Presenting The Relationship Model Between E-Learning, Mental Health, And Career Motivation During The Covid-19 Epidemic

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Abstract

Background and purpose: during the Covid 19 epidemic, the level of job motivation and mental health was negatively affected, on the other hand, e-learning was developed during this period, so the purpose of this study is to present a relationship model between e-learning, mental health, and job motivation during the Covid 19 epidemic. It was done by Don's staff.
Methodology: The current research is a descriptive, applied, and survey research that was conducted in the field. To conduct this research, 2016 people were randomly selected from among the staff of Mazandaran University of Medical Sciences and Health Services and its affiliated faculties, and 322 people were selected as a sample based on Morgan's table. After obtaining the necessary permits, researcher-made questionnaires on career motivation and electronic education and Goldberg's mental health questionnaire (1972) were distributed among the sample and collected. Finally, the structural equation method using SPSS and PLs software was used to analyze the data.
Findings: The results showed that e-learning has a significant effect on mental health and job motivation.
Conclusion: The results confirm the effect of e-learning on the mental health and job motivation of employees, so it is suggested that managers pay attention to e-learning to improve the performance and vitality of employees and find ways to increase the level of mental health and job motivation among employees.

Keywords: E-Learning, Mental Health, Career Motivation.

Introduction

In the 21st century and at the end of 2019, a completely different epidemic of viruses was experienced in Wuhan, China, which killed thousands of Chinese and infected thousands of other citizens during the first fifty days of its release, and in a short period, in It spread all over the world. This new virus was introduced as a coronavirus (COVID-19) [1]. On the other hand, considering the spread of the spread of Covid-19 disease in the world and the number of casualties caused by this disease, health care workers is more likely than others to be exposed to this disease due to being on the front line of dealing with this disease. They are sick. Because they spend most of their time in hospitals and emergency and isolation departments [2]. According to these conditions, in Mazandaran University of Medical Sciences, which is considered an important system in the field of medical science education, the need for human capital, especially doctors and paramedics, has intensified. In addition, the heterogeneous demographic pyramid of the organizational body in this university, which was due to the inability to maintain and train specialist human resources in the past years, has created a deep gap in this field, and therefore this university decided to attract and maintain capital. It took a human to be able to intelligently choose the right way of working and the best ideas [1]. Today, the completely changing conditions governing organizations, the increase in competition, and the necessity of its effectiveness in such conditions, reveal their need for a valuable generation of employees. A generation that is referred to as organizational soldiers. Undoubtedly, these employees are the hallmark of effective organizations [3]. The sudden spread of Covid-19 has faced many challenges in the education systems of the world and has affected the field of education, and in 120 countries, face-to-face learning has stopped and the education of one billion students has been ordered closed schools and education. It was issued as an emergency measure to prevent the spread of infection [2]. In the face of the Covid-19 epidemic, health protocols emphasized social distancing, and in many countries, including our country, the education of students is not interrupted during the period of social distancing, and the curricula are according to the schedule in advance. Specified, to continue, various solutions were presented [3]. In fact, with the beginning of the closure of schools and universities to help eliminate this virus, the concern of developing and implementing educational programs to continue education at home and under home quarantine conditions has become one of the biggest challenges for educational systems, including higher education [4]. In such a way international institutions and organizations such as the United Nations Children's Fund (UNICEF) and the World Health Organization were forced to work hard to develop curricula, instructions, and educational and educational guides for these conditions. Accordingly, electronic education or education through virtual space was chosen as one of the important and serious programs in higher education [5]. The topic of e-learning and e-education has been discussed in recent years as one of the important applications of information and communication technology, and most universities in the world have taken very important measures in the field of expanding education in this way [6]. Electronic education is the application of information and communication technologies for the transfer and interactive use of information and learning content for education, learning, and increasing the performance and knowledge of learners [7]. The broad approach toward e-learning is proof that the e-learning system brings unique benefits and advantages for individuals, organizations, and educational centers and the existence of problems such as the presence of professors and students in face-to-face classes, educational equipment, and facilities. Up-to-date and the

possibility of access to new educational technologies, etc., has caused the development of non-attendance teaching-learning methods and strategies using technology and educational software [8].

On the other hand, during the Corona outbreak, it is necessary to pay attention to human resources as one of the important pillars of any organization. Some psychological issues play an important and key role in improving the performance of employees in organizational fields [1]. Psychological aspects by improving the mental and behavioral capacities of people can bring them to the stage of success in their career path [2]. One of the most important issues in today's environment is mental health. Mental health has been identified as one of the concerns of researchers today. Paying attention to mental health as an important issue among people can create appropriate capacities in mental areas [3]. Paying attention to mental health can be effective in improving people's performance in work environments [4]. Mental health is one of the areas considered by researchers to improve job efficiency and effectiveness. Based on the definition of health from the point of view of the World Health Organization published in 1948 and the research of the past few decades, health is defined in four dimensions: physical, mental, social, and spiritual. Mental health can strongly affect and be influenced by physical, social, and spiritual health [5]. The improvement of indicators related to mental health has been considered one of the key indicators in the evaluations of countries, and extensive efforts have been made in this regard [2].

One of the key variables in the organizational field is job motivation. Career motivation can be important and necessary in directing people's behaviors and attitudes in work environments and even have capacities among people for optimal performance in their jobs [8]. Employees with energy and enthusiasm have a lot of passion and interest in their jobs, they are completely fascinated by their jobs and favorably perform their job tasks. Motivation is the biggest competitive advantage an organization can have. Which can be used as a power lever by the organization [9]. This inner feeling leads employees to excellence. Enthusiasm will raise the motivation for every move that occurs in the organization and will help managers to achieve organizational goals. Job motivation of employees to work has been expressed as a complex concept to motivate, positive results in employees and organizations [10]. In recent years, job motivation has become one of the important concepts and has found a special place in management thinking, and has replaced some traditional concepts such as job satisfaction, motivation, and commitment to a large extent [11]. The positive effects of employee job motivation are not only for the benefit of the organization but also for the benefit of individual employees. These benefits may include increasing employee productivity, increasing self-esteem, and improving employee health [9]. Career motivation is a relatively new concept, which is the result of the influence of positive psychology on human forces, which pays attention to the desired performance and positive work experiences [7]. Parker (2014) believes that enthusiastic people show active and good behavior in the workplace. They are not passive people in the work environment and they actively change their work environment when necessary. Enthusiastic people are cognitively, physically, and emotionally involved in their work [11]. The general indicators presented in the previous research were not suitable or effective for universities, especially universities of medical sciences, and satisfactory results were not achieved; therefore, the results of the current research, which is specifically conducted at Mazandaran University of Medical Sciences, can provide more correct and appropriate guidance. Therefore, the researcher pursues this research to determine the effective factors on the attraction

and retention of human resources of Mazandaran University of Medical Sciences, emphasizing the critical conditions of the patient's way of covid-19.

Universities of medical sciences and related centers in each province are the highest and highest authorities and institutions in each province whose duty is to maintain and develop the health of the people of the society and to regulate and monitor various issues in the fields of health and it pays for hygiene. Considering the role and position of the institution of medical sciences universities and centers related to it in the promotion and implementation of public policies and health development programs at the provincial level, we can see the special role and position of the employees of this organization in Promoting high goals and improving the health status of the people of the community. Sundram et al.'s study showed that in total, 24% of the world's employees do not have job enthusiasm, 62% of them have moderate job enthusiasm, and only 14% have high and significant job enthusiasm [7]. Most senior executive managers admit that the lack of job motivation of employees is one of the biggest threats to their organization. The lack of research on the functions of e-learning in areas such as mental health and job motivation of employees has caused the operational process to improve the mental health and job motivation of employees. On the other hand, this research gap has caused that there is not enough evidence regarding the impact of e-learning on the mental health and job motivation of employees. Therefore, the present research aims to provide a model of the relationship between e-learning, mental health, and job motivation during the covid-19 pandemic and tries to answer the question of whether e-learning affects the mental health and job motivation of employees.

Method

The present research is descriptive research. From the point of view of the goal, it is part of applied research that was carried out in the field. The current research method is a survey in terms of the data collection method. The statistical population of the current research included the staff of Mazandaran University of Medical Sciences and Health Services and its affiliated faculties, numbering 2016 people. To determine the sample size of employees, Karjesi and Morgan table was used, therefore, the number of sample size was determined to be 322 people and the sampling method was stratified random. After obtaining the necessary permits and distributing the questionnaires, 322 questionnaires were analyzed and reviewed. 322 questionnaires were distributed by the researcher among the participants to collect data, which was done in the period of January 2019 to the end of May 2014 through face-to-face and online referrals. It is worth mentioning that the university was in-person in the early winter of 2019 and after the outbreak of the Covid-19 disease, it was forced to be virtual, so during the in-person days, a number of questionnaires were delivered to the subjects in person and they were asked to be as accurate as possible. They were asked to answer the questions of the questionnaire, and during their non-attendance at the university, they were asked to use virtual space and the assistance of some professors and staff to answer the questions. The research tool was a researcher-made questionnaire.

E-learning questionnaire: This questionnaire contains 20 items, which are information quality (1-5 parameters), system quality (6-10 parameters), service quality (11-15 parameters), and electronic satisfaction (20 parameters). -16) is measured. The statements of this questionnaire are scored on a five-point Likert scale (1: I strongly disagree, 2: I disagree, 3: I have no opinion, 4: I agree, and 5: I strongly agree). The maximum score that the respondent can get from

this questionnaire is 100 and the minimum score is 20. Since this questionnaire was created by a researcher and there was no history of using this questionnaire in other studies, therefore, to confirm the formal and content validity of the opinions of 5 prominent professors in the fields of educational technology, educational management, and psychology. It was used by an educationalist with doctoral education and a faculty member in the university, and after editing and modifying some items, its formal and content validity was confirmed. By the method of internal homogeneity and calculation of Cronbach's alpha coefficient, reliability for the use of e-learning and its dimensions, i.e. information quality, system quality, service quality, and e-satisfaction are respectively equal to 0.89, 0.86, 0.86, and 0.85. It was 0.83, which showed that the questionnaire has high and favorable reliability.

Job motivation questionnaire: A researcher-made questionnaire was used to check job motivation. This questionnaire has 68 questions, which have 10 components including leadership, work environment, recruitment, human resources systems, personality traits, job meaningfulness, perception of organizational justice, organizational capital, psychological capital, and organizational commitment. The questions of this questionnaire were designed on a 5-point Likert scale. The validity of this questionnaire was done by examining experts' opinions. Also, the reliability of the questionnaire was determined to be 0.81 after the investigations.

Mental Health Questionnaire: A (general) mental health questionnaire was used to check mental health. The general health questionnaire was created by Goldberg in 1972 and has 28 items and 4 subscales: subscale of physical symptoms (1-7), anxiety and insomnia (8-14), and insufficient action. Social anxiety (15-21) and depression (22-28). In Chan et al.'s (1983) study, they used the Minnesota Multifaceted Questionnaire to check concurrent validity and found a correlation coefficient of 0.54. Kalman and colleagues (1983) implemented two general health questionnaires and the Beck hopelessness scale and reported a concurrent validity coefficient of 0.69. Internal consistency was reported by Cronbach's alpha method in the study of Chan (1985) and Keyes (1984), 0.93. In the present research, the reliability of this questionnaire was determined to be 0.87.

To analyze the data of the present research, the method of structural equations was used. All data analysis process of this research was done in SPSS and PLs software.

Findings

In order to investigate the relationship between research variables, the structural equation method was used. As the results of the research in Table No. 1 showed, e-learning has an effect on the mental health of 0.764. According to the value of t which is 14.751 and this value is higher than 1.96, it was found that electronic education has a significant effect on mental health. The results of the research showed that e-learning has a 0.859 effect on job motivation. According to the t rate which is 25.530 and this rate is higher than 1.96, it was determined that e-learning has a significant effect on job motivation. Table number 2 shows the fit index of the model.

Table 1: Information about the research model

Effect of variables	Efficacy	t	Significant level
E-learning on mental health	0.764	14.751	0.001
E-learning on career motivation	0.859	25.530	0.001

The results related to the research fit indicators in Table No. 2 showed that all the research model fit indicators are in a good condition, which indicates the appropriateness of the research model fit.

Table 2: The fit indices of the research model

Fit indicators	E-learning	Mental health	Job motivation
Cronbach's alpha	0.78	0.82	0.86
Composite reliability	0.83	0.86	0.89
Extracted average variance	0.61	0.51	0.55
The coefficient of determination	-	0.58	0.73
Gof	-	0.54	0.63

Discusses

The importance of e-learning as a concern has always been considered. One of the most important goals of any organization is to increase its productivity and high performance so that maintaining employees and productivity levels of the existing workforce have become a basic concern of human resources management. The issue of e-learning is one of the most important issues that plague the human resources of organizations, because in many organizations today, the level of enthusiasm of employees towards their jobs is low [1]. Career motivation capacities have caused their capacities to be used in various fields. The results of this research showed that e-learning has a significant role in improving mental health. In such a way the improvement of electronic education can provide a serious basis for increasing the level of mental health. Fukui and colleagues (2020) determined that mental health is an internal issue and job issues cannot seriously affect its level [2]. With this in mind, it can be stated that the results of the current research are inconsistent with the research results. It seems that the difference between the environment investigated in the current research and the research of Fukui and colleagues (2020) caused this disparity. The functions of e-learning on mental health were mentioned in various research such as Severin et al. (2021) [4] and Sundram et al. (2018) [7]. This is in line with the research results of Severin and colleagues (2021) [4] and Sundram and colleagues (2018) [7]. In the interpretation of this issue, it is necessary to mention that the capacity building of e-learning in the mental and behavioral fields has caused e-learning to play an important role in the process of improving the mental health of employees. Mental health in the work environment governs all aspects of a person's life. The positive or negative effects that a person receives during working hours affect all personal and social aspects such as personal mental states, self-confidence, life expectancy, social relationships, and family relationships [11]. One of the most important elements of achieving mental health in the workplace is the approved laws and government strategies and policies. A healthy and dynamic workplace can continue to work by supporting and maintaining the health, safety, and well-being of all employees and managers with increased productivity. Understanding the opportunities and needs of employees, knowledge of support resources, support of employees, transfer of sense of control and participation, training programs, and development of employees' skills are among the most important factors in increasing health in the workplace. Therefore, taking advantage of the capacities of job enthusiasm in the field of organizations can improve the performance of organizations in the field of mental health and

personality issues [6]. In general, improving mental health as a concern has always been considered. Improving mental health can create positive effects. Today, mental health is defined as a sense of satisfaction and psychological improvement, and adequate social adaptation to the standards accepted by each society. A healthy work environment can be closely related to the mental health of employees. Mental health and paying attention to it in all areas of life, including personal, social, and professional life, is of great importance, and neglecting it can lead to the reduction of efficiency, the loss of human resources, and the creation of physical and mental complications. Undoubtedly, electronic education has favorable functions in people's attitudes and behaviors, and this issue has caused this variable to have favorable capacities in the career fields. Considering that mental health is the result of a set of attitudes and mental and psychological conditions of people, e-learning through its functions can provide a suitable platform for its improvement among employees [7].

The results of the present research showed that e-learning has a significant role in job motivation. In such a way the improvement of electronic education can provide a serious basis for improving the state of job motivation. Trépanier and colleagues (2020) pointed out in their research that e-learning affects job motivation [8]. With this in mind, it can be stated that the results of the present research are in line with the results of Trépanier et al. (2020) [8]. In the interpretation of this issue, it is necessary to mention that job motivation can have a deep influence on people's behaviors and attitudes. On the other hand, this variable can have an effective effect on their job motivation by involving the inner nature of people. Undoubtedly, e-learning can be effective in improving job motivation by involving people's attitudes and behaviors [2]. On the other hand, the capacities of e-learning in individual attitudes and behaviors have caused

this variable to play an important role in the job motivation of employees. It seems that e-learning, by influencing individual behaviors, can lead to favorable capacity building in the job fields and ultimately bring the job motivation of the employees under the radius. This issue has caused electronic education to be of great importance in improving and expanding mental health as well as job motivation of employees due to its capacities and functions [9].

Conclusion

The results confirm the role of e-learning on the mental health and job motivation of employees. Therefore, due to its capabilities, electronic education can play an important role and influence the process of formation and development of mental health, as well as improving the job motivation of employees.

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