

Virtual Training Impact On Corporate Learning During Covid-19 Pandemic

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[Abstract] Due to the COVID-19 pandemic, the entire educational system has had a huge impact, which has resulted in the start of the new phase of education through “e-learning” in corporate organizations. In fact, electronic technology has been used to reinforce learning through online classes and numerous web forums for students to attend different courses beyond the classroom environment (called e-learning). Virtual training primarily takes face-to-face training and replicates the experience through virtual platforms like Microsoft Team, Zoom, etc. This study focuses on the factors that influence the success of virtual training and its impact on corporate learning during pandemic situations. A sample of 146 respondents employed in various industries in Chennai was selected for the study. From various non-probability sampling methods, a convenience sampling was adopted to select the samples. In this study, a survey Questionnaire has been employed as an instrument. Descriptive statistics have been used to explore the perceptions of the factors that influence the virtual training and domains in e-training. Structural equation modelling is used to study the impact of virtual training on corporate learning. IBM SPSS Statistics v23. and SPSS AMOS v23. have been used to analyze the data and develop the model. Results confirm that virtual training has helped the respondents gain knowledge through online learning in terms of their preference, effectiveness, learning, and satisfaction.

[Keywords] online learning, pandemic, Covid-19, virtual training

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Introduction

The traditional educational system and the methods of coaching have been transformed into modern methods of coaching through advancement in internet technologies and mobile applications. Technological knowledge of the trainers and their self-efficiency, subject knowledge, and the ability in developing the contents reveal the attitude of trainees towards the trainers Abbasi et.al, (2020). The advancement in technology has developed the face of virtual training in emerging newer learning opportunities. Thus, virtual training through technology is not only beneficial for the trainees but also for the trainers in delivering concepts through the help of technology thereby making the classroom environment vivid and enjoyable. In addition, the technology advancement exceeded the boundaries of classroom coaching by offering learning availability at all the time. Technology in virtual training helps many employees through distance learning and learning on mobile. Further, technology in virtual training helps the employer contact the employees without any limitations and vice versa whenever possible. Subsequently, many companies and training centers have started to focus more on virtual training and have been able to create a classroom environment virtually. Online training helps trainees attend the classes even when they are working, as they are able to watch classes when they are free.

Objectives

- To figure out the variables that influence the success of virtual training towards corporate learning in the pandemic COVID-19 period.
- To study the perception of respondents based on the benefits in various domains in virtual training.
- To develop a model to see the impact of virtual training on corporation e-learning during pandemic situation.

Methodology

This study focuses on the factors that influence the success of virtual training and its impact on corporate learning during pandemic situations. It also concentrates on the perception of the respondents on various e-training domains. A sample of 146 respondents employed in various industries in Chennai was selected for the study. This study falls under descriptive type. Among the different non-probability sampling methods, the convenience sampling method was adopted to select the samples. The instrument used in this study was a questionnaire. The respondents were selected irrespective of their age and gender. The questionnaire consists of three parts: The first part consists of personal details of the respondents, second part comprises of the items regarding the various domains in e-training, whereas the third part covers the scales regarding the factors that influence the success of virtual training regarding corporate learning. Percentage analysis has been used to explore the demographic details of the respondents. Descriptive statistics are used to explore the perception of factors that influence the virtual training and domains in e-training. Structural equation modeling is used to study the impact of virtual training on corporate learning. IBM SPSS Statistics v23. and SPSS AMOS v23. are used to analyze the data and develop the model respectively.

Literature Review

According to Mantovani and Castelnuovo (2003), the relationships that exist between the factors play a crucial role in the emergence of virtual training environments. Thus, their research aims to explore the outlining of a suitable model with the help of presence in virtual training environments. Therefore, this model tries to define the key factors that rely on training contexts on one hand, and also, how the sense of presence aids in contributing to the improvement of learning effectiveness and to facilitate subsequent transfer of skills and knowledge on the other hand. Florin Mihai et.al, (2011) conducted research to create an overview of major development directions, as well as to emphasize the influence of computer-assisted coaching know-hows on training and knowledge methodologies, with a direct link to distance and intermingled learning theories. The study concluded that e-learning virtual platforms have changed the role of trainers and trainees profoundly in learning and have, also enhanced social learning concepts through social software tools like blogs, online encyclopedias, and the virtual world. The dynamic changes in the global perspectives of learning and the extensive utilization of virtual environments have paved new directions in institutional research in which some of the researchers started to focus on improving the knowledge assessment through various new technologies. Some of the modern systems that are especially well-designed for e-assessments offer tools for evaluating the knowledge transfer. Thereby making it possible to learn and correct the weak points in the training of employees.

Moskaliuk et.al, (2013) investigated a study by comparing the 3 training environments, namely virtual, standard, and control state. The police officers receive communication training during an operation involving powdered forces: an airliner team participated in this study. All the tasks performed by the police officers, like fire brigade, emergency services, and many others are extremely complex and there is no particular “correct solution”; the training is purely centered on the task’s specialization of the teams, which require intensive communication among the members of the team, and faces dangerous situations in which the lives of human beings are at risk. In this study, the dependent variables are learning outcomes and knowledge transfer. The study’s findings show that online training is as effective as traditional training in terms of knowledge acquisition and much better in terms of knowledge transfer. When it came to the apparent value of training, the participants thought that traditional training was superior to online training

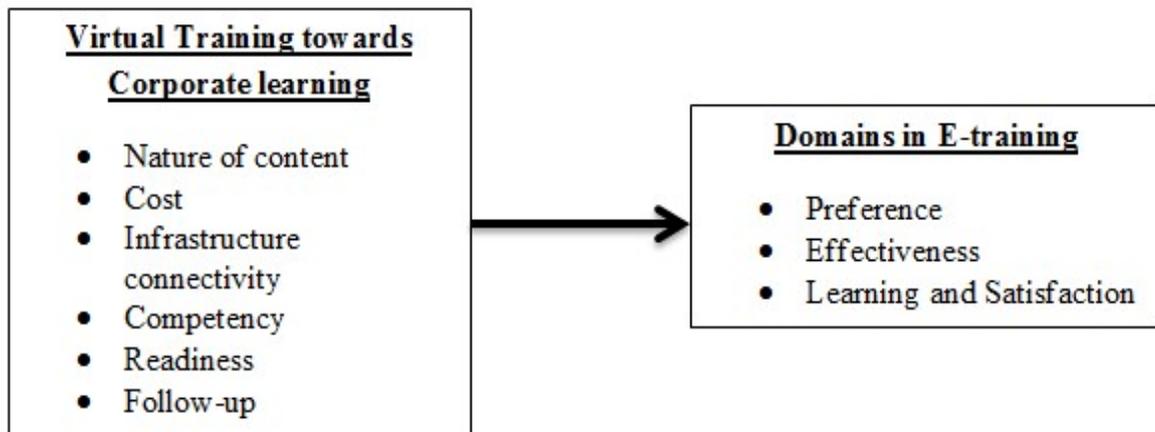
(except for the fact that there is no difference between standard and virtual training with respect to training satisfaction). The findings showed that virtual training is found to be an efficient method for complex tasks training; it is not possible in reality to train them fully, unless and until they can collaborate. Tuan Nguyen (2015) examined the evidence of virtual learning effectiveness through unifying and summarizing the online learning challenges and findings into mixed, positive, negative, and null findings. Special consideration is focused on the meta-analyses of online learning efficiency; the trainees' learning has assorted consequences, as the learning environment is an endogenous issue as the preferred choice of the study. When the bigger picture is observed, there seems to be a confirmation that online education isn't as effective as customary learning. However, this body of evidence suggests that academics look beyond the "no significant difference" issue and concentrate on the next stages of online learning. Corporate learning has paved a way in opening up of various forms of training, stretching from extremely complicated aerospace practice to elementary drill. Corporate learning is a concept that is useful for the distribution of training, evaluation, and backing (Fichter, 2002), and can be initiated with the help of video conferencing, electronic mail (e-mail) and a stand-alone personal computer. Since the 1980s there is visible progress in corporate learning which has played a very important role in technological developments (Lautenbach, 2000).

Conceptual Framework

The conceptual framework of this study is shown as follows.

Figure 1

Conceptual Framework



Learning is defined as the acquisition of knowledge or abilities through study, training, or instruction. Learning through online sources is the process of virtual training that enhances the learning experience through virtual classroom software to engage the employees (even when they are dispersed geographically) and enables them all to fit in to a single online platform, (Binaymin et.al, 2018). Thus, this virtual environment provides employees greater flexibility in accessing the classes with respect to the schedule of the class, content availability, and the structures, and to be able to learn when and where they choose. However, the elements of e-learning, as well as traditional learning, include factors that are quite similar, including motivation, content stimulus, training opportunities to apply for the courses, assessing themselves through various tests, quizzes, and demonstrations, as well as rewards, etc., which are traditionally graded that can support the employees' achievements with a rewards or promotion. It is also critical to keep the employees engaged through online learning to focus them on achieving their goals. Developing online classes is possible with several methods, and success depends on the topic to be covered,

target employees, requirements of affiliated organizations, as well as the user demands. For example, many industries and corporations provide freedom to instructors in developing the contents of online courses; however, while few provide guidelines that are to be followed strictly according to the course structure. Online classrooms are similar to actual classroom methods of coaching in which attendance is required at a particular time, can be self-paced learning or blended learning, and uses a variety of tools to engage the employees, and supports learning online, (Khamparia and Pandey, 2017). Virtual training is a method of training in which the trainer/coach shows, teaches, and explains certain concepts, and skills through the virtual environment in order to benefit the employees to acquire knowledge, (Lister, 2014). Virtual training or virtual instructor-led training is a basis for face-to-face training and helps to replicate the learning experience, not traditionally but virtually, by the students through online platforms like Microsoft Team, Zoom, etc.

On such virtual platforms, the trainers/instructors, and trainees/participants need to log onto the chosen platform from different independent geographical locations. The programs/workshops were conducted as live programs so that all the learners join the platform at the same time with one another. In recent times, health care, insurance, banking etc., are the industries using the virtual platforms effectively. COVID-19 had a significant impact on 191 countries out of 195 around the world (UNESCO). Since COVID-19, over 429 colleges around the world have been closed, but they can still conduct and manage classes using virtual platforms that enable e-learning. In fact, due to COVID-19, the entire organizational system has led to the era of online learning by completely changing the involvement of corporations. In such a pandemic situation across the globe, administrators, trainers, and trainees are in a dilemma to achieve industrial as well as individual objectives (Murphy, 2020). The guidelines for the alternative virtual training methods were issued by the Centers for Disease Control and Prevention in March 2020, regarding communication of classwork and assignments for the employees.

Some of the popular virtual training platforms are Moodle, Zoom, WebEx, Google Classroom, blackboard, etc., and they are critical in the transformation of head-on training sessions into virtual e-learning systems. The global impact of the COVID-19 pandemic is more significant, so corporations made a shift to progress in online learning through virtual training (Allo, 2020). Various virtual platforms and portals help learners to access the online classes, and thus, facilitate e-learning. Although, adapting to the technological advancements in technology is a challenge for both the trainers and trainees; however, experts in industries are now focusing on incorporating this e-learning by equipping the gadgets as well as internet facilities to provide a smooth and regular flow of learning (Yadapadithaya and Stewart, 2003).

Results

It is noted from Table 1 that, 58.2% are male and 41.8% are female, 3.4% of the respondents are 18-25 years age category, 43.2% of them are 26-35 years, whereas 23.3% are 36-45 years of age, 24.7% of them are 46-55 years, and 5.5% of the respondents are older than 55 years. As far as employment is concerned, 40.4% of them are employed in IT, 13% of them employed in engineering, 6.2% of them employed in BPO's, 15.8% of them running their business, 21.9% of them are from the banking sector and 2.7% belongs to other fields. It is also noted that 31.5% of the respondents who participated are engaged with on-site work and 68.5 % work from home. It is found that 58.9% of the respondents have attended e-training program, and 41.1% of them have not.

Table 1

Personal Details of the Respondents

Demographic variables	Classification	Number of respondents	Percentage
Gender	Male	85	58.2
	Female	61	41.8
Age group	18-25 years	5	3.4

	26-35 years	63	43.2
	36-45 years	34	23.3
	46-55 years	36	24.7
	Above 55 years	8	5.5
	IT	59	40.4
	Engineering	19	13.0
Field of Employment	BPO	9	6.2
	Business	23	15.8
	Banking	32	21.9
	Others	4	2.7
Present Status	On site work	46	31.5
	Work from home	100	68.5
Attended e-training program	Yes	86	58.9
	No	60	41.1

Table-2 depicts the Cronbach's Alpha, Average variance explored (AVE) and composite reliability (CR) for the constructs taken in the study. The reliability values of the constructs range from 0.806 to 0.862. It is also observed that the composite reliability for all the constructs is more than 0.7; there were no issues in the reliability. The Average variance explored for the constructs is more than 0.5; convergent validity of the study is achieved.

Table 2
Reliability Measures and Average Variance Explained

	Number of items	Cronbach's Alpha	AVE	CR
Nature of content	7	.818	.521	.821
Cost	2	.825	.547	.816
Infrastructure connectivity	5	.809	.526	.814
Competency	2	.862	.531	.871
Readiness	3	.804	.512	.811
Follow-up	3	.832	.519	.824
Preference domain	2	.819	.522	.821
Effectiveness domain	4	.806	.524	.809
Learning and satisfaction domain	6	.854	.516	.849

Table 3 shows the discriminant validity of the variables. From Table 3, it is noted that the correlation coefficients between the constructs are less than the square root of AVE's, the discriminant validity of the study is achieved.

Table 3
Discriminant Validity of the Variables

	1	2	3	4	5	6	7	8	9
1	.722								
2	.412	.739							
3	.580	.563	.725						
4	.433	.592	.611	.729					
5	.546	.467	.572	.639	.716				
6	.528	.470	.558	.539	.658	.721			
7	.486	.349	.401	.401	.542	.662	.722		
8	.503	.532	.425	.427	.565	.511	.677	.724	
9	.554	.434	.486	.499	.552	.579	.592	.641	.718

1- Nature of content 2- Cost 3- Infrastructure connectivity 4- Competency 5- Readiness 6- Follow-up, 7- Preference Domain 8- Effectiveness Domain 9- Learning and satisfaction Domain

Table 4 depicts the factors that influences the success of virtual training towards corporate training. It is noted from Table 4, that the respondents' perception on all the factors of virtual training towards corporate training is good. Further from the mean responses given by the respondents, it is observed that "Competency" is the most influencing factor for the success of virtual training towards corporate learning, followed by "Follow-up", "Readiness", "Infrastructure connectivity", and "Nature of content". However, it is inferred that the "Cost" factor is least influencing the success of virtual training towards corporate learning.

Table 4
Perception on Factors Influencing the Virtual Training Towards Corporate Learning

Factors	Mean	SD
Nature of content	3.84	.748
Cost	3.16	.954
Infrastructure connectivity	3.90	.730
Competency	4.14	.753
Readiness	3.92	.788
Follow-up	3.96	.787

Table 5 shows the respondents perception about the domains in e-training. From Table 5, it is noted that the perception level of respondents is of a better level. Respondents' mean perception reflects that they are more pleased with the "Learning and satisfaction domain", followed by the "Effectiveness Domain", and the "Preference Domain". This shows that the respondents are content with Preference, Effectiveness, and Pleased with the e-training towards corporate learning in "COVID-19" pandemic period.

Table 5
Perception about Domains in E-Training

Domain	Mean	SD
Preference	3.51	.967
Effectiveness	3.58	.928
Learning and satisfaction	3.72	.765

From Table 6, the Chi-square ratio value $\chi^2/\text{dof}=1.186$ revealed that the model is valid. The goodness of fit index (GFI) value of 0.914 and adjusted goodness of fit index value of 0.907 shows the model fit is good. RMSEA of 0.099 and ECVI of 0.094 reveals the model fit is better. Further in this model, the relationship between Virtual Training and Preference domain ($r=0.88$, $p=.000$), Virtual Training and Effectiveness domain ($r=0.91$, $p=.000$) and Virtual Training and Learning and Satisfaction domain ($r=0.90$, $p=.000$) are observed as significant. This confirms that virtual training has helped the respondents in gaining knowledge through the online learning in terms of their preference, effectiveness, learning, and satisfaction. Also, the R^2 values of Preference domain, Effectiveness domain, and Learning and Satisfaction domain are observed as 0.78, 0.84, and 0.81, respectively. This shows that virtual training explores the variances of 78%, 84%, and 81% over Preference domain, Effectiveness domain and Learning and Satisfaction domain, respectively.

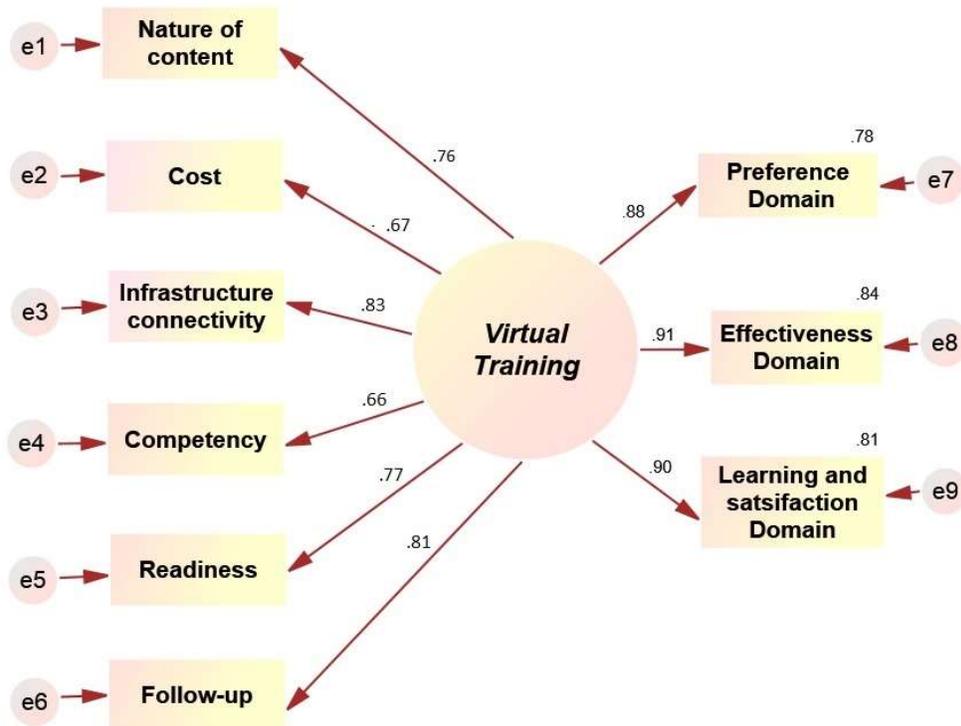
Table 6
Model Fit Summary

χ^2	dof	χ^2/dof	GFI	AGFI	RMSEA	ECVI
32.018	27	1.186	0.911	0.903	0.099	0.094

From Figure 2 A model is developed to see the impact of virtual training on corporate learning during a pandemic situation. In this model, Nature of Content, Cost, Infrastructure connectivity, Competency, Readiness, and Follow-up, Preference Domain, Effectiveness Domain, Learning and Satisfaction Domain are taken as observed variables and Virtual Training is taken as unobserved variable. In this case, Virtual Training and its factors acts as an independent variable, whereas Preference Domain, Effectiveness Domain, and Learning and Satisfaction Domain acts as dependent variable.

Figure 2

Model for Impact of Virtual Training on Corporate learning



Conclusion and Suggestions

The study findings indicate clearly that administrative support, as well as the course contents, is widely accepted, yet the value reflects that there are still areas that need improvement to improve the quality of e-learning. In addition, to support blended e-learning, the course content should be upgraded with the use of technology. Furthermore, the quality and implementation of e-learning are heavily reliant on administrators; thus, administrators must concentrate on and improve e-learning structures. Furthermore, an organized approach to e-learning is required, and it is an effective instrument for educating students, particularly for the period of COVID-19 pandemic. The mean responses given by the respondents confirm that “Competency” is the most influencing factor for the success of virtual training towards corporate learning. However, the “Cost” factor is the least influencing the same. Through analysis, it is observed that the respondents are contented with Preference, Effectiveness, and Satisfied with the E-training towards corporate learning during the COVID-19 pandemic period. Results confirm that the relationship between the Virtual Training and Preference domains, the Virtual Training and Effectiveness domains, and the Virtual Training and Learning and Satisfaction domains are observed as significant. This confirms that virtual training has helped the respondents in gaining knowledge through the online learning in terms of their preference, effectiveness, learning, and satisfaction.

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