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# Elements and Dimensions of Sustainability in Iran's Higher Education System, and Comparison of Public and Non-Governmental Academic Approaches

Salman Darabi[1], Nematollah Azizi [2*], Jamal Salimi[3], Naser Shirbagi[4]

1. PhD Student in Higher Education Development Planning, Faculty of Humanities, University of Kurdistan, Kurdistan, Iran.
2. Professor, Department of Educational Sciences, Faculty of Humanities, University of Kurdistan, Kurdistan, Iran.
3. Associate Professor of Educational Sciences, Faculty of Humanities, University of Kurdistan, Kurdistan, Iran.
4. Associate Professor, Department of Educational Sciences, Faculty of Humanities, University of Kurdistan, Kurdistan, Iran

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**Abstract**

**Purpose**: The main objective was to research the elements and dimensions of university sustainability and to provide a comprehensive conceptual model for the realization of a sustainable university in the Iranian higher education system and to compare the approach of public and non-governmental universities.

**Methodology**: The research approach was applied in terms of purpose and in terms of data collection method was descriptive-correlational. It was mixed in terms of qualitative and quantitative. In the qualitative section, the components of sustainable university were identified through semi-structured interviews with 17 higher education experts and policymakers selected through purposive sampling. Content analysis method was used for data analysis by inductive method. The research method was quantitative descriptive-survey. The research instrument was a researcher-made questionnaire consisting of 8 subscales and its content extracted from qualitative data. The population consisted of 322 faculty members of public and non-governmental universities selected by Cochran formula. The construct validity of the instrument was confirmed by experts and its reliability was calculated by Cronbach's alpha. Data were analyzed using SPSS and AMOS software.

**Findings**: The results of the data analysis in the coding process finally included 8 main categories of pedagogy elements and dimensions in the processes of learning, sustainable research, functional requirements, social sustainability, economic sustainability, academic and academic identity and academic diplomacy in the age of globalization. . The results of the quantitative section also showed the difference of sustainability indices in public and non-public universities.

**Conclusion**: Finally, the results showed that universities need to move towards sustainability in order to maintain their stability in the current situation.

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* Corresponding Author Email: N.Azizi@uok.ac.ir

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## 1. Introduction

Universities are committed to responding to new needs in the Third Millennium to expand their capacity for judgment, innovation, critical thinking, meaningful literacy, while fostering a sense of altruism, cooperation, and service to the people, with challenges and issues such as: Polyphonic echoes (secularism, spirituality, and globalization), 2- Understanding complexity, 3- Changing attitudes, methods, criteria and indicators, 4- Aging of research concepts and methods5- Transforming formal curriculum content into interdisciplinary And interdisciplinary 6. The multicultural issue and the emergence of new organizational culture (molecular, virtual and digital) are facing higher education. Accordingly, universities cannot, in accordance with the Newtonian paradigm (static and inflexible organizations), have long-term planning, precise control and forecasting, or have fixed structures and processes. It is therefore necessary to have new structures, processes, tools and skills in this changing world. But what new models, tools, and skills can contribute to the viability and dynamics of universities? (Soukup, 2011).

Conceptually, there is a huge difference between sustainability and sustainable development. Sustainability describes the final state and sustainable development of the process of achieving sustainability. So the two terms sustainability and sustainable development are two sides of the same coin: the first is what is related and the second is how. Sustainability can be considered as a destination and sustainable development is the route and method of reaching the destination (Salonen & Taste, 2013). Sustainability is divided into two types of superficial (symbolic) and deep (fundamental). Superficial sustainability focuses on alternative strategies with regard to resource consumption and usually accepts dominant goals in the community without question and targets therapeutic solutions to problems. Deep sustainability evaluates goals in relation to higher values and designs the systems needed to meet the goals (Sohrabi & Bordbar, 2012).

Several international documents have been framed between 1970 and 1990 to define sustainability in higher education. All of these documents are in some respects shared by Schek(2007). These include: 1. Academic missions should reflect sustainable development. 2. Sustainability must be integrated into all academic disciplines and specialized educational requirements, as well as faculty and student research. 3. The impact of the university on the environmental and social systems around should be identified and measured. 4. The university must demonstrate a commitment to sustainability in its recruitment, tenure and promotion system. 5. The university is aware of its environmental impacts, incorporating sustainable practices in all its activities. 6. Institutional and student life services should emphasize sustainability. 7. The university must contribute to the promotion of sustainability in serving the local and global community (Schek, 2007). The university must have the characteristics to enable this authority to reach its intended home. Therefore, one can call the system of higher education moving within the framework of the sustainable development paradigm, sustainable higher education. It should be noted that Sustainable Higher Education operates its missions and duties in the realization of sustainable development through universities. From this point of view, the higher education system needs universities that are structured in terms of organizational structure, human capital, educational and research processes and so on to deliver sustainable higher education in particular and sustainable development in general; It is called a sustainable university (Yultusif, 2011).

Accordingly, the term "sustainable higher education" and "sustainable university" were introduced in educational settings. The fundamental elements of the concept of sustainable higher education are believed to be: 1. to formulate basic concepts such as the quality of life and human happiness consistent with any particular culture; 2. Reconfigure the concept of development to focus on meeting the needs and pursuit of all citizens of the world on the basis of social equality, justice, social pluralism, and the balance between humans and the environment; 3. The new order of the world economy based on equality, lack of exploitation, peace and disarmament; 4. Emphasis and focus on environmental and social issues on a global

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scale; 5. Considering future generations; 6. Changes in value systems, attitudes of life, and in relationships between humans and nature and between humans (Faghihian, 2012). According to Barth (2015), sustainability activities in higher education institutions are carried out at least at three levels. These activities include: 1) research on sustainability issues, 2) teaching and learning activities to train future decision makers, 3) organizational change as a form of self-assessment to refine operational parameters and management processes. In other words, a sustainable university is a learning process that develops the capacity and ability to retell, dialogue, suggest different solutions to the problem, and the ability to choose the right solution for the learner (Merck & Beermann, 2015).

Ferrer Balas (2008) stated the following in describing the characteristics of a sustainable university: Special emphasis and focus on transformative education rather than purely transitional education, in order to prepare students to identify the challenges of sustainable development. Instead of being one-sided in the learning process, transformative learning should be more interactive and learner-centered with critical thinking ability; Emphasis on doing interdisciplinary and interdisciplinary research and training; orienting education and research to solving social problems and thus empowering students to interact with complexities of real issues and uncertainties and challenges related to the future; And deploying a network of diverse university-level specialties to effectively and meaningfully share management and vision that drive change through appropriate assignment of responsibilities and rewards; A vision and management committed to the long-term transformation of the university and eager to respond appropriately to the changing needs of society.

Linda (2015) in her research titled Sustainable College and Commitment and Community Engagement found that public awareness of sustainability issues has improved and this has enabled people to participate and be responsive to current issues and challenges. . And for more impact, we need consistent and sustainable mechanisms to meet the challenges and changes of the Third Millennium. The results of Oana and Rodica (2015) research on the factors affecting university sustainability and the relationships between them indicated that activities and environmental factors influence students' academic performance. The research results also showed that in the current situation and given the pace of change and the movement of society towards comprehensive development and consequently higher and stable higher education under the influence of fundamental and fundamental factors such as participation of all involved and economic, social conditions And it's political. And for higher education to achieve its essential goals and missions, it needs to employ systematic and strategic management styles that can safeguard its cohesion and survival.

The results of a research by Amaral and Nelson (2015) on sustainable university research indicated that higher education policymakers must use appropriate environmental, causal, and contextual requirements and contexts for the realization of educational and research functions in order to fulfill their dynamic tasks. Overcoat and that requires strategic, systematic, and sustainable thinking about the whole context of higher education. The academic system must also be constantly in balance with the changing social and scientific environments offered by strategies and constantly in balance with the changing society. This research aims to provide a framework for applying sustainability at the universities and institutes of higher education according to the context and context of the higher education system in Iran. Therefore, due to the unique features and characteristics of higher education system in the knowledge age, the researcher in this study seeks a comprehensive, fragmented and somehow critical view of the causal and causal functions of the higher education system as a coherent system. Be the mechanisms of a sustainable university and its intrinsic mission. The theme of sustainable university in the higher education system of the country is one of the relatively new concepts that have been put into the framework of designing and explaining the development model with a strategic approach. Therefore, the present study aims to identify the components and parameters of university sustainability index in Iranian higher education system and to present a comprehensive conceptual model for the realization of sustainable university in Iranian higher education system. Undertake a thorough review of the country's higher education policies, goals, and

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programs. Therefore, this research seeks to answer the following questions: 1- What are the components and parameters of academic sustainability index in Iranian higher education system from the viewpoints of higher education policy makers and experts? 2- What is the similarity and differentiation of public and non-governmental universities?

## 2. Methodology

This study was applied in terms of purpose and in terms of data collection method, descriptive and correlational in terms of both qualitative and quantitative sections. ) Was. For this purpose, qualitative data were collected to provide different concepts of phenomena, to identify and to explain the conceptual pattern of research. Research data were collected through semi-structured interviews. The research community in this section includes 17 prominent professors of higher education policy makers who have authored, researched, and executed in this field. The data collection tool in this study was semi-structured interview. To interpret the data obtained from semi-structured interviews with experts, the systematic coding method is: 1- Data review and detailed study2- Data compilation and organization3- Data classification4- Open coding 5- Axial indexing was used. In the present study, in order to validate the qualitative findings, two strategies of analysis and review by research participants and peer review were used. In the quantitative part, the descriptive-survey method was used. The statistical population in this section includes all faculty members and professors of Shahid Beheshti University of Technology - Amir Kabir - Allameh Tabatabai - Tehran Science and Research - Sheikh Bahai University of Science and Culture in three fields of Humanities, Engineering - Engineering and Basic Sciences. There were about 2900 people in total. A total of 322 individuals were selected as the sample size using stratified random sampling. In the quantitative section, the researcher-made questionnaire is derived from the theoretical section and the results of the qualitative section. The questionnaire included 92 questions and 8 subscales, and scored 5 to 1, respectively. The validity of the questionnaire was confirmed by experts and its reliability by Cronbach's alpha was 0.88. Data were analyzed using SPSS and AMOS software.

## 3. Findings

What are the components and parameters of sustainability index in Iranian higher education system from the perspective of higher education policy makers and policymakers?

**Table1.** Analyzing the viewpoints of policy makers and planners;

| Selected codes | Pivotal codes | Open Codes |
|---|---|---|
| Elements and Aspects of Pedagogy in Teaching - Sustainable Learning Processes | Learners | Basic education (responsible citizen, participatory and independent thinking), familiarity with and mastering new educational and teaching technologies, lifelong learning, academic literacy (learning how to learn, live with others and live), cognitive competencies (goal setting) - Self-regulation - Critical and creative thinking - Reasoning - Analysis, Evaluation), Social and cultural competences (Self-awareness - Social awareness - Communication skills - Responsible decision making), Global understanding, Transcultural understanding and collaboration, Life literacy Peripheral |
| | Curriculum | Extending interdisciplinary studies, |

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|---|---|---|
| | | nurturing professional citizenship, knowledge networking, linking virtual communities to the scientific community, multifunctional and multifaceted educational programs, developing identity-generating, disciplined and disciplined curricula, incorporating sustainability concepts into the program Curricula, proportional to global / local knowledge |
| | Faculty | Designing new ideas in teaching and learning, information and technology literacy, smart teaching (integrating content knowledge and education, knowledge and education), teaching and learning scholarship, acquiring professional identity (work-consciousness- Ethics - responsibility, influence and persuasion skills |
| Sustainable Research | Areas and conditions of scientific and ideological ijtihad | A platform for innovation, creativity and scientific advancement through the creative collaboration of the scientific community, research investment as an advantage of international competition, networking and adaptation of the university's research capacity, acquaintance with new research patterns, software and hardware |
| | Establishment of the scientific and research community | Ability to change research in response to emerging disciplines, the knowledge life cycle (production-dissemination-application-institutionalization), leading the frontiers of knowledge and technology, and actively interacting with the global environment in line with local and national policies, development Authentic scientific publications |
| | Balanced research | Interdisciplinary research, the content and technical quality of research results, the integration of education and research in response to changing needs, the development of collaborative research and the provision of sustainable social, economic and environmental values. Applied and localized research, effective research in national / local development with technology and new knowledge |
| Structural - Functional Requirements of the Sustainable University | Self-governing scientific community | Security structure and scientific community, participation of all stakeholders, democratically elected university administrators |
| | Rationality in structure | Self-organization, the status of science, professionalism, insight |
| | Human Capital Development | Human Resource Management, Idea Support and Support, Effective Motivational System |

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| | | |
|---|---|---|
| | University Management and Leadership | Interactive Environment Management, Development Thinking, Synergy, Decentralization, Supply and Support of Sustainable Information and Communication Technology, University atmosphere (Constructive, open and dynamic university environment) |
| | Effective organizational communication | Intra-organizational communication, Extra-organizational communication |
| | Green University | Improving the campus environment, applying the principles of occupational health and safety, optimizing energy and resource management, equipment smarts, renewable energy use, incorporating environmental issues into university websites and journals, developing environmental standards documenting, designing and green architecture, sustainable architecture |
| University research | University Sustainability Outlook | Developing, rethinking and reflecting on sustainable university strategic plans, institutionalizing the idea of sustainability at university, identifying and defining organizational sustainability orientations |
| | Looking ahead | Establishing mechanisms and mechanisms for maintaining the future stability and equilibrium of the university, problem solving and resolution, quality assessment and improvement of curricula and curricula, self-reflection, intelligent in the process of recruitment and acceptance |
| | Information authority | Information gathering and analysis, data management and integration for effective decision making, linking dimensions and components of university information together, information systems management (MIS) |
| | Reengineering University Structures and Sustainability Processes | Supervision, Evaluation, Correction and Review, Reporting and Accountability |
| social stability | Social Capital Production | Public awareness of sustainable development through conferences and conferences, active participation in local and national development, community-based problem solving, social cohesion and cohesion, social order |
| | Strengthening a democratic and inclusive civil society | Localizing theories and concepts related to sustainable development, production, dissemination and application of knowledge to improve the quality of life, make a positive and lasting change in people's attitudes to life, develop rationality and open-mindedness in society through creative graduates, Law-free and free-thinking |
| Economic Sustainability | Supply and management of financial | Promotion of financial system and |

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| | | |
|---|---|---|
| | resources | financial management, diversification of funding sources, commercialization of research, sales of technical knowledge and service to the community, receiving financial support from national and international institutions and associations, linking university institution with national and local economy |
| | Funding | Fairness in allocation of funds, allocation of funds by performance, prioritization of finances to key strategies |
| Scientific and academic identity | Academic freedom and academic independence | The existence of open-mindedness, intellectual independence and commentary in the university, the stimulating and political environment of the university, guiding the structure of the university towards information dissemination, not information control, job security, scientific and research freedom, social dignity of scientists |
| | Professional and academic ethics | Managerial ethics (accountability - active participation - fair and just behavior), research ethics (conducting original research and within the framework of agreed missions - intellectual property - development and up-to-date - adherence to scientific norms), educational ethics ( Respect for colleagues - Respect for science and its carriers in society - Privacy and academic freedom) |
| | Academic Citizen | Scientific identity (sense of belonging and affiliation with the university academic community - concern for science and knowledge - participation in university academic circles and associations), organizational identity (adherence to organizational values and norms), personal identity (individual perception and perception of Himself as a scholar in the academic environment) |
| Scientific diplomacy in the age of globalization | Internationalization of the University | Free circulation of scientific resources, competitiveness, the international role of higher education, global / local phenomenon, membership in international accreditation bodies, global scientific community, international teaching and learning participation, global knowledge acquisition |
| | Optimizing infrastructure and processes | Systematic training and culture in national and international communications, producing university documentation in live languages, targeting the university in the leading sciences production league, allocating financial credit for global processes of |

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| | | |
|---|---|---|
| | | defining and explaining science and technology attraction components to actors, contracting And agreements with light-research and academic centers, international law education through workshops and courses |
| | Science and Technology Interactions | Attending international forums, faculty and student exchanges, international face-to-face, collaborating in the implementation of innovative projects internationally, collaborating in the use of scientific language in international interactions, global collective action, resource sharing and sustainability-related experiences. |

Inclusive theme 1: Elements and dimensions of pedagogy in teaching-learning processes: Based on the research findings, a set of features were identified as markers of "elements and dimensions of pedagogy in teaching-learning processes" which are as follows: learner-curriculum dimensions and Faculty - in other words, the components of pedagogy in teaching-learning processes can be defined with these indicators. Expert 9 has stated: "In the age of globalization and the high speed of science and technology, we need very strong educational processes in all its dimensions, So that faculty members need to be flexible and flexible in terms of requirements and requirements. Employ a structured approach to foster learners' cognitive and social competencies such as nurturing responsible citizenship, engaging in atmosphere-familiarity and mastering new educational and teaching technologies - academic literacy - global understanding, transcultural understanding. "

The second overarching theme: Sustainable Research: Based on the findings, most scholars have identified sustainable research as one of the key components of sustainable university. Its components are as follows: the fields and conditions of scientific ijtihad and ideation - formation of knowledge and research community - balanced research; in other words, the component of sustainable research can be defined with these three indicators. For example: Commentator 3 states that: "Sustainable research encompasses the frontiers of knowledge and technology and actively interacts with the global environment in line with local and national policies and provides the platform for innovation, knowledge creation and scientific advancement through creative community collaboration. Scientific"

Comprehensive Theme 3: Structural and Functional Requirements of the Sustainable University: Based on the qualitative findings of the research, the structural and functional requirements of the Sustainable University identified components are: self-governance, rationality in structure, human capital development, management and leadership, university - Effective Organizational Communication - Green University. In other words, the components of the structural-functional requirements of a sustainable university can be defined with these indicators. Expert 1 has stated: "Governance at the university differs from other organizations in terms of its nature and function. In other words, the university's approach should be constructive, free, self-organized and based on the specific requirements and requirements of the academic environment, and it has to be the structure of the university's security committee and the academic community. “Also, commentator 12: "Sustainable university governance should include rational structures, processes, and commitments to scientific approaches across all dimensions of the university." "The regulatory framework is a strategic vision and a flexible approach."

The Fourth Comprehensive Theme: University Research: The main purpose of university research is to deeply explore the workings of an institution to achieve the university's fundamental goals and mission. In this regard, the results of interviews with experts indicate that this component has been overlooked in the

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country's higher education system. This dimension comprises three main dimensions of university sustainability perspective - futurism - information authority and reengineering of structures and processes, "university research as a self-critical and self-critical unit of the university, its policy analysis and organizational intelligence, mediating its change and adaptation. The changing environment is leading the knowledge management and helping the university to realize the modern and learner university paradigm, "commentary 13, also interviewed researcher 14," Reengineering university standards and practices, establishing sustainability mechanisms and mechanisms. And the future balance of students, problem solving and problem solving, recruitment and retention policies Professors know the harmony and connection between dimensions"

Fifth inclusive theme: A set of social sustainability issues: Based on the qualitative findings of the research, the university can play a role in ensuring a healthy society and a sustainable future by providing specialized services at the national and regional level. In this study, one of the functions of the university is to play the role of social sustainability. These include the production of social capital and the strengthening of a democratic and inclusive civil society. In this regard, commentator No. 13 "One of the special functions of the university in this field is the creation of social responsibility to bridge the gap between knowledge produced and its application to the needs of individuals in society". Expert 7 also stated: "In social dimensions, such as greater social cohesion, trust and social order, political stability, the promotion of a spirit of participation and a culture of co-operation between people and social capital."

Comprehensive theme 6: Sustainable Economic University: According to the findings, sustainable economic resources include: financial system upgrading and financial management, diversification of funding sources, commercialization of research, selling technical knowledge and providing services to the community, receiving support Funding from national and international institutions and communities, linking the university institution with the national and local economy, equity in performance, allocation of performance-based funding, prioritization of funding to key strategies. In the end, they can be categorized into two sources of financing and allocation, concerning this component, commentator number 5 states: "Sustainable financial system means autonomy and capability in financial and budgeting, ie policies based on allocation budgets". Expert No. 4 is to meet the economic needs, finances in a multifaceted way and through a variety of channels and not rely solely on government resources with a one-way approach. Financial"

Seventh Comprehensive Theme: Scientific and Academic Identity: Based on the findings of the study, a set of features were identified as markers of "scientific and academic identity", respectively: Dimensions of Academic Freedom and Academic Independence - Professional and Academic Ethics and Academic Citizenship, The components of academic and academic identity can be defined with these markers. In the current study, most scholars identified this dimension as one of the key components of university sustainability. For example: Commentator 1 has stated: "In the age of globalization and the high speed of science and technology, we need to establish a scientific identity at the university. Including the sense of belonging to and dependence on the scientific community, the sense of belonging to educational and research performance, the effectiveness and impact on the university in pursuit of scientific issues - participation in scientific circles and ... ".

Comprehensive Eighth: Scientific Diplomacy in the Age of Globalization: Based on the qualitative findings of the study, a set of features were identified as indicators of scientific diplomacy in the age of globalization, namely: University Internationalization - Optimization of Academic Infrastructure, Processes and Interactions and technology. "The internationalization of higher education and the expansion of academic exchanges are driving the growth of academic communities. As the scope of social experience and cultural knowledge of students and professors increases, there is a kind of leap in their growth process from the perspective of learning and creativity. Globalization processes have profound impacts on all levels and dimensions of the university, "issue 15. The first-order confirmatory factor analysis showed that the

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questions selected for the 8 sustainable university indices have a factor loadings above 0.50 and that The critical ratio was greater than (1.96), significant at the 0.05 error level;

**Table2.** Fit Indicators Confirmatory Factor Analysis of Measurement Models

| Number | Fit index / Model | χ2 | df | χ2 /df | TLI | CFI | RMR | RMSEA |
|---|---|---|---|---|---|---|---|---|
| 1 | Elements and Aspects of Pedagogy in Learning Teaching Processes | 334.31 | 100 | 3.34 | 0.94 | 0.95 | 0.018 | 0.06 |
| 2 | Sustainable Research | 48.16 | 25 | 1.92 | 0.95 | 0.97 | 0.03 | 0.06 |
| 3 | Structural - Functional Requirements of the Sustainable University | 468.26 | 147 | 3.18 | 0.93 | 0.94 | 0.04 | 0.07 |
| 4 | social stability | 88.90 | 35 | 2.54 | 0.93 | 0.95 | 0.014 | 0.057 |
| 5 | Economic Sustainability | 23.65 | 13 | 1.82 | 0.97 | 0.98 | 0.02 | 0.07 |
| 6 | Scientific diplomacy in the age of globalization | 82.04 | 35 | 2.34 | 0.90 | 0.92 | 0.04 | 0.07 |
| 7 | Research University | 111.77 | 37 | 3.02 | 0.95 | 0.97 | 0.02 | 0.07 |
| 8 | Scientific and academic identity | 45.05 | 13 | 3.46 | 0.99 | 0.98 | 0.01 | 0.04 |
| Proper fitting | | -- | -- | ⟨5 | ⟩0. 9 | ⟩0. 9 | ⟨0.05 | ⟨0.08 |

The results of Table 2 show that the chi-square (χ2) and degree of freedom (df) values of the first-order factor models with Tukey-Lewis indices (TLI), comparative fit (CFI), second root mean square (RMR) and second root Estimated Error Squares Mean (RMSEA) have appropriate fit, so it can be said that measurement models are validated and validated in the research community.

What are the similarities and differences between public and non-governmental academic institutions in terms of sustainable academic indicators?

**Table3.** Independent t-test; Comparison of sustainable university indices at public and non-public universities

| Indicators | group | Number | Average | Standard deviation | Degrees of freedom | t | Meaningful |
|---|---|---|---|---|---|---|---|
| Elements and Aspects of Pedagogy in Learning Teaching Processes | Governmental | 226 | 3.05 | 0.55 | 320 | 3.22 | 0.001 |
| | NGOs | 96 | 2.84 | 0.52 | | | |
| Sustainable Research | Governmental | 226 | 3.11 | 0.59 | 320 | 1.89 | 0.059 |
| | NGOs | 96 | 2.96 | 0.68 | | | |
| Structural - | Governmental | 226 | 3.02 | 0.60 | 320 | 2.63 | 0.009 |

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|---|---|---|---|---|---|---|---|
| Functional Requirements of the Sustainable University | NGOs | 96 | 2.83 | 0.56 | | | |
| social stability | Governmental | 226 | 3.02 | 0.47 | 320 | 3.15 | 0.002 |
| | NGOs | 96 | 2.81 | 0.66 | | | |
| Economic Sustainability | Governmental | 226 | 2.78 | 0.60 | 320 | 3.04 | 0.003 |
| | NGOs | 96 | 2.54 | 0.74 | | | |
| Scientific diplomacy in the age of globalization | Governmental | 226 | 2.96 | 0.44 | 320 | 5.68 | 0.001 |
| | NGOs | 96 | 2.62 | 0.58 | | | |
| Research University | Governmental | 226 | 2.96 | 0.53 | 320 | 1.19 | 0.232 |
| | NGOs | 96 | 2.88 | 0.56 | | | |
| Scientific and academic identity | Governmental | 226 | 2.97 | 0.49 | 320 | 1.70 | 0.089 |
| | NGOs | 96 | 2.86 | 0.53 | | | |
| Sustainable University | Governmental | 226 | 2.98 | 0.36 | 320 | 4.11 | 0.001 |
| | NGOs | 96 | 2.79 | 0.40 | | | |

Table 3 shows the independent t-test for comparing sustainable university indices in public and non-public universities from the teachers' point of view. Comparison results show that the overall status of sustainable universities in public universities (2.98) is significantly higher than non-public universities (2.79) ($t = 4.11$; $P < 0.05$). NGOs are in a relatively better position in terms of a sustainable university. Following is a comparison of the current situation with regard to sustainable university indicators.

## 4. Discussion

The purpose of the present study was to reflect on sustainability indicators: to analyze the viewpoints of higher education policy makers and planners. According to the results of sustainability indices there are 8 dimensions: 1- Elements and dimensions of pedagogy in teaching-learning processes 2- Sustainable research 3- Functional structural requirements4- Social sustainability 5- Economic sustainability6- Research university7- Academic identity and academy 8- Scientific Diplomacy In the age of globalization. Each of the indices also had several subscales, which will be explained later. Based on the qualitative findings of the study, a set of features were identified as pedagogical elements and dimensions in the teaching-learning processes, which the learners, curriculum and faculty, respectively. Most scholars cited teaching-learning processes as one of the core functions of the university. The approaches to this part of the research can be found in Teadoreanu(2013), Gunawan, et al. (2012), The Need for Sustainable Education Realization, Rothchild (2011), Velazquez, et al., (2006) (Education as one of the four important strategies for developing projects). Linked to Sustainable University), Buckland and Mingo (2009) (Insisting on Transformational Education instead of Transitional Education Only to Prepare Students for Identifying Challenges of Sustainable Development and Emphasizing Education as a Component of Sustainable University), Malekinia (2014), Kadkhodaie, Et al. (2018) considered the same.

Sustainable research encompasses a set of approaches governing the university's research system that leads to the identification and resolution of societal (environmental, social, economic) challenges and issues, and provides the motivational and supportive mechanisms for conducting such research (Malekinia, 2014). Based on the qualitative findings of the research, sustainable research consists of three components: the fields and conditions of scientific and ideological ijtihad, the formation of a scientific and research community, and balanced research. The approaches of this part of the research can be in line with the findings of Teadoreanu (2013), Gunawan, et al. (2012), Alshuwaikhat and Abubakar (2008). The third indicator related to sustainable university by higher education policymakers and planners, It is functional.

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It has six components of self-governing scientific community, rationality in structure, human capital development, university management and leadership, effective organizational communication, and green university. The approaches to this part of the research can be found in the findings of Oana and Rodica (2015) (University governance as a key element of the Sustainable University), Amaral and Martins(2015) (The necessity of university governance to manage Sustainable University realization measures), Schmitt and Raufflet(2015) (Management and Organization as a Component of a Sustainable University), Fathollahi, et al (2015) (The Role of University Structural and Functional Changes in Creating an Innovative University) and Malekinia (2014) (Sustainable Management System as a Component of a Sustainable University) It seemed to be in line.

Research can be considered as maintaining and enhancing the quality of the university. And its main purpose was to realize the two main functions of improving internal processes and functions and responding to external academic needs and demands. Based on the research findings, university research indicators include: University Sustainability Perspective (formulating, rethinking, and contemplating sustainable university strategic plans, institutionalizing the idea of sustainability at university, identifying and sustaining university organizational sustainability), prospecting (creating) Mechanisms and mechanisms for maintaining future equilibrium and equilibrium of the university, problem solving and problem solving, quality assessment and improvement of curricula and curricula, self-reflection, intelligent in the process of recruitment and acceptance), information authority (data collection and analysis) , Manage and integrate data for effective decision making, deep communication Ed and information components of the university together, management of information systems (MIS) and reengineering of university sustainability structures and processes (monitoring, evaluation, correction, review, reporting and accountability). University research provides a dataset to support policy, planning, and decision-making processes in universities and higher education institutions (Nemati, 2016).

The approaches of this part of the research can be achieved through the achievements of Farostokhah (2014),Targhi (2016), Javdani (2015), and Majchrzak (2014) seemed to agree, based on the qualitative findings of the study, indicators of social sustainability in most of the components of social capital production (public awareness of sustainable development through conferences and conferences, active participation in local and national development, community problem solving, solidarity and cohesion). Social, social order) and fostering a democratic and inclusive civil society (localizing theories and concepts related to sustainable development, production, dissemination and application of knowledge to improve the quality of life, making a positive and lasting change in people's attitudes to life, development Intellectualism and open-mindedness in society through creative, law-abiding and liberal graduates They are epistemological. The approaches to this part of the research can be found in the findings of the research by Gunawan, et al (2012) (insisting on public participation and providing specialized community service to a sustainable university), Velazquez, et al (2006) (extracurricular services and partnerships as one of four important strategies. For Sustainable University-Related Projects), Javdani (2015) (The Role of the University in the Sustainable Development Process Through Social Capital Production), It seemed to be in line.

Based on the qualitative findings of the study, the economic sustainability of the university is: financing and management (promotion of financial system and financial management, diversification of funding sources, commercialization of research, sales of technical knowledge and service to the community, receiving support Funding from national and international institutions and associations, linking university institutions with national and local economies) and allocation of resources (equity in allocation of funds, allocation of performance-based funding, prioritization of funding to key strategies). Based on the qualitative findings of the study, the set of attributes were identified as components of academic and academic identity, respectively: academic freedom and academic independence, professional and academic ethics, and academic citizenship. Bourdieu considers the most important function of the university to shape

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academic identity and explains what constitutes academic identity in the sense of "habits" or "academic property." An academic person or a member of the academic community is one who has habits, habits and mental structures, tastes, tastes, and what enables the social agent to practice the spirit of rules, habits, orientations, trends, values, and other appropriate areas of "academic practice. “And the bioscience within him is formed, accepted, and the source of the work has, these habits, like other social habits are the product of a certain "social structure" and hence exist in different societies of "academic habits" (Hemmati, 2015). The findings of this section are consistent with the results of Samari, et al (2014), Karimian, et al (2011) and Hasin (2010). In analyzing the results obtained in relation to the index of scientific diplomacy in the age of globalization, three components play a key role, namely: internationalization of universities, optimization of infrastructures and processes, and scientific and technological interactions. The approaches of this part of the research can be illustrated by the achievements of Javdani Research (2015) that characterize the internationalization of higher education in the field of knowledge society as well as Moghimi, et al. (2017) Development of Science and Technology Diplomacy in Iran and the Effects of Higher Education System on Iran. Ann and Shahramnia and Nazifi (2013) agreed with regard to culture in scientific and technological exchanges.

The quantitative results also indicated differences between public and non-public universities based on the 8-item academic sustainability index. According to the research findings, it can be said: Sustainable University is a university that has a sustainable strategy and strategy, a transversal vision and a community support in implementing sustainable principles and concepts in teaching-sustainable learning functions, research, strengthening democratic society. Minimize adverse environmental, socioeconomic and health impacts, and have structural-functional requirements, scientific and academic interactions, defined economic and financial systems And it has been strong, always seeking to strengthen the identity of professional citizens in helping a sustainable and pioneering society.

Based on the results of this study, it is recommended that: 1. Higher education policymakers, managers, and planners define each of the components obtained with a strategic, cross-sectional, systematic approach, and be integrated. 2. Universities in their strategic plans use sustainable university indicators in their overall vision and strategy. And operationalize, modify, and revise them.3. Institutionalize international scientific interactions at the country's universities and provide the necessary hardware and software platforms for scientific diplomacy. 4. Moving on the path of academic freedom, academic independence and development of academic functions with regard to the management and leadership of the scientific community5. In order to strengthen the scientific and social capacities of students and professors worldwide, it is necessary to develop educational, social and communication networks in National, regional, and global levels.6. Universities need to update their approach to success and incorporate new and flexible structures into their structure.7. Universities evaluate the use of sustainability indicators.

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