



IDENTIFYING AND RANKING THE FACTORS AFFECTING THE CULTURAL EXCELLENCE OF THE HIGHER EDUCATION INSTITUTIONS, USING THE MULTI-CRITERIA DECISION-MAKING APPROACH (AHP-TOPSIS)

Badri Abbasi¹

¹Associate Professor of Higher Education Management, Department of Education and Human Resources Improvement, Islamic Azad University, Bandar-e- Anzali Branch, Iran

Abstract

The purpose of this study is to identify and rank the factors affecting the cultural excellence of university, using multi-criteria decision-making techniques in Guilan Province. The study is an applied that has an exploratory and descriptive nature. The statistical population includes 3663 experts, professors, and managers of the Islamic Azad University branches, Payam Noor University, and Guilan University. According to Morgan table, 331 people were selected as the sample size and the initial questionnaire was stratified-randomly distributed. Also, the opinions of 15 experts were used to evaluate the factors in the TOPSIS and AHP models. The *instrument* for data collection is researcher-made and standard questionnaires, whose validity and reliability have been confirmed through content validity, construct validity and Cronbach's reliability coefficient, respectively. In this regard, descriptive analysis, structural equations and AHP-TOPSIS multi-criteria decision-making techniques were used to rank the research variables. The results obtained from the opinions of experts and stakeholders of universities using multi-criteria decision-making methods showed that "quality" with a weight ratio of 0.274 has the highest priority. Also, "Professional competence culture of professors" with a weight ratio of 0.185, "Imitation of the myths of universities" with a weight ratio of 0.116, "Management model" with a weight ratio of 0.106, "Learning" with a weight ratio 0.099, "regional participation" with a weight ratio of 0.060, "university communication culture with stakeholders" with a weight ratio of 0.043, "empowerment" with a weight ratio of 0.038, "intellectual capital culture" with the weight ratio of 0.030, "research" with the weight ratio of 0.026, and finally the factor of "disciplinary culture" with the weight ratio of 0.025 are in the second, the third, the fourth, the fifth, the sixth, the seventh, the eighth, the ninth, the tenth and the last priority, respectively.

Keywords

Organizational Culture, Cultural Excellence, Higher Education, TOPSIS and AHP Model

1. Introduction

Culture is the core components of an organization. Organizational culture must reflect the shared values and beliefs that show individuals meaning and provide them the guidance to working behaviors. Organizational culture should be constructed by following the expected future values and considering the common value of people in the organization. Higher education institutions culture, like many service organizations, has strong relation with quality, in terms of knowledge production, customer services and extent of accountability to the social needs (David, 2009: 63). "Excellence of culture" is the key to innovation and sustainability of universities, because in the changing world, only this excellency, can lead universities towards competitive advantage. Different aspects of cultural excellence are considered to constitute diverse layers of values and attitudes in the university (Brimani, 2012: 51). Many factors influence cultural excellence so that the lack of these factors can put the university in a dangerous situation. Cultural excellence and its role in higher education development and its programs' efficacy, should be taken seriously. The university cultural excellency, also needs redefine or evaluate of value system, as a part of core organizational innovative process (Rahman, et al., 2021). Therefore, innovation and operational ideas that cause product and innovative services, are strategic needs in such a competitive environment. Surveys show that universities transfer, norms and values to academics, with culturally institutionalized functions (Ebrahimi et al.

2015: 151). It means that one of the most fundamental problems of the university is its inability to form an academic identity in academics. Therefore, it can be said that the best educational policy in higher education is a policy that can remove the existing obstacles in the path of "academic cultural excellence". Moving in the direction of excellence in research and familiarity with the new issues and creating innovative and practical frameworks for social challenges and bottlenecks has become a vital paradigm in higher education today (Alvidav 2023: 3). This also requires placing culturally related dimensions at the center of higher education programs (Marina et al., 2015). Prieto (2020) considers diverse bodies and interdisciplinary studies in higher education as another dimension of positive cultural transformation (Prieto, 2020: 774). In Iran Higher education institutions, one of the most important and basic factors to fulfill this role is the quality of academic services (Hadi et al., 2016: 39). The low quality of practices in universities can lead to the poverty of knowledge, research vision and skills of human resources and as a result, the country's growth and development programs (Zamani, 2017). Bazargan (2015) believes that although the quantitative growth of higher education in Iran has been in sync with the growth of higher education in the world, there are some doubts about the quality of the higher education system outputs due to the cultural inconsistency of the higher education system. Why these efforts have not been successful so far? And why there is no noticeable result regarding the quality of research and education in universities? Why the students and graduates are always dissatisfied with the low quality of teaching and evaluation processes, the inability of education in the direction of their independent and active learning, lack of participation in the learning process, as well as non-transparent standards? In general, the mission and aims of higher education are in the three areas of education, research and service, and to evaluate and improve the quality of higher education teaching models and indicators, related to each area should be taken into consideration with the understanding of their systematic relationship (Hoveida and Molavi, 1999). Safari and Ahmadi (2023) emphasized on the effectiveness of integrative learning styles as a new paradigm for the excellence of teaching and learning culture in Higher Education Institutions. Accordingly, they introduced Diagnostic Classification Model (DCM) in providing detailed diagnostic feedback for foreign language students (Safari, Ahmadi, 2023:2). Maybe another answer is that we have heard many times that "quality is not random" and it depends on certain conditions and factors and requires unique ways. For example, one of the ways to improve the quality in universities is that opinions, demands and the needs of the society should be recognized and the university should generally move in that direction and adapt to it (Hosseini et al., 2013). The evidence shows that the role of academic culture as an independent subculture with its special characteristics in the process of scientific development and performance of the higher education system of Iran has not been paid much attention. While knowing the culture of a group is necessary for its effective management and leadership (Ahmadi et al., 2016). However, the researches in this field in Iran Higher Education show that many universities are unaware of the existence and functioning of organizational culture and the effective dimensions of their excellence, and in the process of organizational change. Meanwhile, the need to identify and pay attention to academic culture is necessary and inevitable for the growth of knowledge creation and scientific development (Ebrahimi et al., 2015). In this regard, cultural excellence in the aspect of enriching the research culture is also considered one of the important and vital pillars of the growth and development of this institution. Based on what was analyzed and investigated, the identification, analysis and prioritization of the effective factors of cultural excellence of higher education are assessed. Therefore, based on what has been mentioned, this research will identify, and rank factors, affecting the cultural excellence of higher education in Iran. Based on this, this research seeks to answer the main question, what are the factors affecting the cultural excellence of Iran higher education institutions?

2. Review of literature

2-1. Cultural excellence

Culture is consistent, observable patterns of behavior in organizations. Aristotle said, "We are what we repeatedly do." This view elevates repeated behavior or habits as the core of culture and deemphasizes what people feel, think or believe. It also focuses attention on the forces that shape behavior in organizations. (Watkins, 2013). In this regard, Schein believes that having sufficient and extensive knowledge about cultural issues in any group or organization is one of the requirements of its management and leadership. In fact, culture is a set of principles and values, that people form or implement their various behaviors with experience and the passage of time in a certain society and in a certain territory (Zulfiqarzadeh et al., 2011). Cultural excellence of universities is a necessary and sustainable source of competitive advantage. One of the most aspect of cultural excellence is the knowledge recognition and the process of transforming hidden knowledge into explicit knowledge. According to this definition, knowledge is dynamic and has a cultural context (Fazeli, 2003: 99). One of the important fields of knowledge creation is academic culture. Therefore, Cultural excellence is a process of comprehensive sense-making in knowledge creation. With this regard, comprehensive sense-making has been defined as a collaborative process of creating shared awareness and understanding out of different individuals' perspectives and varied interests. It also includes shared knowledge, beliefs, ethics, customs and all the abilities and habits that an academic environment needs to acquire its desirable goals. (Galtung & Structure, 2012: 118). It shapes human behavior and is passed from one generation to another (Niharika, 2011: 16). Meanwhile, the type of attitude and views of employees and senior and middle managers of the organization is very important. The belief in change and

innovation originates from the senior managers of the organization, and the belief system of the organization undergoes a positive approach to innovation when the senior managers organize this belief. (Herguner & Reeves, 2000). In organizational level, when good practices are being repeated everyday by people or community it automatically becomes a culture. Good practices create good culture and excellent practices create excellent culture (Hofstede et al., 1990). To become excellent, one should strive to do something that is extraordinary from their normal routine. Goffee and Jones (1998) highlighted that in order for an organization to achieve a high level of excellence, the employees or staff working for the organization must also have an excellent work culture (Abdulrahman, et.al, 2016).

2-2. University cultural excellence

Universities in the third millennium need to moving on the path of organizational excellence and getting to know the world's models in the field of excellence. Academic culture is a symbol of academic outputs quality, and its inability to shape the academic identity of students and train quality service to human resources, implies the failure of its activities in the formation of an effective learning culture (Hanushek and Woemannss, 2013). The models of university cultural excellence by portraying an ideal university, makes it possible for universities to define and measure their cultural excellence indicators, in terms of quality. McCowan (2018) concluded that higher education system has major quality challenges such as quality improvement, which led toward the lack of qualified human resources, and ineffective higher education management. Abdolrahman et al. (2016) stated that, all public higher education institutions will be able to treat students, faculty and patrons by providing the best quality services in the field of higher education. In their study, they focused on issues such as, integrity and accountability, positive traits, political freedom, rebranding and upholding reputation and force-order as cultural excellence indicators. According to current studies, three main aspect of university cultural excellence dimensions, are managerial-organizational, individual-social and environmental factors. However, if each of the three dimensions that identified for the fields of education, research, and technology, are neglected and removed, a delay and serious quality shortcomings may happen in the country's higher education development (Memarzadeh Tehran and Moradi, 2014). Askari et al., showed that the factors affecting the quality of knowledge creation of the academic faculty members, can be divided into two groups: individual factors and contextual factors. Individual factors such as intrinsic characteristics, commitment to knowledge, knowledge mastery, experience, concern, perspective, questioning, knowledge sharing, perfectionism, scientific identification, critical thinking, professional development, scientific resilience, writing and Ethics, and contextual factors such as the educational system, society's expectations, academic freedom, knowledge reservoirs, financial opportunities and rewarding system. Based on the analysis, individual factors are more influential than contextual factors, and the incidence of many identified individual factors is realized in the educational system (Askari et al., 2016). Zamani in research titled identifying, analyzing and prioritizing the factors affecting the quality of education in higher education. Research finding showed that the factors such as the teacher's teaching method, organizing of educational content, the facilities and equipment of the faculty, the student's facilities (educational classes, time management and Individual talent), teacher's professional competence (teaching and research) and new technologies are among the factors that influence the quality of education in higher education. (Zamani, 2017).

Research Methodology

This paper is considered a developmental study in terms of its purpose, because it was based on the researcher's exploratory study regarding the theoretical foundations, models, and finally the extraction of criteria and sub-criteria for evaluating the cultural excellence of higher education in Guilan province. In terms of the data collection method, this paper is a descriptive- survey study. The statistical population of this research includes 3663 experts, professors and managers of higher education centers in Guilan province. According to Morgan's table, 331 people were selected as the sample size and distribution of the initial questionnaire in a stratified-random manner. Also, the opinions of 15 experts were used to evaluate the criteria in the TOPSIS and AHP models. The data collection method was a library and the data collection tool was a researcher-made questionnaire consisting of 11 criteria and 70 sub-criteria based on a comprehensive review of the literature related to the indicators of higher culture in Guilan province. Questionnaire 1 is for the analysis of factor loadings and structural modeling, which is a combined researcher-made and standard questionnaire (AbdulRahman et al., 2016). Its validity has been confirmed using the opinions of the supervisor and experts, and its reliability has been obtained and confirmed using Cronbach's alpha coefficient of 0.885. Questionnaire 2 is an expert questionnaire of paired comparisons of influencing factors on cultural excellence based on the model (AHP) with the opinion of 15 experts. Questionnaire No. 3 is an expert questionnaire to rank each of the factors (dimensions) in the TOPSIS model (using the opinion of 15 experts). In this questionnaire, experts have assigned 1-9 points to the presented items. Data analysis was done using AHP and TOPSIS multi-criteria decision making techniques. Hierarchical analysis of AHP is a method that provides the possibility of making the right decision in the presence of qualitative, quantitative and composite criteria. In this technique, the factors that are important in decision-making are presented in the form of a decision-making matrix in a hierarchical manner. In the next step, in AHP, the elements of each level are compared in pairs

to their corresponding element at a higher level, and their weight and significant are calculated. These weights are referred to as relative weights. Then, the final weight of each option is determined by combining these weights. The method of calculating the weights from the decision matrix depends on whether the decision matrix is consistent or inconsistent. If the durability ratio (CR) is smaller than 0.1, it will indicate an acceptable level of durability in pair-by-pair comparisons. After the weight of each option is obtained in relation to each criterion, the weight of the criteria itself is also calculated in a similar way to the target, and then the final weight of each option is also calculated. All the above steps in the paper have been carried out in the Expert choice software. The term TOPSIS means preference methods based on similarity to the ideal solution. In this method, m options are evaluated by n indicators. The basic logic of this model defines the ideal (positive) solution and the ideal negative solution. An ideal (positive) solution is a solution that increases the benefit criterion and decreases the cost criterion. The optimal option is the option that has the smallest distance from the ideal solution and at the same time the farthest distance from the negative ideal solution. In other words, in the ranking of options by the TOPSIS method, the options that are most similar to the ideal solution are ranked higher. In this method, A+ and A- are ideal solutions and negative ideal solutions, respectively. Option A1 has a smaller distance to the ideal solution and a greater distance to the negative ideal solution than option A2. This paper have been used the opinions of 15 experts to express the level of agreement in order to evaluate the criteria and choose the appropriate options. Also, in this research, AMOS software was used to check the validity and reliability of the variables.

Research findings

In table (1), the Kolmogorov Smirnov test shows that the level of significance obtained for all variables is greater than 0.05, which means that with 95% confidence, we can say that the distribution of the research variables is normal.

Factors	No	Parameters Normal		Smirnoff Kolmograph Z	Sig
		Mean	Sd		
The culture of university communication with stakeholders	331	3.91	.7131	0.154	.067
Regional partnership	331	3.96	.7231	0.855	.063
Intellectual capital culture	331	4.03	.5800	0.072	.096
managerial	331	3.94	.7043	0.055	.123
learning	331	3.67	.6792	0.828	.098
Empowerment	331	3.87	.6317	0.604	.102
Discipline culture	331	3.94	0.6671	0.369	0.072
Imitating the universities myths	331	4.23	.7392	0.053	.50
The culture of professional competence of professors	331	3.95	.6678	0.968	.69
survey	331	3.93	.6556	0.661	.09
Quality	331	3.94	.6816	0.862	.065

Table 1). The results of Smirnoff- Kolmograph test, factors affecting the cultural excellence of higher education

Testing the measurement model in standard estimation mode and significant numbers

In the section related to inferential statistics, the test of measurement models is examined in the two parts of standard estimation and significant numbers. If the factor loadings of each item on the related construct are significant, it can be argued that the items have sufficient validity. Factor loadings are reported in the tables below. Factor loading values greater than 0.5 are acceptable.

Factors	Cultural Excellence Factors			
	Factor loading	CR	p	Sig.
The culture of university communication with stakeholders	1	-	-	Accepted
Regional partnership	0.935	28.53	0	Accepted
Intellectual capital culture	0.728	25.72	0	Accepted
managerial	0.895	26.77	0	Accepted
Learning	0.837	24.25	0	Accepted
Empowerment	0.882	42.52	0	Accepted
Imitating the universities myths	0.999	34.76	0	Accepted
Discipline culture	0.893	32.91	0	Accepted
The culture of professional competence of professors	0.91	40.86	0	Accepted
Survey	0.909	32.55	0	Accepted
Quality	0.837	41	0	Accepted

Table (2) factor loading and significant numbers of cultural excellence of higher education

Figure (1) shows factor loadings (λ) for each of the cultural excellence factors in higher education. According to the obtained results, the factor loadings of the obvious variables were greater than the cut-off point of 0.2 and their t-statistics were also greater than the cut-off point of 1.96 ($P < 0.05$), which indicates confidence in the concerned structure. Also, the general fit indices show that the compiled model is acceptable to a large extent. The chi-square ratio of the model to the degree of freedom ($1.85 = \text{CMIN/DF}$), comparative fit indices greater than 0.90 and parsimonious indices greater than 0.50, as well as the RMSEA index, which shows a value of 0.030, all confirm the conclusion that the developed model is considered acceptable to a large extent.

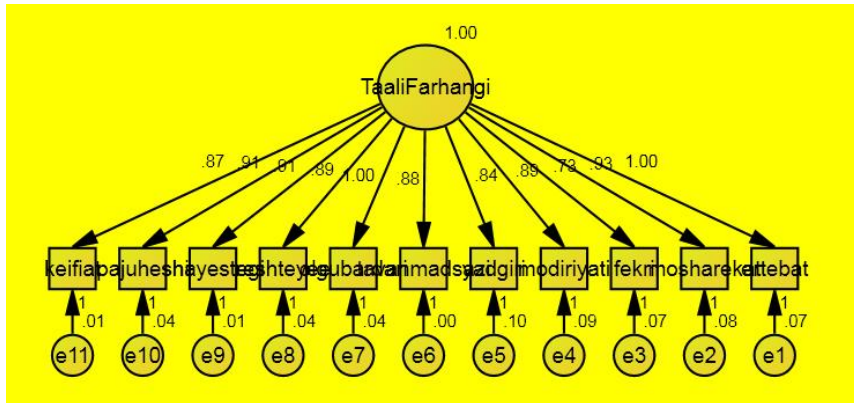


Figure (1). The primary model measuring the variable of cultural excellence factors in the standard estimation mode

Ranking the cultural excellence factors of higher education using the TOPSIS model

After confirming each of the factors in the analysis of structural equations, the relevant factors are placed in TOPSIS model calculations for ranking. In TOPSIS model, calculations are done in 6 stages based on 15 experts and professors with high work experience. In this research, due to the large size of the decision matrix, all the steps performed in this model are not shown, and in this part of the research, the distance from the positive and negative ideal, the closeness coefficient of the options and the final ranking of each factor are presented. In ranking the factors of cultural excellence of higher education in Guilan province, the results obtained in table (3) show that the most important factor that will influence the cultural excellence of higher education in the province is the factor of "Comprehensive view of academic affairs (systemic thinking)" with a weight of 0.832. Also, the factor "professional competence" with a weighted score of 0.812 and the factor "development of collective culture in scientific procedures instead of individualistic" with a weighted score of 0.805 ranks second and third, respectively.

Distance size	+d	-d	Proximity factor	Rank
Attention to the expectations of students and university staff	0.011	0.015	0.5756	38
Responding to the pressure of the scientific community with educational groups	0.01	0.016	0.6067	30
Creating a sense of responsibility among employees, students and faculty	0.014	0.013	0.4882	65
Creating grounds for developing work skills in the university	0.009	0.017	0.6411	21
Development of systems thinking	0.006	0.019	0.7603	4
Cooperation of faculty members and university staff with each other in the region	0.006	0.019	0.7434	6
Encouraging positive competition in the university with other universities in the region	0.01	0.015	0.6101	28
Training of local specialist human resources needed in the region	0.011	0.015	0.5732	40
Taking advantage of the potentials and competitive advantages of the region	0.01	0.015	0.6087	29
Interaction and activity of university management with regional planners	0.007	0.018	0.7124	9
Flexibility and adaptation of cultural development programs of the university to environmental conditions	0.01	0.016	0.6243	25
Attitudes	0.011	0.014	0.556	48
Technical and specialized knowledge	0.011	0.016	0.6052	31
Capabilities and qualifications	0.012	0.014	0.5307	54
Communication with other colleagues	0.011	0.016	0.5756	37
Organizational Learning	0.01	0.016	0.6217	26
Using standard, simple and documented processes so that work and services are delivered without any problem;	0.008	0.017	0.6745	15
Enhance technological capability to serve students effectively.	0.012	0.015	0.5453	50
A regular search for key processes that are critical to the university's progress.	0.011	0.015	0.5604	46
Using systematic methods to investigate the causes of mistakes and corrective actions afterwards.	0.008	0.017	0.6869	13

Distance size	+d	-d	Proximity factor	Rank
continuous learning with the aim of improving the university's competitive status;	0.007	0.017	0.7141	7
Development of learning environment and professional development of employees	0.007	0.016	0.6902	12
Acquiring the knowledge needed to achieve excellent university results with an emphasis on quality processes in standard curricula	0.013	0.014	0.5185	57
Learning to use the strategy of quantitative methods based on factors such as cost, time and performance in line with the progress and advancement of the university	0.01	0.015	0.5993	33
Focusing on service criteria, work and quality processes of workplace university according to the situation of other universities	0.008	0.017	0.6792	14
Emphasis on the evaluation of the educational programs of the workplace university with other universities	0.01	0.014	0.579	36
Emphasizing and focusing on capable students and encouraging them to present valid scientific articles	0.009	0.016	0.6517	17
Focusing on measuring organizational effectiveness compared to mobile universities	0.013	0.014	0.5358	52
Providing incentive services to employees enough to support and support them	0.012	0.014	0.5356	53
Encouraging employees to participate in university team and group work	0.011	0.015	0.5718	42
Examining the performance of faculty members, staff and students	0.015	0.013	0.4722	68
Helping to promote creative education based on international experiences	0.013	0.014	0.526	56
Establishing new educational approaches with a focus on active learning, expanding electronic learning	0.011	0.014	0.5558	49
Exchange of ideas and experience with foreign universities in programs, improving productivity and facilitating the production of science on the world stage	0.015	0.011	0.4297	70
Participation in the promotion of the academic rank of the university at the international level	0.014	0.011	0.4338	69
The set of research activities of students, including participating in scientific seminars and presenting articles or participating in research	0.013	0.013	0.5012	60
A supportive atmosphere for research activities with the classification of disciplines	0.013	0.013	0.4941	63
Formation of scientific communities	0.013	0.014	0.513	58
The development of collective culture in scientific rather than individualistic procedures	0.004	0.019	0.8058	3
Academic culture governing the classification of sciences (soft-hard and practical-pure)	0.011	0.014	0.5619	45
Intellectual competence	0.008	0.016	0.6597	16
Educational qualification	0.009	0.017	0.6417	20
Behavioral competence	0.009	0.017	0.6516	18
Professional competence	0.005	0.02	0.8125	2
Management competence	0.006	0.019	0.7595	5
Functional competence	0.011	0.016	0.6025	32
academic qualification	0.007	0.019	0.7137	8
Personality qualification	0.013	0.013	0.4956	62
Teaching qualification	0.01	0.016	0.6152	27
Raising the level of academic researchers	0.013	0.013	0.4983	61
Trust in other researchers of the country	0.011	0.016	0.5869	34
The attitude of organizations to research from the point of view of university researchers	0.013	0.014	0.5094	59
The level of confidence in the results of the academic researchers' own research	0.009	0.015	0.6356	23
The view of top managers of the country to research from the point of view of academic researchers	0.011	0.015	0.573	41
The state of public trust in survey and cooperation with the researcher	0.012	0.013	0.5269	55
Providing at least equal points for domestic scientific research journals compared to foreign journals (ISI)	0.009	0.016	0.6499	19
Improving the article acceptance process (speed, quality, etc.)	0.012	0.015	0.5401	51
Increasing the number of magazines and... revising and approving the laws and their strict implementation	0.014	0.013	0.4767	67
Continuous internal and external evaluation at the level of the educational group	0.01	0.016	0.6291	24
Developing a strategy to spread the culture of quality among employees, managers, faculty members, and students	0.007	0.017	0.7033	11
Production and application of knowledge	0.012	0.015	0.5599	47
Cultivating critical thinking	0.013	0.013	0.4901	64
Character development of students	0.012	0.015	0.5693	43
A comprehensive view of university affairs (systemic thinking)	0.004	0.02	0.8325	1

Distance size	+d	-d	Proximity factor	Rank
People's passion for continuous learning	0.007	0.018	0.7091	10
Understanding the common goal	0.011	0.015	0.5737	39
Conversation skills	0.014	0.013	0.4789	66
Individual skills to learn	0.012	0.015	0.5657	44
The skill of managing mental patterns	0.011	0.016	0.5793	35
Continuous evaluation of structural and managerial elements of the university	0.01	0.017	0.6363	22

Table (3). Distance from positive and negative ideal, closeness coefficient of options and final ranking

Prioritization of factors affecting the cultural excellence of higher education in the AHP model

After determining the research indicators by using the opinions of experts to compare the general indicators with each other, first the weight of the indicators was calculated using pairwise comparisons of each factor in the Expert choice software. After the pairwise comparisons of the cultural excellence factors in relation to the purpose of the study, it was shown that "quality" has the highest priority with a weight ratio of 0.274. Also, "Professional competence culture of professors" with a weight ratio of 0.185, "Imitation of the myths of universities" with a weight ratio of 0.116, "Management" with a weight ratio of 0.106, "Learning" with a weight ratio of 0.099, "regional participation" with a weight ratio of 0.060, "university communication culture with stakeholders" with a weight ratio of 0.043, "empowerment" with a weight ratio of 0.038, "intellectual capital culture" with a ratio of With a weight of 0.030, "research" with a weight ratio of 0.026, and finally, the "discipline culture" factor with a weight ratio of 0.025 is in the second, third, fourth , fifth, sixth, seventh, eighth, ninth, tenth and in the last priority, respectively. Also, the compatibility rate (CR) calculated in Figure 9-4 is equal to 0.09, and since it is less than 0.1, therefore, the compatibility of the indicators is acceptable with the purpose of the research.

Matrix	The culture of university communication with stakeholders	Regional partnership	Intellectual capital culture	Managerial	learning	Empowerment	Discipline culture	Imitating the myths of universities	The culture of professional competence of professors	Survey	Quality	Significant coefficient	Priority
The culture of university communication with stakeholders		1/4	5	1/6	2	1/3	1/2	3	1/5	2	1/7	0.043	Seventh
Regional partnership			4	1/5	3	1/4	1/3	4	1/6	4	1/5	0.060	Sixth
Intellectual capital culture				1/7	2	1/2	1/4	2	1/7	3	1/6	0.030	Ninth
Managerial					4	1/3	1/3	6	1/5	5	1/4	0.106	Fourth
learning						1/3	1/6	7	1/6	4	1/6	0.099	Fifth
Empowerment							1/2	4	1/4	3	1/2	0.038	Eighth
Discipline culture								3	1/2	6	1/5	0.025	Eleventh
Imitating the myths of universities									1/4	4	1/7	0.116	Third
The culture of professional competence of professors										3	1/6	0.185	Second
Survey											1/2	0.026	Tenth
Quality												0.274	First

Table (4). Matrix of paired comparisons, importance coefficient and prioritization of factors affecting the cultural excellence of higher education

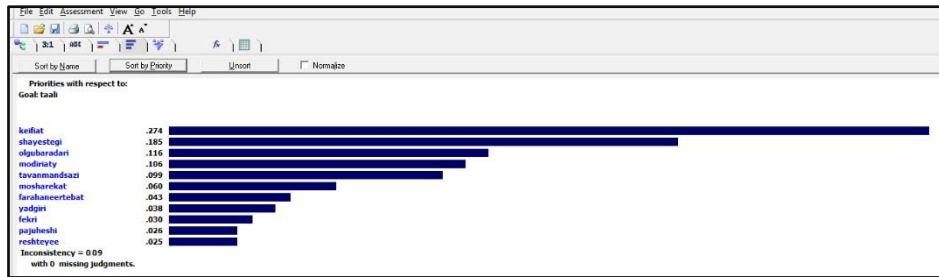


Figure (2). Calculating the weight of the factors influencing the cultural excellence of higher education in the Expert choice software

Conclusion

Many studies have been conducted in the field of cultural excellence of higher education and many criteria have been proposed by countries or higher education evaluation institutions in the world that included local requirements considered by researchers. In fact, these criteria, with all their inclusiveness and comprehensiveness, have some differences. According to the studies conducted and the comparison between the criteria proposed in higher education as well as the achievements of researchers in the field, it can be concluded that despite the minor differences in the expression of various indicators and sub-indices in the productivity and cultural excellence of higher education, there are common points in all these models and researches. In fact, these commonalities draw an obvious path for higher education institutions, which definitely depends on paying attention to these departments and correct and valuable planning to achieve excellence and efficiency. In fact, we can achieve a new model by finding the common points of these researches and models that is related to the local requirements of our country and is applicable and reliable. The results of cultural excellence modeling in this study showed that all the variables related to the cultural excellence of higher education have high validity (0.5). Also, the ranking by the TOPSIS multi-criteria decision-making method showed that the most important factor that will influence the cultural excellence of the province's higher education is "comprehensive approach to academic affairs (systemic thinking)". Also, the factor of "professional competence" ranks second and the factor "development of collective culture in scientific procedures instead of individualistic" ranks third. Also, the results of the AHP model showed that "quality" has the highest priority. And "Professional competence culture of professors" was placed in the second priority and "Culture of modeling the legends of universities" was placed in the third priority. The results of experts' opinions in the AHP model have shown that the quality factor should be prioritized in the goals of achieving cultural excellence in the development of higher education in the province. Today, quality is at the top of the attention of the higher education audience, and improving the quality is considered the missing link in higher education, which has made only quantity the main focus of its policies. In addition, identifying the weaknesses and strengths, recognizing the opportunities and threats and trying to improve the current situation to reach the desired situation and obtain a superior position are among the most important academic perspectives. Continuous improvement of quality requires continuous evaluation of existing structures. The academic system should continuously judge the desirability of its input, process, and output factors, and the result should be used by decision makers to improve matters (educational, research, and providing specialized services to society). Based on the results, the following suggestions are made:

- It is suggested that the field for the development of systemic thinking in the university and higher education environment will be provided by creating fields for the development of work skills in the university.
- It is suggested to increase the cooperation of faculty members and university staff in the region in order to encourage positive competition in the university with other universities in the region.
- It is suggested to strengthen the ground for the growth and development of intellectual capital culture in higher education by taking advantage of technical and specialized knowledge, capabilities and qualifications.
- It is suggested to use systematic methods to investigate the causes of mistakes and further corrective measures in order to increase the technological ability to serve students effectively and regularly search for key processes for the university's progress.
- It is suggested to strengthen the field of continuous learning with the aim of improving the competitive status of the university, developing the learning environment and professional development of employees by acquiring the knowledge needed to achieve excellent results of the university with an emphasis on quality processes.
- It is suggested that an opportunity to focus on measuring the organizational effectiveness of the province's higher education should be provided by emphasizing the evaluation of the educational programs of the university in the workplace with other universities and focusing on capable students and encouraging them to present valid scientific articles.

- It is suggested to provide the opportunity to exchange ideas and experience with foreign universities, and to improve productivity and facilitate the production of science in provide a global stage in the higher education of the province by identifying factors that contribute to the promotion of creative education based on international experiences, the establishment of new educational approaches with a focus on active learning, the expansion of electronic learning;
- It is suggested to strengthen the support for research activities and the formation of scientific communities in the university environment in order to develop a collective culture in scientific procedures instead of individualistic ones.
- It is suggested in line with academic growth and development in selecting professors based on intellectual competence, educational competence, behavioral competence, professional competence, managerial competence; their functional qualification, scientific qualification and teaching qualification should be paid more attention;
- In order to develop the research culture, providing at least equal points for internal scientific research journals compared to foreign journals (WOS) should be a priority in the planning of managers.
- In order to develop the quality of higher education, attention to the comprehensive view of academic affairs (systemic thinking) and people's passion for continuous learning should be prioritized in the work of planners and executives.

References

- Abdulrahman.N., HoVoon,A.F, and Firdaus,A., 2016, Identifying the Dimensions for Culture of Excellence in Higher Education, *Procedia - Social and Behavioral Sciences*, Vol. 224, P.P 84-92
- Ahmadi, Gh.A., Pasandideh, J. and Dehghanzadeh, A., 2016, Academic culture and its changes in Iran, *Educational Studies Journal - Center for Studies and Development of Medical Education of Army University of Medical Sciences*, 4(1), pp. 23-34;
- Askari, M., Adli, F., and Mehran, G., 2016, Identifying factors affecting knowledge creation of faculty members of higher education institutions, *Journal of Marine Science Education*, 3(6), pp. 27-39;
- Becher, T. and Trowler, R. P. (2001) "Academic Tribes and Territories: Intellectual Enquiry and the Culture of Disciplines", Milton Keynes, Open university Press.
- Brimani, F., Elhani, F., Mohammadi, I. and Abbaszadeh, A., 2012, students' understanding of obstacles to acquiring professional ethics: a qualitative research, *Development Steps in Education*, 8(1), pp. 67-80;
- David. F. R, Strategic Management,2009 translated by Arabi and Parsaeen, Tehran, *Cultural Research Office*, (Persian)
- Ebrahimi, R., Adli, F. and Mehran, G., 2015, the role of university culture on knowledge creation from the perspective of higher education system experts, *Research and Planning Quarterly in Higher Education*, 21 (1), pp. 151-127;
- Fazeli, N., E., 2003, comparative study of Iranian and British university culture (Anthropological study on the causes of inefficiency of university education in Iran), *Anthropology Quarterly*, first year, third issue, pp. 93-132.
- Galtung, J., Structure, Culture and intellectual Style: and essay comparing Saxonic, Teutonic, G., and Hipponic, B, *Social science Information*, London, 2012, (20) 817-56
- Hadi, R., Rezapour, Y., and Sulaimanpour, S., 2016, quality indicators of higher education based on Kano model in Urmia University, *Scientific-research journal of education and evaluation*. 9(34), pp. 35-50.
- Hanushek, E, A., Woessmann, L., September, 2008. The role of cognitive skills in economic development. *Journal of Economic Literature*, 46 (3), 607–668.
- Hosseini, M., Farahani, A., and Qarabaghi, A., 2013, Designing a quality assurance model for physical education in the distance education system. *Applied Researches in Sports Management*, 2(6), pp. 119-135;
- Hoveida, R., and Molavi, H., 1999, The process of improving the quality of education according to the faculty members of Isfahan province, *Iranian Journal of Education in Medical Sciences*, No. 1, pp. 132-141.
- Marina, N., Kicherova, Galina Z. Efimova, T.V., Khvesko, (2015). Early Professional Socialization of University Students in Russia. *Social and Behavioral Sciences*, Vol 200, PP 442–448.
- McCowan,T., 2018, Quality of higher education in Kenya: Addressing the conundrum, *International Journal of Educational Development*, Vol 60, 128-137
- Memarzadeh T., Gholamreza., and Mohammadreza M., 2014, Identification and prioritization of factors affecting the development of higher education in Iran (investigation in three areas of education, research and technology), *welfare planning and social development quarterly* 5 (18).
- Niharika Doble and M.V. Supriya. (2011). Student life balance: myth or reality? *International Journal of Educational Management*, 25 (3)• 237-251.

- Olvido, M.M., 2022, Developing research culture in teacher education institutions: The gestation, expansion, maturation theory, *Routledge open research*, Available on: <http://doi.org/10.12688/routledgeopenres.17510.1>.
- Prieto, L.R., 2020, Concerns about teaching culturally diverse students in a cross-disciplinary sample of higher education faculty, *Teaching in Higher Education*, 28(4) 772-783
- Rahman, S. Partwi, G. and Theopilus, D.S., 2021, University organizational culture mapping using organizational culture assessment instrument, *IOP material conferences series, Materials Science Engineering*, DOI 10.1088/1757-899X/1072/1/012069
- Safari, F., Ahmadi, A., 2023, Developing an evaluating and empirically- Based diagnostic checklist for assessing second language integrated writing, *Journal of Second Language Writing*, 60, 1-15
- Watkins, M.D., 2013, What Is Organizational Culture? And Why Should We Care? *Harvard Business Review*, Available on: <https://hbr.org/2013/05/what-is-organizational-culture>
- Zamani, A., 2017, identifying, analyzing and prioritizing factors affecting the quality of education in higher education, *Innovation and Value Creation Quarterly*, 6(11), pp. 23-35;
- Zulfiqar Zadeh, D., Amiri, M.M., Ali Naghi, A., and Zarei M., 2011, Discovering University Culture, Theoretical Analysis and Typology of University Culture Studies, *Strategic Management Thought*, 5 (9), pp. 45-97