

A Model to Improve the Quality of E-Learning in Farhangian University of Khuzestan

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ABSTRACT

The aim of this study was to design a model to improve the quality of e-learning at Farhangian University of Khuzestan Province. For this research, the mixed research method of sequential exploratory type has been used. The statistical population of the research consists of a number of managers and officials of Farhangian University, experts, thinkers and prominent professors of this university. In the qualitative part of the research, sampling was done purposefully and in the quantitative part, the sampling method was stratified-random. The qualitative method of content analysis was used to construct the model and the quantitative descriptive-analytical method was used to test the model and the correlation type based on the structural equation model was used. The results of 15 interviews conducted, through open and axial coding (using Max QDA Pro version software), led to the extraction of 142 concept codes and 12 main categories, which are management and infrastructure, program Courses, objectives, content, educational media, social, cultural and moral factors, economic factors, human factors, interaction, teaching and learning, evaluation and homework and support infrastructure. Given that the T-value for 5 relationships related to the research hypotheses is more than 0.95, this means a good fit of the model.

KEYWORDS

E-learning; Farhangian University; quality improvement

INTRODUCTION

E-learning is one of the new educational methods based on information and communication technology that by focusing on human beings as active learners, can transform all forms of education and learning in the 21st century and meet the challenge of demand. (Razi, 2006) Technological advances since the 1990s have led to an increase in the integration of web-based courses in educational activities, and on the other hand, dramatic changes in higher education and its move to Towards universalization, a new perspective on the development of higher education has emerged, and e-learning, as the most prominent application of information technology, has added a new dimension to the Higher Education Charter. According to some experts, e-learning is the most important technology that can support new approaches to teaching and learning (Grison and Anderson, translated by Attaran, 2008). It is difficult not to take advantage. To stay competitive, universities must offer this type of education because e-learning will be the future education of the world. In fact, in the global dimension of education, the necessity of its existence is certain that the development of education is a global necessity and e-learning is one of the most useful solutions (Faramarzian, 2005). Now, due to the importance of e-learning in the new educational system,

many universities in the country are trying to plan principles for its use in the learning process. (Mirsaeidi, Golnoosh, 2016)

Mahin Naderifar et al. (2016) in his research entitled (Challenges of e-learning in medical education) to challenges such as non-implementation by professors due to ignorance of its work, lack of role of teacher, lack of Expertise in its use, fear of using it, special cultural beliefs and the existence of insufficient resources can be mentioned.

According to research conducted by Razeghi and Saberi, virtual education can be as effective as face-to-face education in students' academic achievement, and on the other hand, in some cases, have a greater impact on some components of academic self-regulation. Therefore, considering the benefits of virtual education, this type of education can be used as an acceptable alternative (Razeghi and Saberi, 2016).

Reza Gharaei (2015) in his research entitled (Study, identification and ranking of the most important key success factors in the implementation and implementation of e-learning system based on video conferencing) to key and effective success factors such as human factors, user support and senior management support, Immediate and sustainable environmental, organizational, cultural, economic interaction and, most importantly, the existence of technology infrastructure.

Abbas Anarinejad and Mehdi Mohammadi (2014) examined the practical indicators of e-learning evaluation in Iranian higher education. The results of this study indicate some strengths and weaknesses of the e-education system in the country that can provide valuable information for managers and officials of the higher education system to adopt principled policies and use appropriate strategies and strategies to improve and Improving the quality of some relatively desirable aspects and removing the obstacles and problems of e-learning Take basic steps. Mahmoud Jafarpour (2012) in his research entitled (Model for acceptance of e-learning in Iranian universities), indicators of advanced technologies and desirable organizational and administrative processes, as the most important and indicators of honesty in solving problems and satisfaction with facilities in Accessibility was identified as the least important indicators in the e-learning acceptance process. In another study, Momeni Rad and Aliabadi (2012) examined the quality of information technology in the e-learning course of Khajeh Nasir al-Din Tusi University of Technology based on e-learning standards. The results of their research showed that the quality of information technology in the e-learning course of Khajeh Nasir al-Din Tusi University of Technology is relatively favorable.

In a study by Mohammadi, Amir Teymouri, Ghasemi and Atashk (2010) in order to evaluate the e-learning of Roshd network based on the criteria of designing educational sites, the evaluation results show that the educational objectives of the courses are undesirable and the written content is teaching methods. Learning, evaluation methods, design of web pages and the general part of the site are relatively desirable. In recent years, one of the centers providing e-learning in the field is Amir Kabir University.

In a study conducted by Yudo, Begchi, and Kears (2011) to evaluate the quality of e-learning experience, the results showed that the dimensions of assurance, understanding and empathy with others, accountability, reliability, and website content play an important role in quality acceptance. Plays e-learning. In a study by Jang (2010) examining the dimensions of e-learning quality from a learner perspective, participants suggested the dimensions of interaction, staffing, organizational quality assurance mechanism, organizational credibility, learner support, information and advertising, and task training.

The results of a study aimed at examining students' attitudes toward e-learning in selected agricultural education courses show that students learn the basic concepts in this field very quickly and need less help from educators. Discussions and discussion groups are also common tools in this area. Parr and David (2005) conducted a case study to determine the

attitudes of successful learners participating in e-learning courses and to examine the reasons for their success in these courses compared to face-to-face courses. In this study, graduates were interviewed and their biographies were examined. The results of this study strongly showed that educators, learners' personal interest and the time they devote to educational programs have been the most important reasons for the success of these students. Liao Whang (2004) proposes three types of considerations for designing effective e-learning environments: learners' characteristics, learning structure, and interaction. Understanding the needs of society is essential in creating e-learning development and learning. Learners' characteristics such as their attitudes, motivations, beliefs, and confidence must first be identified.

RESEARCH METHODS

The main purpose of the study was to develop a model to improve the quality of e-learning at Farhangian University in Khuzestan Province. The statistical population of the present study consisted of experts on this subject, including experts, managers and officials of Farhangian University, experts familiar with the subject. Foundation data theory sampling method; Sampling was theoretical and samples were selected with the aim of obtaining comprehensive information. Sampling continued until the theoretical saturation of the categories. Corbin and Strauss (2008) argue that theoretical saturation occurs when no new categories of data are extracted. In-depth, open and unstructured interviews with each of the interviewees for 60 to 100 minutes were used to collect data. In the 16th interview, the data was saturated and in the 17th interview, it was done for more certainty. To conduct the present study, after designing general questions and compiling the interview protocol, in-depth interviews were conducted with experts. At the end of each interview, its content was fully implemented on paper and the data were initially coded to extract the basic concepts. After reaching saturation, a more in-depth study of the theoretical foundations and previous research was conducted to combine them with the researcher's experiences and the opinions of experts to design the model. The designed model was provided to the experts and after receiving their suggestions and comments on the classification of categories and concepts, the final model of e-learning was designed. Then, based on the mentioned model, an e-learning questionnaire was developed. After distributing and collecting the questionnaires among the statistical population, using the structural equation model, the model of improving the quality of e-learning in a quantitative phase was identified. Also, due to the unknown number of the statistical population of the quantitative section and due to the insensitivity of Smart PLS software to the number of the statistical population, 385 complete questionnaires were collected from the administrators and officials of Farhangian University and professors and students of Farhangian University. Used for analysis.

Table 1. Distribution of frequency percentage of sample groups

Percent	Number	Sample Group	No.
1.8	7	Managers and officials of Farhangian University	1
17.9	69	Professors of Farhangian University	2
80.4	309	Student teacher of Farhangian University	3
100	385		Total

The results of the table showed that 1.8% of the research samples are managers and officials of Farhangian University, 17.9% are professors of Farhangian University, and 80.4% are students and teachers of Farhangian University.

RESULTS AND DISCUSSION

The results showed that the results of 15 interviews conducted through open and axial coding (using Max QDA Pro version software) showed that 142 concept codes and 12 main categories were extracted, which are managerial and Infrastructure, curricula, goals, content, educational media, social, cultural and moral factors, economic factors, human factors, interaction, teaching and learning, evaluation and homework and support infrastructure. Finally, the categories in the form of 12 main categories in the heart of the six dimensions of the paradigm model as causal causes (1 category), the main category: Improving the quality of e-learning (3 categories), strategies (3 categories), contextual conditions (2 Category), intervening conditions (2 categories), and consequences (1 category) were included.

Table 2. Summarizes the open and pivotal coding of the interviewees

Management and infrastructure
Characteristics extracted from verbal propositions (concepts) of categories
Design e-learning courses based on the organization's vision. Management and infrastructure
Training courses should be designed based on the missions of the organization.
Design and implementation of e-learning to achieve the goals of the organization.
The necessary budget and funds have been allocated for the realization of e-learning in line with the goals of the organization.
All the necessary infrastructure and resources are provided for the realization of the e-learning process.
Technology requirements such as ICDL training should be reminded by the university.
The design of university web pages is graphically attractive.
It is possible to personalize the course based on visual appeal.
Internet speed and bandwidth are appropriate.
Easy internet access.
Easy access to the computer with other accessories.
Curricula
E-learning curricula should be based on learning objectives. Curricula
The design and production of e-learning curricula should begin with specific goals.
The most important goal of e-learning curricula is to develop the ability to critically analyze the problems and issues of society in relation to their field of specialization.
In developing an e-learning curriculum, it is necessary to pay attention to the needs and interests of students.
The e-curriculum should require e-learning instructors to teach systematic thinking skills.
The e-curriculum should seek to create learning experiences that are satisfying to each student.
The production and design of an electronic curriculum should be based on practical and logical processes.
The e-curriculum should first enable students to master cognitive skills (inference, analysis, and critical thinking), and then the teacher should teach the specialized knowledge of the course.

It is necessary to pay attention to the needs and interests of students in developing an e-learning curriculum.
The most important priority of e-curricula should be to educate and acquaint students with the important cultural works of their community in relation to their field of specialization.
The e-curriculum should allow students to understand social issues and take action to build a new community
The e-learning curriculum should emphasize strengthening students' mental abilities.
Goals
The educational goals are clearly and codified.
The main goal in e-learning should be to promote self-direction and management in students' lives.
The development of students' cognitive skills, such as memorization, hypothesis building, problem solving, analysis, integration and composition, which are generally effective in learning, is one of the main goals of e-learning.
Knowledge building by the student himself through social interaction with students and professors is one of the important goals of e-learning.
Objectives Each lesson should state clearly all that the learner needs to learn.
The objectives of each lesson should be clear at the beginning.
The objectives of each lesson should be formulated in a way that reflects the overall expectations of the course.
Students are aware of the general and objective objectives of e-learning courses.
Professors and faculty members and other staff are aware of the objectives of e-learning courses.
The educational goals of e-learning courses are tailored to the job needs of individuals.
The educational goals of e-learning courses are tailored to the needs of the community.
Content
The specialized content is the basis of designing quality electronic curricula in universities.
The selection of content and learning activities related to each subject in e-learning is based on precise and objective learning objectives.
The most important content of the e-curriculum is teaching students research methods.
The most important content in the e-learning curriculum is thematic and specialized knowledge (regardless of the needs of students and society).
The content of the courses is offered in different formats (for mobile and ...).
Decisions about e-curriculum content should be made based on objective and practical situations within the local university.
The content of the course provided is up to date.
Lesson content can be adjusted from simple to complex.
The content of the lessons is organized from theoretical concepts to practical concepts.
The content of each lesson motivates and interests the person.
The content of each lesson should be presented in the form of multimedia (text, sound, animation, etc.).
Content, activities and exercises should be formulated to meet the educational and professional needs of the individual.
The content presented should be consistent with the objectives of each lesson.
Interactive content is provided.
The content has the necessary quality (proper structure, no mistakes, design and attractiveness, etc.).

Content is presented in different ways.
The content of the curriculum emphasizes issues related to the specialized field of each discipline in society.
The learning content in e-learning should be realistic, problem-solving, and relevant to the social and cultural context of the students.
Instructional Media
Working with the e-learning system is easy.
E-learning system is multimedia.
The e-learning system has the necessary security.
There are various tools (email, chat, etc.) for communication and interaction between professors and students and other users.
Instructional materials to be downloaded quickly and easily and displayed clearly.
The system is easy to access.
There is an educational guide about the educational system.
The instructions and directions of the educational system are understandable.
The files in the educational system can be downloaded.
There are other educational materials such as e-books, videos and pictures as well as links to other sites.
Course learning materials (tools, articles, text, etc.) are relevant and useful.
Socio-cultural and moral factors
E-learning courses have been instrumental in creating equality and educational justice.
Cultural diversity has been considered in the design of e-learning courses.
The content of the lessons offered is in line with the moral values that govern society.
Privacy is maintained in e-learning and information remains confidential.
The most important priority of e-curricula should be to educate and familiarize students with the important cultural works of their community in relation to their specialty.
Current issues in society should be the basis and focus of e-curriculum design.
The e-curriculum should enable students to understand social issues and take action to build a new community.
Economic factors
E-learning has reduced the cost of travel.
E-learning is effective in reducing the cost of accommodation.
E-learning will bring someone income in addition to education.
The cost of an internet connection is affordable.
Human Factors
Professors are proficient in current knowledge in their specialty.
Professors have complete mastery of the subject and content of the courses.
Professors welcome learners' comments and questions.
Teachers respond to learners' comments and questions with high speed.
Professors give feedback to students on their progress.
The feedback of the professors is informative and comprehensive so that the student can correct his homework based on it.
Teachers have a positive attitude towards e-learning.
Professors use chat and email to advise and guide students.
Professors have facilitated collaboration between learners.
The task of the professor in e-teaching is to transfer the best and most important content in the specialized field (field) to students.

Teachers during teaching and learning in e-learning should constantly monitor students' readiness to take advantage of learning opportunities emotionally, cognitively and skillfully.
Students have sufficient skills in the use of information and communication technology (hardware, software, methods, communication equipment such as audio, video, storage, retrieval, etc.).
Students participate in group activities (online discussion, discussion rooms, bulletin boards, etc.).
The teacher has a confidential attitude towards different opinions and views.
The professor's expectations of the student are clear.
University experts and technical staff quickly resolve student problems with the system.
Interaction
Students interact with professors and professors' help to access course information, course content and projects, etc. online.
Students interact with their classmates to carry out academic activities, projects, receive course content, etc. online.
Professors interact with each other online to update their information.
Professors apply students' opinions in presenting the content of the courses.
Group activities are done online and easily.
There are necessary tools for students and professors to interact (email, chat, etc.).
Teaching and learning
E-learning should be based on precise steps and pre-determined steps.
Learning activities and experiences in e-learning should be based on the interaction and interaction of people with each other.
The best learning occurs when students have the opportunity to analyze and evaluate existing social issues in relation to their major
Students' needs in e-learning should be the basis of the curriculum.
Allow the student to take responsibility for their own learning.
Providing opportunities for students to think and reason in e-learning is very important.
E-learning provides a place for students to complete their assignments in a variety of learning environments.
In teaching the lesson, use examples that clearly show how to do homework.
For each lesson there are links or examples from the Internet where the student is directly involved in the learning process.
Download master content easily.
Provide technical support and guidance options to meet students' needs and concerns.
Resources that enrich the content of the course are available to students.
Evaluation and assignments
In the evaluation of students, the assessment of civic awareness and decision-making skills in the specialized field is emphasized.
In e-learning, assessment of student learning emphasizes the assessment of students' decision-making skills and abilities in the face of real-life situations.
In e-learning, evaluation serves education and correction and emphasizes self-evaluation.
In evaluating e-students, measuring their learning from thematic and specialized knowledge is a priority.
The purpose of evaluating e-learning is to determine how well students achieve their pre-determined learning goals.

In e-learning, in addition to academic achievement, educational evaluation should emphasize students' personality development, such as self-confidence and motivation.
Evaluation is commensurate with the goals of the program.
Criteria for evaluating and grading courses should be clearly defined.
There are clear expectations and criteria for evaluating assignments and how to do them.
Students can evaluate their progress.
Evaluation should be done at the beginning of each topic and during the training.
Self-examination exercises and online tests are performed.
There is flexibility in student assessment and evaluation is done in different ways.
Test results and assignments will be announced in a timely manner.
Homework is provided for each lesson that engages the individual in the learning process.
Assignments are designed to facilitate learning.
The characteristics of the assignments and the way of receiving the grade indicate the teacher's expectations from the student.
Homework in each lesson should be realistic and motivate the student.
Educational rules and regulations are specified and communicated to all.
The rules and regulations of online education regarding academic activities, discussions, email communications and plagiarism are clearly stated and communicated to everyone.
You can do all your administrative work online, without a face-to-face visit, including a certificate of employment, registration, payment of tuition, and deletion and addition.
It is possible to get advice on various academic issues at Farhangian University.
There is access to resources, books, videos, CDs online on Farhangian University.
Support infrastructure
A digital library and source of scientific information is available. Support infrastructure
Farhangian University prevents unauthorized access to the authentication system, etc.
Certification is done quickly and accurately.
Advertisements and how to inform the courses are provided to all users in a timely and correct manner.
The process and how to register for the courses is provided to all users in a timely and correct manner.
If users encounter a problem, they will be supported and instructed.
Informed about ways to get guidance and support.
At the end of the course, students' records are registered and a certificate is awarded.
There are tips and tutorials on media.
Necessary software is available in the system such as Adobe Acrobat.

Open coding step: 142 basic conceptual propositions

Axial coding step: 12 category statements

1. Causal causes :Human factors
2. Background conditions: management and infrastructure, infrastructure and support
3. Interfering conditions: educational media, social, cultural and moral factors
4. Strategies: Assessment and assignments, interaction, training and learning
5. Main phenomenon: curriculum, objectives, content
6. Consequences: Economic factors

The conceptual model of a model to improve the quality of e-learning at Farhangian University of Province is shown in the following figure:

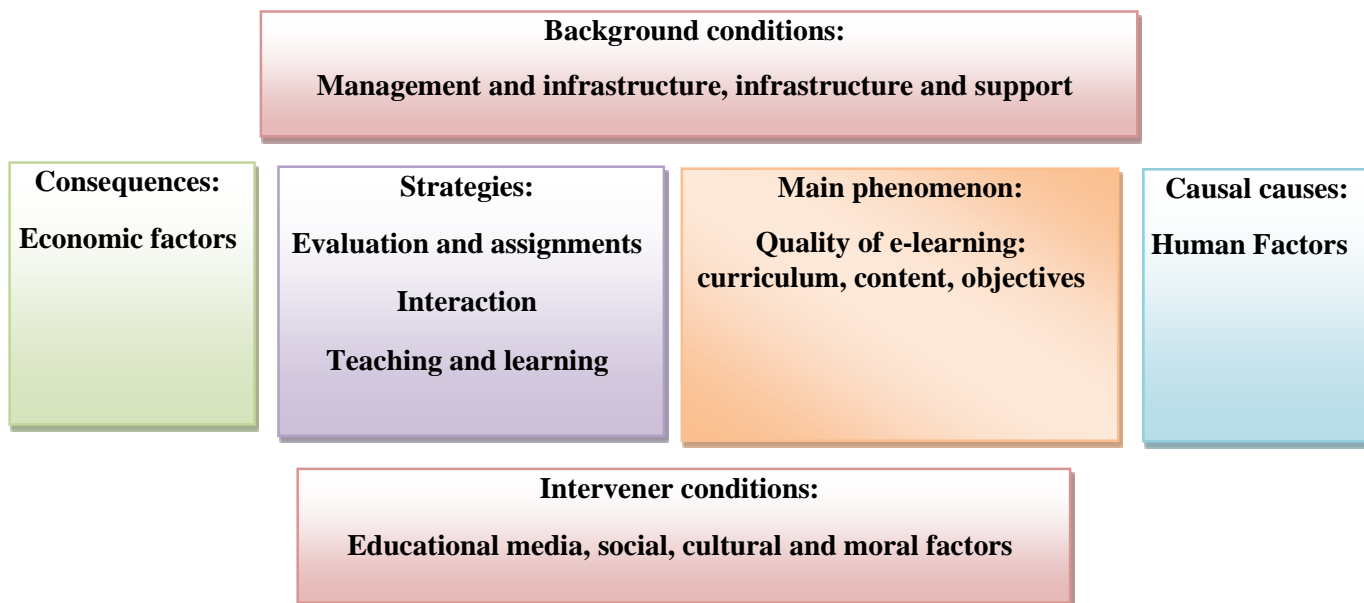


Table 1. Investigating the factor load coefficients of each of the questions related to the 12 research variables

	Casual conditions	The main phenomenon	Underlying conditions	Interfering conditions	Strategies	consequences
Human Factors	0.9999999					
Curricula		0.523967				
Targets		0.842990				
Content		0.872649				
Management and infrastructure			0.794088			
Infrastructure and support			0.668171			
Educational media				0.788538		
Social, cultural and moral factors				0.571318		
Evaluation and assignments					0.658419	
Educational and learning					0.683710	
Interaction					0.688619	
Economic factors						0.9999999

The value of the criterion for the suitability of the factor load coefficients is 0.4. If after running the model, we encounter questions with factor loads less than 0.4, we have to delete that question so that the review of other criteria is not affected. No questions were omitted in this study.

As shown in the table below, the value of these criteria, i.e. Cronbach's alpha and the combined reliability of the variables in each of the 6 variables is higher than 0.7, which indicates the appropriate reliability of the model. In this research, the reliability of the variables is at the desired level. The table below shows that the combined reliability and Cronbach's alpha are appropriate for all 6 indicators of the questionnaire. Since the reliability

is confirmed, the hypotheses can be examined by structural equations and the result can be generalized to the whole society.

Table 2. Combined reliability and Cronbach's alpha

	Combined reliability	Cronbach's alpha
Casual conditions	0.884470	0.840080
The main phenomenon	0.735591	0.542384
Underlying conditions	0.899918	0.851523
Interfering conditions	0.873257	0.828864
Strategies	0.852422	0.768349
consequences	0.831628	0.754713

According to the table below and the Fornell and Larker methods, which have introduced a suitable value for AVE of 0.4 and above. For all 6 sub-variables, the value of AVE is greater than or equal to 0.4.

Table 3. Convergent validity review

	AVE
Casual conditions	0.503541
The main phenomenon	0.533599
Underlying conditions	0.452387
Interfering conditions	0.595108
Strategies	0.693859
consequences	0.511231

Given that the appropriate value for Cronbach's alpha is 0.7, for composite reliability is 0.7 and for AVE 0.4, and all criteria in the factor load measurement section are appropriate, the suitability of the reliability status and convergent validity of the research can be confirmed.

Divergent Validity

Divergent validity is the third criterion for examining the fit of measurement models.

Table 4. Divergent survey (1)

	Casual conditions	The main phenomenon	Underlying conditions	Interfering conditions	Strategies	consequences
Human Factors	0.999999	0.279730	0.415429	0.313848	0.427224	0.394023
Curricula	0.170824	0.824995	0.107572	0.029651	0.097477	0.117560
Targets	0.242429	0.724496	0.465279	0.374069	0.501312	0.425868
Content	0.251191	0.746998	0.311992	0.730952	0.378124	0.256294
Management and infrastructure	0.484208	0.042938	0.879233	0.292016	0.322016	0.219568
Infrastructure and support	0.403669	0.164338	0.773194	0.251942	0.297141	0.245133
Educational media	0.435762	0.130987	0.298004	0.822915	0.337040	0.243561

Social, cultural and moral factors	0.501523	0.014957	0.244455	0.704747	0.312897	0.207517
Evaluation and assignments	0.334752	0.265368	0.546935	0.212963	0.896683	0.423359
Educational and learning	0.334752	0.265368	0.546935	0.212963	0.896683	0.423359
Interaction	0.275809	0.888470	0.430434	0.132914	0.738188	0.449549
Economic factors	0.247827	0.904651	0.467766	0.113390	0.333357	0.999999

As can be seen in the table above, the questions for each variable are more correlated with the variable itself than with the other variables.

The following matrix is the correlation matrix of research variables:

Table 5. Divergent check (2)

	Casual conditions	The main phenomenon	Underlying conditions	Interfering conditions	Strategies	consequences
Casual conditions	1.000000					
The main phenomenon	0.283319	1.000000				
Underlying conditions	0.522451	0.478022	1.000000			
Interfering conditions	0.591435	0.117081	0.356689	1.000000		
Strategies	0.568720	0.332062	0.876721	0.412745	1.000000	
consequences	0.474439	0.521417	0.323966	0.298154	0.584284	1.000000

Fornell and Larker's method for examining divergent validity proposes a matrix that is similar to the above matrix, except that the original diameter of this matrix contains the square root of the AVE values for each of the six variables. The table above shows the original diameter values with the number 1. Therefore, the Fornell and Larker matrices for divergent validity are plotted below:

Table 6. Divergent study with Fornell and Locker matrices

	Casual conditions	The main phenomenon	Underlying conditions	Interfering conditions	Strategies	consequences
Casual conditions	0.784852					
The main phenomenon	0.283319	0.865986				
Underlying conditions	0.522451	0.478022	0.870548			
Interfering conditions	0.591435	0.117081	0.356689	0.748493		
Strategies	0.568720	0.332062	0.876721	0.412745	0.893251	
consequences	0.474439	0.521417	0.323966	0.298154	0.584284	0.885623

As shown in the table above, the square root of each variable is greater than the correlation value of the two variables.

Structural Model Fit

To evaluate the fit of the structural model of the research, several criteria are used, the first and most basic of which are the significant coefficients t or the same values as t-values. The most basic criterion for measuring the relationship between variables in the model (structural part) is the significant numbers t. If the value of these numbers exceeds 0.95, it indicates the correctness of the relationship between the variables and thus confirms the

research hypotheses at the confidence level of 1.96. Of course, it should be noted that numbers only show the correctness of the relationship and the intensity of the relationship between the variables cannot be measured with it.

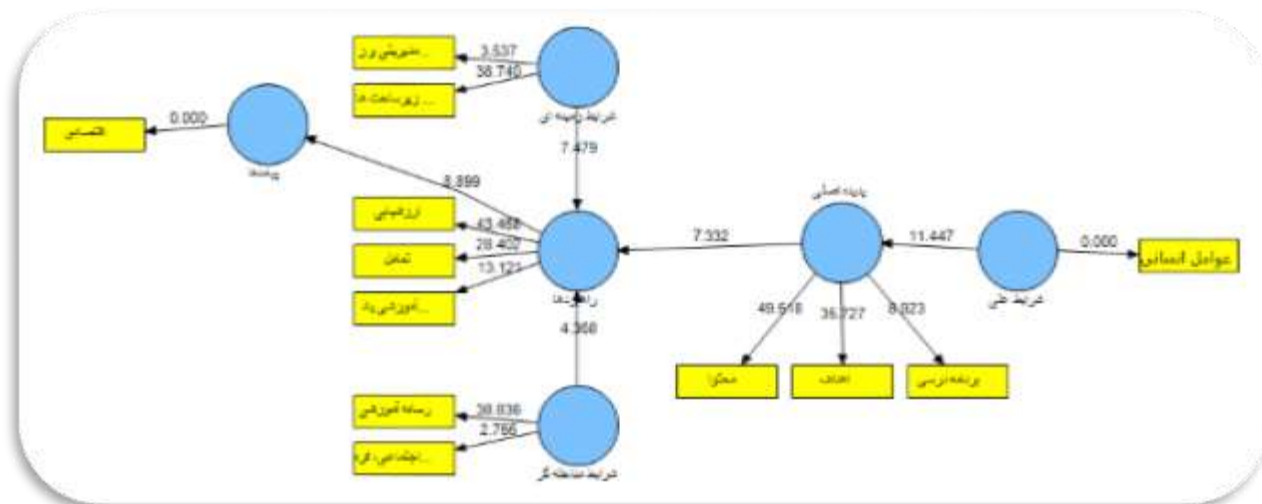


Figure 1. Significant coefficients t (t-values)

According to the above two tables, the T-value for 5 relationships related to the research hypotheses is more than 0.95 and all relationships are confirmed. This means that the model fits properly.

Table 7. T-Value values

Relationships	T-Value
Causal conditions on the main phenomenon	11/447
The main phenomenon on strategies	7/332
Underlying conditions on strategies	7/479
Interfering conditions on strategies	4/368
Strategies on consequences	8/899

According to the above two figures, the T-value for 5 relationships related to the research hypotheses is more than 0.95 and all relationships are confirmed. This means that the model fits properly

CONCLUSION

In analyzing the first question of the research (causal conditions affecting the quality of e-learning promotion of Farhangian University of Khuzestan Province) it should be stated that human factors have been identified as a category of causal conditions in this study. In this regard, it is consistent in the research of Braille and Pop (1999), Salim (2007), Farzin (2006), Samadi (2007), and Gwain (2001). Salim (2007) in his research on the promotion of e-learning found that updating professors and their training and implementation by professors can improve e-learning. Farzin (2006) in his research pointed out that human resources are one of the most important factors in promoting e-learning. In a study conducted by Samadi et al. (2007) entitled Identifying the key factors for the success of e-learning system in Iranian universities, it was concluded that human factors are effective in the success of e-learning systems in countries. Gwain (2001) points to seven key factors in the success of e-

learning: organizational support, content development, teaching and learning, lesson structure, student support, faculty support, and evaluation.

Therefore, e-learning significantly saves the time of professors and educational activists and educational costs because in this method, educational materials are compiled once and used many times and in different places. Numerous studies have shown that learning E-learning is at least as effective as traditional education, and even more so, providing more learner satisfaction.

In the analysis of the second question (contextual conditions affecting the improvement of e-learning quality in Farhangian University of Khuzestan Province) the research should be stated that the categories of managerial and infrastructure factors, infrastructure and support were identified as contextual conditions affecting e-learning in Farhangian University. Khatib Zanjani et al. (2012) consider the factors and infrastructures of technology, management infrastructure and administrative infrastructure and support system as the most important factor in improving the quality of e-learning. Hasheminejad et al. (2012) Five infrastructure, information, psychological, support and skill factors as deterrents to the use of combined learning and four executive factors and infrastructure, incentives, management and support factors as learning promoters Electronically explain. Bagheri Majd et al. (2013) considered the managerial factor, technology factor, organizational factor, individual factor and infrastructure as effective factors in e-learning in the university, respectively. In this regard, it can be said that given that there is a relatively centralized system in higher education in Iran and university administrators have an important role in shaping educational structures and facilities, it seems that experts believe that there are flexible and open-minded administrators. It plays a role in technological changes in education, as well as the characteristic of support and innovation of managers, which can play an important role in providing virtual and electronic courses. In fact, for this reason, managers and innovative and accepting attitude of managers is considered as the most basic level that the main people in the university system in the direction of change programs, innovation and training methods appropriate to the training environment of managers. . If administrators are reluctant to make educational changes, it is natural that the efforts of other educational stakeholders, including professors and students, will face serious problems.

In the analysis of the third research question (intervening conditions affecting the quality of e-learning in Farhangian University of Khuzestan Province) it should be stated that the categories of educational media, social, cultural and moral factors were identified as intervention conditions affecting the quality of e-learning in Farhangian University of Khuzestan. These findings are consistent with the research of Roy (2015), Gbadeyan, R., & Akinyosoye-gbonda (2010), Al-Hujran et al. (2013), Al-Gamdi and Samarji (2016). Roy (2015) identified the lack of social interaction (feeling of isolation and loneliness) as the most important social factor in e-learning. J. Badin and Aquinasuye (2010) identified cultural and social challenges as the most important barrier to e-learning. Lehgren et al. (2012) Al-Gamdi and Samarji, (2016) Weak access to learners and teachers, low value to the process of evaluating e-learning courses, low quality of content provided in e-learning. Lack of English language proficiency is one of the most important educational challenges. Tarus et al. (2015) in his study entitled Challenges of using e-learning in Kenya: a case study in Kenyan public universities concluded that barriers Identified in this study include: inadequate IT and e-learning infrastructure, financial constraints, lack of adequate cost-effective Internet bandwidth, lack of e-learning policies and procedures, lack of technical skills of training staff in developing e-learning and content Electronic, lack of interest and t The commitment of training staff to use e-learning is the amount of time required to develop e-learning content. Therefore, in order to address this important issue in the field of

implementation, the need to pay attention to the role of various institutions, especially non-governmental and private institutions in various areas of "providing e-learning network infrastructure" and providing educational services is very significant. The growing needs of the people for education, their lack of access to educational centers, lack of economic facilities, lack of experienced teachers and the high cost of education, led professionals to invent new methods of education with the help of information technology, which It is both economical and high quality and can be used to train a large population at the same time. Due to the fact that the e-learning system has limitations, such as the time consuming to check the large number of messages received and send answers, as well as the need for information skills. It seems that the best method in this regard is the implementation of combined education, in which the benefits of both traditional and electronic methods can be used simultaneously.

In the analysis of the fourth research question (strategy (processes / interactions) affecting the quality of e-learning in Farhangian University of Khuzestan Province) it should be stated that evaluation and assignments, interaction, training and learning were considered. These findings with theoretical research (1396) in his research found that evaluation and homework, interaction, education and learning are factors affecting e-learning in medical sciences. Messoni (2015) in a study entitled "An approach to improving quality in e-learning environments (virtual university). The survival of virtual universities depends primarily on the trust and confidence of stakeholders, especially students, and stakeholder trust and confidence in It depends on the increasing quality of these universities and virtual institutions; therefore, quality is one of the most important and effective factors in the creation, maintenance and development of these universities. Also, education and learning are considered as quality improvement factors in e-learning environments. Assessment and homework, interaction, teaching and learning are the most important factors and strategies for implementing e-learning. Golband et al. (2014) Most of the factors affect teaching and learning in the application and implementation of e-learning. In fact, structures are educational incentives Existence of infrastructure and evaluation and assignments, interaction and supportive and innovative managers are all mentioned as factors that affect empowerment.

In response to the fifth question of the study on the effective consequences of improving the quality of e-learning at Farhangian University of Khuzestan Province, economic factors have been considered as a consequence and result of this model. This research is consistent with the research of Mirsaedi (2015), Clark and Meyer (2011), Walkington (2013), Bachnan (2013). Mirsaedi (2016) in his research found that in order to effectively use e-learning in the Islamic Azad University of Medical Sciences in Tehran, two economic and administrative dimensions - university support by managers in these departments should be strengthened. Bachnan (2013) In order to use e-learning in educational affairs, it is necessary to provide conditions such as creating economic factors, strong infrastructure, developing the necessary educational standards for the evaluation of educators and students, appropriate culture, investment in this field. The application of e-learning in education is considered as one of the key issues in the development of information technology in the current situation and as a challenge in the future of this university. Universities have to adapt to new developments and changes. In the new environment, the role of coaches and professors will change. They will mostly play the role of facilitator and educator or educational designers. Therefore, it is necessary to change or design and set up appropriate educational management systems. Walkington (2013) emphasizes the role of technology and Internet infrastructure, administrative and support infrastructure, and economic infrastructure in the development of e-learning in an education system. Obviously, access to this important

(establishment of virtual and e-learning system and provision of infrastructure that is a macro view that can only be achieved with a strategic and global view. Therefore, e-learning is effective in reducing the cost of accommodation, reducing the cost of travel and earning money in addition to education.

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