Birthing Babies for National Defense

The Securitization of Falling Fertility Rates in South Korea

Author: Maija Palomäki

Supervisor: Thorsteinn Kristinsson



Abstract

The decrease in fertility rate has become an increasingly pressing matter worldwide. This research employed the Copenhagen School-rooted theory of securitization in analyzing the discourse on falling fertility rates within South Korea's defense white papers from 2012 to 2022. In contrast to the mainstream security studies, the argument is that state-specific fertility rates can be considered a threat to national security despite being a non-material threat. The case study of South Korea and its Ministry of National Defense contributes to how the declining birth rate has been framed regarding national security with two questions; 1. How have different administrations framed the issue of falling birth rates in terms of security, 2. What measures have been the consequences in response regarding military practices and national security? The analysis found that since 2020 the securitization of dropping fertility rates intensified strongly, positioning this demographic trend as a serious threat to South Korea's national security and reached its peak in 2022. The frequency of measures taken in response to the threat was also highest in 2022. The state invested especially in advances in technology and science, force structure reorganizing, and improving the conditions and number of female army members.

Keywords: South Korean birth rate, Fertility rates, National security, Defense, Security studies, Securitization, Copenhagen school

Acknowledgments

I am deeply grateful for all the opportunities this Master's Programme and the center have offered me. An even greater thank you belongs to my supervisor, who with all the kindness, remained by my side and offered me reflection and room for improvement with this thesis. I was allowed to be messy and lost and to find some of the genius inside.

I am filled with gratitude for myself for making it. For doing what was necessary for the future fulfillment of my purpose and my goals. I am proud of myself for all the hard work, although this is only the beginning.

Thank you, Kiara, for the endless support, devotion, and love that abled this. Thank you, Mom, for putting up with my nervous sprints, shrieks – and sweating.

Table of Contents

List of Table	es	1	
1. Introduction			
	1.1. Research aim	2	
	1.2. Disposition outline	3	
2. Literature review			
	2.1. Declining fertility	4	
	2.2. Theoretical approaches to security	6	
	2.3. The bridge between falling birth rates and security	9	
3. Theory		12	
	3.1. Securitization	12	
4. Methodology			
	4.1. Method	14	
	4.2. Data and data selection	15	
	4.3. Coding process and operationalization	17	
	4.4. Research limitations	19	
	4.5. Ethical considerations	20	
5. Analysis		20	
	5.1. Changes in military structures	22	
	5.2. Evolution of social policies	24	
	5.3. Alternative military service systems and recruitment policies	26	
	5.4. Economic changes as aftermaths	28	

5.5. Technology and science	
5.6. Main findings	32
5.7. Discussion	33
6. Conclusion	
7. Bibliography	

List of tables

Table 1: Defense White Papers by the Ministry of National Defense Republic of Korea, 2012–2022

Table 2: Securitization and measures taken in terms of military practices in Ministry of National Defense Republic of Korea's Defense White Papers, 2012–2022

1. Introduction

Falling birth rates as a threat to national security – case of South Korea. Recent times have seen declining birth rates and demographic transition – the shift from high mortality and high fertility to low mortality and low fertility – that inevitably according to Howe and Jackson (2011, p.23) accompany development and modernization. Not only is the size of nations ultimately impacted but this contemporary issue involves various dimensions across social, economic, and political areas.

Decreases in fertility rates in modern nations are seen taking place worldwide, including in South Korea which has the lowest birth rate in the world (OECD, 2024; Yoon, 2023). This has been widely recognized as a threat requiring further study (Yoo, 2023, p.305). The latest reports on the birth rate per woman in South Korean society have the number at 0,72 (McCurry, 2024; Statistics Korea, 2023) and the number has been predicted to worsen each following year.

Factors negatively influencing the decision to have kids include housing costs (Yoon, 2024b) which is also measured as the most powerful factor, education fees, unemployment, career interruptions of birth-givers (Lee & Kim, 2024; Yoon, 2024a), etc. In addition to the before listed factors found from pre-existing literature on the topic, the effects of political polarization, the level of democracy and equality (Heo, 2023), capitalism, and the taboo of mental issues that have led to high suicide rates (WHO, 2022), and the long working hours impact decisions on births thus the population size of the nation.

Concerning political polarization (Al-Fadhat & Choi, 2023) as an impactor on the negative decision to have children, one can further consider feminism in South Korea (Choo, 2020). Feminism itself for many is a curse word within Korean society and multiple campaigns have led to the blaming of feminism for the decrease in fertility and the collapse of demography. Campaigns such as this include Escape the Corset, MeToo, and 4B (Jung & Jang, 2024).

The political polarization (Cheong & Haggard, 2023) between young females and young men in South Korea has only intensified. The term idaenam (Chan, 2023, p.227) was newly created to have a name for the movement of men in their twenties who have shifted from progressive parties to conservative ones because of the deepened gender polarization. South Korea can be found 105th out of the 146 states ranked in the World Economic Forum's Gender Gap Index (2023), which makes it easy to argue for the need for further work concerning feminism and equality in the country.

Measures have been set to tackle the increasing decline in births. One of the latest 'big' developments has been current President Yoon's new cost-free after-school program 'to help ordinary citizens' (Son, 2024). Broader tools mentioned include immigration and its further opening, reforming the public education system (Jung, 2024), and further developing support for new parents in the shapes of money, parental leaves, and service (Kim & Parish, 2022; Yoo, 2023).

Despite the massive amounts of money, incentives, government policies, and welfare reforms built to reverse the decline of the birth rates the crisis keeps worsening. This means the number of future soldiers in the Korean army keeps shrinking despite the expenditures on military and defense growing annually (SIPRI, 2024; World Bank, 2024).

This interesting intersection that exists between falling birth rates and the ensuring of national security is the topic of this research. This thesis analyzes the securitization of the declining birth rate in South Korea regarding its national security with two questions; 1. How have different administrations framed the issue of falling birth rates in terms of security, 2. What measures have been the consequences in response regarding military practices and national security?

1.1. Research aim

The aim of this study is to analyze the complex impact of falling birth rates on national security as it is essential to assess demographic changes shaping security strategies and policies. With the use of securitization theory, the framing of the issue of the falling fertility rate by the Ministry of National Defense of South Korea is analyzed. A timeline through the analyzed administrations is created to showcase the securitization of birth rate decline concerning national defense white papers from the period between 2012 and 2022.

Not only is the analysis on the framing of the phenomenon of declining fertility rates a new approach to the fields of security studies and political science but it in addition it can reveal more of the intersection between security discourse on defense and critical changes within fertility so forth demographics within the specified Asian Studies context. This is especially fruitful as the research in the Asian Studies field includes the understanding and regarding of regional, societal, and cultural norms influencing the process of securitization and the frames within discourse, thereby enriching scholarly debates of various fields.

Thus, the purpose of this study is to provide a clear analysis of the defense white papers' discourse to examine how the 2012-2022 administrations of South Korea have securitized the decline in fertility rates in terms of national security. Furthermore, this research seeks to present the policy

measures made concerning military practices and national security, following the securitization of the falling fertility rates. This is natural because in most cases securitization leads to shifts in policies (Lindgren, 2019, p.358).

The data consists of six defense white papers from the mentioned time frame through which the following research questions are answered. This is done utilizing a hybrid method of qualitative and quantitative content analysis. The thesis focuses on the mentioned white papers and utilizes the methodological tools of qualitatively analyzing them and employing the quantifying of the data through frequency counting. This paper contributes to expanding the understanding of the dynamics of securitization of falling birth rates and policy responses in military practices within the national security of South Korea.

1.2. Disposition outline

This thesis examines to which extent South Korean administrations have framed and considered its falling birth rate a threat to its national security. Also to be analyzed is how have the national security measures and military practices changed during the analyzed period. In answering the research questions the next section first examines existing literature on the fall of fertility rates. A sub-section after that analyzes what has been researched regarding security studies and securitization. These are linked together in the next section by providing requests for further study of the topic by academics from fields related, thus providing further support for the importance of this research.

The next section of the thesis handles the theory part in-depth for a convenient understanding of the flow and reasoning of this study. The constructivist-originated securitization theory of the Copenhagen School of International Relations (IR) theory is explained for the expanded understanding of the theoretical framework of this thesis. This theory emphasizes discursive power, the socially and verbally constructed threats, and the following justified securitization of the threatened objects. Securitization is introduced thoroughly together with the reasoning for the selection of it as well as the implicit definitions.

Within the methodology part of the study the introduction to the method – a mix of qualitative and quantitative content analysis. The chosen method consists of both counting the frequency of certain words that fall under the theoretical concepts presented but also the qualitative side of how they have been framed, and what measures have been taken after the discussed framing. The data of the thesis consists of defense white papers from 2012 to 2022 by the Ministry of National Defense of the Republic of Korea. In addition, data selection, coding process, operationalization, research limitations of the author, and ethical considerations are further delved into.

In the fifth chapter of the thesis, the analysis provides the empirical findings of the state of South Korea's Defense Ministry's framing of the threat – read securitization – of the falling birth rate to its national security and the concrete consequences it has had on its national security policies in the military. This is followed by the final chapter concluding the thesis by summarizing the mastered research and the existing opportunities for further study.

2. Literature review

This section moves forward to give an overview of the existing body of literature as a by-product of the analysis, particularly within research on security studies and fertility. The assessment of the pre-existing works is done not only to evaluate the issue at stake but also, to further clarify the benefits of this research.

The existing research in this thesis is summarized into three strands. The first part of this chapter is 2.1. which brings forward literature on the fall of birth rates, to provide further background for the importance of the topic. Chapter 2.2. on the other hand, entails a more theoretical approach and considers the field of security studies, explaining the reasoning behind the selection of the securitization theory of this research piece. Lastly, part 2.3. combines the two previous strands of literature to clarify the gap in the existing literature that this thesis seeks to address.

Despite appearing like the targeting of dominant theories and understandings one could argue that all theories include a twinkle of critique for competing approaches. After all, arguments must be made for the justification of the right choice in theory even if one is extending pre-existing theories.

2.1. Declining fertility

The decrease in birth rates has been mainly approached from the point of view of nations and their internal struggles. These studied obstacles include social security systems, social structures, and policies (Komine & Kabe, 2009). Often studies addressing the tackling of low fertility rates, frame the urgency of this issue for improved economic performance. Additionally, the imbalance of demographic composition is a topic widely discussed within fertility rate literature.

Date and Shimizutani (2007) discuss that in Japan fertility rates turned to decline in the late 1970s, triggering responses from the Japanese government since the 1990s in the form of different policies and laws. The authors have not only analyzed the menu of policies but offered advice to the

government for the creation of a more functioning policy set. Although Date and Shimizutani (2007) analyze policy formulation within Japan, they demand further academic and empirical research on all sectors regarding the fertility rate decline. This demand is because they categorize the fall of birth rates as the most critical issue to study currently. This thesis takes a security-driven approach in response, to the decrease in fertility rates.

Similarly to Date and Shimizutani, Iijima et al. (2021) revolve their approach around internal policy shifts including raised retirement ages, etc. in encouraging and engaging programs for citizens for a brighter future for the Japanese society. The authors analyze that a falling birth rate and an aging population can be considered a threat to a state's growth potential. This thesis similarly considers policy shifts. The difference is that policy measures are analyzed within the national defense sphere. This is done after recognizing the framings of the administrations in South Korea between the years 2012-2022.

On the other hand, Liu and Tang (2017) in their China-focused study on the policy of second child contend it was created mainly to answer to the deepening structural issues regarding population. They note that the fertility policy system has been under an impactful transformation to answer the faced challenges. The authors do take into consideration security in terms of population security. They press the importance of having a balanced long-term development plan for the population. Population security and long-term plans influence the implementation of a wider support system included within the fertility policy system. Nevertheless, this approach does not analyze fertility rate challenges concerning state-level national security.

Duncan (2020) researched immigration policies and immigration minimization for the maintaining of national security and enhancement of the economy despite the globally fallen fertility rates. Though this thesis is not focused on immigration's impact on population size and national security it is important to note the author's recognition of the birth rate decline having an effect on the security and power of a state. Though Duncan (2020) mentions some states using immigration in answering to the worsening fertility rate it is safe to say South Korea is not one of these countries.

The South Korean government's ability to form a full military force is hampered by more than just a declining birth rate. Not only are the serving soldiers often against their mandatory service but additionally, the analyzed white papers (Ministry of National Defense Republic of Korea, 2012; 2014; 2016; 2018; 2020; 2023), show that the number of applications for the job of non-commissioned officers has hit an all-time low. Manpower reports signal of lack of trust in the military, a lack of plausible career prospects, dissatisfaction with the work environment and the

hierarchical culture within the military, and low occupational status and job security (Shin & Kim, 2019) as possible reasons for the manpower loss. All of the above further complicate the forming of a balanced and complete military in South Korea.

The above only scratches the surface of the mass of academic literature that has considered falling birth rates – with an empirical focus in East Asia as well – but with the perspective turned inside. These lack the acknowledgment of the effects on national security though it can all be argued related. Policy shifts and economic priority changes impact defense, military, and national security.

While the national policy, structure, and economic level focus is worthy, turning attention towards the plausibility of a wider view that highlights security as the impacted factor by the declining birth rate can offer a new fruitful approach.

2.2 Theoretical approaches to security

Security impacts the lives of people all around the globe. To address the field of security studies one shall shortly examine the main theoretical approaches. This section briefly describes the realist and liberal approaches. The last approach introduced is constructivism, which encompasses the utilized securitization theory of the Copenhagen School. This theoretical overlook is done to gain an understanding of the field and gain reasoning for the theoretical approach of the thesis.

A commonly taken security studies approach is realist. Realism is a traditional approach to security studies. Traditional realists such as Morgenthau (1948) built the school of thought with the focus on power, the balance of power, and national interests. The main actors are states that act based on self-interests and power dynamics.

Consequently, neorealists such as Waltz (1979) primarily argue that the international system is in anarchy with no overarching authority above states. Accordingly, in the uncertain international environment, above all else is the competition for survival, power, and dominance that equals security. Behavior and interactions are considered but the international system of power distribution is the main factor shaping them (Ibid.). This approach to studying security acts is not aligned with the research questions of this thesis.

Offensive realists such as Mearsheimer (2001; 2018) likewise emphasize state survival with the pursuit of power. The protection of sovereignty and national interests is from external threats. Aggressive striving for power exists because power is seen as relative in relation to other states. Military power and deterrence are used to ensure stability and state survival. Although the analysis

of interstate conflicts shall not vanish from its spot at the heart of security studies, realism does have its limitations regarding the analysis national defense concerning fertility rate decrease framing.

In a manner suitable for realism this thesis does have the state as the main object of the study. Likewise, military capabilities are considered. However, as the text above clarifies realism prioritizes traditional military threats and power competition. This has also been the case with security studies regarding South Korea. Its geopolitical location and North Korea relations concerning nuclear weapons and deterrence have been the main objects of study. Mearsheimer (2018, p.4) goes as far as saying that the possibility of a large-scale conventional war between two nuclear-armed states contemporarily exists on the Korean peninsula.

In answering the research questions of this thesis realism lacks the full ability to provide answers. The analysis of defense white papers on framing and measures taken is not about power competition between states. It is also not only about material capabilities. To not neglect societal and cultural factors and the frames created this thesis utilizes constructivism. In analyzing the framing of falling fertility rates attention is on discourses constructed and this aligns with the constructivist approach.

Liberalism then again offers an alternative approach to security studies through its emphasis on security through cooperation and complex interdependence (Keohane & Nye, 1987). In this school of thought, international organizations, agreements on trade and collective security arrangements, and institutions promote democracy and human rights in achieving security.

In contrast to realism, the liberal approach believes in security through collective security efforts. Liberalism focuses on mutual processes aimed at securing stability and security as exemplified by the Kantian three principles for the establishment of perpetual peace (Suri, 2013, p.225). These principles are the Republican principles, international law, and cosmopolitan rights. However, the topic of this thesis does not benefit from utilizing peace theories, nor is it the subject of the analysis of international organizations or cooperation. Nevertheless, the demographic peace theory is briefly mentioned in the next part of the literature review.

Similarly, Keohane and Martin (1995) and the importance of institutions or Nye's soft power concept would have limited relevance with defense white paper analysis on the framing and measures of fertility rates. Analyzing frames and the framework of national security and military practices does not focus on the projection of soft power. However, indirect connections might exist.

Soft power operates through non-coercive means of cultural influence, diplomatic initiatives, and partnerships within economics. It is the ability to affect the outcomes Analyzing the framing of fertility rates in defense white papers can reflect cultural and societal values and norms. Accordingly, studying the decrease in birth rates and its consequences on quality of life and social stability impacts human security. Despite all the above this thesis does not address or significantly gain from the concept of soft power. Further study of this might enrich a broader understanding of the topic.

This thesis, however, utilizes the securitization theory of the Copenhagen School which falls under the umbrella of constructivism. As briefly mentioned in the introduction to the realist and liberal approaches to security studies, constructivism focuses on subjects more crucial to this research. Constructivists emphasize the socially constructed nature of security which can be analyzed through discourse, norms, identities, and perceptions (Finnemore & Sikkink, 2001, p.394). As the empirical issue of decreasing birth rate's framing is the subject of the analysis, constructivist principles can offer valuable insight.

Constructivism accordingly highlights identity and values as impactors of state behavior and security dynamics (Ibid., p.398). The analyzed framing of the birth rate decline as a national security threat and the measures taken can therefore signal the societal values and national interests of South Korea. The securitization theory by the Copenhagen School – that will before long be described in greater detail – can shed light to securitization through the analyzed frames.

In addition, constructivism and securitization under its umbrella provide a valuable theoretical framework for the analysis of fertility rates concerning national security for it takes into account contestation and change. These are both socially constructed by interactions and interpretations. Therefore, research on the framings of administrations on fertility rate decrease as a national defense threat suits this ideology.

Constructivism considers the shifts in discourses and narratives. It also reflects on the outcomes of said changes. Therefore, by applying a constructivist approach to the framing of falling fertility rates one can discover insights into changes in security agenda frames over time. This timeline throughout the South Korean administrations of 2012-2022 is by constructivists seen as fluid construction by societal identities and norms. Important to note, is how the constructivist approach argues that actors also choose to construct and change identities and social facts (Finnemore and Sikkink, 1998, p.393; 2001, p.410). This leads us to framing and securitization theory.

The concept of security needs to be defined for further understanding of the context of this thesis. According to the Copenhagen School security is survival and threats to security shall be handled. However, this is given a justification by leaning on the nature of the security threats (Buzan et al. 1998, p.21) which facilitates a wider acceptance of explosive actions by actors normally frowned upon. States and actors within can apply this concept of security and speak on behalf of actions to be taken to contain the detected threat.

To conclude, as the previous and contemporary research on security has mainly been on military processes and actual armed forces clash this zero-sum approach should be complemented by a wider approach to security. What these theories fail to explain or analyze is non-military affecting security spheres.

The nonexistence of an immediate material threat to a state, its territory, or its integrity has resulted in ignorance of non-traditional security threats. Therefore, it is crucial that one expands beyond these traditional approaches and their limitations and begins to consider other approaches to threats in the contemporary world. The decrease in fertility rates can be observed as an unintended and untraditional security threat that should be captured. Therefore, the constructivist Copenhagen School securitization theory is used in analyzing the fertility rate issue. This new theoretical approach to fertility rate decrease analysis is delved further into in the theory chapter.

2.3. The bridge between falling birth rates and security

Previous works on the relationship between low fertility rate and security are scarce and lacking but exist, nevertheless. In 2011 Howe and Jackson wrote a prediction on the upcoming crisis of global aging and rapidly falling birth rates of the 2020s. Not only did their research assess the declining trend of birth rates but they also recognized that developed countries would have a weakening ability to maintain security globally because of this.

Howe and Jackson (2011) mention manpower size and GDP size as direct factors negatively impacted by population decline. A smaller population hinders the flow of many youths to serve in the military and the war if needed. This creates further difficulties for the protection of territory and the overall security of a state. Accordingly, Howe and Jackson (2011, p.20) acknowledge that on top of the previously mentioned directly affected components national goals through the capabilities of states are impacted indirectly.

Although as mentioned above the authors discuss security factors such as manpower being affected in the shape of shortages, they especially highlight weakening economic performance leading to a graying. Graying means the rising pensions and health care costs that pressure governments to conclude that national defense budgets might be on the other end of this evolvement, suffering losses. As the state of the economy worsens and recession takes place families become smaller as costs get higher resulting also in less willingness to risk youth into the military and war (Howe & Jackson, 2011, p.22). However, critical to note, is that this is not possible with South Koreans as military service is mandatory for all men.

As no one can dispute how population and economic size together constitute a potent double engine of national power (Ibid, p.21) the gap in the research area here should be answered. Other researchers have likewise noticed and paid attention to the importance of the size of the population concerning the economy which is likely to deteriorate. This deterioration is to be expected to be answered with a sacrifice within the several fields of spending which includes national defense and security.

In relation, Howe and Jackson (2011, p.23) discuss the demographic peace thesis. According to this thesis, the transition progress of demographics is followed by economic growth and social, and political stability. This is the case when population growth slows down, the median ages rise, and the burden of birth rate seizes to exist.

This thesis agrees with Howe and Jackson in rejecting the demographic peace thesis approach. It tends to ignore all historical processes, neo-authoritarian state success, and variations of time and pace of the transition. It can be argued that the demographic peace theory's claim that demographic progress will enhance the security environment should also not be taken as gospel truth. Not only the lack of manpower within the falling fertility rates but also political polarization, and terrorism are variables showcasing the unreliability of the demographic peace thesis.

Following this manner, demographic transition has been the stressed point of view by many concerning the falling birth rates and security. Eberstadt (2010, 2019) – whose argument Howe and Jackson (2011) also describe as indisputable – argues that for geopolitics and security, population is the most important driver. Although Eberstadt's (2019) research on the changes within the size, capabilities, and characteristics of populations is done with geopolitics and great power competition in mind, admittedly, economics and military power are taken as something of importance as well.

Remarkably, according to Eberstadt, the high fertility rate is together with high education and open immigration policies key demographic advantages for becoming the most powerful state in the world (Ibid, p.152) which strengthens the call for this research on the deteriorating situation of fertility rate and its impact on national security.

Another approach (Rosenberg-Friedman & Brand, 2015) considers a founding father of the state of Israel, and his leadership that pressed the importance of population and specifically fertility rate for the survival and security of the state. Ben-Gurion had most of his statements on the importance of a high birth rate number within discussions on military and military conscription as high fertility kept the state of Israel alive (Ibid, p.752).

Although Ben Gurion's approach concluded that the birth rate was a topic of national security the study by Rosenberg-Friedman and Brand do not expand on the importance of this thought outside the analysis of the leader himself. This thesis tackles the here avoided connection between the falling birth rate and national security in the case of South Korea.

Kramer (2012) studied birth rates concerning demographic decline and although he mentioned security implications lightly, the main focus of the article was policy responses and the dangers of the decline itself. More importantly, Leuprecht (2010) in his research on international security strategy and global aging concluded the high priority of strategic predictions for states in becoming and remaining successful and in 'defeating' state enemies. These conclusions include the independent variable of fertility and the risks its falling involves.

It is summarized that countries with less critical aging crises and higher fertility rates are better able to follow their national interest and shape their own and international security (Ibid). This argument supports the further analysis of the gap that exists between falling birth rates and security. Likewise, Shin and Kim (2019, p.473) not only wonder about the total fertility rate causing serious social problems but call for future research specifically on the variable of birth rate in their study of recruitment issues in the military of South Korea.

To summarize, although fertility rates have been slightly discussed within the realm of security studies, the securitization of the birth rate decline has not been analyzed. At least verifiably studies such as this have not been conducted. In the case that they exist, they are not available in common databases such as Cambridge University Press, Sage journals, JSTOR, etc.

The academic significance of the puzzle can be found in its ability to broaden knowledge on the recognition of the threat of low birth rates, what type of measures and policies have been established to fight this serious issue, as well as how security and military procedures and expenditure has evolved since the recognition of this threat. South Korea is not the only state – though the extent is to an extreme level – facing this threat that can potentially challenge its economy, security, survival, and demographic structure. Therefore, current events and future scenarios

worldwide can be analyzed better with a further understanding of the means and changes the state has gone through in the battle of falling birth rates.

This thesis not only frames the type of threat this decline in birth rates is but it showcases how it has been framed, and attempted to tackle through policy responses, by the Ministry of National Defense in South Korea. This creates a basis for further research on the impact of the falling birth rate on national security.

3. Theory

This chapter of the thesis provides a brief explanation of the theoretical framework through which the analysis has been executed. This thesis takes a theory-consuming approach with securitization theory bringing sense to the matter of the defense white papers regarding the framing of the fertility rate crisis.

This paper takes a quite traditional stance at the heart of the forever question of whether national security should be defined in militarized terms. The approach is on the military capabilities but in the form of people and their utilization. Buzan has considered politics, economics, society, and the environment together with military capabilities in defining national security. In a similar manner, this thesis takes a constructivist approach that allows the inclusion of the social sphere together with the material point of view.

Regarding the scientific ontology of this thesis constructed ideas of interests, processes, and the actors themselves are recognized. Core assumptions theory-wise unsurprisingly revolve around constructivism. There are no worldly truths but rather everything exists due to social constructs. Equally, everything is exposed to the possibility of change at all times.

Not only is it important to mention constructivism as the base of the thesis but more precisely the Copenhagen School and its concept of securitization. The examination of the theory and the concept is followed by an explanation of the utility of both within this thesis.

As discussed previously the constructed aka ideational factors shape changes within institutions, policies, politics, and especially actions are chosen to have been taken, thus comprehending securitization is of importance in understanding the opportunities and consequences of framed security threats.

3.1. Securitization

Securitization theory originates from the constructivist Copenhagen School in the 1990s. Its founding fathers are Buzan, Waever, and de Wilde who constructed it as a tool for the aim of studying security. According to them, securitization is the constructing, framing, and voicing out of a threat. This recognition or plain designation of an existential threat is for the justification of acts played against the threat further along (Buzan, et al. 1998, p.21).

Crucially, an audience needs to perceive this designation as an existential threat in order for the securitization act to take place (Buzan, et al. 1998). The former point means that the actor establishing the securitization of a topic needs to be significant enough to reach an audience and thus succeed in securitization. South Koreas Ministry of National Defense in this case qualifies as a valid securitizing actor.

To further expand one's knowledge on securitization it is of significance to recognize the following specific units – referent object, securitizing actor, functional actor – of security analysis (Buzan, et al. 1998, p.35) for the further comprehension of the development of this paper. Firstly, the referent object is the thing perceived under the existential threat with a legitimate claim for survival. In a traditional sense, the referent object has been the state and likewise in this thesis, the referent object can be identified within the existence of the state in its entirety as well.

For the securitizing actor, the securitization theory allows anyone and any entity to become the securitizer of a stated referent object. The securitizing actors present the referent objects as existentially threatened furthermore justifying the need for protection. In this piece of research, the state of South Korea and its Ministry of National Defense through official white papers on defense are analyzed as the securitizer of birth rate decrease.

The final unit is functional actors, which might be formed of media and think tanks. Likewise, to their nature, they can help to frame and thus securitize issues through for example othering (Hagström et al. 2023) but remain unable to significantly take part in the equation. In this thesis, the functional actor is not paid wide attention to due to the scope of the research.

Central to securitisation theory is speech act of saying the words. Through this, something is done, in a manner of bet or a promise (Buzan et al. 1998, p.26). Accordingly, the specific words used in executing framing and labelling things as threats or dangerous are important to pay attention to.

With securitization the articulation and presentation of things a certain way is the key object to analyze. The presentation of and mentions concerning falling fertility rates and words related

to this demographic change are analyzed to learn the extent of the securitization. Table 2 later in the paper provides a list of all of the previous.

In the analysis, the securitizing theory is utilized in exploring the ways and to what extent the falling fertility rate has been framed and thus securitized by the Korean Ministry of National Defense. The data is not only analyzed to expand on how the securitization of the fertility issue has evolved in the span of 2012 to 2022, but to see the policy shifts taken in response as well.

Part of the analysis is additionally the examination of the aftermath of the framing and securitization of the falling birth rates. Although this thesis provided information on the seriousness of the falling fertility rate of South Korea on a world scale, the analysis is done to explore the act of securitization not the matter or solemnity of the threat.

4. Methodology

To describe and motivate the methodology of this thesis this section of the paper presents the mixed method of qualitative and quantitative content analysis used, data and the process of its selection, coding of the words used in the analysis of the securitization, conceptualization, and the research limitations and ethical considerations present in this study.

It must be noted that ontologically the nature of existence in this thesis by the securitization theory of the Copenhagen School is constructivist. Naturally, this means that reality is an interplay of material reality and social construction by actors. This approach considers the creation of threats to one's security partially as socially constructed as well. Security within the theory and this thesis research is therefore conceptualized as a highly self-referential practice of labeling and framing things as a security threat through which it becomes a threat.

Although the approach of the securitization theory of the Copenhagen School presses socially constructed aspects in research, this is not to reject the existence of materially concrete threats. Constructivism merely focuses on the perspective of social constructs.

4.1. Method

In this section, the mixed method utilized – the qualitative and quantitative content analysis – is further introduced. The reasoning regarding the choice is reflected upon as well as the case study method before the data selection, coding process, and conceptualizations are further delved into.

The utilization of the qualitative approach allows the interpretation of the specifics of frames found within the defense white papers by the South Korean Ministry of Defense. Furthermore, analyzing of interrelation between issues is simple with this method (Pashakhanlou, 2017, p.448).

In this thesis, the analyzed qualitative data was also converted into quantitative data by counting and summarizing the word frequency of the securitization of fertility fall and measures taken. Table 2 in the analysis section of the thesis demonstrates these frequencies of the findings, simplifying the analysis of each administration's securitization and policy measures.

According to Pashakhanlou (2017, p.449) the quality of content analysis is conventionally determined by its reliability and validity. The manual rummage through the hits on all of the securitization subjects as well as measures taken has secured the maximization of the reliability of the quantification. Thus, for example, parts concerning the birthday parades of presidents are excluded when counting the frequency. This means that the accuracy of quantifying mentions on birth rates has been covered.

Additionally, content analysis systematically reduces the communication. Restricting the investigation to the theme(s), concept(s), or word(s) of interest condenses the communication to more relevant and manageable pieces of data (Pashakhanlou, 2017, p.448). This equals a more thoroughly executed research. As content analysis is predominantly descriptive, the analysis of securitization – which occurs through selected descriptions – is appropriate through the qualitative content analysis method.

Staying cautious of the dangers of oversimplifying or overgeneralizing case study results one can produce valuable research findings even in the case of specifying to one object state. In accordance, when researching the securitization and measures taken to thwart declining fertility, it seems only logical to centralize the analysis to the stated most critical case of the phenomenon. Therefore, South Korea was determined as a fruit-bearing object of a case study. The findings of an in-depth case study of fertility rate decrease concerning national defense, provide unique insights on the specifics of the case, but also lessons for future policymaking.

The following section further explains the data selection process and how the period of the defense white papers analyzed was determined.

4.2. Data and data selection

In the analysis of contemporary threat perception, framing, and securitization of fertility rate fall, the official defense white papers of the analyzed state are a direct way to approach the puzzle. Thus, this

paper utilizes defense white papers by the Ministry of National Defense of South Korea from the years 2012 to 2022 as presented in Table 1. Both tables in this paper (1 and 2) were constructed by following the suit of Turner's (2016) formatting of tables in his article.

Table 1. Defense White Papers by the Ministry of National Defense Republic of Korea, 2012–2022.

Statement year	Minister of National Defense	(author) Administration/party
2012	Kim Kwan Jin	Lee Myung Bak/Saenuri
2014	Han Min Koo	Park Geun Hye/Saenuri
2016	Han Min Koo	Hwang Kyo Ahn/Independent
2018	Jeong Kyeong Doo	Moon Jae In/Democratic
2020	Suh Wook	Moon Jae In/Democratic
2022	Lee Jong Sup	Yoon Suk Yeol/People Power

In Table 1 the years of statements, responsible ministers of the national defense ministry, as well as the administrations and presidents are listed to clarify the backgrounds of the data employed. Table 1 above additionally mentions the party of each administration.

Worth noting is that all the other presidents belonged to a conservative party but in the years 2018 to 2020 Moon Jae In took the Blue House. Moon Jae In presented the Democratic Party thus representing liberals in contrast to other South Korean presidents. The Blue House also known as the Cheong Wa Dae is the official residence of the president equal to the White House in the United States.

These selected white papers provide insight into how the falling birth rates have been addressed within national security and defense policies as they are official statements on the threats and policies of the defense of the state. The analyzed period is set to the years 2012 to 2022, not only to provide a contemporary outtake on the national security and securitization of the falling fertility rate in South Korea but furthermore, the brief analysis of all accessible documents in English – translations exist from 2006 till 2022 – revealed that a shift that took place between the white paper of 2012 and 2014.

Furthermore, the time period was set till the year 2022 as it is the latest defense white paper available. The Ministry of National Defense in South Korea publishes the official defense plan every two years.

The mere examination of the table of contents on the white papers already revealed a foretaste on the trend of framing of the falling fertility rate as a threat to national security. Some chapters have stayed within the white papers exactly by the same name whereas some administrations have organized the order or edited the titles. What truly signals significant shifts within the national security and defense realm are the newly established chapters or the ones discarded.

The biggest change to the previous defense white papers is the enforcement of the ROK Defense Reform Basic Plan (2014-2030) (Ministry of National Defense Republic of Korea, 2014, p.4) which was created for the reforming of structures and preparedness in the light of new rising security challenges. Accordingly, the Minister of National Defense of the time Han Min Koo in the 2014 defense white paper (Ibid, p.4) begins by assertively stating that the Korean Peninsula's security has never been threatened to this extent.

Furthermore, the securitization of falling birth rate is evident since the 2014 white paper in the newly added section of 'strengthening future-oriented self-defense capability' whereas the structure of the 2012 white paper entirely lacks this section. Instead, the document from the 2014 chapter on defense posture – which can be found in both of these compared papers – is followed by a chapter on the ROK-U.S. alliance and cooperation.

Although the fertility rate can be found mentioned within the older defense white paper (2012), only as part of the section on the public's daily life. Fertility rates are casually mentioned in a sentence on the importance of efficient personnel utilization thus it is not described in relation to main threats to the nation. 2012 paper does not outline low fertility as a national threat hence it serves as an effective starting point of the analysis and timeline. Furthermore, a longer research period would expand outside the scope a master thesis shall stretch to.

Besides, although the inclusion of for example presidential speeches in the analysis of frames by different administrations seems worthy, in reality, the accessibility of official speeches by each president or minister of the national defense of the analyzed administrations is lacking. It seems to be a trend of the office-taking administrations to implement a complete makeover to the websites of the president's office and minister of national defense. Next discussed is the coding process of the research and operationalization.

4.3. Coding process and operationalization

Securitization was outlined within the theory section and next presented is its operationalization to understand the process of the quantification. After the brief overview was completed with all the

defense white papers available and the research period was set, the documents were downloaded to the NVivo software program to locate and generate the commonly found possibly securitized concepts and measures taken. As fragile specifics were required to study in recognizing securitization within the white papers, the data was analyzed manually.

In the beginning of the analysis chapter Table 2 outlines the concepts analyzed in relation to the securitization of falling birth rates. These concepts are mentioned in the text exactly as they are listed in the table or with a close synonym. Slight form changes within the securitized concepts were included as well. Additionally, once a word is counted within a category of securitization, it cannot appear again in another category. The same goes for the listing of measures taken.

Table 2 was put together to present the most commonly recognized concepts and measures taken concerning falling fertility rates, within the data. Table 2 demonstrates the frequencies of the findings, clarifying and making it easier to comprehend the analysis of the securitizations by each administration.

The measures taken include a slightly wider variation in recognizing them from the analyzed white papers. For example, budget expansions include mentions of synonyms such as budgetary support, reflecting plans to budget, defense spending, increased spending figures, and cost of improving policies. Budget allocation work entails managing the budget more efficiently and changing the allocation emphasis from one sector or policy to another.

Childcare and maternity leave improvements are quite self-explanatory. Discussion on parental, paternity, fertility, infertility leave, work-life balance, childbirth, and parenting programs have been analyzed in counting the frequency of these measures.

Civilian manpower increase to secure manpower includes – to mention a few – the acquiring of superior manpower and developing professional manpower, civilian recruitment, and efforts to acquire personnel.

In the identification of exploring efficient human resource management phrases and concepts investigated were the establishment of smart manpower management systems or strategies, strategic methods and efficient utilization of manpower, ensuring that combat power is generated efficiently, efficient use of the country's human resources, and efficient operation of troops.

Analyzing the frequency of gender equality, the improvement of military personnel's children's environment, and female recruiting and conditions are stated straightforwardly. It is worth

mentioning that military personnel's children's environment improvements include for example the expansion of scholarship programs for the children of army personnel and other programmes to offer significant advances in the highly competitive education system of South Korea for the children of military personnel.

Reorganizing force structure due to manpower loss is similar to the measure policies above unproblematic to uncover. Supplementary military service and recruitment policies then again include discussion on alternative service, requirements for admissions to active duty, and assistance for enlistees with special needs, or financial hardships.

Technology and science policies were easy to discover with the exact words. These policies incorporated AI, robotics, and different technologies and programs to advance military capabilities.

4.4. Research limitations

A grain of salt is needed in the consumption of the analysis. Despite government documents having the reputation of reliable data it should be kept in mind that some subtle attributes and meanings from the Korean language might have been lost in translation even if the data has been labeled as official English translations. Nevertheless, this does not equal compromised findings of the thesis as the main themes and developments have been detected.

In addition, the Korean versions of the documents were skimmed through to clear any doubts about the differences between the original and the translated documents. It is safe to say that no such divergence was found. Furthermore, the importance of the question on the reliability of the data can be partially answered by the chosen theoretical approach and method of the thesis.

The mixed approach of the method has strengths and weaknesses, and both have been considered. By manually analyzing and providing both quantitative and qualitative data, one can facilitate the danger of bias (Halevi Hochwald et al. 2023, p.4407). Underlying expectations unknown to the researcher have a more difficult time leading the results of the analysis when qualitative data is complemented with quantitative data.

There is a commonly asserted limitation to the mixed method and specifically the quantifying process of qualitative data. This is the loss of nuanced and rich expressions and experiences within the analyzed data. However, this weakness of the mixed method is more of a concern when it comes to people's experiences in research utilizing interviews (Ibid). Thus, because this thesis consists of publicly available defense white papers the concern of this limitation is avoided.

Equally important to remember with this thesis it that one is analyzing the performance of securitization through the presented discourse on the existential threat, not the 'truth' or degree of said threat.

4.5. Ethical considerations

The principles of ethical considerations are vital to give thought to for reliable research. Voluntary participation, consent, anonymity, confidentiality, or prospects of harm are important to consider when for example interviews are used as data. Wester (2011) has provided instructions for ensuring the accomplishment of the five principles of ethical research which include respect for people, autonomy, protection of the vulnerable, beneficence, and justice. This work and the guidelines of the center were all thoroughly examined and found valid and of importance.

The above among other ethical consideration principles were considered in the writing process of this thesis. However, the analysis of defense white papers by the Ministry of National Defense of South Korea made it easy to ensure that no ethical considerations were overlooked or dismissed. Ethical considerations were considered but assessed not to be a great concern with this paper. This consideration process was carried out in cooperation with the supervisor of the thesis.

5. Analysis

This section presents the analyzed securitization of falling fertility rates by the Ministry of National Defense of South Korea within its defense white papers from 2012 to 2022. First, the analysis of the securitization alias framing and policy measures taken is presented in the sector of military structures. Following this, the frames and measures in the shape of social policy shifts are considered. Next is the section on securitization and consequential policies regarding alternative service forms and recruitment.

Following is the economic section on policy response evolution and framing throughout administrations, which considers budget expansions and efficient budget allocation. Afterward, through the section on technology and science, the analysis provides information on the highlighted importance of investing in AI, robotics, etc. The main findings are presented in chapter 5.6. and after the discussion chapter provides a wider interpretation of the presented findings.

Table 2 presents the totals of securitization and measures taken in terms of military practices in the Ministry of National Defense Republic of Korea's Defense White Papers from years

2012-2022. All securitization concepts and policy measures concern falling fertility rates. As mentioned in the coding process section of the thesis close synonyms, or slight form variations of each concept of securitization are included. For example, childbirth securitization might include different forms of the exact word and related phrases such as giving birth, etc. The sum within each year's document on securitization and measures taken is on top of the list to highlight the overall trends.

Table 2. Securitization and measures taken in terms of military practices in Ministry of National Defense Republic of Korea's Defense White Papers, 2012–2022.

Concept and measures taken	Frequency within each Statement no. (refer to Table 1)						
	2012	2014	2016	2018	2020	2022	
Securitization (Total)	4	9	11	22	42	53	
Birth rate	1	2	4	1	0	1	
Childbirth	0	0	2	7	6	1	
Defense budget	0	2	0	6	16	11	
Fertility	0	0	0	0	1	4	
Pregnancy	0	0	2	2	5	1	
Manpower decrease	2	3	3	1	8	26	
Scarcity of military service resources	1	2	0	0	2	3	
Demographic cliff	0	0	0	5	4	6	
Measures taken (Total)	246	188	230	430	594	801	
Budget expansions	7	8	12	15	25	21	
Budget allocation work	22	13	12	22	22	19	
Childcare and maternity leave improvements	7	7	28	21	28	20	
Civilian manpower increase to secure manpower	9	4	9	7	15	38	
Exploring efficient human resource management	31	17	16	18	21	26	
Founding Gender Equality	17	1	8	8	19	44	
Improving military personnel's	11	9	15	5	10	15	
resource management Founding Gender Equality	17	1	8	8	19	44	

children's environment						
Increasing female army members and their conditions	51	16	20	36	45	34
Reorganizing force structure due to manpower loss	79	89	84	166	161	112
Supplementary military service and recruitment	10	7	8	11	77	62
Technology and science advances	2	17	18	121	171	410

5.1. Changes in military structures

The analysis of the evolution of frames and policies begins with the internal structure shifts in the military. This is the second most activated measure of reform concerning birth rates decline. Under this heading the policy measures of reorganizing of force structure and civilian manpower increase are taken a closer look into. A quick overlook of Table 2 reveals the trend through the administrations. The past three white papers from 2018, 2020, and 2022 include most mentions of the importance of a structural reinvention due to manpower loss.

The latest defense white paper (Ministry of National Defense Republic of Korea, 2023) describes the goal of the ministry to reorganize its structures, systems, and units to pre-emptively prepare for changes in the defense environment. Especially regarding the answering of the decline in manpower, the ministry describes in the 2022 white paper (2023, p.133) its aims to improve the combat capabilities of its reserve force by reinforcing the mobilization units through introducing and expanding the part-time reserve force system as well as improving the reserve force training program.

To make these improvements easier utilization of advanced technologies is within the plan to achieve this goal, but this is further discussed in the last section of the analysis. While discussing the reorganizing of military units and reserve force the manpower decline is described as rapid. The white paper also considers that the above changes in structures are required indeed to prepare against the decline in military manpower resources due to the population structure shift.

In the 2014 defense white paper, a need for reforms was also framed by mentioning of the effect of a low birth rate and rapidly aging society that might limit the sustainment of the military structure. This led to the establishment of the Defense Reform Basic Plan 2014-2030 for the further acceptance of the changes in the security environment.

This section on changes within the military structure also includes the framings and measures regarding the utilization of civilian manpower to repair the troop deficit. The Defense Reform Basic Plan 2014-2030 – which has kept evolving yearly – from 2014 not only was established to maintain state security from North Korea's strengthening threat but also to lay the groundwork for conquering the future reduction in military resources. The paper states that improving the military structure means increasing the number of civilians as officers and NCOs to prepare against this awaiting reduction in military resources. The author goes as far as demanding a timely response as the downscaling of standing forces due to the reduction of military resources should not be overlooked (Ministry of National Defense Republic of Korea 2014, p.55).

Accordingly, the 2016 defense white paper also goes to great lengths in describing the shortage of manpower to rationalize the greater use of civilians. It states that in order to prepare for a North Korean-initiated full-scale war the mobilization system for troops and munitions should be rearranged and this also means adding more highly trained reserve forces to compensate for the existing lack of manpower (Ministry of National Defense Republic of Korea, 2016, p.59). As Table 2 showcases, starting from the defense white paper after the 2016 one, measures regarding force restructuring go through the roof by almost doubling. Since 2018 the frequencies of policy measures with reference to this reorganizing remain high, though by the publication of the 2022 defense white paper the numbers have come down.

Defense Republic of Korea, p.143) – after having revised and refined – including additional changes to the national defense sphere such as the decrease in available conscripts, the frequency is the lowest of the years compared. Some reflecting was done, and supplementary measures were added to the set plan for basic reform for 2012-2030 but, overall the securitization of the decline in birth rate remained low and unurgent throughout the defense white paper by the Lee Myung Bak administration.

Importantly, the 2022 white paper has a full chapter dedicated to Defense Innovation 4.0 "Developing a Powerful Modern Military Based on Advanced Science and Technology (Ministry of National Defense Republic of Korea, 2023)". New plans for defense development are standard in defense white papers as proven above. However, this one in particular describes the main challenge factors of South Korea's security and one of four is the scarcity of military service resources due to the second demographic cliff (Ibid., p.106).

Thus, despite the frequency of birth rate fall synonyms being low within this piece of white paper data the threat perception can be found and the measures to secure against said

demographic threat exist and thrive. The Ministry of National Defense characterized Defense Innovation 4.0 as a must. Not an option but a must for overcoming the threats mentioned therefore it is safe to place this innovation plan as a measure taken in response to the issue of falling birth rates.

The discourse characterizes the implementation of Defense Innovation 4.0. as a necessity and manpower shortage within the military is described as a challenging factor within the defense environment of the nation. This reform will be further discussed within the science and technology chapter of the analysis.

5.2. Evolution of social policies

This section of the analysis covers the discussion of the changes in policies regarding childcare and maternity leaves, military personnel's children's environment, gender equality, as well as female recruitees and their conditions.

Out of the measures listed in Table 2, increasing female army members and improving their environment within service is the one with the highest frequency. Surprisingly year 2012 has the most hits on the matter. Though this strikes as an interesting find the overall securitization frequency within that defense white paper barely exists. Few parts mention manpower decrease as an upcoming challenge, but the language is not urgent nor is the falling birth rate considered within main threat to the state. Despite this, policy measures of this line were upgraded to a great extent.

The frequency of measures in this plummeted in 2014 although, the Ministry of National Defense (2014, p.217) ensured that it would make efforts for people should personally feel the effects of regulatory reform mentioned in the previous sub-section of the analysis. Birth rate, fertility rate, as well as a rapidly aging society (Ministry of National Defense Republic of Korea, 2014, p.83) are mentioned in the chapter – that differentiated and excluded the white paper of 2012 and earlier years from the data collection – on strengthening future-oriented self-defense capability concerning the establishment of the ROK Defense Reform Basic Plan 2014-2030. These factors are described as a concern to sustaining and securing the (in 2014) existing structure of the military.

In this reform plan the declining birth rate is framed both as a sociopolitical and economic threat to the national security. As the increase in social welfare takes place due to the aging population and the changes required to be done – because of the demographic change and lack of children thus future workers and reduction of military resources – the defense budget is increasingly threatened by the low birth rate.

Manpower management policies are set to be implemented in the near future. This is also an outcome of the low birth rate and fertility situation as there is the need to utilize manpower wisely. Again though, the actual content of these manpower management policies is withheld from the readers. All in all, albeit mentioning the threat of the fall of fertility and birth rate the 2014 defense white paper offers a quite limited selection of concrete policies or black-on-white in defeating the recognized threat.

As the section on changes within army structures described, since the first page of the document (Ministry of National Defense Republic of Korea, 2023), the decline of military manpower has been mentioned and its fall has been recognized as a provider of a serious challenge for the ensuring of the security of the nation. The white paper (Ibid) discusses the changing structures within the forces currently shifting and being reprogrammed in accordance with the main goal to "foster a defense culture that can resonate with the future generation (Ibid, p.3)" to improve the surroundings, atmosphere, and medical services for army personnel.

This translates into measures taken for the condition improvements of female members in the military. Although the number of measures is slightly lower in 2022 than in 2020 – from 45 to 34 – the direction of this evolution has remained positive. For female servers in the army, the conditions for parental and fertility leave as well as family emergencies have been bettered, fertility treatment appointments have been marked as proper leave reasons, night shifts have been disallowed, and centers for childcare have been operationalized and made more accessible at all times (Ministry of National Defense Republic of Korea, 2023).

Not only is the South Korean government doing this in order to enhance the abilities and feasibility of women in service and officials working to have children but these work-life balance support programs regardless of gender are a clear step towards an improvement of parenting conditions to encourage couples to have children in comfort.

A way to consider the slight bend within the female condition improvements in 2022 is to analyze the founding of gender equality instead. Yoon Suk Yeol's administration is famous for promoting discussion on the improvements for equality rights instead of previously used women's rights (Al-Fadhat & Choi, 2023, p.730; Chan, 2023, p.234). Consequently, the year 2020 defense white paper has the most measures taken for the improvement of gender equality.

Another point referred to is the continuing improvement of assistance for enlistees with special needs or health conditions as well as financial hardships (Ibid, pp.231-232). This is done to expand the pool of potential recruits to in a way answer the – not so – slowly decreasing manpower

issue. The support of low-income civilians can be analyzed as an attempt to enhance motivation for those most negatively affected by the mandatory service. Another similar feature bringing up the military service atmosphere is the Honorable Families with Military Service Tradition that honors active-duty personnel and the next three generations that follow (Ibid, p.232). Included in this are public facility discounts and fee waivers.

The requirement for changes within the South Korean military culture is the strongest within the new white paper on defense. The Yoon Suk Yeol administration emphasized the meeting of rights of the service members and offered various improvements starting from equipment and pay, as promised during the election campaign. These developments of the military culture are justified by the needs created by the future generation. This factor includes the acknowledgment of the manpower decrease that is taking place now and worsening year by year (Yoon, 2023).

Another significant change from the latest defense white paper (Ministry of National Defense Republic of Korea, 2023) can be found in the deletion of the chapter dedicated to peace settlement on the Korean Peninsula. Despite mentioning the establishment of peace between the two Koreas, the change in approach in Yoon Suk Yeol's administration is apparent in their framing of North Korea and its violations that are said to have broken the trust in building inter-Korean relations (Ministry of National Defense Republic of Korea, 2023, p.98). Unfortunately, this falls outside the scope of this study which for the analysis of the matter shall be left for future research.

5.3. Alternative military service systems and recruitment policies

Alternative service forms were first introduced in South Korea back in 1973. Nevertheless, the frequency of these measures makes a U-shape and since 2020 has gone into heavily multiplied spheres. 2022 has a frequency of 62 coming only slightly behind the 77 of 2020. The lowest numbers can be found from 2014 and 2016.

Analyzing the peaks first, the section on improving the program for alternative services the administration of Moon Jae In through Defense Minister Suh Wook (Ministry of National Defense Republic of Korea, 2020) highlights the importance of improving this program due to the decrease in fertility rate and so forth military manpower resources. In the same manner, the white paper from 2022 unexpectedly presses the bringing up to date of the alternative military service system.

This is argued for the reason that the declining fertility rate has provoked 'a sharp drop (Ministry of National Defense Republic of Korea, 2023, p.231)' in manpower in service for the country. The Ministry of National Defense argues that the scheme for alternative servers should be

redetermined and updated as both circumstances and times have drastically evolved since the adaptation of alternative service forms (Ibid.). Plus, the lowering of the standards of acceptance policies would slightly edge the number of soldiers up although the overall number of people is critically falling.

Chapter six of the 2022 white paper on defense under the wider topic of 'safe and transparent civil-military cooperative defense management' equals the section on wider cooperation together with people outlines the manpower loss that has been detected since the 2014 white paper on defense and presents updates on the alternative military service system (Ministry of National Defense Republic of Korea, 2023, p.231).

These updates include the main tasks of, increasing the research personnel within industrial support-related fields for a more strategic use of human resources, strengthening discipline toward insubordination and noncompliance during the service period, further ensuring the protection of rights and interests of personnel, and the overall improvement of military manpower management and fairness (Ibid).

An interesting point is how the white paper of 2018 has a low frequency of supplementary military service and recruitment policies although commonly the year has been a starting point for many policy expansions. This is explained by a proposal of reducing and abolishing alternative services altogether (Ministry of National Defense Republic of Korea, 2018, p.267). The ministry states that alternative services in lieu of military service have been acceptable as long as the interference with the recruitment of the required number of servicemembers has been non-existent. The birth rate and population prognosis however are seen resulting to a significant decrease in the number of potential servicemembers which for alternative services should be dismissed.

Having said that, this proposal discussed within the 2018 white paper by the Moon Jae In administration did not take wind beneath its wings but as mentioned by the year 2022 the policy measures in regards dilated. Comparably, the 2016 defense white paper described the toughening of draft criteria for military service back in 2015. This was done to alleviate a backlog in draft processing. For the tackling of the security threat of falling birth rate and population decline these military service criteria tightened back in 2015 were modified to a loosened determining.

Regarding the recruitment of military resources policies within the 2016 defense white paper (p.223) there exists a plan to stricten draft criteria despite including that a shortage of human resources for the military is expected after early 2020s. The recruitment criteria loosening can be detected taken place since 2018 and has evolved to a lightened criterion yearly. The 2022 statement

(Ministry of National Defense Republic of Korea, 2023, pp.232-233) describes that Defense Innovation 4.0, for the regaining of an appropriate size of standing force will be implementing redetermined criteria to ensure the stable supply of manpower.

These criteria shifts include eased BMI (body mass index) requirements. Previously the BMI rating of under 17 or above 33 is now modified to under 16 or above 35. Additionally, tattoos will no longer be considered to deteriorate a soldier's grading. The strengthening of the criteria for determining mental diseases will also take place (Ministry of National Defense Republic of Korea, 2023, p.391).

Similarly, the 2022 defense white paper has changed the contents of determining physically 'handicapped (2023, p.395)' persons' degree of impairment. All the above is said to be done for the changing of the criteria to reflect active service performance in the scores of service appraisals from absolute to inclusive assessment scores. Not only are people ordered to active duty from reserve but the grounds for exemption are under strict scrutiny to complement the growing deficit in manpower.

5.4. Economic changes as aftermaths

Within the analyzed defense white papers one can locate a frame expressing the importance of funding and budget concerning the declining birth rate and population. Budget expansion similar to the measures discussed in the previous chapters is the most strongly argued for within the last two defense white papers. Although budget expansions are mentioned as the second to last measure budget allocation improvements are mentioned almost as many times as childcare and maternity leave improvements. The calculated total of budget allocation policies is 110 whereas childcare and maternity leaves are at 111.

2014's defense white paper (Ministry of National Defense Republic of Korea, 2014) has some securitization characteristics within the framing of birth rate, childbirth, manpower decrease, scarcity of military service resources as well as a rapidly aging society that is mentioned in the chapter – that differentiated and excluded the white paper of 2012 and earlier years from the data collection – on strengthening future-oriented self-defense capability concerning the establishment of the ROK Defense Reform Basic Plan 2014-2030.

These factors are described as a concern to sustaining and securing the (in 2014) existing structure of the military but within this reform plan the declining birth rate is framed also both as a sociopolitical and economic threat to the national security. As the increase in social welfare takes

place due to the aging population and the changes required to be done – because of the demographic change and lack of children thus future workers and reduction of military resources – the defense budget is increasingly threatened by the low birth rate.

In relation, the white paper from 2014 (p.172) frames a need to increase the defense budget. This is a clear difference from the before-published 2012 piece. This need for a change to the defense budget is argued for due to the low birth rate and rapid aging of society leading to increases in public welfare. It is also described limiting the capabilities of the military, which can expand to hindering the stable securing of the defense budget. In a concerned manner, the paper states that failing to respond effectively to these kinds of security crises can negatively impact not only the military budget but the economy of the whole country. Nevertheless, the frequency of 2014 is low in comparison.

The 2016 defense white paper (p.125) mentions the plan of saving budgets and trying to cut costs by decreasing expenditures as it is difficult to secure an adequate defense budget not only due to fiscal constraints but also for the increase in the demand for welfare caused by a low birth rate and an aging population.

The defense white paper of 2020 (pp.53-54) frames it as impossible to postpone national defense reforms or cut budgets further due to the rapid deterioration of the conditions for implementing defense policies. Included in this is the threat of the shortage of military service resources due to a population cliff and the public demand for human rights and welfare. Thus, to ensure the feasibility of Defense Reform 2.0 of that time, the Ministry of Defense of Moon Jae In administration secured the required budget and plans of expansion.

As the number of standing troops was recognized to be reduced by year 2022, the budget for recruiting additional NCOs and civilian military employees was positively reflected upon in the defense budget (Ibid, p.191).

The defense budget for 2023 was increased to KRW 57.143 trillion to meet fiscal needs in building and securing a strong professional military, that has a pleasant environment and military culture that service members can be proud of (2023, p.254). As the white paper on the defense of 2020 (p.189) describes the defense budget-to-GDP ratio of a country is proportionate to the severity of its security threats, thus the growing expenditure of South Korea signals of critical threats it must conquer as soon as possible.

Thus, the Yoon Suk Yeol administration frames that securing an adequate level of defense budget is essential in order to maintain a comprehensive defense posture against the spectrum of security threats South Korea faces. The Ministry of National Defense outlines the need for a strong budget to build the army bigger and more efficient. Not to forget the reference to service morale that is also spent on as the 2022 defense white paper (p.525) promises efforts for more rationally allocated budget resources. This frames the need for budget expansion as something touching upon every soldier.

Furthermore, the improvements on the allocation of budget resources are done to ensure transparency and that the implementation of expenditure planning is aligned with promised policy measures (Ministry of National Defense Republic of Korea, 2023, p.252).

Although the budget on defense was raised again in 2022 from the 2020 version, the slowing of global economic growth, declining size of productive populations, and worsening government fiscal conditions are all mentioned as significant challenges to securing a sufficient level of defense budgets in the future (Ibid, p.41).

Nevertheless, for example within the defense cooperation between South Korea and the U.S., South Korea agreed to raise the Korean defense contribution to KRW 1.0389 trillion for 2020 and KRW 1.1833 trillion for 2021 and to continue to increase the amount for the subsequent four years between 2022 and 2025 by the previous year's rate of change (Ministry of National Defense Republic of Korea, 2023, p.154). Together with the overall expansion of the defense budget, the framed threats seem to be stronger than the need to save expenditures despite the challenges.

5.5. Technology and science

This section of the analysis is closely related to the previous one on the economic changes of the Ministry of National Defense as improving and investing in technology and science requires funds. Despite being closely linked to one another there exists a difference in the framing of the birth rate decline as a threat between economic expansions and the request for high-speed development of science and technology. This section explores the latter.

Important to note is that technological and scientific measures had the highest frequency. The measures taken regarding technology and science advances skyrocketed in 2022, with 410 mentions. The difference from 2012's two mentions on policies regarding technological advances is severe. The total of measures taken concerning science and technology sums to 739 mentions.

Within the white papers from 2014 and 2016 a 'standard' chapter on national security strategy and defense policy exists whereas the years 2018 and 2020 have an additional section labeled 'Defense Reform 2.0'. Although the 2020 defense white paper mentions the creation of a strong national defense based on the fourth industrial revolution technology the concrete plan for the tackling of the threats is only brought forward within the latest white paper in 2022. The latest defense white paper has added a full chapter on an ameliorated defense reform the Defense Innovation 4.0.. This is the evolved version of the 2.0 established in 2018.

The Concept of Defense Innovation 4.0. as mentioned above was created to answer the following main threats to South Korea; the decrease in military human resources due to the fertility rate crisis, instability in Northeast Asia, North Korea with its materialized nuclear and missile threats, and the changing nature of the warfare due to the technological hegemony competition escalation (Ministry of National Defense Republic of Korea, 2023, p.107).

The decrease in births and manpower is linked strongly to the need for the development of science and technology. The Ministry (Ministry of National Defense Republic of Korea, 2023, p.107) describes the rapid decline in birth rate by highlighting that by the year 2040, the population of 20-year-old males will be down by more than half – from 290.000 in 2021 to a mere 130.000 by 2040.

To tackle this one of four main threat of the national security the Defense Innovation 4.0. was formed to further utilize advanced science and technology such as artificial intelligence, robotics, and autonomous vehicles. In this, for example robots for operational sustainability support can be used in answering fatigue problems caused by the reduction of human resources or managing heavy weights and repetitive tasks (Ministry of National Defense Republic of Korea, 2020, p.144). The white paper of 2022 consequently mentions strengthening operation capabilities in space, cyber, and electromagnetic spectrum domains (Ministry of National Defense Republic of Korea, 2023, p.108).

Although this measure of innovation perspicuously is a partial consequence of the escalation of the falling birth rate one should note that the enhancement of military structures is part of taking the necessary steps in having the upper hand within the evolving security environment of today. Nevertheless, the main focus areas of Defense Innovation 4.0 include transforming the military structures and systems and mastering the utilization of the available military manpower efficiently, for the countering of the birth rate threat.

The previously mentioned military structure changes are performed to develop a future-oriented structure that serves as an information and technology-intensive military since the reduction in manpower resources due to the declining birth rate is anticipated to worsen. Concrete examples mentioned in technology advances are reconnaissance UAVs and 230mm Multiple-Launch Rocket System (MLRS) that expand the surveillance and striking ranges, K-2 tanks, upgraded 105mm howitzers, and 81mm mortar IIs. The use of artificial intelligence, virtual reality, drones, robotics, big data, and MUM-T combat systems that consist of remote and autonomous vehicles has a main role in the latest defense white paper (2023). These measures seem to be the future of ensuring of national security in South Korea.

5.6. Main findings

Table 2 included the quantification of the securitization and policy measures of all the analyzed defense white papers. From this, it is evident that the year 2022 is by far the highest point of securitization by frequency. Despite the securitization of falling fertility rates slowly starting to take place since 2012 a significant rise begins in 2018 and from there onwards the pace is drastic. This is not to say that the white papers from years before do not include securitization or policies taken in relation.

Despite all the defense white papers analyzed in this research having sections on the strengthening and developing of the service environment, welfare, and morale of the servicemembers the documents from 2020 and 2022 press these matters the most. Not only do the last two publications consider and provide improvements on the rights, support, and environment of military servers but they take a step further with the augmentation of chapters on inclusiveness, trustworthiness, and transparency of the defense system and military service.

As provided by Table 2 2012's defense white paper took most policy measures regarding the reorganization of the military structures and expanding efficient use of manpower. Childcare or maternity leave improvements were not considered almost at all as was with budget expansions. 2014 which marked a slight growth in the securitization process similarly had most measures taken regarding force structure reorganizing and efficiency in human resource management. Gender equality stood out in this white paper with only one measure taken.

In 2016 the Ministry of Defense put the most effort into improving policy measures not only on the military structures but into childcare and maternity leave improvements. Gender equality and supplementary service and recruitment policies were not taken into consideration to a great extent.

In 2018 as mentioned already in the thesis marks the starting point of full-on advancing the policy measures regarding the threat of falling birth rates. As with all the defense white papers force structure improvements are experiencing the most changes regarding the threat. In 2018 childcare and maternity leave improvements were also pressed in policy plans.

A new approach to taking measures against the framed threat of decreasing fertility rates increased in 2020 when supplementary military service and recruitment policies were in a drastic shift. All measures experienced a high frequency of improvement. The least pressed on here was military personnel's children's environment as well as civilian manpower increase despite both including more than ten mentions.

The latest defense white paper was similar in many ways to the previous one from 2020. These two entailed the most securitization of falling fertility rates and population decrease and measures taken followed the suit. Most hits were within the same policies with both publications. The rearrangement of force structures, making changes with recruitment and supplementary service policies, as well as improving the conditions and number of female conscripts were measures emphasized in both publications. The 2022 defense white paper, however, had in comparison to the previous one improved gender equality, efficient use of human resources management, and civilian manpower increase as measures.

Importantly, science and technological advance measures were significantly increased. In 2020 the frequency was 171 whereas in 2022 it is at 410. This change is the most drastic in the frequencies calculated. This shift includes economic savings for the future, reducing the need for operating troops (2018, p.128), and remaining at the top of the evolving security landscape. All of these are of help in preparing for further fertility rate and population decline.

To summarize, it is evident that although securitization of the threat of the decline in birth rate has taken place throughout the analyzed administrations, the years 2020 and 2022 rose to another level of urgency in framing. The latest defense white paper has by far most policy measures taken. Therefore, one can conclude that the evolution of securitization by the last two administrations has been especially prominent. The threat perception of the falling birth rate as a national security issue is evident and a wide range of measures have been taken to response to it.

5.7. Discussion

This section further interprets the findings of the analysis. Table 2 presented how securitization was detected from the defense white papers (Table 1) utilized in this thesis. A key finding is how the

frequency of securitization acts has grown year by year. A significant growth spurt can be detected in the last two publications from 2020 and 2022 which have the most prominent securitization.

The most prominently securitized concepts through which falling birth rates were mentioned in the defense white papers were manpower decrease – thanks to the year 2022's white paper – and defense budget. Both concepts were most strongly securitized through the two latest publications. This finding equals as and supports the strong measures taken in these sectors. Both sectors due to the threat of falling fertility rates and thus future military servers were heavily dealt with within the new policies of the 2020 and 2022 defense white papers. Although the taken measures are not unheard of the rapid press for action on the discourse on the white papers can be analyzed as fundamental to the whole outlook on security and defense – which is new.

Although this research on the securitization of dropping birth rate began from a white paper in 2012 the notable intensification has occurred since 2020. Though the securitization of this demographic issue can be detected as having taken place throughout the research period, the last two defense white papers signal the current severity of the threat to South Korea's national security. The government is not only acknowledging an upcoming issue anymore but it is described as an ongoing threat and actions to answer said threat are taken.

Not only are the frequencies on the side of the very contemporary urgency of the securitization and measure taking but the stronger rhetorics, shorter goal years of defense plans, and greater range of policy measures are provided to address the significance of the threat. The government provides incentives from within the military to encourage higher birth rates, in the shape of financial incentives, family-friendly policies, and social advancements as listen in Table 2.

Interestingly, the two latest administrations – Moon Jae In and Yoon Suk Yeol – presented the opposite sides of the political scale but both securitized and took the most measures on the threat of falling birth rates. One can interpret this as a signal of an existing cross-party agreement on the seriousness of falling fertility rates as a national threat. However, the urgency of the threat posed by the fall in fertility is to another sphere in the latest defense white paper of 2022 which was published during the conservative People's Party administration.

One cannot press the frequency of the technological and scientific advances enough. The policy measures taken have seen no such increase in any section in any year. The Yoon administration has clearly invested in technology in response to the constructed threat of declining fertility rate. The trend of the population size does not seem bright and therefore manpower has to be

replaced with alternative sources of power. This approach to enhancing military capabilities is also significant in competing with other states.

Furthermore, not only does this research provide a timeline on the framing of the administrations of South Korea on the threat and policy measures taken, but the potential of securitization is highlighted as well. As Buzan et al. (1998) describe, securitization legitimizes the actions of the government, moves resources, and changes social policies and norms which can then powerfully shape the perceptions and priorities of audiences. This can be seen occurring in South Korea.

As mentioned before in the theory section, according to Buzan et al. (1998) words can be used in framing and labelling that can lead to significant changes in beliefs about threats and the level of danger of said threats. This was also recognized as having taken place within the analyzed data. Thus, it is safe to state that securitization is an adaptative concept and theory through which a range of issues can be analyzed. This not only means traditional threats but ones beyond as well.

This analysis and its findings took part in the slow broadening of the study of securitization and its implications. As mentioned in the literature review section of the thesis this area of the field is still young and lacking. Therefore, further expansion of this novel approach to security studies is more than welcome. Threats outside the traditional sphere commonly researched are increasing and evolving which makes the potential of securitization bloom further.

The contemporary intensification of securitization by the South Korean government around falling birth rates should be seen as both an opportunity and a concern. One should applaud the positive consequences of the measures taken that can better the quality of work and private life for many and increase gender equality. However, prioritizing population growth can additionally be problematic as the depth and focus on important social issues can potentially be overshadowed by the government's and defense body's interests in national security and its ensuring.

To summarize one could state that securitization theory is a valid tool to further expand security studies. Equally important, is to note, that falling fertility rates are indeed worthy of taking into account as a subject of securitization. This thesis provided a new timeline of the framing of the threat of a decreasing fertility rate and the measures taken consequently.

One can also argue that more attention should be paid to the overall trends in world population. Although fertility rates have been declining in many parts of the world the need for people in defense and security does not reflect itself to mother earth's needs.

Certain countries are experiencing a more critical shift in their fertility rate, which increases the urgency in policy changes as well. For some nations, a birth rate decrease means an overall population decline in the future. Although South Korea alongside with its neighbouring Japan might be an extreme case, the analysis of this securitization of falling fertility rates is very important.

It is of importance because the Western world will face the same issue and experience similar trends in population and fertility rates in the upcoming ten or so years. Thus, analyzing the securitization of the issue, and the policy measures taken is crucial in drawing relevant and powerful action points to this threat. By examining one of the most critical cases of fertility rate decrease and the framing of it concerning national security, lessons for the future can be detected. This is also the case with the measures taken in response.

Is it that there is an upcoming request for a more regional or global point of view where the status of a state will be in recession? Fertility rates and populations in parts of our world are getting smaller and so might the role of states as well if the military capabilities to defend diminish. Thus, the deepening of the level of understanding of security from nations to individuals and to systems above the state level might be a useful approach for the future. This topic is contemporary now and will only become more urgent to answer in the future.

6. Conclusion

The purpose of this paper was to analyze how the declining birth rate has been framed in South Korea regarding its national security by answering the following two questions; 1. How have different administrations framed the issue of falling birth rates in terms of security, 2. What measures have been the consequences in response regarding military practices and national security?

This research on the securitization of the falling birth rate in South Korea from 2012 to 2022 shed light on the contemporary evolution of the state's national security and discourses around it. The securitization theory explored the framing of the threat of the falling fertility rate and provided insight into the changing level of securitization and the multifaceted policy measures taken throughout the administrations of 2012-2022. As the intensification was verified as having taken place more effectively each year one can only wait for the 2024 defense white paper with anticipation.

It can be concluded that the last three administrations took significant steps in securitization of the decline in the birth rate in South Korea. Similarly, these administrations from

2018 to 2022 took most measures in tackling the framed threat. The most recent administration, as evident in the 2022 defense white paper, securitized the decreasing fertility rates the most and implemented the greatest number of measures in response. Especially technological and scientific policies were widely implemented. Reorganizing force structures was the second most pressed policy measure.

This analysis through the mixed method presented that addressing the demographic change of the falling fertility rate is integral to the complex sum of a state's national security. Although security studies or Asian studies on fertility rates have not previously focused on this specific sector of birth rate decline as a threat, the dynamics and structures requiring changes in terms of national security must be further explored. Not only does decreasing birth rates impact a state's economic stability, labor force, and welfare system and structures, but according to the securitization theory the security and existence of the state as well. This thesis paved the way for further studies on this fascinating research topic.

The challenge and – partially – self-constructed threat of the falling fertility rate is only worsening which will require more intense and immediate action for the securing of the national security of the state. What might be the next policy measures taken and will the seizing or turning around the decline of birth rates be plausible?

7. Bibliography

Al-Fadhat, F., & Choi, J. (2023). Insights From The 2022 South Korean Presidential Election: Polarisation, Fractured Politics, Inequality, and Constraints on Power, *Journal of Contemporary Asia*, vol. 53, no. 4, pp.724-736, https://doi.org/10.1080/00472336.2023.2164937

Buzan, B., Waever, O., & de Wilde, J. (1998). Security: A New Framework for Analysis, London: Lynne Rienner Publishers

Chan, M. (2023). Unveiling Gender Polarization: The Rise of Right-Wing Populism and Anti-Feminism Sentiments among Idaenam, *Korea Journal*, vol. 63, no. 4, pp.226-260, https://doioorg/10.25024/kj.2023.63.4.226

Cheong, Y., & Haggard, S. (2023). Political polarization in Korea, *DEMOCRATIZATION*, vol. 30, no. 7, pp.1215-1239, https://doi.org/10.1080/13510347.2023.2217762

Choo, J. (2020). The Spread of Feminism and the Silence of Gendered Militarism in the Neoliberal Era: Controversy Over Military Conscription Among Members of the Young Generation in South Korea, *Journal of Asian Sociology*, vol. 49, no. 4, pp.477-500, https://www.jstor.org/stable/26979896

Date, Y., & Shimizu, S. (2007). Why Has Japan's Fertility Rate Declined? An Empirical Literature Survey with an Emphasis on Policy Implications, *The Japanese Economy*, vol. 35, no. 1, pp.4-45, https://doi.org/10.2753/JES1097-203X350101

Duncan, H. (2020). Immigration Policy as Foreign Policy, *International Relations*, vol. 17, no. 68, pp.5-20, https://www.jstor.org/stable/10.2307/26980733

Eberstadt, N. (2010). The Demographic Future: What Population Growth – and Decline – Means for the Global Economy, *Foreign Affairs*, vol. 89, no. 6, pp.54-64, https://www.jstor.org/stable/20788716

Eberstadt, N. (2019). With Great Demographics Comes Great Power, *Foreign Affairs*, vol. 98, no. 4, pp.146-157, https://www.jstor.org/stable/26798233

Finnemore, M., & Sikkink, K. (1998). International Norm Dynamics and Political Change, *International Organization*, vol. 52, no. 4, pp.887-917, https://www.jstor.org/stable/2601361

Finnemore, M., & Sikkink, K. (2001). TAKINGSTOCK: The Constructivist Research Program in International Relations and Comparative Politics, *Annual Review of Political Science*, vol. 4, no. 1, pp-391-416, https://doi.org/10.1146/annurev.polisci.4.1.391

Hagström, L., Wagnsson, C., & Lundström, M. (2023). Logics of Othering: Sweden as Other in the time of COVID-19, *Cooperation and Conflict*, vol. 58, no. 3, pp.315-334, https://doi.org/10.1177/00108367221110675

Halevi Hochwald, I., Green, G., Sela, Y., Radomyslsky, Z., Nissanholtz-Gannot, R., & Hochwald, O. (2023). Converting qualitative data into quantitative values using a matched mixed-methods design: A new methodological approach, *Journal of Advanced Nursing*, vol. 79, no. 11, pp.4398-4410, https://doi.org./10.1111/jan.15649

Heo, I. (2023). Economic inequality and deepening ideological polarization in South Korea after 2010, *Asian Politics & Policy*, vol. 15, pp.605-622, https://doi.org/10.1111/aspp.12717

Howe, N., & Jackson, R. (2011). Global Aging and the Crisis of the 2020s, *Current History*, vol. 123, no. 850, pp.20-25, https://www.jstor.org/stable/42896172

Iijima, K., Arai, H., Akishita, M., Endo, T., Ogasawara, K., Kashihara, N., Hayashi, Y., Yumura, W., Yokoda, M., & Ouchi, Y. (2021). Toward the development of a vibrant, super-aged society: The future of medicine and society of Japan, *Geriatr Gerontol*, vol. 21, pp.602-613, https://doi.org/10.1111/ggi.14201

Jung, M. (2024). Birth rate-boosting bills should be passed: Assembly Speaker, *The Korea Herald*, 4 January, https://www.koreaherald.com/view.php?ud=20240104000558&ACE_SEARCH=1 [Accessed 29 January 2024]

Jung, H., & Jang, H. (2024). A consensual qualitative study on the conflict of "escape the corset" within the group of Korean feminist women in their 20s, *Current Psychology*, pp.1-19, https://doi.org/10.1007/s12144-024-05930-9

Keohane, R., & Martin, L. (1995). The Promise of Institutionalist Theory, *International Security*, vol. 20, no. 1, pp.39-51, https://doi-org.ludwig.lub.lu.se/10.2307/2539214

Keohane, R., & Nye, J. (1987). Power and Interdependence revisited, *International Organization*, vol. 41, no. 4, pp.725-753, https://www.jstor.org/stable/2706764

Kim, E., & Parish, S. (2022). Family-supportive workplace policies and benefits and fertility intentions in South Korea, *COMMUNITY, WORK & FAMILY*, vol. 25, no. 4, pp.464-491, https://doi.org/10.1080/13668803.2020.1779032

Komine, T., & Kabe, S. (2009). Long-term Forecast of the Demographic Transition in Japan and Asia, *Asia Economic Policy Review*, vol. 4, pp.19-38, https://doi.org/10.1111/j.1748-3131.2009.01103.x

Kramer, S. (2012). Baby Gap: How to Boost Birthrates and Avoid Demographic Decline, *Foreign Affairs*, vol. 91, no. 3, pp.2-6, https://www.jstor.org/stable/23217960

Lee, J., & Kim, C. (2024). In South Korea, world's lowest fertility rate plunges again in 2023, *Reuters*, 28 February, https://www.reuters.com/world/asia-pacific/south-koreas-fertility-rate-dropped-fresh-record-low-2023-2024-02-28/ [Accessed 9 May 2024]

Leuprecht, C. (2010). International Security Strategy and Global Population Aging, *Journal of Strategic Security*, vol. 3, no. 4, pp.27-48, http://dx.doi.org/10.5038/1944-0472.3.4.2

Lindgren, P. (2019). Advancing the Role of Social Mechanisms, Mediators, and Moderators in Securitization Theory: Explaining Security Policy Change in Japan, *Asian Security*, vol. 15, no. 3, pp.343-364, https://doi.org/10.1080/14799855.2018.1445895

Liu, J., & Tang, D. (2017). China's Universal Second-Child Policy: Grounds, Effects and Strategies, *Contemporary Social Sciences*, vol. 8, no. 3, pp.86-100, https://css.researchcommons.org/journal/vol2017/iss3/8

McCurry, J. (2024). South Korea's fertility rate sinks to record low despite \$270bn in incentives, *The Guardian*, 28 February, https://www.theguardian.com/world/2024/feb/28/south-korea-fertility-rate-2023-fall-record-low-incentives [Accessed 8 May 2024]

Mearsheimer, J. (2018). Conventional Deterrence: An Interview with John J. Mearsheimer, *Strategic Studies Quarterly*, vol. 12, no. 4, pp.3-8, https://www.jstor.org/stable/26533611

Mearsheimer, J. (2001). The Tragedy of Great Power Politics, New York: W.W. Norton & Company

Ministry of National Defense Republic of Korea. (2023). 2022 Defense White Paper (11-1290000-000446-11),

https://www.mnd.go.kr/user/mndEN/upload/pblictn/PBLICTNEBOOK_202307280406019810.pdf (Accessed: 7 February 2024)

Ministry of National Defense Republic of Korea. (2020). 2020 Defense White Paper (11-1290000-000446-11),

https://www.mnd.go.kr/user/mndEN/upload/pblictn/PBLICTNEBOOK_202301171100181360.pdf (Accessed: 7 February 2024)

Ministry of National Defense Republic of Korea. (2018). 2018 Defense White Paper (11-1290000-000446-11),

https://www.mnd.go.kr/user/mndEN/upload/pblictn/PBLICTNEBOOK_201908070153390840.pdf (Accessed: 7 February 2024)

Ministry of National Defense Republic of Korea. (2016). 2016 Defense White Paper (11-1290000-000446-11),

https://www.mnd.go.kr/user/mndEN/upload/pblictn/PBLICTNEBOOK_201705180357180050.pdf (Accessed: 7 February 2024)

Ministry of National Defense Republic of Korea. (2014). 2014 Defense White Paper (11-1290000-000446-11),

https://www.mnd.go.kr/user/mndEN/upload/pblictn/PBLICTNEBOOK_201704260250138940.pdf (Accessed: 7 February 2024)

Ministry of National Defense Republic of Korea. (2012). 2012 Defense White Paper (11-1290000-000446-11), https://media.nti.org/pdfs/ROK 2012 White Paper.pdf (Accessed: 7 February 2024)

Morgenthau, H., (1948). Politics among Nations: The Struggle for Power and Peace, New York: Alfred A. Knopf

OECD. (2024). Fertility rates (indicator), https://data.oecd.org/pop/fertility-rates.htm (Accessed: 7 May 2024)

Rosenberg-Friedman, L., & Brand, G. (2015). David Ben-Gurion and the 'Demographic Threat': His Dualistic Approach to Natalism 1936-63, *Middle Eastern Studies*, vol. 51, no. 5, pp.742-766, https://www.jstor.org/stable/24585564

Shin, J. (2024). Government neglect of single moms sends babies abroad despite S. Korea's low birth rate, *The Korea Herald*, 21 January, https://www.koreaherald.com/view.php?ud=20240121000201&ACE_SEARCH=1 [Accessed 29 January 2024]

Shin, D., & Kim, Y. (2019). Military Recruitment Issues in the ROK Armed Forces and Policy Alternatives: Focusing on the Army Non-commissioned Officer, *The Korean Journal of Defense Analysis*, vol. 31, no. 3, pp.457-475

Son, J. (2024). Yoon vows to focus on living standards in 2024, *The Korea Herald*, 9 January, https://www.koreaherald.com/view.php?ud=20240109000509&ACE_SEARCH=1 [Accessed 29 January 2024]

Statistics Korea. (2023). Birth Statistics in 2022 [pdf], https://kostat.go.kr/synap/skin/doc.html?fn=2841347b31d973ed0ec5adb7edc8c394b24e67ff963a48 b8b83cca9508c9c934&rs=/synap/preview/board/11773/

Suri, V. (2013). Conceptualizing China Within the Kantian Peace, *Harvard International Law Journal*, vol. 54, no. 1, pp.219-258

Turner, O. (2016). China, India and the US Rebalance to the Asia Pacific: The Geopolitics of Rising Identities, *Geopolitics*, vol. 21, no. 4, pp.922-944, https://doi.org/10.1080/14650045.2016.1190708

Waltz, K. (1979). Theory of International Politics, New York: McGraw-Hill

Wester, K. (2011). Publishing Ethical Research: A Step-by-Step Overview, *Journal of Counseling & Development*, vol. 89, pp.301-307, https://doi.org/10.1002/j.1556-6678.2011.tb00093.x.

World Health Organization (WHO). (2022). Suicide rate, 2019, https://ourworldindata.org/suicide

World Economic Forum. (2023). Global Gender Gap Report 2023 [pdf], https://www3.weforum.org/docs/WEF GGGR 2023.pdf

Yoo, H. (2022). Political vulnerability and alliance restraint in foreign policy: South Korea's territorial issue, *Australian Journal of International Affairs*, vol. 76, no. 4, pp.452-472, https://doi.org/10.1080/10357718.2021.2016608

Yoo, S. (2023). Total numbers of births shrinking faster than fertility rates: fertility quantum decline and shrinking generation size in South Korea, *Asian Population Studies*, vol. 19, no. 3, pp.289-310, https://doi-org.ludwig.lub.lu.se/10.1080/17441730.2022.2054090

Yoon, M. (2024a). Half of women find return to work short lived, *The Korea Herald*, 8 January, https://www.koreaherald.com/view.php?ud=20240108000582&ACE_SEARCH=1 [Accessed 29 January 2024]

Yoon, M. (2024b). Why won't S.Koreans have kids? Costly housing, report says, *The Korea Herald*, 3 January, https://www.koreaherald.com/view.php?ud=20240103000728&ACE_SEARCH=1 [Accessed 29 January 2024]

Yoon, Y. (2023). Korea's Potential Growth Rate Dips below 2% for First Time in History, *Business Korea*, 24 October, https://www.businesskorea.co.kr/news/articleView.html?idxno=204092 [Accessed 25 April 2024]