Introduction

Global environmental problems, their destructive consequences on the economy and therefore life quality, and the interdependence of this phenomenon have led governments and researchers to focus on environmental issues. In this context, the concept of sustainable development has been formed. The topic of sustainable development is currently being discussed as one of the world's major issues. The concepts and issues related to this approach of governance are continually being developed and completed. Consequently, the concept of sustainable development has been accepted by most governments as a desirable approach and as a solution to development issues. Apart from the debates on the pattern of development and the country's political economy, sustainable development is more about those aspects of development that may be neglected at first glance. Some of these topics are environmental impacts, intergenerational justice challenges, debates, and transnational aspects of development.

"The fulcrum for the worldwide attention being paid to the concept of sustainable development (SD) was the Brundtland Commission report of 1987 which helped define SD as seeking to meet the present's needs and aspirations without compromising the ability to meet those of the future". However, there have been challenges in meeting some of the thresholds of SD due to the limitation imposed by social issues, technological advancement, and the ecosystem's ability to accommodate human carbon footprints. Therefore, it is unrealistic to have a single SD blueprint for every country or region. Hence, each country would need to develop its SD policies and standards but with a global objective in mind (Olawumi & Chan, 2018, p. 232).

By tracking global trends of development, it seems that "Sustainability and SD are two concepts that have gained reception at national and global levels due to challenges and risks faced in areas such as rural development, environmental conservation, energy, climate change, human wellbeing, etc. Hence, there has been a shift in focus and action plans to address these problems in recent years. SD is currently adopted as a growth strategy in the built environment" (Axelsson, et al., 2011 in Olawumi & Chan, 2018 p. 232). According to the United Nations goals, by 2030, there are 17 goals to achieve sustainable development: eliminating poverty; eliminating hunger; good health and wellbeing; quality education; gender equality; clean water and sanitation; affordable and clean energy; decent work and economic growth; industry, innovation, and infrastructure; reduction of inequalities; sustainable cities and communities; responsible production and consumption; action for the climate; life bellow water (attention to global resources); life on land (attention to pastures, forests, etc.); peace and justice with strong institutions; and partnerships for goals (sustainable development goals). In this context, sustainability can be considered as a process and mechanism for achieving sustainable development (Sartori, Latrônico, & Campos, 2014), while from another perspective, sustainability is the process of intentional change and improvement (Dovers & Handmer, 1992).

"Environmental Sustainability is concerned with confining human activity within the carrying capacity of the ecosystem (such as materials, energy, land, and water, etc.) prevailing in the locality and places emphasis on the quality of human life (air quality, human health). Moreover, economic Sustainability considers the efficient use of resources to enhance operational profit and maximize market value. It also deals with substituting natural for human-made resources, reuse, and recycling. However, the social Sustainability focuses on the social wellbeing of the populace, balancing the need of an individual with the need for the group (equity), public awareness and cohesion, and participation and utilization of local labors and firms" (Olawumi & Chan, 2018, p. 232).

Verma (2019, 45), in the paper “Sustainable development and environmental ethics”, addressed and discussed the principles, which are directly or indirectly applicable to developmental activities economic sustainability, ecological sustainability, social sustainability and cultural sustainability. It has both intra-generational and inter-generational

equities with several approaches. Wall (2018, 28) based on his experiences primarily in Indonesia and Taiwan and the literature on resilience, emphasized the role of culture and "a modified sustainable livelihoods framework that incorporates these ideas is presented as a possible way forward." Considering current research in the literature, it is clear that there are few papers covering the environmental issues toward the intergenerational dimensions of justice. Furthermore, in the context of Iran as a developing country with too many environmental disasters, few researches had been done on the intergenerational justice. None were presenting a holistic picture about the environmental issues.

As a result of this gap, this paper aims to explore the environmental requirements affecting the intergenerational justice toward sustainable development, using thematic analysis as a qualitative method by conducting 18 semi-structured interviews which were analyzed by using MAXQDA software. Finally, 43 indicators were explored in this research, which were categorized in nine themes.

Literature: Sustainability and Sustainable Development

Today, most organizations seek to achieve sustainable development with respect to the concepts of "green" and one of the main criteria for assessing green performance is economic efficiency (Rashidi & Farzipoor Saen, 2015). Economic productivity is an improved criterion of sustainability as it directly relates environmental effects to economic performance (Muller, 2014) and serves as a valuable tool for sustainable development. To monitor environmental consequences, environmental sustainability indicators are designed to analyze the development of economic productivity by measuring economic activity in terms of consumption and production and related consequences. These environmental indicators assess the traditional technical and economic evaluation of the engineering projects and support the decision-making process. Economic productivity indicators may also be used to measure the ecological productivity of different sectors in a country and compare economic efficiency in similar industries in different countries (Caiado et al.,2017).

For people, sustainability, in both aspects of the terminology and scholarly, is based on a strong sense of intergenerational justice (Golub, Mahoney & Harlow, 2013). Thus, it is possible to conclude that the concept of sustainable development is extremely attractive, and there is no doubt the requirement for intergenerational justice is one of its key elements. As the Brundtland Report, its most popular definition is the progress that "according to the current needs without compromising the ability of future generations to meet their needs" Furthermore, sustainable development issues are discussed in the justice theory recently. However, it should be emphasized that several normative criteria should also be considered to be fully comprehensible in environmental issues. Examples of international law and international justice issues and local (geographically) or gender issues are also noteworthy. These dimensions are, in practice, even more effective or conceptually more challenging for some environmental challenges than intergenerational dimensions (Gosseries, 2008).

Many researchers have considered the link between sustainable development and intergenerational justice, and it seems that there is a strong relationship between intergenerational equity and sustainable development. So that in recent years many intergenerational equality issues have been developed using terms such as "sustainability" or "sustainable development," which has paid particular attention to the role of natural resources and the environment in sustaining economic growth. Hence, sustainability is the need to ensure a better quality of life for all, now and in the future, fairly and equitably, given the limitations that exist in human-to-back ecosystems (Agyeman & Evans, 2004). Intergenerational justice in sustainability discusses sustainability literature and the contribution of equality and justice, especially intergenerational justice (Golub, Mahoney & Harlow, 2013).

Besides, some scholars also recognize sustainable development as a concept dealing with intergenerational justice in some way at a normative level. Figure 1 illustrates that sustainability is a part of intergenerational

justice, which itself includes: ecological, financial, and social sustainability.

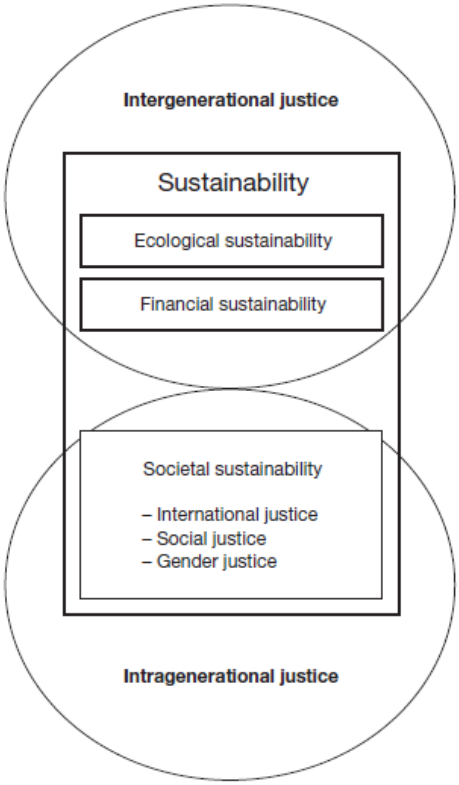

Figure 1. The analytical definition of Sustainability, (source: Tremmel, 2009, p.8)

Meanwhile, in addition to the intergenerational justice dimension of sustainable development, the environmental aspect has been considered. It focuses on ecological constraints such as limitations of the Earth's capacity to absorb garbage and waste. For a long time, we are at the risk of environmental threats and destroying natural resources. These threats seem to be decisive factors in the decline of particular civilizations. In other words, a famous argument about the collapse of civilizations is excessive consumption (Gosseries, 2008).

In the 1970s, terms such as "intergenerational equality," and "intergenerational justice," were commonplace in the title and content of various researches. In this context, the most crucial contribution is related to Hartwick's work. It responded to the question about the quality of benefits from non-renewable resources by adopting a justice-centered approach. The result is known as Hartwick's Rule. In the case of sustainable development and intergenerational justice, the fact that the previous generation has its obligations (issues of non-compliance), or at various levels, affects the tasks that each of the justice theories puts on the current generation. In this context, it is clear that one should keep in mind that a generation usually disregards intergenerational obligations. A review of the various theories on justice in various schools suggests that fair-minded intergenerational equity theories are reasonably clear about the various ways in which it is possible to address issues of our generation's obligations. However, there is still a long way to go to define the exact lines of these commitments and prepare the institutions for their implementation (Gosseries, 2008).

In scientific literature of sustainability, there is almost a unity of protection of equal intergenerational rights and a reference to the utility of intergenerational shares of extensive patterns for accurate analysis. Suppose the historical roots of current injustice and future preferences and predictions are not carefully scrutinized. In that case, it will most likely negatively affect the implementation of solutions to intergenerational sustainability and justice. Starting a conversation about future generations is no longer possible due to the current moral dynamics' complexity. To do this, we need to understand how the elements of injustice have come about over time and are fraught with the challenges that history has imposed on us (Golub et al., 2013).

Sustainable development has been central in global debates of development due to the expansion of global environmental crises. There are some concerns about the future of the planet as well as intergenerational justice issues. The link between intergenerational justice and sustainable development can be seen in numerous studies. Some related researches are as follows:

Yuan and Zhang (2020) in their paper “Flexible environmental policy, technological innovation and sustainable development of China’s industry” were seeking “How to rely on market mechanism for achieving industrial sustainable development is an important issue both to current scholars and policymakers?” They revealed that: flexible environmental

policy facilitates industrial sustainable development, and has a significantly positive impact on technological innovation which is significantly and positively related to industrial sustainable development. Besides, environment regulatory enforcement positively moderates the relationship between flexible environmental policy and technological innovation.

Simcock (2016), in the paper entitled "Procedural justice and the implementation of community wind energy projects," investigated the deciding process about wind and reproducible energy and their effects on future generations. Previously, Llavador et al. (2010), in their paper entitled "Intergenerational justice when future worlds are uncertain," discussed the maximization of the different generations' welfare and introduced the presence of global warming as the main problem of today's society.

In this path, Miller and Siggins (2003), in their paper "A framework for intergenerational planning," reviewed some subjects such as assessing the extent and nature of future need, outlined some scenarios, and described some of the principles that have been adopted for the intergenerational planning. They also offered some principles to guide government investment. Before the reviewed papers, Howarth (1997, 9) discussed sustainability concepts in his paper entitled "Sustainability as Opportunity" and explored "the relationship between sustainability concepts and contractarian principles of distributional fairness." He introduced sustainable development as an element, which correlates intergenerational justice to intra-generational one. He emphasized another aspect of sustainable development and stated that intergenerational justice could be assured by endowing future generations with a structured bequest package that includes specific endowments of reproduced capital, technological capacity, natural resources, and environmental quality.

Research Methodology

This paper uses a qualitative method. Qualitative research data were collected through observation and semi-structured interviews focused on the participants' meanings and interpretations. This type of research retrieves information by referring to beliefs, values, and behaviors in the social context. One of the simplest and effective methods of qualitative analysis is thematic analysis. Thematic analysis is a flexible and useful research tool that can analyze a large amount of complex and detailed data (Braun & Clarke, 2006). The research method is summarized in Figure 2 assumed as the onion of this research:

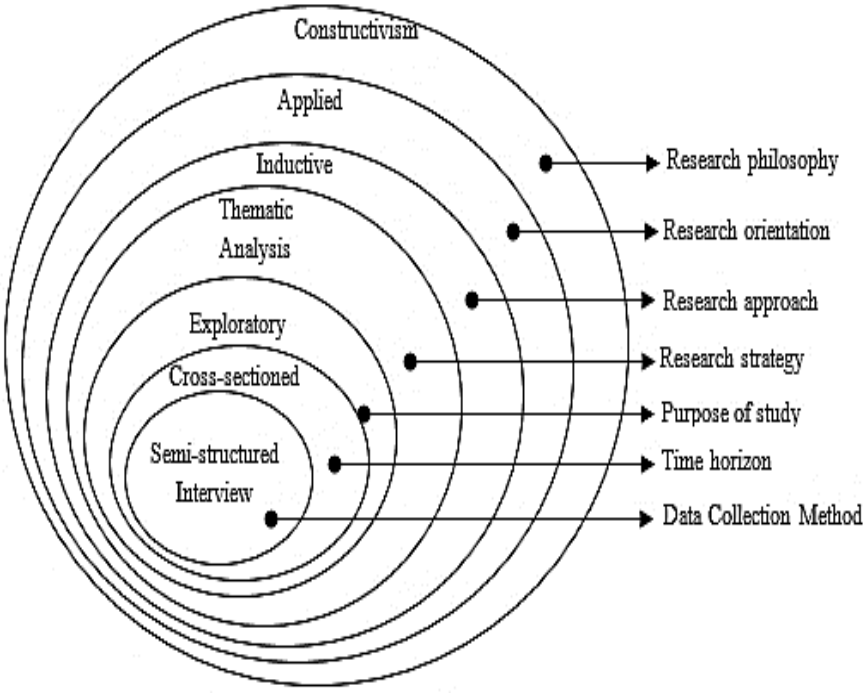

Figure 2. Research Onion

The thematic analysis process starts when an analyst looks at semantic patterns and topics that are potentially attractive. This analysis involves a continuous sweep between the data set and the set of coding and analyzing the created data. The writing of the analysis starts from the first stage. In general, there is no unique way to start a study on the thematic analysis (Braun & Clarke, 2006). The process used in this research follows these phases: Phase 1: Becoming familiar with the data; Phase 2: Generating initial codes; Phase 3: Searching for themes; Phase 4: Reviewing themes; Phase 5: Defining and naming themes; Phase 6: Producing the report (Braun & Clarke, 2006).

For gathering data, books, articles, dissertations, research projects, and interviews were used to collect information (Hesse-Biber et al., 2004, p.185). In the interview method, it is not possible to determine in advance how many people should be selected for an interview so that the subject is fully identified and as long as the information is collected to reach the saturation point and find that with new interviews, something No new information is added (Seidman, 2006, p.56). To select the interviewees, purposeful or judgmental sampling was first used, and then a snowball sampling method was used. In this way, the researcher may ask the interviewee, after the interview, to identify him if he or she wishes to know the person. This method guides us from an interviewer to another participant (Gray et al., 2007, p. 117). In this study, 18 elites were selected to be interviewed. After interviewing selected experts in public administration, public policy, management, economics, environment, and sociology, the interviews were coded systematically using MAXQDA software. Using thematic analysis, these codes were converted to sub-themes and converged themes formed the main themes.

Findings

After implementing the interviews into Microsoft Word, the interviews were incorporated into the MAXQDA software and were carefully studied and coded. To summarize the paper, interviews and codes were not mentioned in this paper, and just an example of the process was reviewed here. Each section highlighted in the interviews contains a code and index for the researchers. An example is shown in the table 1:

Table 1. An example of coding

Quotations (interviews)	Codes	Subthemes
"Government resources are discussed for more resources. The first one is oil, underground resources, and mines. The oil itself is considered an intergenerational resource."	Oil, Underground Resources	Fossil Fuels

This was done for all interviews, and all themes and codes were extracted. Then the code, having a common meaning, was grouped into a more abstract category called a subtheme.

After analyzing all interviews and identifying semantic units, a total of 43 indicators were extracted. According to the methodology of research, the procedure for doing this was that the conceptualization of the data took place, and the data that were close to each other were labeled with appropriate names. All of the indexes and themes were extracted in the same way. Subsequently, those extracted concepts that the scholar referred to in common sense and concept were placed under a more abstract label and created research themes. Finally, the indices obtained were placed in 9 themes.

Through systematic coding mentioned in research methodology, 43 sub-themes as founded indexes of environmental requirements of intergenerational justice for sustainable development under nine themes were collected. They were summarized in Table 2.

Table 2. Sub-themes and Themes of research

Themes	Sub-themes
Natural Resources	Fossil fuels
	New energies
	Solar energy
	Wind energy
	Nuclear energy
	Water energy
Social Capital	Public participation
	Civil education
	Private sector participation
	NGOs
	Protective vision about environment
Laws and Regulations	Restrictive policies about the environment
	The rule of law and law enforcement
	Green tax expansion
	Avoid tax breaks
	Civil projects policies
Spatial Planning	Geographic identification of different areas
	Identify the talents of different regions
	Knowledge of different ecosystems
Renewable Energy	Solar power generation
	Hydroelectric power generation
	Wind power generation
	Geothermal energy production
	Investment in renewable energy
Environmental Vulnerability	Soil erosion
	The level of forests and pastures
	Groundwater level
	Desertification rate
Environmental Health and Sustainability	Air pollution
	Global warming
	Noise

	Soil pollution
	Water pollution
	Waste management
Environmental Performance	How to exploit surface water resources
	How to exploit groundwater resources
	How to exploit soil resources
	How to use forests
	How to use hydrocarbon resources
Ecological Footprint	Measuring resource consumption
	Absorption rate
	Changing lifestyle
	Amount of waste production

After examining the interviews and summing up the indicators and themes, some were described briefly in Table 2. These themes were compared to the theoretical literature. By this comparison, the main themes can be described as Indexes.

Table 3. Description

Index	Description
Spatial Planning	Spatial planning is a set of sciences, techniques, principles, policies, programs, and actions coordinated and coherent to organize and organize biological and geographical spaces and places to balance the relationship between man, space, and activities. It considers equivalence and all-natural, spatial, geographical, human, environmental, economic, and, in particular, strategic considerations and requirements. Spatial planning's overall objective is to organize the wise use of space of the land and the long-term perspective of development in its various dimensions. The distribution of economic, social, demographic, and apparent and hidden capacities is due to changes in time and needs, mainly due to the long-term vision and optimal utilization of its facilities, as well as the identification of the specific role and responsibilities of each region based on its capabilities Coordinated with other areas. Based on this role and responsibility, which is the result of natural and legal processes of each region, as well as regional planning and national development program can be implemented in different regions. For this reason, experts acknowledge that Spatial Planning without regional planning will not be practically applicable. According to some experts, the main issue that identifies Spatial Planning is the management of the country, and some believe that land management is a long-term plan for better distribution of the population, facilities and activities in order to increase the welfare, comfort and harmony of the community. In terms of concept, the land plot has been defined to create a balance between the three elements of man, space, and activity, which is the subject of management in relation to human being, and in relation to space, the climate is discussed and is highlighted in relation to the activity of the program category and planning.
Ecological Footprint	The Ecological Footprint is a kind of accounting tool used to estimate and measure the consumption of resources and the absorption of pollutants for the population or the economy. It is calculated based on their conversion to fertile land. This concept, which has become the subject of sustainability comparison among countries, compares the effects and consequences of communities, regions, countries, and individuals on the environment by turning them into the areas needed to generate basic needs and absorb pollutants. In other words, the Ecological Footprint relates human lifestyle to the environmental consequences. However, these calculations depend on the amount of information, accuracy, conversion index, agricultural land area, the land surface of the forest, and other natural resources. Ecological Footprint depends on the amount of consumption and also on the production of lesions.
Environmental Sustainability Index	Given that conventional methods of economic measurement and national accounts systems have not measured sustainability, the ESI has been developed by a group of

	scholars from various disciplines at Yale University and the World Economic Forum (WEF) (47). The Environmental Sustainability Index (ESI) was first proposed in 2000, but its weaknesses and deficiencies were revised in 2002. The index, with modest changes in 2005, was calculated and published for 146 countries. The Environmental Sustainability Index (ESI) assesses the capabilities and capabilities of nations to support the environment over the next decades. This index is derived from 76 statistical data groups integrated into the 21 environmental sustainability indicators. According to the results of this report, the higher the country's score for the ESI, the better environmental conditions will be.
The Environmental Performance Index	The Environmental Performance Index (EPI), as a supplement to the ESI Index, was published by the University of Yale and the World Economic Forum in 2006. Using the appropriate statistical methods, the Composite Environmental Performance Index (EPI) is developed for different countries. To build the index, the performance of countries in the index of 25 persons, authorities, and expert estimates determined using cluster analysis to classify, and the final value of each index sub-estimate, and then using appropriate techniques index A combination of environmental performance (EPI) is being prepared for countries around the world. Values in ESI fluctuate between a zero and 100 range. The country is higher than this indicator to obtain the best performance of the environment.
Environmental Epidemic Vulnerability Index	In 1998, the United Nations Commission on Sustainable Development (CSD) launched efforts to develop the Environmental Vulnerability Indicators (EVI) in collaboration with the South Pacific Ocean Commission for Applied Sciences (SOPAC). The Environmental Epidemic Vulnerability Index (EVI) is a non-dimensional index that indicates the vulnerability of the countries' environment. This indicator's main objective is to provide a quick and standard method for determining countries' vulnerability in all economic, social, and environmental spheres and identifying and prioritizing the most critical steps that must be taken in each of these areas to achieve sustainable development. Based on these indicators, the priorities of planning, policy, and actions in different areas of sustainable development are determined, and the country's situation is determined in comparison with other countries in the field of environmental vulnerability. The Environmental Vulnerability Index (EVI) is one of the first tools for measuring sustainability that has been introduced in the 1990s and expanded rapidly. This indicator shows the risks that threaten the environment.

Conclusion

The gradual evolution of natural disasters such as global warming, air pollution, etc., led development theorists to develop it beyond mere economic growth at a specific period. This concept includes various development dimensions such as paying attention to environmental problems, sustainability, compliance with intergenerational requirements, etc. The geopolitical position and the overall context of Iran with its rich hydrocarbon resources, mineral resources, and other environmental capabilities have made it one of the world's strategic countries. Excessive extraction of underground resources and their costing as current expenditures have made the next generation highly vulnerable to the natural threats from natural resources. The need to pay attention to intergenerational justice in Iran's development, which is in the midst of deep political, social, economic, environmental, and other crises, is more crucial than ever. In respect to the development concept, along with intergenerational requirements for sustainable development, the paper examined this concept to greatly contribute to our understanding of the concept of balanced development while respecting future generations' rights, leading to maximum economic productivity. Hence, this study examined intergenerational equity in the light of sustainable development.

Revealing the effects of environmental problems and undermining many people's lives in their work highlighted that many elites' attention accentuated the dangers of neglecting the environment. Urmia Lake

drainage, dehydration crisis, annual desertification, climate change, water pollution, air, etc were some of the accentuated issues by the experts. All are alarming to the decision-making system in Iran to pay more attention to this vital dimension. As stated earlier, any country needs a tailor-made plan to achieve sustainable development. Each country must review its developmental policies and standards in line with the global goals. On the other hand, one of the main concerns of planners and politicians should be the use of those criteria and principles that characterize their country's policies and programs quantitatively and measure how their goals could be realized through the indicator presented here.

The criteria and principles derived from interviewing the experts in this study are the nine main themes of this study, briefly described in Figure 3.

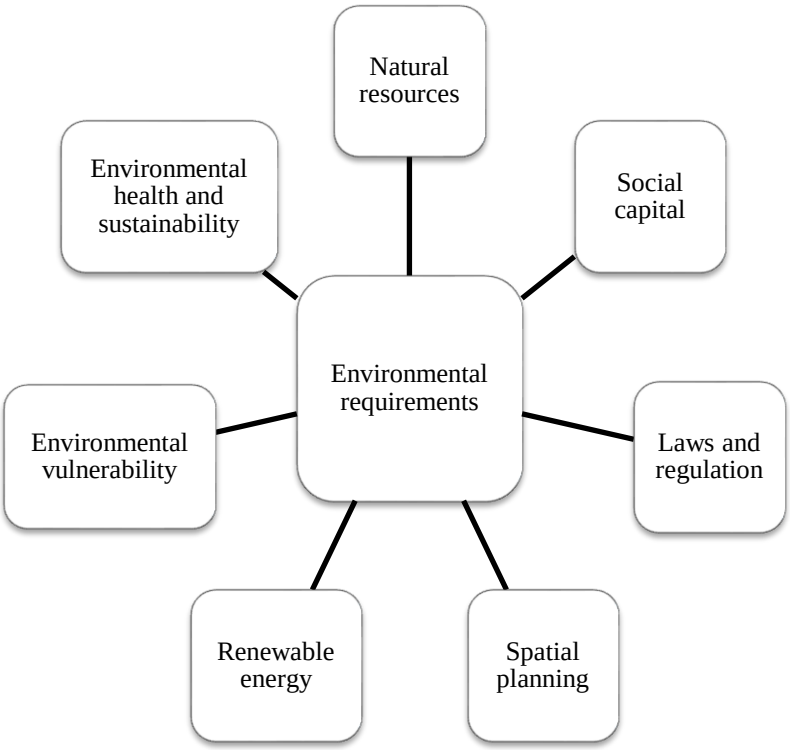

Figure 2. Themes Network

Moreover, this research was done to determine what indicators we could use to measure the quality of policymakers' quality of development policies and could seek to achieve them. Therefore, in this study, to achieve intergenerational justice, the environmental dimension were studied from different sustainable development dimensions. Indexes outline the areas where policymakers need to consider sustainable development. Regarding the structure of the governance system in Iran, the 5-year plans for development and, therefore, annual budgets as the government operational programs should provide a way to forward to realize intergenerational justice, i.e. considering environmental considerations through consideration of extracted indicators.

The extracted indices are general, requiring specialist research and expertise for appropriate policy and budget allocation. A more comprehensive look at these indicators suggests that budget allocation should be based on this logic rather than the political processes. This systemic view of governance requires accurate evaluation of allocated funds' effectiveness and the designated goals and visions.

This study was also in consistent with Howarth's (1997) study considering sustainable development as the bridge between generational and intergenerational

justice and emphasizes its necessity in all aspects. According to Miller (2003), our study emphasizes government investment guidelines, research in the fields of natural resources, law and regulation, and all environmental areas on government presence and public sector investment to estimate sustainable development goals and intergenerational justice. As Llavador et al. (2010) argued, the most pressing problem is global warming and, consequently, future generations' welfare. Most of the themes present in our article also emphasize the above issues (see table2). Nevertheless, this article has added to other research a general rather than a partial perspective of sustainable development. Sustainable development is made up of different dimensions, focusing on one entity will lead to neglecting the other entities and ultimately failing to achieve the primary goal of achieving intergenerational justice. (As it was reviewed, most articles focused only on the environment). Finally, one of the most critical aspects of our research was related to laws and regulations. Lack of law in many instances undermines intergenerational justice in all aspects of sustainable development, so it is recommended that researchers in the future carefully study this arena.

REFERENCES

Agyeman, J., & Evans, B. (2004). "Just Sustainability": The Emerging Discourse of Environmental Justice in Britain? *The Geographical Journal*, 170(2), 155–164. Retrieved from http://www.jstor.org/stable/3451592

Axelsson, R., Angelstam, P., Elbakidze, M., Stryamets, N., & Johansson, K.-E. (2011). Sustainable development and Sustainability: Landscape approach as a practical interpretation of principles and implementation concepts. *Journal of Landscape Ecology*, 4(3), 5–30.

Ayumi Onuma. (1999). Sustainable consumption, sustainable development, and green net national product, *Environmental Economics and Policy Studies*, 2: 187-197.

Braun, v & Clarke, v (2006), Using thematic analysis in psychology, *Qualitative Research in Psychology Journal*, 2(1): 123-140

Caiado, R. G. G., de Freitas Dias, R., Mattos, L. V., Quelhas, O. L. G., & Leal Filho, W. (2017). Towards sustainable development through the perspective of eco-efficiency - A systematic literature review. *Journal of Cleaner Production*, 165, 890–904. https://doi.org/10.1016/j.jclepro.2017.07.166

Dovers, S. R., & Handmer, J. W. (1992). Uncertainty, *Sustainability and change. Global Environmental Change*, 2(4), 262–276. https://doi.org/10.1016/0959-3780(92)90044-8

Emmanuel Kumi, Albert A. Arhin, & Thomas Yeboah. (2014). Can post-2015 sustainable development goals survive neoliberalism? A critical examination of the sustainable development neoliberalism nexus in developing countries, *Environ Dev Sustain*, 16:539–554.

Eleni Sinakou, Jelle Boeve-de Pauw, & Peter Van Petegem. (2017). *Exploring the concept of sustainable development within education for sustainable development: implications for ESD research and practice*, Environ Dev Sustain

Golub, A., Mahoney, M., & Harlow, J. (2013). Sustainability and intergenerational equity: Do past injustices matter? *Sustainability Science*, 8(2), 269–277. https://doi.org/10.1007/s11625-013-0201-0

Gosseries, A. (2008). Theories of Intergenerational Justice: a Synopsis. *Surveys and Perspectives Integrating Environment and Society*. https://doi.org/10.5194/sapiens-1-39-2008

Gray, P., Williamson, J. & Karp, D. (2007), T*he Research imagination: an Introduction to qualitative and quantitative methods.* Cambridge University Press.

Helen Kopnina. (2013). Evaluating education for sustainable development (ESD):using Ecocentric and Anthropocentric Attitudes toward the Sustainable Development (EAATSD) scale. *Environ Dev Sustain*, 15:607–623

Hesse-Biber., Nagy, S., & Levy, P. (2004), Approaches to Qualitative Research. New York: Oxford University Press

Howarth, R. B. (1997). Sustainability as Opportunity. *Land Economics*, 73(4), 569–579. https://doi.org/10.1307/3147246

Lan Moffatt. (1993). Sustainable development: conceptual issues, an operational model an its implications for Australia, *Landscape and Urban Planning*, 23 (1993) 107- 118.

Llavador, H., Roemer, J. E., & Silvestre, J. (2010). Intergenerational justice when future worlds are uncertain. *Journal of Mathematical Economics*, 46(5), 728–761.

Mel, M. (2003). A framework for intergenerational planning. *Foresight*, 5(6), 18–25. https://doi.org/10.1108/14636680310698801

Muller, J. (2014). The pathos of specialised knowledge. Educational Research in South Africa: *Practices and Perspectives*, 1–10.

Michael J. Dockry, Katherine Hall. William Van Lopik, & Christopher M. Caldwell. (2016). Sustainable development education, practice, and research:an indigenous model of sustainable development at the College of Menominee Nation, Keshena, WI, USA. *Sustain Sci*,11:127–138.

Nguyen Cao Don, Hiroyuki Araki, Nguyen Thi Minh Hang, Hiroyuki Yamanishi, & Kenichi Koga. (2008). Modeling groundwater flow and its associated environmental problem in a lowland coastal plain: a first step towards a sustainable development plan. *Environ Dev Sustain*, 10:219–231.

Olawumi, T. O., & Chan, D. W. M. (2018). A scientometric review of global research on Sustainability and sustainable development. *Journal of Cleaner Production.* https://doi.org/10.1016/j.jclepro.2018.02.162

Rashidi, K., & Farzipoor Saen, R. (2015). Measuring eco-efficiency based on green indicators and potentials in energy saving and undesirable output abatement. *Energy Economics*, 50, 18–26. https://doi.org/10.1016/j.eneco.2015.04.018

Rawls, John (1999) *A Theory of Justice. Revised Edition.* Cambridge, Harvard University Press

Sartori, S., Latrônico, F., & Campos, L. M. S. (2014). Sustainability and sustainable development: a taxonomy in the field of literature. *Ambiente Sociedade*, 17, 1–22.

Simcock, N. (2016). Procedural justice and the implementation of community wind energy projects: A case study from South Yorkshire, UK. *Land Use Policy*, 59, 467–477. https://doi.org/https://doi.org/10.1016/j.landusepol.2016.08.034

Seidman, I. (2006), *Interviewing as Qualitative Research: A Guide for Researchers in Education and the Social Sciences.* 3rd ed. by Teachers College Press.

Sustainable development goals. (n.d.). Retrieved from United Nations website: https://www.un.org/sustainabledevelopment/sustainable-development-goals

Verma, A. K. (2019). Sustainable development and environmental ethics. *International Journal on Environmental Sciences*, 10(1), 1-5.

Wall, G. (2018). Beyond sustainable development. *Tourism Recreation Research*, 43(3), 390-399.

Yuan, B., & Zhang, Y. (2020). Flexible environmental policy, technological innovation and sustainable development of China's industry: The moderating effect of environment regulatory enforcement. *Journal of Cleaner Production*, 243, 118543.