Strategies for Iran's Security Policy in the twenty-year Vision

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Abstract

Futurology is an interdisciplinary field of research that predicts and presents possible futures using diverse methods. Also, Security is the most famous concept in human history and the pursuit of a secure state has been the first choice of political units throughout history. Accordingly, the futurology of the security of Iran is the main topic of this article, which tries to present the secure state and possible and optimal scenarios for the security of Iran in the twenty-year vision. In other words, the objective of this article is to identify the geopolitical criteria affecting the security of Iran and to introduce its desirable security future with a futuristic approach in the twenty-year vision. This article is fundamental research that uses quantitative and qualitative models. First, with the help of existing studies in security, its criteria are classified into six groups: military, economic, geographical, cultural, political, and environmental. Second, the effective criteria for the security of Iran are presented, and third, the opinions of experts are collected through a questionnaire. The data and key criteria for optimal security of Iran in the new century were analyzed and extracted by the TOPSIS method. The results showed that the three criteria of 'Strengthen infrastructure', 'Impacts of Climate Change', and 'Increasing military capabilities' are the key geopolitical criteria of the security for Iran. These three criteria create eight security scenarios. Finally, the scenario of 'strengthen multidimensional infrastructure, adapt to climate change, and increase hardware military capabilities' with a higher score, should be the criterion for formulating the roposed security perspective of Iran in the new century.

Keywords: Iran, Security, Infrastructure, Climate Change, Military Capabilities.

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1. Introduction

On the one hand, security, the most famous concept in human history, and the pursuit of a "secure state" have been the first choices of political units throughout history. Inherently, the concept of security refers to essential issues that have always been important to the people. Although the course of time has changed the face of security and its dimensions, this concept is still the center of gravity of research studies in various fields. Issues related to the sense of security have always caused disparate controversies and debates; Thomas Hobbes believed that security is not the center of government activities but the main center of the existence of the state itself. Hobbes believed that no political entity could exist without security (Kryvyzyuk and et al,2021:78).

On the other hand, although in the distant past, transcendental methods and predictions were used to know the future, over time, today, scientific methods have come to aid in predicting the future, and transcendental methods have lost their effectiveness. With the rapid growth of science and the rapid expansion of human progress in various fields, planning for a better future has become so necessary that if we cannot have a vision of the future, we will not be able to achieve the planning goals. Future research is an approach that has entered all fields of science since the last years of the twentieth century, and instead of predicting the future, it seeks to build a desirable future for planners. Futurology is an interdisciplinary field of research that predicts and presents possible futures using a various method. Futures studies seek to improve policy-making, decision-making, and planning by identifying a different future from today (Bengston, 2019: 1099).

With the two concepts of security and future studies, this article tries to study the security future of Iran in the twenty-year vision. It seems that Iran, as a country with a prominent geographical and geopolitical position and its opportunities and threats, will continue to be at the center of gravity of regional studies in the Middle East and international studies. In this situation, the issue of Iran's security and how to achieve optimal security in the new century is still one of the issues that need attention for Iran. In the context of growing insecurity in the Middle East and the world and wideranging changes in the traditional security concept and new strategies in providing security for political units, the need to better delineate Iran's security and how to achieve it is considered in this article. Therefore, this article studies the future of Iran's security with a security futures research approach. The essential purpose of this article is to provide suggestions for Iran's security by focusing on the geopolitical criteria of this country. To achieve this, goals can also be proposed as intermediaries, which are explaining the theoretical approach of futures studies as a framework for achieving geopolitical security, identifying effective geopolitical criteria in Iran's security in order to facilitate and strengthen the security process, and mapping Iran's favorable future with a futures research approach in the security framework.

This article seeks to explore the security geopolitical criteria of Iran to achieve a desirable future with a heuristic approach, so the hypothesis is not the basis and the purpose of proving or disproving a hypothesis is not clear. In this regard, it can be assumed that among the effective geopolitical criteria in Iran's security, some have greater importance and role in achieving security goals that can be identified and explained. Another consequential assumed of the research is that by implementing the methodology of future research, it is possible to draw a favorable future for Iran's security. Accordingly, the main question of the present study is: By emphasizing the geopolitical criteria affecting Iran's security and with a futuristic approach, how is the desired future of Iran's security drawn? And the subsidiary question is: Which of the geopolitical criteria has a more significant role in the Iranian security process?

2. Theoretical Framework

The theoretical framework of this article focuses on the two key pillars of the concept of futures studies and the concept of security and presents a new analytical approach to security futures studies. Hence, first, the concept of futures studies and then the concept of security will be explained and finally, the concept of security futures studies will be presented.

3. Futures Studies or Futurology

Efforts to predict the future have gone through several stages. Initial efforts in this area were related to prediction, which had a completely unscientific aspect. This concept was based on the role of a kind of God in future affairs. Next, the concept of the forecast was introduced, which was directly related to guessing with the help of statistics. Then, the evolution of these concepts created the concept of futurism. It sought to identify and analyze the future.

The above three concepts were complemented by the concept of futurology. Futures studies or futurology, as a subset of the social sciences, seeks to understand what is going to happen in the future and what needs to be done. This concept helps to systematically understand the probability of future events and trends. The methodology of this field is far from positivist compared to natural sciences or even social sciences such as sociology and economics. In this regard, some researchers even ask whether this field is art or science, and is sometimes even known by some scientists as pseudoscience (William, 2013:122). Futurology can be defined in relation to planning knowledge, the process of guessing and predicting future achievements to help plan and identify the future in a structured and organized way (Inavatullah, 2019:139-143). This concept is closely related to the concept of repetition, meaning that previous hypotheses are reinforced or invalidated and replaced by new hypotheses (Hammershøj, 2017:1-20). This interdisciplinary knowledge reflects a wide range of approaches that improve the decision-making process. In fact, the future of the project is a tool for policy-making (Simandan, 2018:42). The goals of future studies are to build a vision, identify priorities, identify emerging technologies, educate and disseminate information, network, and create a culture of thinking about the future (Maffei and et al, 2020:2-4).

3-1. Security and 'Safe Status'

Although security is a well-known concept throughout human history and "safe status" is the first choice of any political unit, it is scientifically difficult to understand (Buzan, 2006:1-25) and several definitions have been provided for it. In a comprehensive definition, the concept of security for a country is the preservation of territorial integrity, the preservation of people's lives, the survival of the social system and sovereignty, the preservation and promotion of vital resources, and the absence of serious external threats to national and vital interests (Matthews, 2021:142-144). In defining the concept of security, it is more necessary to refer to the features of the concept of security;

• Empirically, it is a relative and accepted term that this concept is more or less analyzed instead of all or nothing (Baldwin, 1995); therefore, security is not a fixed and definite phenomenon. The factor of time, ideology, and international situation as well as the position of the country and the views and opinions of the leaders have a great impact on the quality and quantity of security and the way of education and preservation. Since the main factor is to ensure the security of power and power is also variable, relative and different, security cannot be absolute and is relative and variable. Hence, with the change of power and the existence of potential and actual threats, even the strongest governments do not have absolute security. In short, absolute security is not achievable, and no amount of social order can eliminate all instability, danger, destruction, and death.

- One of the significant features of security is its subjectivity. The sense of security and its quantity and quality depend on the perception that people and governments have of their potential enemy (Williams, 2013).
- Just as one cannot distinguish between the insecurity of a region and the security of a political system, the insecurity of countries in a state of conflict will affect the security of regions and even international security. That is, if a civil war or insecurity arises in a city or province of a country, it cannot be claimed that because security is not disturbed in other cities, that country has complete security (Salter and et al, 2019:12). In this regard, Mandel also believes that due to the unification of the international community, such as the domestic political community, all the issues of the international community, including security, are interconnected and close to each other. In other words, in such a world, the security of one country is equal to the security of all, and vice versa. In other words, the concept of security for governments is a reciprocal, alike, and equal concept (Mandel and Irwin,2021).

3-2.Futurology of the Security

Given the two key concepts of futurology and security, the theoretical framework of this article is the futurology of the security. In fact, futurology of security of a political unit is a type of futures studies that focuses on a specific territory and tries to examine the safe status of the political unit for the future and provide optimal security solutions for it.

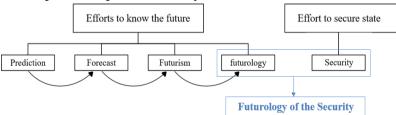


Figure (1): Efforts to Know the Future and Security

4.Materials and Methods

There are several methods for using the futurology approach in research, which are mentioned in Figure (2). In this article, the combined method of scenario writing and identification of key priorities has been used. A scenario is a tool to regulate a person's perception of alternative environments in which decisions will be made and is part of strategic planning that is used as a tool to manage future uncertainty (Spaniol and Leoni, 2019; Eimani, 2020:20). Scenarios describe future situations and possible events in them (Durance and Godet, 2010). Scenarios are important because they take into account the complexities of the real world and offer alternative insights into the future in a logical sequence of events. On the other hand, when selecting priorities in future studies, the key priorities method is a valuable and useful approach. In this method, by using a set of criteria that are used to measure the importance or keyness of priorities, a list of important and key priorities is determined (Miles and Keenan, 2003: 27-28).



Figure (2): Methods of Implementing Futures Research

In future studies, we are faced with three methods: quantitative, qualitative, and hybrid (Melnikovas, 2018). This article is based on a hybrid method, which is the interface between quantitative and qualitative methods. The importance of the hybrid method is that, in most cases, subjective judgments require quantification through a series of rules or definitions. Also, some methods use subjective probabilistic estimates (Hines, 2014:43). Data collection for this article is through purposeful questionnaires of the expert group. The target group of this article is 39 faculty members and Ph.D. students in Political Science, Political Geography and International Relations, University of Tehran. Key geopolitical criteria for Iran's security in the twenty-year vision are identified through questionnaires and then, with the help of the scenario writing method, the desired future of Iran's

security is introduced. A closed and purposeful questionnaire was distributed among the expert group. After analyzing the questionnaires, the key effective criteria for Iran's optimal security were identified. According to the number of extracted criteria, orthogonal scenarios were developed. Then, the developed scenarios were scored based on the points of their constituent criteria, and finally, the best scenario is selected.

4-1. Questionnaires and Questions

The questionnaire questions of this research were designed in two groups with two different purposes. The questions of the first group were designed with the aim of prioritizing criteria, sub-criteria and items. Answering these questions, numbers have priority. For example, respondents were first asked to number the importance of the military, economic, geographical, cultural, political, and environmental criteria of Iran from 1 to 6. Then, we asked the respondents to prioritize the sub-criteria between numbers 1 and 2. In the third stage, the question of priorities reaches dual items for each sub-criterion. This three-step process is repeated for all criteria, sub-criteria, and items. The questions of the second group question the importance of sub-criteria in the Likert spectrum. These questions had two purposes; First, after collecting the questionnaires, the group of answers provided that differ in the deviation from the mean of both types of questions is removed from the questionnaire. The second goal is to more accurately assess the views of respondents.

The total number of questions in the questionnaire was 53 questions, of which 31 questions were designed to prioritize (first type) and 22 questions were designed to assess the importance (second type) of criteria, sub-criteria and items. For the first type of questions, which had 2 to 4 options to prioritize depending on the question, a total of 107 items were evaluated. Finally, 39 questionnaires were distributed among the target group and after collecting the questionnaires, matching the answers, and matching the questions of the first and second groups, 8 questionnaires were removed due to discrepancies and 31 questionnaires were finalized.

4-2. The Criteria and the Sub-Criteria

'Geopolitical agents' provide the geopolitical mechanism. In fact, it is the geopolitical agents that drive geopolitics (Flint,2021:48). According to Colin Flint's hypothesis, the geopolitical agents in his hypothesis are the

same as the geopolitical criteria in this article. Geopolitical criteria are purely natural, human, or geographical phenomena that, through direct geographical relevance, affect the power of a political unit as well as the decisions of a political unit. Accordingly, due to the important assumed of a direct relationship between politics, geography and power in geopolitics (Gray and Sloan, 2014; Wu, 2018) and on the other hand the important assumed of a direct relationship between geopolitics and security (Colin, 1988), as a result geopolitical criteria affect the security of a political unit. In general, different security doctrines, with different attitudes, offer different criteria and sometimes a combination of criteria to achieve security. An overview of all the criteria presented in different security doctrines can show that most of the main criteria are common among different researchers, and the main and key criteria have been repeated in all research (Benner,2001:170). So, the criteria discussed in different researches, in addition to comprehensiveness, also have conceptual overlap. Accordingly, in this article, using the literature review in this field and with a geopolitical approach to the subject of the article, geopolitical criteria related to security are introduced, which include military, political, economic, geographical, socio-cultural, and environmental criteria.

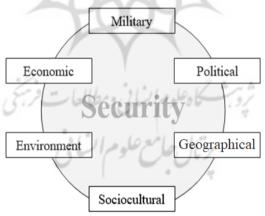


Figure (3): Geopolitical Criteria Related to Security in this Article

4-3. Economic Criteria

The importance and role of the economy in the power of countries have the confirmed hypothesis (Baldwin and Milner, 2019) and because power directly affects the security of political units, it is necessary to consider the role of economic criteria in the security of a political unit. Luttwak believed that capital, technical and technological innovations, production, trade, and the market were the determinants of power in the post-Cold War world, and that weapons, soldiers and barracks were no longer marginalized (Luttwak, 1990:17-18). In this article, economic criteria are considered as one of the main criteria related to the security of political units. Sub-criteria and items of economic criteria in this article are:

- Infrastructure (García and et al,2017:3): economic infrastructure (Timilsina and et al,2020:6-7), per capita production, GDP (Xu and et al,2021), annual growth rate (Mohmand and et al,2021:8-11; Shoukat and Ahmad,2021:3), ...
- Production issues (Rybalchenko,2021): Innovation, high-level technology (Karpenko and et al,2020; Smith,2020:499), economic freedom (Dokmanović and Cvetićanin,2020:629; Gwartney and et al,2021), and economic competition (Rasser,2020; Schmidt,2022), ...
- Economic Exchange (Bhandari,2020): Imports and exports (Prazeres, 2020), ...
- Financial resources (Rieznik and et al,2020): foreign exchange reserves (Dudin and et al,2018:1), foreign debt (Islam and et al,2018), foreign direct investment (Livadiotti,2021), ...

4-4.Geographical Criteria

This criterion refers to geographical determinism and its role in ensuring the security of political units. 'Hypothetica', Haggett's hypothetical country, is an example of the fact that geographical criteria play an important role in the security and de-security of countries (Haggett,2001:521; Ghalibaf and Gholami,2022:8; Ghorbaninejad,2018). In this article, geographical criteria are considered as one of the main criteria related to the security of political units. The sub-criteria and items of geographical criteria in this article are:

- Features of geographical location (KAJOBA,2022): Geographical area, geographical environment (Stogiannos,2019; Klinger,2021), geographical boundaries (Rossetto and Lo Presti,2021; Prescott,2014), ...
- Features of spatial geography (Jones and et al,2014): Strategic depth (Ozkececi-Taner,2017; Tüysüzoğlu,2014), housing systems (Stephens and et al,2015), population dispersion (Chandra and Bhonsle,2015), service distribution system, communication infrastructure (Nadiri and et al,2018), ...

4-5. Military Criteria

The military criteria are one of the most important criteria that directly affect the security of political units. In international relations governed by the law of the jungle, having a strong and efficient military force with quality is essential for maintaining the security that cannot be ignored (Snow,2003:30) .The need to secure the country with military power is an old tradition and a common method; although military power dominates, it must be said that its use is not very legitimate today. Although many realist thinkers emphasize the importance of the military capabilities of political units in maintaining and expanding security, in particular, the contemporary realist thinker Ouincy Wright in his studies has addressed this issue and stated that the most important criteria in maintaining world peace, stability and security is the military capabilities of countries (Ranjan, 2019). Walter Lippmann argues that "security in the general sense will always be with military power" (O'Sullivan and Subramanian, 2015). In this article, the military criteria are considered as one of the main criteria related to the security of political units. Subcriteria and items of military criteria in this article are:

- Hardware military capabilities: military infrastructure and equipment (Correia, 2019), number of military forces (Baldwin, 2012), military budget (Fontanel, 2019:1), military industry ...
- Software military capabilities (Parrott, 2010): military doctrine and strategies (Rynning, 2002:1-3), military organization (Cordesman, 2016), military technology (Raska, 2019), military treaties (Lamsal, روبت کاه علوم انسانی ومطالعات فرسیج 2022), ...

4-6.Environmental Criteria

Thomas Hammer-Dixon was one of the main pioneers in emphasizing the importance of the environment and geoecology criteria to the security of political units. He believed that environmental hazards directly, such as drought, water shortages, natural disasters, etc., endanger the security of political units. He also emphasizes that environmental hazards indirectly and more dangerously, with identity and social effects, economic crises, migration, conflict, etc., weaken the legitimacy of political systems and weaken their security (Homer-Dixon, 1993:65-67; Suhrke, 1993:14). In this article, the environmental criteria are considered as one of the main criteria related to the security of political units. Subcriteria and items of environmental criteria in this article are:

- Climate change: increase in temperature, decrease in rainfall, drought, dust (Jamshidi,2019; Andregg,2020), ...
- Natural hazards (Omand,2021): floods, earthquakes, storms (Yulianto and et al,2021), ...
- Natural resources: non-metallic minerals, non-ferrous metals, forests, and pastures (Macuane and et al,2018), ...
- Human changes in nature: air pollution (Hough,2020), deforestation (Azare and et al,2020), Soil erosion (savari and et al,2022:2) ...

4-6. Socio-Cultural Criteria

In the socio-cultural criteria, the issue of national identity and culture is prominent. Barry Buzan is one of the important thinkers who have dealt with the relationship between socio-cultural criteria and security. He believes that the main goal of socio-cultural security is the protection of national identity and culture, which is seen in the form of language patterns, culture, religion, identity and national custom (Šlapkauskas,2021). Also, given the importance of ethnic identity and culture within political units, the socio-cultural security of countries is directly dependent on the preservation of ethnic identities within countries from any harm and the ability to maintain ties with other ethnic groups. In this article, the socio-cultural criteria are considered as one of the main criteria related to the security of political units. The sub-criteria and items of socio-cultural criteria in this article are:

- Socio-cultural values: religious diversity (Gavrilova and et al,2018), ethnic diversity (Legomsky,2005), ...
- Social harms: Migration (Adamson, 2006), poverty, addiction, unemployment (Mousavi Chelak and et al., 2019), ...
- Cultural ties: national identity, national cohesion, national pride (Katzenstein, 2018), ...

4-7.Political Criteria

The importance of governance and how the country is governed is emphasized in the political criteria related to security. How a country is run, how it views the world and its neighbors, what is the security view of the country, what is the role of political actors in policy-making, and many similar questions directly affect the security of political units. In fact,

security from the perspective of the political criteria is the preservation of the existence of land, population, government and sovereignty, unity, national cohesion and reconciliation and interaction between groups and political elites (Jusdanis,2011). In this article, the political criteria are considered as one of the main criteria related to the security of political units. The subcriteria and items of the political criteria in this article are:

- Governance (Bickerton, 2011): centralized, decentralized, semicentralized, ...
- Management style: public management (Triantafillou,2017), private management, quasi-government management (Smith and Flinders, 2017), ...
- Civic Activities: Political Parties (Sklar,2015), NGOs (Kluczewska and Foroughi,2021), Citizens' Political Participation (Simões and Jerónimo, 2018), ...
- Relations with foreign countries: interaction (Kameneva and et al., 2018), confrontation (Brenner, 2019), ...
- The role of the central government: intervention (Zhang and et al, 2021), moderator, spectator, ...

Finally, in Figure (4), an overview of the criteria, subcriteria, and items of this research are presented. It is emphasized that the introduced criteria have been done using similar researches and of course, expert opinion has been applied in the final classification. Subcriteria and items have been obtained by the direct and indirect use of researchers' security studies and a review of research literature.



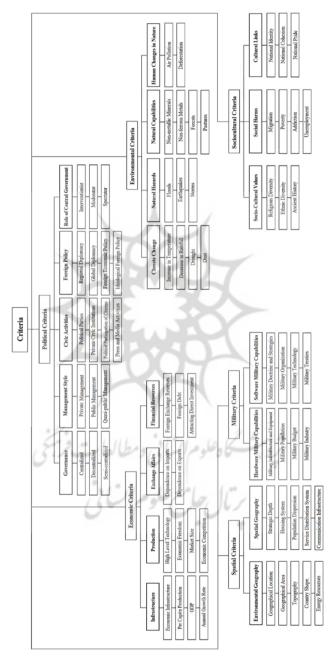
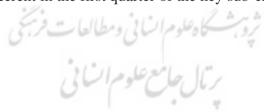


Figure (4): Criteria, Sub-Criteria and Research Items

5. Results

From 31 final questionnaires, the final answers were analyzed after equalizing their weights. It was found that the most key criteria, with a score of 2.32 were the economic factor and then the environmental criterion with a score of 2.88. Accordingly, in the opinion of the respondents, the military criterion with a score of 2.96, the socio-cultural criterion with a score of 3.11, the spatial criterion with a score of 3.32, and the political criterion with a score of 3.69 were the following ranks. In other words, in the eyes of the respondents, the economic criterion, regardless of how its sub-criteria, is the most important in creating security for Iran in the new century. Obviously, for a more detailed examination, the questions of the subcriteria, which are partially extracted from each criterion, should also be examined. In order to rank the sub-criteria, like the ranking of the criteria, the TOPSIS and AVERAGE methods have been used once for the first type of questions and once for the second type of questions. It should be noted that the weighting stage of the TOPSIS method has been removed from the TOPSIS process in order to make the respondents' opinions more important and to prevent researchers from applying their opinions. As shown in the table below, the sub-criterion of 'strengthening infrastructure' was ranked first with a score of 3.17. 'Impact of Climate Change" was ranked second with a score of 3.33 and 'Increase of military capabilities' was ranked third with a score of 3.63. Only these three sub-criteria are significantly different in the first quarter of the key sub-criteria



^{1.} TOPSIS (Technique for Order of Preference by Similarity to Ideal Solution) is a multicriteria decision analysis method, which was originally developed by Ching-Lai Hwang and Yoon in 1981 ((Hwang:1981:3).

| Table (1). The Rank of Sub-Criteria in Six Ranking Methods | | | | | | | | | | | | | | | |
|--|--|--------------------------|------|--|------|---------------------------------|------|-------------------------|-----------------------|--|-------------------------------------|--------------------------|----------------------------------|--------------|----------------------|
| Row | Sub-criteria | Average of main question | Rank | Average of question of importance rate | Rank | Score of Calculation of Average | Rank | TOPSIS of Main Question | Rank of Main Question | TOPSIS of Question of Importance Rate | Rank of Question of Importance Rate | Multiplication of TOPSIS | Rank of Multiplication of TOPSIS | Average Rate | Rank of average rate |
| 1 | Strengthen infrastructure | 1.72 | 7 | 1.42 | 1 | 1.57 | 4 | 0.74 | 1 | 0.66 | 4 | 2.05 | 2 | 3.17 | 1 |
| 2 | Strengthen production | 3.04 | 15 | 1.62 | 8 | 2.33 | 14 | 0.49 | 7 | 0.60 | 7 | 3.39 | 8 | 9.83 | 9 |
| 3 | Strengthen exchange affairs | 1.46 | 4 | 1.54 | 5 | 1.50 | 2 | 0.52 | 6 | 0.59 | 8 | 3.26 | 7 | 5.33 | 4 |
| 4 | Increase financial resources | 1.42 2.45 | 2 | 1.92 | 15 | 1.67 | 5 | 0.54 | - 5 | 0.58 | 9 | 3.19 | 5 | 6.83 | 6 |
| 5 | Emphasis on the characteristics of spatial geography | | 14 | 1.81 | 13 | 2.13 | 13 | 0.35 | 18 | 0.46 | 12 | 6.26 | 17 | 14.50 | 16 |
| 6 | Strengthen the features of spatial geography | 1.58 | 6 | 2.15 | 17 | 1.86 | 9 | 0.46 | 12 | 0.42 | 16 | 5.17 | 15 | 12.50 | 13 |
| 7 | Increase hardware military capabilities | 1.43 | 3 | 1.69 | 9 | 1.56 | 3 | 0.73 | 2 | 0.67 | 2 | 2.04 | 1 | 3.33 | 3 |
| 8 | Increase software military capabilities | 2.14 | 11 | 1.81 | 12 | 1.97 | 12 | 0.46 | 13 | 0.45 | 13 | 4.88 | 12 | 12.17 | 12 |
| 9 | Dealing with the effects of climate change | 1.36 | 1 | 1.58 | 6 | 1.47 | 1 | 0.69 | 3 | 0.63 | 6 | 2.31 | 3 | 3.33 | 2 |
| 10 | Strengthen exposure to natural hazards | 3.57 | 20 | 2.00 | 16 | 2.78 | 20 | 0.41 | 17 | 0.43 | 15 | 5.71 | 16 | 16.67 | 18 |
| 11 | Increase the utilization of natural capabilities | 3.13 | 16 | 1.81 | 14 | 2.47 | 17 | 0.46 | 11 | 0.50 | 10 | 4.38 | 11 | 13.17 | 15 |
| 12 | Dealing with human change in nature | 1.54 | 5 | 1.81 | 11 | 1.67 | 6 | 0.48 | 9 | 0.41 | 17 | 5.09 | 13 | 10.17 | 10 |
| 13 | Strengthen socio-cultural values | 1.96 | 9 | 1.5 | 3 | 1.73 | 8 | 0.48 | 8 | 0.64 | 5 | 3.20 | 6 | 6.50 | 5 |
| 14 | Reduce social harms | 2.17 | 12 | 1.69 | 10 | 1.93 | 11 | 0.44 | 15 | 0.44 | 20 | 5.16 | 14 | 12.67 | 14 |
| 15 | Creating and strengthening cultural ties | 3.39 | 18 | 1.46 | 2 | 2.43 | 16 | 0.44 | 14 | 0.66 | 3 | 3.45 | 9 | 10.17 | 11 |
| 16 | Improving governance | 1.75 | 8 | 1.62 | 7 | 1.69 | 7 | 0.57 | 4 | 0.49 | 11 | 3.59 | 10 | 7.83 | 7 |
| 17 | Improve management practices | 2.13 | 10 | 2.62 | 20 | 2.38 | 15 | 0.46 | 10 | 0.25 | 18 | 8.55 | 18 | 14.83 | 17 |
| 18 | Strengthen civic activities | 3.62 | 19 | 2.53 | 18 | 2.89 | 19 | 0.45 | 19 | 0.34 | 14 | 6.56 | 20 | 16.95 | 19 |
| 19 | Interaction with foreign countries | 2.25 | 13 | 1.5 | 4 | 1.88 | 10 | 0.42 | 16 | 0.76 | 1 | 3.14 | 4 | 8 | 8 |
| 20 | Strengthen the role of the central government | 3.81 | 17 | 2.19 | 19 | 2.93 | 18 | 0.47 | 20 | 0.42 | 19 | 7.14 | 19 | 17.35 | 20 |

Table (1): The Rank of Sub-Criteria in Six Ranking Methods

5-1.Developing of Scenarios

The method of this article to formulate scenarios for optimal security of Iran in the new century is to formulate a scenario based on three criteria. In other words, from the combination of the three main criteria extracted from the respondents' views on the future of Iran's security in the new century, where each criterion has two different sub-criteria, eight scenarios for the future of Iran's security can be developed, which are:

| | 16,5 | 1 / L- A D- | |
|--------------|-----------------------------|------------------|----------------------------|
| Sub-criteria | 0 | 1 2 00 10 | 49 |
| Scenarios | 1 | 2 | 3 |
| 1 | Strengthen one-Dimensional | Prevent Climate | Increase Hardware Military |
| | Infrastructure | Change | Capabilities |
| 2 | Strengthen one-Dimensional | Adapt to Climate | Increase Hardware Military |
| | Infrastructure | Change | Capabilities |
| 3 | Strengthen one-Dimensional | Adapt to climate | Increase Software Military |
| | Infrastructure | change | Capabilities |
| 4 | Strengthen one-Dimensional | Prevent Climate | Increase Hardware Military |
| | Infrastructure | Change | Capabilities |
| 5 | Strengthen Multidimensional | Prevent climate | Increase Software Military |
| | Infrastructure | change | Capabilities |
| 6 | Strengthen Multidimensional | Prevent Climate | Increase software Military |
| | Infrastructure | Change | Capabilities |
| 7 | Strengthen Multidimensional | Adapt to Climate | Increase Software Military |
| | Infrastructure | Change | Capabilities |
| 8 | Strengthen Multidimensional | Adapt to Climate | Increase Hardware Military |
| | Infrastructure | Change | Capabilities |

In the next step, the score of the scenarios is calculated based on the score of each of the dual sub-criteria by the TOPSIS method. For each scenario, two total scores and a standard score are calculated. The total score of each scenario is the sum of the scores of each of the dual sub-criteria in the score of the same criterion by the TOPSIS analysis method and the standard score is the result of the total score of each analysis group in each scenario divided by the average of the same analysis group in all scenarios. Finally, according to the total score and the standard score of each scenario, the final ranking of each scenario is calculated.

Table (3): Comparison and Ranking of Scenarios

| Strengthen Ifrastructure | | Table (5): Comparison and Kanking of Scenarios | | | | | | | | | |
|--|---------|--|-----------------------------|---------------------------|--------------------------------|-----------|------------|----------|--|--|--|
| TOPSIS | Scenari | Analysis | Economic | Envirnmental | Military | Total Sco | Standard S | Rank | | | |
| TOPSIS | 0 | Strengthen Hrastructure Impacts of China | | Impacts of Climate Change | Increase Military Capabilities | re | core | | | | |
| TOPSIS | | | | 2.04 | 2.31 | | | | | | |
| Strengthen one-Dimensional Increase Hardware Military Capabilities A.121 1.236 2 | | | Infrastructure | | Capabilities | 2.280 | 0.684 | 8 | | | |
| Capabilities Capa | 1 | TOPSIS | **** | | | | | <u></u> | | | |
| Strengthen one-Dimensional Infrastructure Adapt to Climate Change Increase Software Military Capabilities 3.428 1.028 4 | | | Infrastructure | | Capabilities | 4.121 | 1.236 | 2 | | | |
| Strengthen one-Dimensional Infrastructure D.5 D.34 D.76 D.5 D.34 D.76 D.5 D.34 D.76 D.5 D.34 D.76 D.76 D.5 D.34 D.76 D.77 D.7 | 2 | TOPSIS | 0.76 | OIL OIL | 0.65 | | | | | | |
| Strengthen one-Dimensional Infrastructure Infrastructure O.22 O.5 O.65 Strengthen Multidimensional Infrastructure Infrastructure O.22 O.62 O.62 O.65 Strengthen Multidimensional Infrastructure O.22 O.62 O.65 TOPSIS O.22 O.62 O.65 Strengthen Multidimensional Infrastructure O.62 O.34 Strengthen Multidimensional Infrastructure O.62 O.65 O.65 O.65 O.65 O.65 O.65 O.65 O.65 | | | 2 | Capabilities | | 3.428 | 1.028 | 4 | | | |
| Capabilities Capa | 3 | TOPSIS | 0.76 | 0.5 | 0.34 | | | | | | |
| Strengthen Multidimensional Increase Software Military Capabilities 2.545 0.764 7 TOPSIS | | | Infrastructure | - C | Capabilities | 2.973 | 0.892 | 6 | | | |
| Capabilities Capa | 4 | TOPSIS | 0.22 | 0.5 | 0.65 | | | | | | |
| Strengthen Multidimensional Infrastructure Strengthen Multidimensional Strengthen Multidimensional Infrastructure Strengthen Multidimensional Infrastructu | | | č | Prevent Climate Change | 3 | 2.545 | 0.764 | 7 | | | |
| Strengthen multidimensional Adapt to Climate Change Increase Software Military Capabilities 3.238 0.972 5 | 5 | TOPSIS | 0.22 | 0.62 | 0.34 | | | <u> </u> | | | |
| Strengthen multidimensional Infrastructure Adapt to Climate Change Increase Software Military Capabilities 3.693 1.108 3 TOPSIS 0.76 0.62 0.34 Strengthen Multidimensional Infrastructure Adapt to Climate Change Increase Hardware Military Capabilities 4.386 1.316 1 | | | | Prevent Climate Change | 3 | 3.238 | 0.972 | 5 | | | |
| Infrastructure | 6 | TOPSIS | 0.22 | 0.62 | 0.65 | | ı | | | | |
| 7 TOPSIS 0.76 0.62 0.34 Strengthen Multidimensional Increase Hardware Military Capabilities 4.386 1.316 1 | · | | Strengthen multidimensional | Adapt to Climate Change | Increase Software Military | | | | | | |
| Strengthen Multidimensional Adapt to Climate Change Increase Hardware Military Capabilities 4.386 1.316 1 | | | Infrastructure | | Capabilities | 3.693 | 1.108 | 3 | | | |
| Infrastructure Capabilities 4.386 1.316 1 | 7 | TOPSIS | 0.76 | 0.62 | 0.34 | | | | | | |
| 8 TOPSIS 0.76 0.63 0.65 | | | | Adapt to Climate Change | | 4.386 | 1.316 | 1 | | | |
| | 8 | TOPSIS | 0.76 | 0.63 | 0.65 | | | | | | |

According to the results of the table above, scenario 8, 'Strengthen multidimensional infrastructure - Adapt to climate change - Increase hardware military capabilities' has been introduced as the first scenario for the future of optimal security of Iran in twenty-year vision.

6.Discussion

Optimal vision is provided with the aim of paving the way to achieve the goals. In formulating the vision, the main principles of its formulation should be considered such as non-idealism, realism, transparency, coherence, structural communication, etc., (Inayatullah,2019). The findings of this article showed that in order to formulate a security vision for a better Iran by entering the twenty-year vision, Iranian officials should consider and follow the scenario of Strengthen multidimensional infrastructure - Adapt to climate change – Increasing hardware military capabilities.

6-1. The Impact of 'Strengthen Multidimensional Infrastructure' in Optimal Security of Iran twenty-year Vision

One of the most important economic goals of countries is to create the necessary conditions to increase GDP and economic growth. Investing in economic infrastructure and strengthening them is one of the main conditions for increasing production and economic growth. Analysis of the data of this article shows that Iranian experts in the target group of this article believe that investing in economic infrastructure by increasing the productivity of production factors, expanding the market, balancing supply and demand, creating better competitive conditions and increasing the level of welfare that increases Iran's production and economic growth is the most important criterion in improving Iran's security in the new century. The analysis of the findings also shows that in addition to the first priority of strengthen (strengthening) infrastructure in the perspective of better security in Iran, it is necessary to pursue the strengthening of infrastructure in all sectors including agriculture, industry, trade, technology, transportation, energy and etc. One of the serious problems facing Iran in recent decades has been the lack of balanced development of infrastructure in various sectors, and despite the reasonable speed of strengthening of infrastructure in the communication and transportation sectors (Oryani and et al,2021:2), development of infrastructure in other sectors such as agriculture (Farahmand and Zeraatkish, 2019:99) and energy (Mohsen and et al,2021:28) occurred at a much slower pace. This article believes that strengthening multidimensional infrastructure is a key necessity in developing a security perspective for Iran to enter the new century.

6-2. The Impact of 'Adapt to Climate Change' in Optimal Security of Iran in twenty-year Vision

Reports indicate that Iran will face a 2.6 ° C increase in average temperature and a 35% decrease in rainfall in the coming decades. Research by Alizadeh Choubari et al. shows that from the years 1951 to 2015, the minimum, maximum, and average daily temperatures close to the air level in most parts of Iran have increased. The temperature in most parts of Iran in the 1980s or 1990s had a change point and also the average temperature of all regions after the change point was approximately 1.2 degrees Celsius higher than the average temperature before the change point. Due to this warming, most regions of Iran have experienced a decreasing trend in their annual rainfall. Decreased rainfall and rising temperatures show that Iran has become drier and more vulnerable to drought in recent decades (Alizadeh-Choobari and Najafi,2017). Also, Bazrkar et al. have predicted a monthly temperature increase for Iran in the coming years based on SRES IPCC scenarios (Bazrkar and et al,2015:651-53). As a result, in Iran, we see a decrease in annual rainfall in most climatic stations, which indicates the early stages of climate change that is to occur in Iran. This article emphasizes that the second key criterion for developing a security perspective for Iran to enter the new century, which should be considered by Iranian officials, is to understand the widespread climate change in Iran and try to plan to reduce its effects on food security; this means adapts to climate change. It is obvious that neglecting the consequences of climate change in Iran directly leads to food insecurity (Leisner, 2020; Savari and Zhoolideh, 2021:650), which also directly affects Iran's national security.

6-3. The Impact of 'Increase Hardware Military Capabilities' in Optimal Security of Iran in twenty-year Vision

Hardware military capabilities are the most traditional, important, and obvious dimension of power and have been a vital factor of the preservation and survival of a country since ancient times, which is of interest to governments because of its impact on deterring rivals and neutralizing threats. Also, the security conundrum in international relations is one of the main challenges in ensuring the security of countries. This has made hardware military power one of the most important factors of future security planning, without which security would be far from a reality. Mearsheimer (2021) considers the effective and efficient power of a government to be ultimately a function of its military forces and how to compare these forces with the military forces of rival governments. Russia's invasion of Ukraine proved that even countries that had pursued a policy of neutrality for years could not be safe from military aggression forever. After the revolution in Iran and the problem of providing military hardware in the eight-year war with Iraq, Iran prioritized the strategy of providing security by relying on the production of military hardware domestically. Reports in this regard show that due to the conditions of comprehensive international sanctions against Iran, its military development and hardware have slowed down at a good pace, and Iran has a high ranking in the Middle East in the ranking of tough military power (Firepower, 2020). The current fragile security in the world, and especially in the Middle East, necessitates the continuation of Iran's efforts to strengthen its military hardware; Because not only does it increase Iran's deterrent power, but it is also a serious supporter of Iran's political, economic and cultural power in the region and the world. This article emphasizes that the third key criterion for developing a security perspective for Iran to enter the new century, which should be considered by Iranian officials, is to increase hardware military capabilities which should be considered with the aim of increasing deterrence in insecurities in the Middle East; it is obvious that neglecting to increase Iran's military hardware power directly affects Iran's national security.

7. Conclusion

Futurology of the security of a political unit is a type of futures studies that focuses on a specific territory and tries to examine the safe status of the political unit for the future and provide optimal security solutions for it. Although the effective criteria in security can be identified in large numbers, this article, based on different approaches to security and similar research, classified a total of 20 main criteria affecting Iran's security into six geopolitical criteria, which are military, economic, spatial, socio-cultural, political and environmental. To answer the first question of the research by accurate field survey, completing the questionnaire through interviews with experts, prioritizing 20 criteria of security for Iran was determined and based on this, three key criteria were identified, which are 'Strengthen infrastructure', 'Impacts of Climate Change', and 'Increase military capabilities'. Based on these three criteria, eight security scenarios were proposed for Iran to enter the twenty-year vision. Then, based on the scores of each criterion and sub-criteria, the scenarios were ranked, and finally, the

first proposed scenario of this article for Iran was introduced, which is: 'strengthen multidimensional infrastructure, adapt to climate change, and increase hardware military capabilities'. As a result, geopolitical criteria affecting Iran's security were developed with the futurology of the security approach.

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