follows.

- H1:** Awareness of childbearing encouragement policies will have a positive impact on the child-rearing environment.
- H2:** Perception of the importance of childbearing encouragement policies will have a positive impact on the child-rearing environment.
- H3:** Awareness of childbearing encouragement policies will have a positive impact on marital attitudes.
- H4:** Perception of the importance of childbearing encouragement policies will have a positive impact on marital attitudes.
- H5:** The child-rearing environment will have a positive impact on marital attitudes.

2.2. Mediating Effect of the Child-rearing Environment

Analysis showed that even high participation in joint child-rearing by fathers does not have a positive impact on mothers' child-rearing behavior or changes in the child-rearing environment. Significant results were shown in the analysis mediated by mothers' child-rearing efficacy (Jihyun Kim & Yunkyung Choi, 2020). The research hypotheses set based on this are as follows.

- H6:** When awareness of childbearing encouragement policies affects marital attitudes, the child-rearing environment will mediate.
- H7:** When the perception of the importance of childbearing encouragement policies affects marital attitudes, the child-rearing environment will mediate.

2.3. Operational Definition of Variables

In this study, the operational definitions were divided into awareness of childbearing encouragement policies, perception of the importance of childbearing encouragement policies, child-rearing environment, and marital attitudes. First, the awareness of childbearing encouragement policies was set with a total of five items, including government-supported family child-rearing and child allowance, Gyeonggi Province-supported postnatal care expenses support, Goyang special city-supported childbirth support funds, and elementary school childcare classroom support. Second, the perception of the importance of childbearing encouragement policies was set with a total of six items, including family child-rearing and child allowance,

postnatal care expenses support, childbirth support fund support, elementary school childcare classroom support, and middle/high school freshman uniform support, which is jointly supported by Gyeonggi Province and Goyang City. Third, the child-rearing environment was divided into work-family balance environment, spouse's child-rearing participation degree, government childcare support policies, and infant childcare facility support. Fourth, marital attitudes were divided into a total of two items, including ideal number of children and child planning.

IV. Empirical Analysis and Hypothesis Testing

1. Data Collection and Analysis Method

For the implementation of this research, a survey was conducted from November 28 to December 13, 2019, targeting 1,000 residents of Goyang City, aged 19 and above, to grasp the perception of population policies including marriage, childbirth, and child-rearing. Out of the respondents, empirical analysis was conducted using SPSS 29.0 statistical program on response data of a total of 247 individuals, including 156 individuals in their 20s and 191 individuals in their 30s.

2. Empirical Analysis and Hypothesis Testing

This study conducted factor validity and reliability analysis using the SPSS 29.0 statistical program to verify the proposed hypotheses. It was found that there were no issues with the validity and reliability of the items. Detailed analysis results are as shown in Table 1.

Table 1. Factor Analysis and Reliability Analysis

Factor	Ingredient				cronbach's α	cumulative(%)
	1	2	3	4		
Awareness of Childbearing Encouragement Policies	.719	-.004	.009	-.022	.763	23.175
	.693	-.027	-.057	.151		
	.782	.021	.108	-.033		
	.615	.123	-.037	-.100		
	.649	-.035	.144	-.037		
Perception of Importance Childbearing Encouragement Policies	.037	0.834	-.043	-.020	.906	37.557
	.083	0.853	.016	-.007		
	.014	0.874	-.056	.014		
	-.050	0.826	-.156	-.015		
	.039	0.728	-.055	.039		
	-.023	0.694	-.084	.008		
Child-rearing Environment	-.050	.075	.732	.159	.717	50.139
	.005	.122	.580	.258		
	-.175	-.003	.780	-.052		
	-.076	-.031	.747	-.116		
Marital Attitude	.027	-.040	.008	.882	.769	60.112
	-.006	-.030	.154	.879		
KMO and Bartlett test of sphericity test	KMO				.752	
	Chi-square				1569.120	
	df(p)				136	
	Significance Probability				.000	

3. Correlation Analysis

A Pearson correlation analysis was conducted to check whether the variables are independent or related, and a significant correlation was found among independent, mediating, and dependent variables. Detailed correlation analysis results are as shown in Table 2.

Table 2. Correlation Analysis Results

Division	Average	Standard Deviation	Awareness of Childbearing Encouragement Policies	Perception of Importance Childbearing Encouragement	Marital Attitude	Child-rearing Environment
Awareness of Childbearing Encouragement Policies	7.80	1.75	1	-0.026	-0.036	0.097
Perception of Importance Childbearing Encouragement Policies	22.12	5.69	-0.026	1	0.004	-.131*
Marital Attitude	5.28	1.35	-0.036	0.004	1	.161*
Child-rearing Environment	9.26	2.70	0.097	-.131*	.161*	1

4. Hypothesis Verification Result

4.1. Awareness and Importance Perception of Childbirth Encouragement Policy and Parenting Environment

First, the effect of awareness of childbirth encouragement policies on the parenting environment was analyzed, and Hypothesis 1 was accepted with a result of .091. Second, the effect of the perception of the importance of childbirth encouragement policies on the parenting environment was analyzed, and Hypothesis 2 was accepted with a result of .016. Detailed results are as shown in Table 3.

Table 3. Awareness and Importance Perception of Childbirth Encouragement Policy and Parenting Environment

Model	Standardized Regression Coefficient		Standardized Coefficients	t	p	95.0% confidence interval for B		Collinearity Statistic		
	B	SE				β	Supremum	Infimum	tolerance	VIF
1	(constant)	9.376	0.459		20.442	0.000	8.474	10.279		
	age	-0.072	0.278	-0.014	-0.258	0.796	-0.618	0.474	1.000	1.000
2	(constant)	9.626	1.063		9.057	0.000	7.536	11.717		
	age	-0.063	0.280	-0.012	-0.223	0.824	-0.613	0.488	0.963	1.039
	A	0.141	0.083	0.091	1.695	0.091	-0.023	0.304	0.972	1.029
	B	-0.062	0.025	-0.130	-2.421	0.016	-0.112	-0.012	0.988	1.012

A: Awareness of Childbearing Encouragement Policies, B: Perception of Importance Childbearing Encouragement Policies, subordination variable: Child-rearing Environment

4.2. Awareness and Importance Perception of Childbirth Encouragement Policy and Marriage Attitude

First, the effect of awareness of childbirth encouragement policies on marriage attitudes was analyzed, and Hypothesis 3 was rejected with a result of .582. Second, the effect of the perception of the importance of childbirth encouragement policies on marriage attitudes was analyzed, and Hypothesis 4 was rejected with a result of .980. Detailed results are as shown in Table 4.

Table 4. Awareness and Importance Perception of Childbirth Encouragement Policy and Marriage Attitude

Model	Standardized Regression Coefficient		Standardized Coefficients	t	p	95.0% confidence interval for B		Collinearity Statistic		
	B	SE				β	Supremum	Infimum	tolerance	VIF
1	(constant)	5.381	0.245		21.947	0.000	4.898	5.864		
	age	-0.070	0.161	-0.028	-0.435	0.664	-0.387	0.247	1.000	1.000
2	(constant)	5.610	0.619		9.065	0.000	4.391	6.829		
	age	-0.066	0.164	-0.026	-0.401	0.689	-0.388	0.257	0.973	1.028
	A	-0.029	0.053	-0.035	-0.552	0.582	-0.134	0.075	0.996	1.004
	B	0.000	0.016	0.002	0.025	0.980	-0.031	0.032	0.973	1.028

A: Awareness of Childbearing Encouragement Policies, B: Perception of Importance Childbearing Encouragement Policies, subordination variable: Marital Attitude

4.3. Parenting Environment and Marriage Attitude

The effect of the parenting environment on marriage attitudes was analyzed, and Hypothesis 5 was accepted with a result of .011. Detailed results are as shown in Table 5.

Table 5. Parenting Environment and Marriage Attitude

Model	Standardized Regression Coefficient		Standardized Coefficients β	t	p	95.0% confidence interval for B		Collinearity Statistic	
	B	SE				Supremum	Infimum	tolerance	VIF
1 (constant)	4.473	0.326		13.725	0.000	3.831	5.114		
A	0.086	0.034	0.161	2.569	0.011	0.020	0.152	1.000	1.000

A:Child-rearing Environment, subordination variable: Marital Attitude

4.4. Mediating Effect of Parenting Environment

First, to understand the mediating effect of the parenting environment when the awareness of childbirth encouragement policies affects marriage attitudes, analysis using SPSS process macro 4 showed results of LLCI(Boot) -.0017, ULCI(Boot) .0437, leading to the rejection of Hypothesis 6. Second, results of LLCI(Boot) -.0185, ULCI(Boot) -.0006 led to the acceptance of Hypothesis 7. Detailed results are as shown in Table 6.

Table 6. Mediating Effect of Parenting Environment

Route	Effect	se(Boot)	t	p	LLCI(Boot)	ULCI(Boot)	Effects
A1 → D1	-.0298	.0530	-.5612	.5751	-.1342	.0747	T/E
A1 → D1	-.0441	.0527	-.8371	.4034	-.1478	.0597	D/E
A1→C1 → D1	.0143	.0118	-	-	-.0017	.0437	I/E
B1 → D1	-.0006	.0160	-.0367	.9708	-.0322	.0310	T/E
B1 → D1	.0070	.0161	.4336	.6650	-.0248	.0388	D/E
B1→C1 → D1	-.0076	.0046	-	-	-.0185	-.0006	I/E

V. Conclusion

Up until now, South Korea has been operating its economy based on its export industry. The production and import effects resulting from exports have greatly contributed to economic growth. Furthermore, the value-added and employment effects from exports have been prominent, leading to an increase in job opportunities. While there are varied research outcomes regarding the correlation between exports and employment, studies on the elasticity and ex-

pansion of exports in areas like Incheon and Jeonbuk have shown that local exports have a positive influence on employment.

Given the current demographic shift with the aging population increasing and the productive population gradually decreasing, pragmatic measures to address the low birth rate are required. In this study, we aimed to analyze the effectiveness of pro-natal policies on the MZ generation, pinpoint the root causes and diagnosis of the current low birth rate, and propose solutions to the existing problems. The implications and anticipated effects of the proposed policies from this research are as follows:

Firstly, it was found that the awareness of pro-natal policies significantly impact the child-rearing environment. However, the recognition of the importance of these policies has a notably positive influence on the child-rearing environment, which in turn positively affects attitudes towards marriage. Instead of focusing solely on awareness campaigns for national birth policies, there's a preemptive need to implement tangible pro-natal measures that enhance the child-rearing environment. The MZ generation, in particular, prefers policies that strengthen child-care systems, support allowances for infants, and improve the awareness and institutional measures to prevent career discontinuation during parental leave. To elevate the birth rate, we suggest emulating France's CAF (Family Allowances Fund) approach to ease the burdens of childbirth and child-rearing. Since most areas of a child's brain develop within the first 36 months, parents should either be facilitated to nurture their child during this period or be provided with child care facilities supervised by licensed physicians. To achieve this, government ministries related to women and family should collaborate with experts, formulate detailed management indicators to reinforce care systems, and consistently monitor quality to ensure parents can confidently entrust their children.

Secondly, while the awareness of pro-natal policies and their perceived importance don't significantly influence attitudes toward marriage, the child-rearing environment mediates when the significance of these policies impacts marital attitudes. Existing pro-natal policies operated and supported by the government and local bodies may not necessarily enhance the willingness or intent to marry. However, a supportive child-rearing environment, involving a balance between work and family, active participation of both spouses in child-rearing, government-sponsored child care, and infant-care facilities, can indeed boost marital attitudes. Addressing the current low birthrate and aging population is a nationwide concern. To remedy this, businesses and the MZ generation should spearhead the formation of child-rearing policies and measures. As of 2022, only 5,415 businesses in South Korea are certified as family-friendly, indicating low participation. Although certified companies receive incentives like certification marks, preferential loan interest rates, bonus points during government policy support, and management consulting, these perks seem inadequate. It's crucial for relevant associations like the Small and Medium Business Corporation to conduct surveys and glean insights to truly foster family-friendly certified businesses. The MZ generation's desired enhancements to child-rearing and care systems include the operation of fatherhood schools by local bodies to promote active paternal participation in child-rearing. Additionally, we suggest revising the current government-operated hourly and full-day child-care services to expand support eligibility. Mid-term, we propose benchmarking family allowances from countries like Germany, the Netherlands, and Sweden to launch a Korean-style child-rearing allowance system. We suggest merging the existing child-rearing (100,000 KRW for ages 2-6) and child

allowances (100,000 KRW for ages 0-7), providing 300,000 KRW monthly for children up to 18 years, and extending it to 25 years for students or those undergoing vocational training.

References

- Choi, Y. J, J. H Choi and H. I Park (2012). "A Study on Export Promotion Strategies for Regional Growth: Focused on Jeonbuk Region", *Korea Trade Review*, 37(2), 73-104.
- Oh, J. B and M. J Kim (2016). "Does Export Promote Employment in the Manufacturing Sector", *Journal of Economics Studies*, 34(2), 61-93.
- Sung, N. K and S. K Park (2012). "Childcare Facilities, Private Education Expenses, and Birth Rate: Evidence from Korean Regional Data", *Korea Journal of Population Studies*, 35(2), 73-101.
- Cho, J. W (2021). "A Study on the Problems and Improvement Tasks of the Framework Act On Low Birth in an Aging Society", *Journal of Law (Journal of Law)*, 32(1), 11-42.
- Lee, C. H and J. S Shin (2013). "An Analysis of Current Local Governments' Childbirth Policies and their Effects on Birthrate", *The Korea Local Administration Review*, 27(1), 97-124.
- Lee, M. O and S. J Myung (2015). "A Study on the effectiveness of the Childbirth Promotion Policy: A Case of Uiryeong-Gun, Gyeongsangnam-do", *Korean Journal of Local Government & Administration Studies*, 29(1), 331-350.
- Lee, M. R (2009). "Effects of Childbirth Encouragement Policies on Unmarried Women's Motivation for Childbirth and Childrearing", *Korean Journal of Family Welfare (K.J.F.W)*, 24(3), 75-96.
- Morgan, S. P. (2003). "Is Low Fertility-First-Century Demographic Crisis?", *Demography*, 40(4): 589-603.
- No, W and S. H. Moon (2010). "The Effect of the Trust on the Policies for Childbirth Promotion on the Attitudes toward Childbirth", *Korean Journal of Policy Analysis and Evaluation*, 20(2), 257-281.
- Kwon, H. (2022). "Effect of Local Government Senior Support Policy Policy on Preparation for Later Life: Verification of Mediating Effect of Recognition of Senior Citizen Problem", *Culture and Convergence (Culture and Convergence)*, 44(3), 799-820.
- Kim, J. H and Y. K Choi (2020). "The Influence of Father's Co-parenting on Mother-infant Interaction and Home Environment: the Mediation Effect of Mother's Parenting Efficacy", *Korean Journal of Child Care and Education Policy (KJCCPEP)*, 13(3), 53-75.

こども政策担当大臣(2023),「こども・子育て政策の強化について(試案)~次元の異なる少子化対策の実現に向けて~」

Statistics Korea. (2023). <https://kostat.go.kr/ansk/>

KOSIS (2023). <https://kosis.kr/index/index.do>

Korea Toy Industry Cooperative (2023). <http://www.kotoy.or.kr/>

Korea Population, Health and Welfare Association(2021). <https://www.ppfk.or.kr/>

Jeju Women and Family Research Institute(2022). <http://en.jewfri.kr/index.php>

CAF(2023). <https://www.caf.fr/>