

## EXPLORING THE INFLUENCE OF VIRTUAL LEARNING ON EMPLOYABILITY SKILLS-ISSUES AND SOLUTIONS

**Dr Muragesh Y Pattanshetti**

Associate Professor, Department of Management & Research Centre, BLDEA's A S Patil College of Commerce (Autonomous), Vijayapur, Karnataka, India

**Mr Gangadhar S Mamadapur**

Assistant Professor, Department of Management & Research Centre, BLDEA's A S Patil College of Commerce (Autonomous), Vijayapur, Karnataka, India

**Dr Chidanand G Byahatti**

Associate Professor, Department of Management & Research Centre, BLDEA's A S Patil College of Commerce (Autonomous), Vijayapur, Karnataka, India

**Mr Mahantesh P Kanamadi**

Assistant Professor, Department of Management & Research Centre, BLDEA's A S Patil College of Commerce (Autonomous), Vijayapur, Karnataka, India

**Mr Ravi S Chavan**

Assistant Professor, Department of Management & Research Centre, BLDEA's A S Patil College of Commerce (Autonomous), Vijayapur, Karnataka, India

### ABSTRACT:

The expansion of digitalization, the virtual learning centers offering online degree & diploma courses to students that has ensured the continued importance of virtual learning in the classroom and as a self-study-based platform for developing skills. The purpose of this study is to highlight the most important aspects of e-learning that contribute to the acquisition of marketable competencies. Multiple regression analysis was carried out in stages. First-of-its-kind research was conducted. The study included data from 475 pupils in the Vijayapur, Karnataka. In order to ensure that the sample size was sufficient, the researchers used the KMO Bartlett test. According to the findings, the ease with which students may acquire functional and job-specific knowledge through online learning is more important than any other factor when it comes to preparing graduates for the workforce. Teachers should keep the aforementioned things in mind as they design virtual learning activities and modules to help their students acquire job-specific abilities.

**Keywords:** Virtual Learning, E-Learning, Technology, Students

### INTRODUCTION

India's current educational system isn't equipped to handle the country's future demands. The Indian government's "Digital India" programme is designed to increase Internet use throughout the country. As a result, the education sector will be able to reach more underserved students, and those students will benefit from increased access to high-

quality training that will allow them to compete for open positions in the modern economy. According to the previous report, between 2013 and 2018, the Indian e-learning industry is projected to expand at a CAGR of 17.4 percent, which is twice the rate of expansion seen in the rest of the world. Despite the fact that more than half of India's population is under 25 years old, the country will suffer a shortage of 250 million trained workforce members by 2022 due to its inadequate education infrastructure. The employment skills gap can be closed and training costs can be lowered for businesses with the help of E-learning in this context.

Educators using E-learning must be aware of the importance of changing students' mindsets so that they are intrinsically driven to study, The importance of employable skills must be emphasised, and they must be taught to the students. Teachers need to know how to motivate their students, share their expertise, help them grow as individuals, and prepare them for the workforce.

The meteoric ascent of online coursework for the purpose of E- education over the past 10 years has been one of the most significant innovations in the world of higher education. Despite the fact that it's useful for all students, who may have to juggle school, work, and family obligations, often find it most enticing. Despite the fact that the rise of online distance education has increased the number of opportunities for learning (Aslanian, 2001). The rate of growth of enrollment in online learning programmes has been particularly high at two-year colleges, which have a large proportion of their student bodies comprised of nontraditional students. One possible explanation for this phenomenon is that nontraditional students find it easier to participate in online educational opportunities.

Virtual learning environments (VLEs) allow students and workers (collectively referred to as students) to sit in front of a screen and perform tasks such as attending meetings, reading documents, operating machinery, accessing computers, and observing an assembly line. Biology majors can observe live reproduction of any species, and Geology majors can keep an eye on equipment during an earthquake, All the steps in making paint are simple enough that a Chemical Engineering student might grasp them and All the steps in making paint are simple enough that a Chemical Engineering student might grasp them, A sociology major taking electives in the opposite direction can create programmes to raise public awareness, and an accounting major can examine financial statements, For example, a student majoring in finance could help a company pay down its debt by selling off non-essential assets, while a student majoring in industrial relations could help the company reach an agreement with its trade union, A student majoring in marketing might put into action methods for securing a lucrative sales contract, while a student majoring in operations might institute Quality Circles in a manufacturing facility. All of these scenarios provide the learner with background knowledge necessary for effective learning. Information that is placed in a meaningful context is easier to grasp, remember, integrate, and put to use.

This paper's primary goal is to determine what influences students to adopt e-learning for the purpose of acquiring marketable skills for future employment. The results of this study may be useful to teachers as they design new lessons and refine existing ones.

### **Review of Literature**

In recent years, e-learning has become increasingly fruitful, and a wide variety of e-learning options are now available (Hylton et al., 2016 & Koohang, et al., 2014). E-learning facilitates the dissemination of knowledge and instruction on a wide range of

topics, from specific educational programmes to recreational interests (Koohang et al., 2013 & Keh et al., 2008). E-learning systems are rapidly evolving into a vital infrastructure for universities, businesses, and people of all ages interested in furthering their education (Beaudoin et al., 2015). Skills, according to Boyatzis et. al., (1991), are “the integration of talent, learning, and experience that leads to improved performance.” In order to achieve success in one's professional, recreational, and academic undertakings, one must first develop a solid foundation of skills. Growing one's knowledge and proficiency in one's chosen field is crucial at any stage of life (Fletcher, & Wolfe, 2016). According to Levy & Ramim, (2015), a significant portion of e-learning courses should be devoted to developing skills, which are essential for achieving success in any field of endeavour or in advancing one's own personal growth. Ability to find work that is suitable for one's level of education is what is meant by the term "employability" (Dearing, 1997). The knowledge, abilities, and dispositions of a person all contribute to his or her employability; how they are presented to prospective employers, where they are used, and the overall work environment are all factors (Hillage et al., 1998). Skills, knowledge, and character traits that help someone get and thrive in a job that's a good fit for them professionally and personally also contribute to their employability, which in turn benefits others in the workplace, the community, and the economy (Yorke et al, 2004).

It's not easy to pin down exactly what "employability skills" are, but the UK Commission for Employment and Skills suggests that they include things like "self-management," "problem-solving," and "people skills," as well as "functional competence." It's not easy to pin down exactly what "employability skills" are, but the UK Commission for Employment and Skills suggests that they include things like "self-management," "problem-solving," and "people skills," as well as "functional competence."

## Issues & Solutions

Higher education in India is currently in a period of change. Reaching this point indicates that the adjustments you've made are working, and that further improvements can be made. The higher education systems of all modern nations need to be reevaluated. In light of the urgent issue posed by pandemic, the question of how academic institutions and their students will respond to the widespread adoption of online learning tools remains open (Bao, 2020). Universities and colleges all across the world were pushed by the pandemic to abandon the more conventional way of teaching and learning, which consists of in-person lectures, and instead adopt the more flexible and efficient online platform. The transition gives rise to the difficulty of adapting to new information and to the exciting possibilities that technology has opened up. In contrast to the private and publicly funded institutions, which have found this transition rather straightforward, the public sector has encountered certain difficulties. Many Indian institutions have temporarily suspended on-campus classes due to the ongoing pandemic issue.

In addition, a few schools have launched pilot programmes offering online courses to city dwellers. Students and teachers alike were thrown into a loop by the abrupt shift to online education. The focus of the currently occurring online classes has shifted to the issue of learning quality education (“Crawford et al., 2020”). Many schools recently announced

that they were offering online courses, with some boasting that they had already attracted 90 percent of their target audience and built the necessary infrastructure. It has been publicly acknowledged by a number of educational institutions that the transition to a new mode of instruction is hindered by a lack of widespread internet access and effective communication channels. Institutions have tried a variety of approaches since the start of the lockdown to maintain the curriculum, including recording lessons and posting the recordings on social media or websites. For students without reliable internet, schoolwork is nearly impossible (Ary & Brune, 2011). Online or live classes are another option. For universities to be successful in reaching students through live classrooms, they need reliable high-speed internet, a suitable physical space, a software tool to contact students, and student comfort. Neither the professor's oral presentation nor the student's passive listening constitute the entirety of an online course. Neither teachers nor students have much experience with live online classes, so there is a significant learning curve to overcome. Educational technology teams also often aren't adequately prepared for or available to help with these issues (Wang et al., 2020). Both instructors and students should consider the potential benefits and drawbacks of taking courses online. Online education provides instructors with a fresh approach to the classroom, one that makes use of the latest technological tools and resources and has the potential to reach a large number of students (Appana, 2020). On the other hand, students can learn how to use a variety of online resources and methodologies, pay close attention to recorded or live dialogues with top-tier experts, watch or listen to classes many times, and study at their own pace all thanks to the convenience of online learning (Arkorful & Abaidoo, 2015). Absence of face-to-face & physical connection with students hinders free fair conversations, discussions & solutions, and mentoring; lack of online teaching experience, which requires more & more time for practise; technological difficulties may occur like high-speed internet access; and learning and the evaluation processes themselves (Arasaratnam et al., 2017; Claywell et al., 2016).

### Research Gap:

As can be seen from the foregoing literature review, most studies focus on E-awareness, learning's importance, and benefits for the learners, but very little is done to identify the factors that motivate students aged 25 and up to adopt E-learning as an efficient means for the development of job-specific skills. Educators would be wise to investigate student attitudes regarding E-learning and the elements that may shape those attitudes. The programme will be more efficient and cost-effective as a result of this. Thus, the study's goals are to investigate the many aspects of e-learning that contribute to the development of general job-readiness skills and to identify the most important feature of e-learning that aids in the cultivation of specialised job-related abilities.

### Objectives of the study:

- To identify issues that influence of virtual learning on employability skills.
- To provide solutions that influence of virtual learning on employability skills.

### Hypothesis of the study

- **H01:** There is no significant issues that influence of virtual learning on employability skills.
- **Ha1:** There is significant issues that influence of virtual learning on employability skills.
- **H02:** There is no significant solutions that influence of virtual learning on employability skills.

- **Ha2:** There is significant solutions that influence of virtual learning on employability skills.

### Research Methodology:

This investigation combines elements of an exploratory and a causal study. Data from both primary and secondary sources was gathered. Publicly available resources provided the secondary data, while B-school students in the Vijayapur, Karnataka of India provided the original data. Simple random sampling was used to contact 500 respondents for this study; 486 completed forms were obtained, but only 475 were considered usable for analysis. It was thought to use a structured questionnaire with 15 questions and a 5-point Likert scale for initial data collecting. The statements in the questionnaire were designed to gauge respondents' attitudes on various aspects of using the internet for professional growth, as well as examine their reactions to questions about the dependent variable, namely, the acquisition of job-related expertise. To determine the many aspects of e-learning that affect job-readiness, an exploratory factor analysis was conducted. The description of variables under study are as follows:

S.No.	Statements understudy
1.	Distance and isolation don't have to be barriers to accessing a quality education with e-learning.
2.	Electronic learning facilitates career advancement and lifelong learning.
3.	Online education facilitates participation in obligatory societal roles.
4.	With the use of e-learning, many more people can get an education.
5.	E-learning allows for Cooperation and Interaction
6.	Group work can be accomplished with relative ease using E-learning.
7.	Learning online fosters introspection and analysis.
8.	In order to get the most of e-learning, one must first receive proper training.
9.	Distance learning, or e-learning, is useful for a wide range of industries and professions.
10.	It is possible that using e-learning in a different setting would necessitate further instruction.
11.	E-learning, or distance learning, is the dissemination of knowledge and expertise through the use of electronic means.
12.	E-learning provides a plethora of answers, boosts expertise, and improves efficiency.
13.	E-learning has been a great asset to me in terms of testing.
14.	I am able to acquire the necessary skills through online courses.

15. E-learning allows me to collaborate with others while gaining knowledge from a variety of sources, including text, images, sounds, and videos.

**Result and discussion**

**Table 1: Age Distribution**

Age	Frequency	Percentage
18-20	12	7.80%
20-22	134	26.40%
22-26	147	29.40%
26-28	123	24.60%
Above 28	59	11.80%

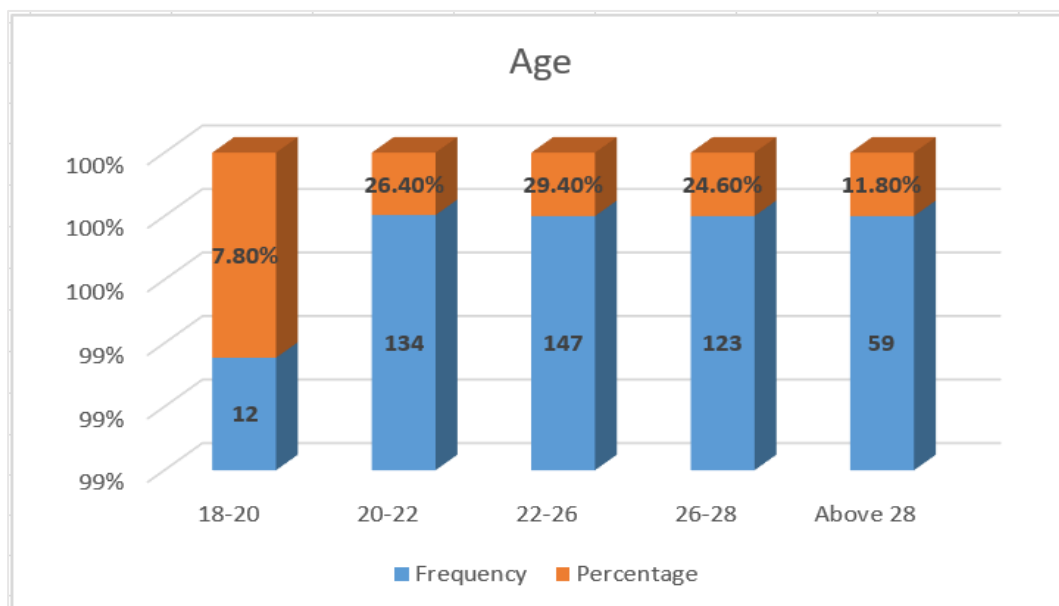


Table 1 conducted age wise distribution analysis and stated that majority of respondents were at the age of 22-26 years (n=147, 29.40%) followed by 20-22 years (n=134, 26.40%). Respondents at the age of 18-20 years (n=12, 7.80%) found to be least.

**Table 2: Gender Analysis**

Gender	Frequency	Percentage
Male	177	40.40%
Female	298	59.60%

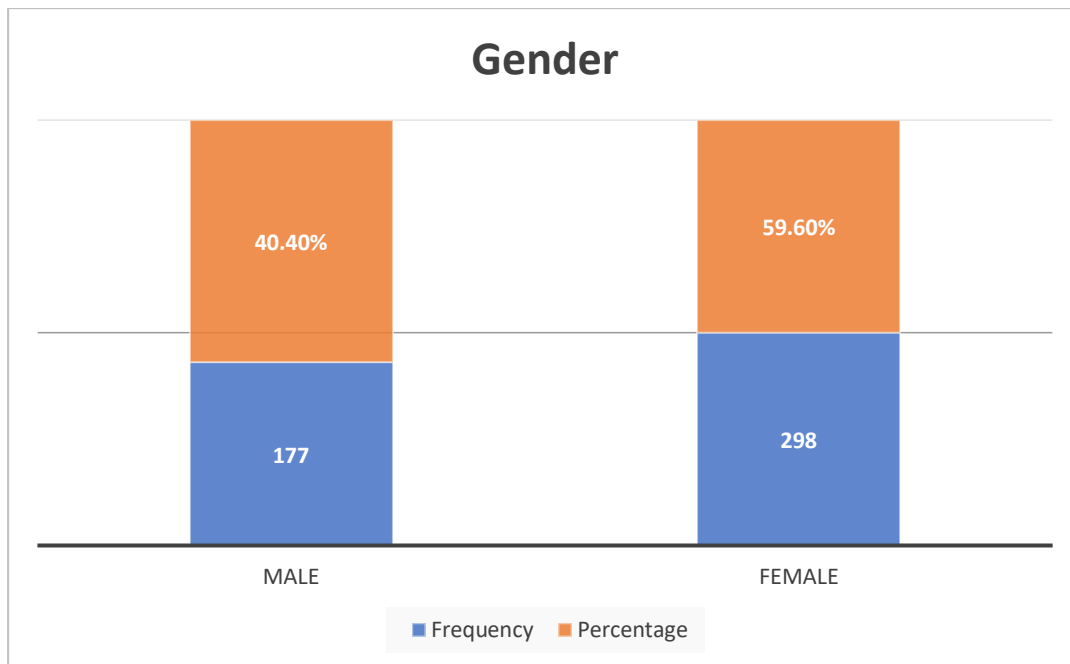


Table 2 documented the gender of respondents and stated that majority of respondents found to be female (n=298, 59.60%) followed by male (n=177, 40.40%).

**Table 3: Marital Status**

Marital Status	Frequency	Percentage
Single	162	37.40%
Married	193	38.60%
Others	120	24%

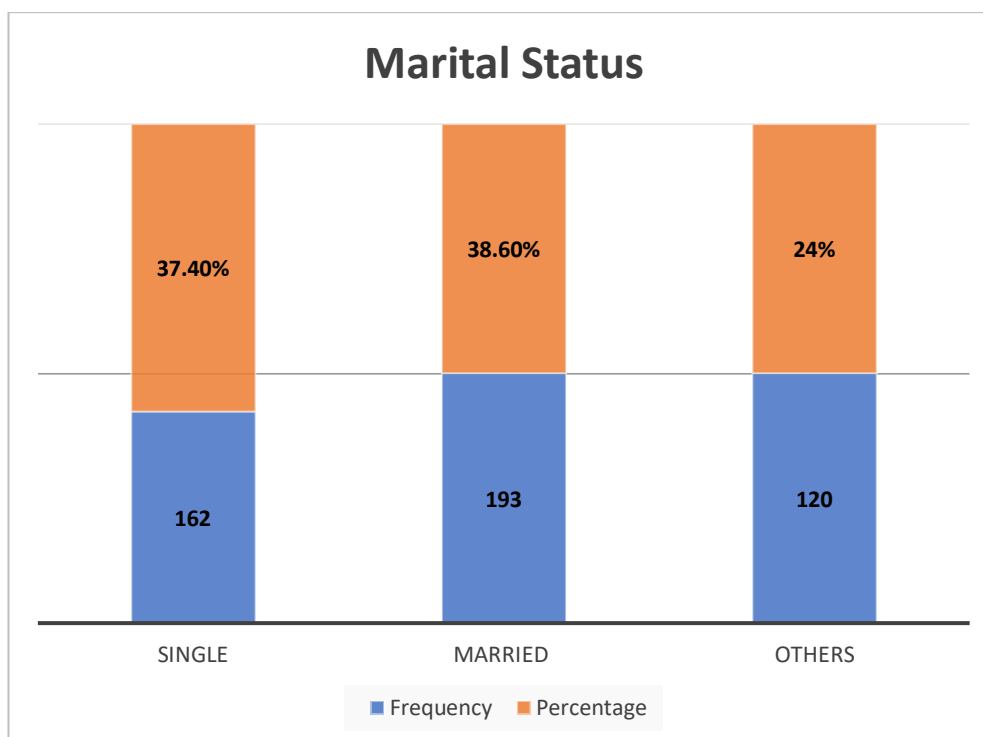


Table 3 documented the marital status of respondents and stated that majority of respondents found to be married (n=193, 38.60%) followed by Single (n=162, 37.40%). The others (n=120, 24%) found to be least in the study.

**Table 4: Educational Qualification**

Educational Qualification	Frequency	Percentage
10 <sup>th</sup>	89	22.80%
12 <sup>th</sup>	130	26.00%
Graduation	77	15.40%
PG & Higher	56	11.20%
Professional degree	123	24.60%



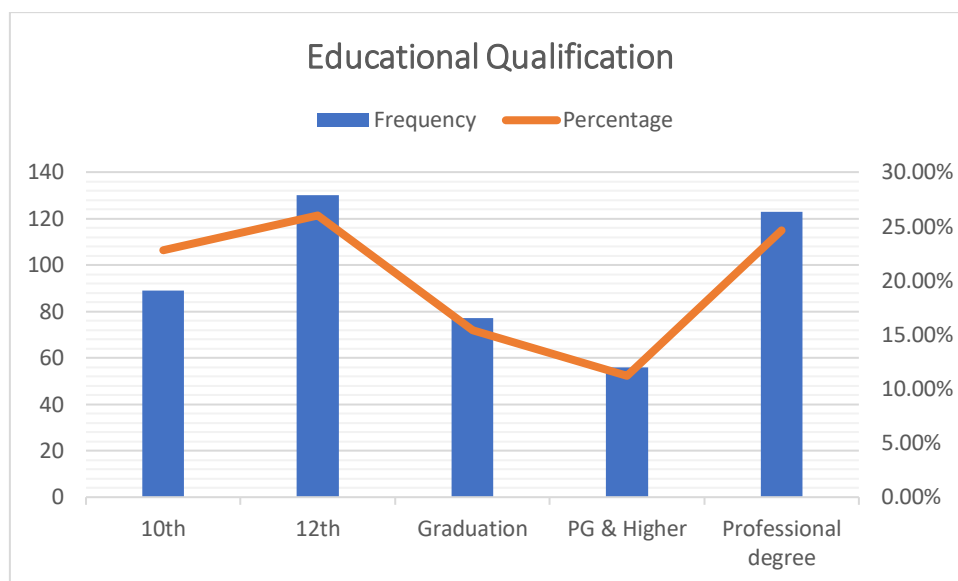


Table 4 documented the majority of respondents having educational qualification of 12<sup>th</sup> (n=130, 26%) followed by professional degree (n=123, 24.60%). PG and higher (n=56, 11.20%) found to be least qualification found among the respondents residing in Vijayapur, Karnataka.

**Table 5: Annual income of the family**

Annual income of the family	Frequency	Percentage
Up to 1,00,000	78	20.60%
1,00,001 - 2,00,000	111	22.20%
2,00,001 - 5,00,000	143	28.60%
5,00,001 – 10,00,000	73	14.60%
Above 10,00,000	70	14%

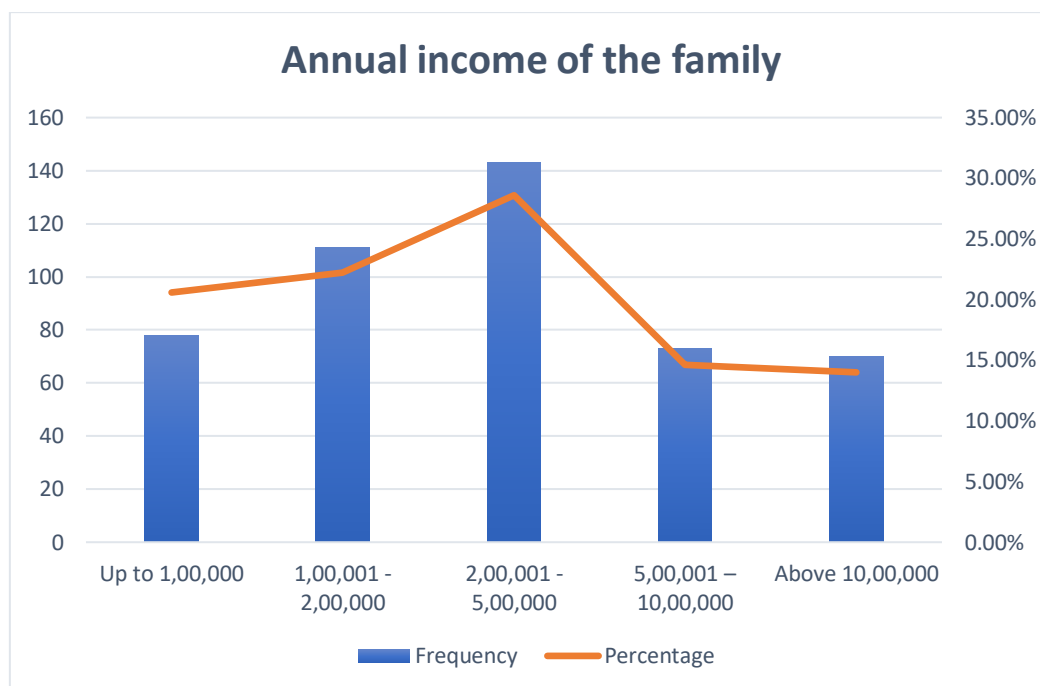


Table 5 stated the annual income of the family and found that majority of the respondent’s annual income of the family is Rs. 2,00,001 - 5,00,000 (n= 143, 28.60%) followed by Rs.1,00,001 - 2,00,000 (n=111, 22.20%). Annual income of the family found to be least in Above R. 10,00,000.

**Table 6: Reliability Test**

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items	Mean	Std. Deviation
0.877	0.864	15	87.367	17.4356

Cronbach's alpha was calculated for this collection of questions using SPSS 23, and the value was found to be 0.877, which is excellent (a value of Cronbach's alpha above 0.7). For the questionnaire's final set of 15 questions, the mean score was 87.367, with a standard deviation of 17.4356.

**Table 7: KMO and Bartlett's Test**

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.976
Bartlett's Test of Sphericity	Approx. Chi-Square	2025.712
	Df	474
	Sig.	.000

There was a survey distributed to 475 people, who scored their level of satisfaction with

various components of an e-learning programme that helped them acquire employability skills on a 5-point scale. The data was run through the Bartlett test of sphericity to determine the overall correlations between the variables and to verify the significance of the correlation matrix as a whole. The Kaiser-Mayer-Olkin (KMO) value was 0.976, which is a respectable result.

**Table 8: Factor loading matrix**

Items	Factor Loadings	% Variance Factor Explained		Alpha
Distance and isolation don't have to be barriers to accessing a quality education with e-learning.	0.772	62.716		0.909
Electronic learning facilitates career advancement and lifelong learning.	0.667		Functional and Job-Specific Ease	
Online education facilitates participation in obligatory societal roles	0.776			
With the use of e-learning, many more people can get an education.	0.689			
E-learning allows for Cooperation and Interaction	0.665			
Group work can be accomplished with relative ease using E-learning.	0.698			
Learning online fosters introspection and analysis.	0.774			
In order to get the most of e-learning, one must first receive proper training.	0.678			
Distance learning, or e-learning, is useful for a wide range of industries and professions.	0.779			
E-learning, or distance learning, is the dissemination of knowledge and expertise through the use of electronic means.	0.567			
E-learning, or distance learning, is the dissemination of knowledge and expertise through the use of electronic means.	0.789			
E-learning provides a plethora of answers, boosts expertise, and improves efficiency.	0.678	7.896	Transformation of knowledge and skills	0.823
E-learning has been a great asset to me in terms of testing.	0.779			

I am able to acquire the necessary skills through online courses.	0.765			
E-learning allows me to collaborate with others while gaining knowledge from a variety of sources, including text, images, sounds, and videos.	0.678			

The 15 assertions were put through principal component analysis to determine what factors, if any, could be extracted for further study. Significant factors had to have Eigen values greater than one in order to be used for the Varimax orthogonal rotation. Only items with factor loadings of 0.5 or more were examined in the analysis of the 15-item questionnaire about the elements of e-learning for employability skills, and two factors were discovered, namely Functional and Job-Specific Ease, and Transformation of Knowledge and Skills.

**Table 9: Model Summary**

Model	R	R Square	Adjusted Square	R	F Change	Sig. Change	F
1	0.676	.465	.456		345.889	.000	
2	0.674	.765	.765		56.234	.000	

Table 9 stated the R, R square and adjusted r square value in regression analysis and documented that in all cases the estimated value of r is greater than 30%. Therefore, dependent variable of virtual learning is highly influenced by independent variables under study.

**Hypothesis Testing**

Application of Regression analysis, KMO Bartlett test and Factor loading matrix, the findings of the study stated that null hypothesis which is there is no significant issues that influence of virtual learning on employability skills; there is no significant solutions that influence of virtual learning on employability skills is rejected and alternative hypothesis which is there is significant issues that influence of virtual learning on employability skills; there is significant solutions that influence of virtual learning on employability skills is accepted.

**CONCLUSION AND RECOMMENDATIONS**

Extensive studies have been undertaken to determine the characteristics that most significantly affect students' ability to stay engaged and ultimately succeed in online courses. Based on his research, Mason (2001) concludes that students drop out of classes more often because of a lack of time than because of the distance between their homes and the schools. The present research further affirms that, from the perspective of students, e-adaptability learning's is the most important aspect in the acquisition of occupationally relevant abilities. There is a serious issue with certain students' ability to keep up with the demands of their online courses due to factors including a lack of time and physical distance. The study also shows that students prefer e-learning since it is convenient and

helps them acquire skills that are directly applicable to the workplace. It also implies that consumers value the transmission of skills and knowledge as an aspect of e-learning. However, the experts concur that students' familiarity with and comfort using information and communication technologies are major factors in their engagement in e-learning. Consequently, those working in the e-learning industry need to make adaptable, user-friendly, and career-focused e-learning modules a priority. This research shows that students are more likely to embrace an e-learning course if it is user-friendly, focuses on their specific field of study, allows for the transfer of skills and knowledge, and provides a high degree of personalization in their educational experience. Teachers should keep these things in mind as they design e-learning activities and modules to help their students acquire job-specific abilities. The study is exploratory in nature, and it has only collected data from 475 genuine respondents among students of varying ages in Vijayapur, Karnataka, hence the results cannot be generalised. For more accurate findings, more study with a wider range of participants should be conducted.

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