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Investigating the relationship between e-learning and mobile learning on students' academic self-handicapping during the outbreak of COVID-19

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Abstract
Purpose: The aim of this study was to investigate the relationship between virtual education and mobile learning on students' academic self-handicapping during the outbreak of COVID19.
Research Methodology: The present study is a descriptive study of correlation type. The statistical population includes all primary school students in Zabol city. Using Cochran's formula and Morgan's table and cluster random sampling method, 277 people were selected as the research sample. Data were collected using the Jones & Rudwalt (1982) Academic Self-handicapping Scale Questionnaire, Mobile Learning Ability Questionnaire, and Virtual Learning Questionnaire**.**
Results: The results of statistical analysis indicate that there is a positive and significant relationship between students' academic disability and virtual education. The intensity of this relationship is very strong and virtual education has the power to predict academic self-handicapping($P \leq 0.05$). Besides that, there is no significant relationship between students' academic disability and mobile learning.
Conclusion: Therefore, we conclude that students who are more prone to academic disability are less likely to participate in the classroom.
Limitations: One of the most important limitations of the present study is that due to the timing of the conference, researchers did not have enough time to conduct follow-up tests to sustain the impact of brain teasers.
Keywords: Academic disability, Mobile-learning, Outbreak of COVID-19, Students, Virtual education
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1. Introduction

In today's world, the mass media have played a major role in the development of human culture and civilization through the transmission of new information and the exchange of public opinion, so many scientists have called the present era the age of communication. Information and communication technology includes a set of hardware, software, and thought software that makes it possible to circulate and use information. With the advent of new phenomena in information technology and their impact on lifestyles, the process of education, which is one of the fundamental pillars of human societies, has evolved, to the extent that there are vast communication networks including the internet, tools, and advanced training facilities have made it possible for a wide range of science and

knowledge seekers in different parts of the world and from a distance to be covered by the distance learning network and be trained in different ways from traditional and common methods (Chipps, Brysiewicz, Mars, 2012). At present, various tools have been provided for the implementation of virtual education, including web conferencing, virtual classroom software, online teaching using social networking facilities, and other tools that provide the necessary platform for the implementation of virtual education. Virtual education in order to develop and improve the quality of various educations through the possibility of access to the whole society has made education continuous, dynamic, and inseparable from social life. With the slogan of equal opportunities for the community has been able to achieve great success. In terms of the diversity of programs and video coverage throughout the country, it is a mission is to emphasize the increase of scientific ability and level of public awareness for the cultural, scientific, religious, social, and economic development of the country.

The use of the virtual education network is required both in the framework of the formal and non-formal education system. In formal education, it should be able to play the role of direct education in some situations (inclusive education programs) and in other conditions, it should play the role of supplementary education. Hence, the education network can be effective in education in different ways (Dastour, 2012). Distance learning is a response to the needs of today's complex and changing world. Education as one of the important institutions of society is not far from the effects of changes and consequently new social issues and should be associated with these changes and developments as a fundamental institution and provide a way based on the needs of today's human beings and new methods. To educate people in the community in times of crisis. The closure of schools for various reasons, including political crises, infectious diseases, and weather conditions, are among the problems that have caused concern among officials, teachers, and students' parents. Education has no choice but to solve this problem and concerns with the help of other sectors. COVID-19 is one of the problems that has recently become a problem in many countries, including Iran, and has led to the closure of schools. Because of the limitations of social contact dealing with COVID-19 virus is important because the disease is reduced by reducing contact and increasing distance with patients (Chen, Yang, Yang, Wang, & Bärnighausen, 2020).

Therefore, in response to the COVID-19 epidemic, the World Health Organization has strongly emphasized the need to stop the activities of companies and unnecessary commercial, economic, social, and educational organizations (Guangmingnet, 2020). In China, schools and other educational institutions across the country have suspended their face-to-face training courses, postponed the start of the spring semester of 2020, and conducted teaching activities using information and communication technology in accordance with the needs of education (Zhou, Wu, Zhou, & Li, 2007). The use of mobile phones in learning is important for teachers because it allows them to access learning materials in all situations. Mobile learning allows teachers and students to engage in a specific environment of discussion and interaction on a topic that expands their horizons. Thus, the biggest change that new technologies have brought about is the increasing willingness of teachers and students to participate. In today's society, the value and efficiency of traditional education have almost decreased and new methods of education have replaced the old methods with the use of new technologies and technologies. Mobile technology is one of the newest methods of learning that has entered the field of education. Following the advent of these technologies, teachers are also looking for new ways to teach.

Mobile learning is in fact a type of learning that leads to the realization of universal and accessible education for all learners. This type of learning is actually a model of e-learning that is used through mobile technologies such as mobile phones, Pocket PCs, and hand tools (Eliasson, 2013). Due to the increasing progress of societies and schools, the use of traditional methods is declining and new methods of education are being added day by day. One of the goals of education at this time is to increase the quality of learning that new teachings give teachers the opportunity to use new technologies to increase the scientific quality of students' learning. As a representative of change, teachers are the mediator between inclusive and technology and play a vital role in teaching and learning, so it is essential to be aware of new technologies in order to play their role well. Obviously,

the role of the teacher in the application of technology in schools is important and any effort made for educational transformation should take into account the knowledge, skills, and attitudes of teachers (Anarinejad & Mohammadi, 2014). The integration of mobile technology in teacher education and learner learning is expected to have a positive impact on the performance and experience of learners and educators (Manian & Sohrabi, & Mortazavi, 2014). Using this type of learning is considered important for teachers because students focus critically on the material and this also leads them to apply what they have learned in school in their real-life environment and thus teaching. And cultivation achieves its main goal, which is to transform theory. Learning in the 21st Century everywhere with the use of computers and technology is progressing and influencing the lives of young people, which makes it an important part of education. Students' daily use of technology is also influenced by education. The popularity of mobile devices in recent years has led the education industry to find a way to use them as an educational tool to achieve individual learning at any time and place. Factors influencing the adoption of any new technology are the first step in its implementation (Manian & et al, 2014).

Technology changes thinking, corrects mistakes, and summarizes facts for information management, and participatory work. Technology enables activities by which students are able to demonstrate their knowledge, understanding, and ability by emphasizing the learning process. Information technology is a paradigm that has played a fundamental and sustainable role in the change in education. This paradigm is used to determine the methods of doing educational work in repetitive and progressive ways. Unmotivated or lacking in motivation also refers to people who have no motivation, internal satisfaction, and value or external incentives, they do not receive for their activities and therefore avoid doing them. The harsh teaching conditions of COVID-19 discouraged students from learning. Newman believes that the rapid growth of technology has motivated schools to adapt to it. Technology can transform teaching conditions from teacher-centered to student-centered and encourage exploratory learning (Sheibanifar, 2021). Education and academic success are one of the ways that a person can prove his intelligence, talent, ability, and interests and show people in the community that he can be successful. Success in education requires a lot of effort because with the development of societies, more competition in the field of education has become dominant. Academic competition leads to collective criteria that are beyond one's ability, so one does everything to have a reason for failure. One of the common behaviors that occur in these situations is academic disability itself. Self-disabling is a defensive strategy in which the individual creates barriers before the operation to process his or her credentials after the operation of the device (Uysal & Lu, 2010)

One of the most common psychological problems among students today is self-disability. Most researchers believe that the reason for people's self-disability is to protect themselves against the negative consequences of failure (Mearaji, 2020). Indifference is a type of emotion that includes physiological, emotional, cognitive, and marker components. At first, it seems that boredom is a fleeting emotion, but a review of research has been reported shows that it is necessary to reflect on students' motivation and the reasons for its occurrence. Academic apathy can be influenced by various factors such as learning characteristics, personality, social adjustment, teaching method, and so on. Motivation has been largely excluded from empirical and theoretical research into the contribution of emotions to world education. Motivation is common among students and is seen during learning and classroom situations (Khajeh Nouri, Akbari, & Rahimzadeh, 2020). Academic disability itself is one of the influential variables that in recent years has disrupted the learning process and the rate of academic achievement of society, especially students. Academic disability itself refers to behaviors that students usually use to protect themselves from the failure that threatens them in school (Yousefvand & Zarei, 2018).

The advancement of information and communication technology has affected all aspects of human life and has introduced new methods to human beings in various fields. In addition, the speed of change and development of information technology is such that societies are trying to adapt to these changes in the shortest possible time. Considering that the most important pillar of any society is its educational system, education must also proceed in line with these changes, and in order to keep pace with it, tools appropriate to this staggering speed are needed. In this regard, mobile learning has been

considered as a new stage in the development of e-learning. The extensive capabilities of mobile tools and the possibility of learning conditions, regardless of time and place, have made it an important tool in learning (Rezaei Rad & Naseri, 2020). Different statistics in Iran indicate that in the future we will have a significant growth in the convergence of mobile phones and the Internet. Therefore, due to the significant effects of developments in the field of information and communication technology on various aspects of human life, including the education and learning system, in addition to providing a suitable platform and development of communication and technology infrastructure by the government, the need to satisfy learners and teachers. And even make them enthusiastic about the quality of services (Babaei, 2012). The level of access to educational facilities, information resources, and communication methods, like many other social and economic factors in urban and rural areas of developing countries, are significantly different from each other. New technologies, including mobile technology with their unique features and high flexibility, seeks to eliminate the existing gap. Education has experienced significant growth in the last 50 years and now has a unique opportunity to create effective learning using mobile tools (Manian & et al, 2014). According to many researchers, the use of mobile learning provides new opportunities in the traditional classroom and lifelong learning, which takes place outside the school. Change and transformation in thoughts is one of the educational requirements and is a key factor for educational change (Anarinejad & Mohammadi, 2014).

One of the most important issues in the education of any country is to pay attention to the reasons for academic failure. Every year, a large number of students fail for various reasons. This failure has negative consequences and failure in the future, resulting in reduced student motivation and causing them to see themselves as helpless, and in addition to creating a feeling of helplessness and weakness in many cases, it extends unsuccessful experiences to other life situations. Given the issues raised, it appears that the prevalence of COVID-19 and the closure of schools, as well as the virtualization of classrooms and the reduction of students' social relationships have led to apathy and academic disability in students, so research in this field seems necessary. One of the goals of education is to acquire the necessary knowledge and skills to train motivated and capable students. These systems are trying to make the best use of their resources to prepare people for employment. Therefore, the education and training of students are very important. With the outbreak of COVID-19 virus, e-learning has received more attention than before and in our country, in order to improve the quality of education, new learning methods have been implemented. It should be considered that the introduction of strengths and weaknesses of the e-learning system in the drawer that can provide valuable information for managers and officials of the education system and psychologists and researchers to adopt principled policies and use strategies and strategies Appropriate steps should be taken to improve the quality of some relatively desirable aspects and to remove the obstacles and problems of e-learning. Therefore, considering the role of e-learning and mobile learning on students' academic self-handicapping during COVID-19 outbreak, it seems necessary. arrives. The results of the present study help teachers and psychologists to use new educational tools before using them, Familiarize themselves with the impact of these tools on the psyche of students. It also helps to provide the necessary grounds for the successful implementation of these approaches in the classroom and other educational institutions with respect to the influential factors.

2. Literature review and hypothesis development

There have been few studies on the research variables inside and outside the country, some of which have even examined only one of our research variables, however, some of them are mentioned below: Findings of Askari, Mirani Sargazi, & Fakhimpour (2020), show that both parents and teachers evaluate the additional training provided by the education network called the TV school and believe that the training provided during the COVID crisis 19. School closures can be desirable and compensate for many of the students' academic and educational backwardness. As mentioned in the research findings section, parents and teachers believe that TV school curricula are readily available and are tailored to the subject of the textbook. In fact, they believe that television school education was a smart move during the COVID-19 crisis.

The result of Karami & Lorestani (2021) showed that parenting style and self-disability are able to describe the correlation between the defined components, Therefore, by strengthening the educational strategies of the family along with paying attention to the strategies of parenting styles, the improvement of educational activities can be increased.

The result of Sheibanifar (2021) showed that mobile learning that has been done through new technologies has a significant effect on the formation of motivation and can reduce student apathy from school.

The result of Bahramsari & Naeni (2020) showed that there is a negative and significant relationship between self-disability and unstable self-esteem and fear of negative evaluation with students' academic achievement. That is, changes in self-disability and self-esteem and fear of negative evaluation decrease with students' academic progress in the opposite direction.

The result of Bahrami & Amiri (2020) showed that the model has a good fit with the data of the present study and perception of the learning environment has a direct and significant effect on academic self-handicapping (-0.15), academic procrastination (-0.25).) And had academic optimism (0.40) and the direct effect of procrastination on academic self-handicapping (0.20) was significant. In addition, perception of the learning environment had an indirect and significant effect on self-disability (-0.07) only at the level of 0.01 through academic procrastination. Therefore, by creating a positive atmosphere of the learning environment, students' perceptions of it can be improved and their tendency to academic procrastination and the use of self-disabling strategies can be reduced and make them optimistic about their studies.

The result of Khodadadi Sangdeh, Rezaei Ahvanavi, & Rasouli Taher (2020) showed that there is a significant relationship between information identity style, confusion, and academic self-handicapping. There was also an inverse relationship between identity commitment and academic self-handicapping. But there is no significant relationship between normative identity style and self-disability. Another finding showed that there is a significant relationship between resilience and academic disability itself. Resilience variables and identity styles can explain and predict the disability of female adolescents. Therefore, paying attention to resilience and identity styles is important in reducing students' self-disability.

Besides that, the results of Rezaei Rad & Naseri (2020) showed that mobile learning-based education has an effect on students' self-efficacy, self-control, self-regulation, and academic performance.

The results of Shirani & Ghomsi's (2019) research have shown that students who face the problem of emotional dysfunction are unable to understand and describe their own and others' emotions and in variables such as academic disability, empathy, and scoring talents. They, themselves face problems, while it is difficult to identify emotions and distinguish between them. The tendency to self-disability should be considered in educational situations, because usually in situations where more is expected of the student, they are skeptical about the possibility of success and lack self-esteem about failure, especially in families with parents. A specific disease, that psychologists consider to be one of the most important institutions influencing the development and training of human behavior. This organization is the first and most enduring factor in the development of personality of children and adolescents in which the existence of a problem has a profound effect on children. In this study, the relationship between the components of emotional dysfunction and academic self-handicapping in students with parents with specific diseases showed that there is a significant relationship between all three components of emotional dysfunction with self-disability.

The results of Najafi, Rahmanifar, & Tanhaye Rashvanloo (2017) showed that there was a significant correlation between academic self-esteem and the dimensions of self-disability and burnout. Path analysis also showed that academic self-esteem has significant indirect effects on the dimensions of academic burnout due to the dimensions of self-disability. The model had a good fit. The findings of

the present study showed the indirect effects of academic self-esteem on academic burnout and the mediating role of self-disability dimensions in this field.

The results of Deireh, Dehghani, & Sourshajani (2016) show that predicting learning motivation by academic self-handicapping. Also, neurotic personality was not a significant predictor of learning motivation, while test anxiety and academic self-handicapping were significant predictors of learning motivation.

3. Research methodology

The present study is applied in terms of purpose and in terms of implementation method is among the descriptive correlational research that is based on determining the relationship between variables. Since the present study seeks to investigate the relationship between e-learning and mobile learning on students' academic self-handicapping during the outbreak of COVID-19, it is descriptive in nature. In this research, a survey method was used to collect data, and because the results of the research can be a guide for the use of education, teachers, and students. Therefore, based on the goal, it is included in the category of applied research. The statistical population of the present study is all male and female students of Zabol city. Out of 4 areas of this city, using a random cluster sampling method, the area behind the water was selected as the research community. In the academic year 1400, the total number of students in this area was 1000, and the sample of the research was selected from this number of people with the method that will be described in the next section. One of the things that is required in scientific research is knowing the sample size so that you can start collecting information. There are different methods of sampling and determining the sample size. Random cluster sampling is one of the most widely used sampling methods. Sample size is also a topic that should be calculated by special statistical and scientific methods because a high sample size wastes time and low sample size cause uncertainty and accuracy in the results, so the sample of the present study using Morgan table and 277 people were determined by simple random sampling method.

Data collection tools

One of the data collection tools in this research is the library method. In order to study the research literature, Latin and Persian scientific articles, books and journals, valid master's and doctoral dissertations have been used in websites and libraries, online journals and available information sources. One of the common tools in research and a direct method of data collection is a questionnaire. Therefore, another tool that was used to collect information related to the test of research hypotheses is a questionnaire that the following questionnaire was used to prepare a research sample:.

A) The Jones & Rudwalt Self Disability Scale (1982)

The Self-Disability Scale (SHS) was developed by Jones and Rodwalt to measure self-disability. The scale consists of 25 items. Questions are answered on a 6-point Likert scale from 0 to 5.

Validity and reliability of the questionnaire

The internal consistency of this scale is at an acceptable level (79% alpha). The stability of the scale was maintained by retesting during one month and also the data collected in different samples show convergent and divergent validity. In the study (Niknam & et.al, 2010), the validity of this scale was examined by researchers using the internal consistency method and Cronbach's alpha coefficient was 69%. Content validity was also confirmed by 5 experts. In this study, high and significant correlation of factors, subscales and total score of self-disability with self-esteem is the agreed validity of self-disability scale. The result was consistent with the theories and research conducted on self-disability, stating that one of the main structures associated with self-disability is self-esteem. The conclusion is that the 23-item scale of self-disability has high validity and reliability, and considering that self-disability is a strategic behavior that can negatively affect a person's success in job, education and communication, and with structures Psychology such as self-esteem, depression, anxiety, procrastination and perfectionism are also related. The self-disability scale is also used to diagnose people with disabilities in counseling, treatment, training, and research situations.

B) Mobile learning desire questionnaire

The Mobile Learning Desire Questionnaire was designed and validated by (Bohloli, 2019). This questionnaire consists of 4 answer pack items based on a five-point Likert scale. The questionnaire was validated by the researcher during the research process.

Scoring method

The spectrum used in the questionnaire is based on the spectrum of five Likert options (including: strongly agree to strongly disagree)

Reliability and validity

Estimating the reliability of the questionnaires

The reliability coefficients of the questionnaire in Bohloli (2019) research were 0.725. The questionnaire used in this study, due to being researcher-made, requires a careful review of content validity and formality. Accordingly, it was sent to the supervisor and professors of the group and the formal and content validity of the questionnaire was confirmed. Then, based on the data obtained from the pilot study, confirmatory factor analysis was performed. The results of the confirmatory factor analysis of the questionnaire are presented below.

Table 1. Results of confirmatory factor analysis of the questionnaire

Dimensions	Factor load
The first question	0.64
The second question	0.57
The third question	0.83
The fourth question	0.70

C) Virtual education questionnaire

This questionnaire was designed by VatanParast, Royani, & Ghasemi (2016) and has 20 questions and its purpose is to assess students' attitudes toward virtual education (cognitive, emotional, action orientation). Its response spectrum is of the Likert type. The above questionnaire has three dimensions and the questions related to each dimension are presented in the following table:

Table 2. Dimensions of Virtual Education Questionnaire

Dimension	Relevant questions
Interest in working in a virtual environment	5, 6, 7, 10, 12, 13, 16 and 17
Anxiety about working in a virtual environment	8, 9
The importance of virtual education	1, 2, 3, 4, 11, 14, 15, 18, 19, 20

To get points for each dimension, add the total points of the questions related to that dimension. To get the total score of the questionnaire, add the total scores of all the questions together.

Reliability and Validity

In the research of VatanParast, Royani, & Ghasemi (2016) the face and content validity of this questionnaire have been confirmed using the opinions of professors and experts. Cronbach's alpha test was used to measure its reliability and its value was 0.85.

Method of data analysis

After collecting the questionnaires, the data were analyzed using Spss25 software. First, the data were coded and then entered into SPSS software, then analyzed using descriptive and inferential statistics. In the descriptive statistics section, frequency distribution tables and percentages, means, and variance were used, and in the inferential statistics section, Pearson correlation coefficient and multiple regression analysis were used simultaneously.

4. Results and discussions

Descriptive research findings

In this section, first, the demographic characteristics of the statistical sample of the research are described, then the data obtained from the research tool (questionnaire) are described.

Table 3. Demographic characteristics of statistical samples of research by gender and educational level

Field of Study	**Girl**		Boy		total	
	Percentage	Frequency	Percentage	Frequency	Percentage	Frequency
First to third elementary	14.44	40	21.66	60	100	277
Fourth to sixth elementary	27.79	77	31.6	100		

Table. 4 Descriptive statistics related to mobile learning

N	Valid	277
	Missing	22
Mean		16.0000
Std. Deviation		2.72934

Table 5. Descriptive statistics related to virtual education

N	Valid	277
	Missing	22
Mean		64.8014
Std. Deviation		10.67607

Table 6. Descriptive statistics related to academic self-handicapping

N	Valid	276
	Missing	23
Mean		89.0435
Std. Deviation		14.64532

According to the results of the Table 4, 5, 6, the highest mean is related to the variable of academic self-handicapping (89.0435) and the lowest mean is related to the variable of mobile learning (16.0000). Then, according to the data obtained from the research tool, first, using Bartlett sample size adequacy test, the sample volume adequacy hypothesis was tested and then using Pearson correlation test and multiple linear regression, the research hypotheses were tested

Inferential research findings

In this section, according to the data obtained from the research tool, first using Bartlett and Kolmogorov-Smirnov sample adequacy tests, the hypothesis of sample adequacy and normality of research variables is investigated and then using hypotheses (Pearson correlation, multiple linear regression) hypotheses. The research has been tested and reviewed.

Table 7. Sample volume adequacy test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.530
Bartlett's Test of Sphericity	Approx. Chi-Square	19.794
	df	3
	Sig.	.000

As can be seen in Table 7, considering that the chi-square value calculated from the critical value of the table with degree of freedom 3 is significant at the level of sig = 0.000 and $p \leq 0.05$, then the results indicate the adequacy of the sample size

Investigation of research hypotheses

Hypothesis 1: There is a significant relationship between virtual education and students' academic self-handicapping during the outbreak of COVID-19.

Table 8. Correlation coefficient between virtual education and academic self-handicapping

		academic self-handicapping	virtual education
academic self-handicapping	Pearson Correlation	1	.232**
	Sig. (2-tailed)		.000
	N	276	276
virtual education	Pearson Correlation	.232**	1
	Sig. (2-tailed)	.000	
	N	276	277

**. Correlation is significant at the 0.01 level (2-tailed).

As you can see, the correlation matrix for these two variables is presented in Table 8. According to the above figure, the correlation (r) between the two variables of students' academic disability and virtual education is equal to 0.232, which is also statistically significant (P = 0.000). So there is a positive and significant relationship between students' academic disability and virtual education. The intensity of this relationship is very strong.

Table 9. Multiple linear regression analysis coefficients between virtual education and academic self-handicapping.

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	68.425	5.289		12.938	.000
	virtual education	.318	.081	.232	3.951	.000

In Table 9, the coefficients of the multiple linear regression model are given to examine the significance of the effect of each of the predictor variables (virtual education) on the criterion variable (academic self-handicapping). Considering the significant levels obtained, it is concluded that virtual education has the power to predict academic disability ($P \leq 0.05$).

Hypothesis 2: There is a significant relationship between mobile learning and students' academic self-handicapping during the outbreak of COVID-19.

Table 10. Correlation coefficient between mobile learning and academic self-handicapping.

		mobile learning	academic self-handicapping
mobile learning	Pearson Correlation	1	.082
	Sig. (2-tailed)		.176
	N	277	276
academic self-handicapping	Pearson Correlation	.082	1
	Sig. (2-tailed)	.176	
	N	276	276

According to Table 10, as you can see, the correlation matrix for these two variables of academic disability and mobile learning is presented. According to the above figure, the value of r correlation between these two variables is equal to 0.082, which is not statistically significant (sig = 0.176). Therefore, we conclude that there is no significant relationship between students' academic disability and mobile learning, the intensity of this relationship is very strong.

Table 11. Multiple linear regression analysis coefficients between mobile learning and academic self-handicapping

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	82.044	5.237		15.666	.000
	mobile learning	.438	.323	.082	1.356	.176

In Table 11, the coefficients of the multiple linear regression model are presented to examine the significance of the effect of each of the predictor variables (mobile learning) on the criterion variable (academic self-handicapping). Considering the obtained significant levels, it is concluded that mobile learning does not have the power to predict academic disability itself (P >0.05).

5. Conclusion

The aim of this study was to investigate the relationship between virtual education and mobile learning on students' academic self-handicapping during the outbreak of COVID-19. The results of data analysis showed that there is a positive and significant relationship between students' academic disability and virtual education. The intensity of this relationship is very strong and virtual education has the power to predict academic disability itself ($p \leq 0.05$). Also, there is no significant relationship between students' academic disability and mobile learning, the intensity of this relationship is very strong and mobile learning does not have the power to predict academic disability itself (P >0.05). Perception of the learning environment has a positive and significant effect on academic optimism. Also, the relationship between academic optimism and academic self-handicapping is negative and significant, and the relationship between academic procrastination and academic self-handicapping is positive and significant. Self-disability is a strategy that the student uses to justify his or her failure in order to maintain his or her value (Bahrami & Amiri, 2020). When students realize that the teacher cares about the class and their learning, their tendency to procrastinate decreases. Learners also work in classrooms that are structured in such a way that teachers emphasize learning and comprehension of the curriculum and are constantly tested on the curriculum; Put aside excuses and procrastination

and try to learn (Salmani, Khamsan, & Asadi Younesi, 2016) Therefore, if we increase optimistic beliefs in learners, the level of self disability in them decreases (Dampur & et.al, 2018).

The findings of the present study are related to the research from Bahramsari & Naeni (2020), Shirani & Ghomsi (2019), Sheibanifar (2021), Askari et al (2020), Najafi et al (2017), Bahrami & Amiri, 2020, Karami & Lorestani (2021), Khodadadi Sangdeh et al (2020), Rezaei Rad & Naseri (2013), Deireh et. al (2016) have a correlation relationship. Therefore, in explaining the above findings, it can be said that students who are more prone to academic disability are therefore less inclined to participate in the classroom, so these students are interested in having fun outside the classroom. They bring and as a result, they face a severe academic decline. In general, many students resort to academic disability to avoid blaming others. In order to create an attractive teaching-learning environment, it is necessary to provide purposeful curricula that are appropriate to the academic needs of the students and attractive, and the classroom atmosphere leads to the relaxation of students. Learning requires quality education and away from compulsion. The outbreak of COVID-19 virus has brought about change in all areas of social life, shifting education to virtual education. Academic disability itself occurs when the gap between one's potential and actual talents widens, which is one of the major negative consequences of COVID-19 outbreaks and cyberspace-style education. Lack of face-to-face communication between teacher and student, illiteracy of some parents and their inability to guide their children's education and solve their academic problems, the busyness of some parents due to economic and livelihood losses due to the outbreak of COVID-19 virus, students' inattention to education Students 'entertainment in the virtual world and the reduction of school hours in cyberspace, their long separation at home and not doing homework and not trying to solve academic problems can be named as the main reasons for students' academic disability. Virtual teaching methods have made parents, especially those who are employed, unable to adequately care for and accompany the student due to the pressures of work and daily life and the problems of life, and are unable to control their children. The sentence itself led to students' academic disability. Therefore, it is suggested that teachers and educators in the school provide a constructive environment for students, for example, to help enhance students' abilities by creating an interactive, diverse and challenging atmosphere, and by providing engaging activities. Among the limitations of the research is the absence of sufficient scientific content around the research variables, the lack of cooperation of some schools in the implementation of the questionnaire, and the limitation in the generalizability of the results of this research.

References

Anarinejad, A., Mohammadi, M. (2014), Practical indicators of e-learning evaluation in Iranian higher education. *University Journal of E-learning (Media)*, (1) 16, 1-10.

Askari, M., Mirani Sargazi, N., Fakhimpour, M. (2020). A Study of the Performance of the School of Television Education Network during School Holidays Due to Covid's Disease from the Perspective of Parents and Primary Teachers, *Sixth National Conference on Humanities and Management Studies*.

Babaei, M. (2012). *Evaluation of Mobile Learning Admission in Iranian Universities*. Master Thesis. Shiraz University, Faculty of Engineering.

Bahrami, F, Amiri, M. (2020). The role of quality of educational environment in academic self handicapping through mediation of academic procrastination and academic optimism. *Journal of Educational Psychology Studies*, 17 (39), 52-23.

Bahramsari, S., Naeini, M. (2020), The study of the relationship between self-disability and unstable self-esteem and fear of negative evaluation with students' academic achievement, *The second scientific conference on psychology, counseling, educational sciences and social sciences and humanities*.

Bohloli, M. (2019). *The study of the desire of students and graduates of Master of Educational Technology in the use of mobile education*. Master Thesis of Educational Technology, Islamic Azad University, Shiraz Branch.

Chen, S., Yang, J., Yang, W., Wang, C., Bärnighausen, T. (2020). COVID-19 control in China during mass population movements at New Year. *The Lancet*, 395(10226), 764-766.

Chipps, J., Brysiewicz, P., Mars, M. (2012). A systematic review of the effectiveness of videoconference-based tele - education for medical and nursing education. *Worldviews on Evidence-Based Nursing*, 9(2), 78-87.

Dastour, M. (2012). Evaluation of the effectiveness of educational programs of Sima Education Network on the audience (A case study of Payame Noor University students). *Radio and Television Quarterly*, 8 (19). 142_166.

Dampur, A, S., Yusufvand, M., & Rajabi, H. (2018). The role of academic optimism and metacognitive beliefs in predicting academic self handicapping. *Journal of Psychological Studies Educational*, (208) 3, 1-10.

Deireh, A., Dehghani, Y., & Sourshajani, N, K. (2016), A study of the relationship between academic self handicapping, neurotic personality traits and test anxiety on learning motivation of high school students in Karaj, *First International Conference on Psychology and Social Sciences, Tehran*.

Eliasson,J.(2013). Tools for Designing Mobile Interaction with the Physical Environment in Outdoor Lessons, *International Journal of Handheld Computing Research*, 3(2),26-43.

Guangmingnet. (2020) Economic impact of new coronary pneumonia and policy suggestions. Https://theory.gmw.cn/2020- 02/10/content_33541497.htm,02-10/2020- 03-11.

Jones E E, & Rhodewalt F. (1982).The self – handicapping scale. UK: Princeton University.

Karami, J., Lorestani, S., (2021), The relationship between academic self handicapping and parenting style in students of Kermanshah, *Fifth International Congress of Psychic Sciences and Education, Tehran*.

Khajeh Nouri, A., Akbari, S., Rahimzadeh, M., (2020), The relationship between academic optimism and achievement motivation with responsibility, *Sixth International Conference on School Psychology, Tehran*.

Khodadadi Sangdeh, J, Rezaei Ahvanavi, M, Rasouli Taher, N. (2020). Predicting academic self handicapping based on resilience and identity styles. *School Psychology*, 9 (3), 68-82.

Manian, A., Sohrabi, B., Mortazavi, A. (2014). Investigating the effective factors on the acceptance of mobile learning, *Journal of Scientific-Research Executive Management*, (12) 6, 131 - 154.

Mearaji, M., (2020), Predicting academic self handicapping based on fear of negative evaluation and metacognitive beliefs with respect to the mediating role of cognitive emotion regulation, *7th International Conference on Psychology, Educational Sciences and Lifestyle*.

Najafi, A, Rahmanifar, J, Tanhaye Rashvanloo, F, (2017). Academic self-esteem, self-disability and academic burnout in students, *Sixth Congress of the Iranian Psychological Association, Tehran*.

Niknam, M., Hosseinian, S. Yazdi, S.M., (2010). The Relationship between Perfectionist Beliefs and Self-Empowering Behaviors in Students of Behavioral Sciences Center, (2) 7, 10-1.

Rezaei Rad, M, Naseri, A. (2020). The effect of mobile learning-based education on students' self-efficacy, self-control, self-regulation and academic performance. *Journal of Information and Communication Technology in Educational Sciences*, 10 (3 (39 consecutive)), 125-144.

Rezaei Rad, M. (2013). Identifying and prioritizing the effective factors in applying mobile learning in higher education, *Journal of Modern Educational Approaches, University of Isfahan*, (2) 8, 112-93.

Sheibanifar, R. (2021). Teaching mobile learning and its effect on coronary apathy (how I got Saman interested in learning). *Educational Research*, 7 (26), 74-84.

Salmani, M., Khamesan, A., Asadi Younesi, M.R., (2017). The mediating role of motivational beliefs in the perception of classroom atmosphere and students' procrastination. *Quarterly, Educational Psychology*, (49) 19, 117-193.

Shirani, Z., & Ghomshi, A. (2019), The relationship between emotional dysphoria components and academic self handicapping in students with parents with special diseases, *Fifth National Conference on Humanities and Psychological Studies, Tehran*.

Uysal, A., Lu, Q. (2010). Self-handicapping and pain catastrophizing. *Personality and Individual Differences*, 49, 502-505.

Vatanparast, M, Royani, Z, Ghasemi, H, (2016), A Survey of Nursing Students' Attitudes Towards Virtual Education in 2009, *Journal of Nursing Education*, Volume 5, Number 1, April and May 1995, 53-61.

Yousefvand, M., Zarei, P., (2018), Predicting Students' Academic Disability Based on Anxiety Coping Styles, *12th National Congress of Pioneers of Progress, Tehran*.
Zhou, L., Wu, S., Zhou, M., & Li, F. (2020). 'School's Out, But Class' On', The Largest Online Education in the World Today: Taking China's Practical Exploration During The COVID-19 Epidemic Prevention and Control As an Example.