



Technology Adoption in Tourism and Hospitality Pedagogy: Analysis of Teacher Readiness Amidst of COVID-19 Lockdown in India

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Abstract Sudden rise in the pandemic has also revolutionized the teaching practices amidst of lock down practices which have led the universities and institutions to adopt technology systems as a source of connectivity to students and impart education. However the haphazard implementation of technological practices has levied a stress upon deliverability by faculties especially in tourism and hospitality which is more a practical based concept. Keeping in view the current scenario of teaching and learning practices, the current study examines factors associated with the technological adoption in tourism and hospitality faculty. Where the technological acceptance model describes the adoption for technology in teaching practices, results for structural constraints associated with it cannot be neglected. So to understand how to sustain technology use, there is a requirement for understanding what influences adoption process among teachers and how such factors determine their future intentions. Accordingly an online survey was conducted from faculties of tourism and hospitality of various universities and institutes in India. About 355 responses which were found reliable were used for final analysis. SEM analysis revealed that the relationship between self-efficacy, perceived ease of use at one hand have direct significant impact on intentions for future use, the structure constraints also mediates the relationship between the self-efficacy and intention to use thereby reflecting a significant role in technology adoption practices. The research will help in filling up the theoretical as well as implications for tourism education system and technological adoption practices where while technological training and digital familiarity programs needs to be implemented play as structural factors induces a significant impression on online pedagogical system in India.

Keywords: Intentions for Technology Adoption, Perceived Ease Of Use, Self-Efficacy, Structural Constraints, Indian Pedagogy

INTRODUCTION

Sudden rise in the pandemic has revolutionized the teaching practices amidst of lock down which have led the universities and institutions to adopt technology systems as a source of connectivity to students and impart education. As far as Indian scenario is concerned, more than 630 million subscribers have been reported and in fact it has retained the second position with largest base for internet users in 2020 amidst of COVID-19 pandemic (BBC, 2020).

Many teaching organizations and institutions have started to develop online course structures to sustain with rapidly increasing technology based education marketplace (Chen, Lou & Luo, 2002; Park, Lee & Cheong, 2008). However, the haphazard implementation of technological practices has levied a stress upon deliverability by faculties especially in tourism and hospitality which is more a practical based concept. Insignificant knowledge and less training with the available softwares are the barriers to technology adoption by teachers (Kleiman, 2000; Angeli, 2003). However, the

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educational institutions differ in their goals and objectives and generally have less competition amongst teachers have been observed amongst teachers for using the technology in daily work practices (Hu, Clark & Ma, 2003). Where the technology has been found to transform pedagogical aspects, the use of technology has been observed to be minimal and inefficient among teachers (Lim & Khine, 2006; Han & Shin, 2016). According to an analysis conducted by Sheth, Reddy and Shukla (2020) the ancillary education market size in India is about \$15 billion having less than 5% digital penetration which reflects a significant base for technology based education and adoption during COVID-19. Here, when it comes to educational technology, users are the biggest concern (Lee et al., 2016).

Zhao, Hueyshan and Mishra (2001), emphasized that teachers are supposed to realize precise role of technology in delivering lectures so as to cope up with the demands for usage of technology and persistent innovation in education system (Rogers, 2004). Teacher support has been identified as a critical factor is successful establishment of technology in education system (Zellweger, 2007). Such situations, made us to comprehend a planned technology scenario for educational organizations (Rodriguez, Nussbaum & Dombrowskaia, 2011; Rieley, 2020; Dhawan, 2020). Where authorities in education system expect teachers to remain consistent and utilize technology for effective teaching, the constraints that teachers have faced or are facing that sometimes discourage them to accept the technology in teaching practices also needs to be considered and discussed (Teo, 2009; Bayhan, Olgun & Yelland, 2002; Zellweger, 2007). Overall, the challenge is not putting the suitable technology with classroom scenario, rather incorporating efficacy among teachers with technical changes and thereby defining their willingness to incorporate those changes for further (Buckenmeyer, 2010). Moreover if the teacher does not feel not that utilizing a specific technology will contribute towards their fulfillment their requirements, they ultimately tend will avoid or do not intent to adopt same (Adukaite, van Zyl, Er & Cantoni, 2017).

Though, the most of the segments associated with education has already taken up benefits of this new source for imparting education like online technology but tourism and hospitality education organizations specifically in developing nations like India are still struggling to constitute the capitalization technology based teaching and learning (Iqbal & Qureshi, 2012). Keeping in view the current scenario of teaching and learning practices, the current study examines factors associated with the technological adoption in tourism and hospitality faculty. Where the technological acceptance model describes the adoption for technology in teaching practices, results for structural constraints associated with it cannot be neglected. So, to understand how to sustain technology use, there is a requirement for understanding

what influences adoption process among teachers and how such factors determine their future intentions. In the light of above discussions the present study is conceptualized and has been undertaken to investigate the teachers readiness and technology adoption in tourism and hospitality education amidst the ongoing COVID-19 pandemic crisis.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Becker and Ravitz (1999), through their study highlighted that because of its complexities majority of teachers tend to avoid usage of technology in teaching-learning practices. Since, the access to technology is expanding dramatically; the adoption of policies, practices to improve the capability of teachers and administrators towards technology effectively requires a thoughtful approach (Swanson, 2006; Sutherland-Smith, 2002; Yuen & Ma, 2008). Researchers like Violato, Mariniz and Hunter (1989); Buckenmeyer (2010); Wu, Hsu and Hwang (2008) and Kotrlik and Redmann (2009) considered attitudes, knowledge and teaching skills in using technology as factors affecting that determines the initial acceptance and their future behavior with online pedagogy.

Further, education traditional beliefs makes adoption more complicated (Honey & Moeller, 1990). Nonetheless, attention towards the adoption has been scarce, to which we need to understand that the process for adaptability process cannot be done immediately, and be applied and extended over a significant time duration (Aldunate & Nussbaum, 2013). To this, Technology Acceptance Model (TAM) proposed by Devis in 1989 has been largely been conceived as a source to explain technology adoption practices by users in numerous business and commercial organizations which has also been applied for defining educational contexts with technological refinements (Alharbi & Drew, 2014; Hsu & Ching, 2013; Sánchez & Hueros, 2010; Huang, Lin, & Chuang, 2007). Further, explaining the faculty technology adoption model Zellweger (2007) in his study gave a special emphasis on institutional support and technology integration in teaching learning practices. With respect to current study, the TAM has been found apt to determine the individual intentions and behavior regarding the adaptability as it has been conceived to draw better framework for technology usability in various forms (Venkatesh & Davis, 2000; Legris, Ingham & Colletette, 2002; Yuen & Ma, 2008; Buchanan, Sainter & Saunders, 2013). To this, TAM signify the technology adoption and acceptance with individual's self-efficacy, Perceived ease of use and Perceived intention of users which thereby formulate the composite framework their further intentions to use (Hall & Higgins, 2005; Teo et al., 2008; Venkatesh, Morris, Davis & Davis, 2003).

Self-efficacy has been considered as a positive dimension or source for adopting technologies associated with tourism

and hospitality sector (Huh et al., 2009). To this, self-efficacy depicts people's perception towards their own tendency to cope and administer situational aspects in a given environment (Wang & Xu, 2015). Supported by the social cognitive theory, self-efficacy depicts the individual's beliefs about themselves to perform or execute a particular behavior and may become meaningless if they lack self-confidence regarding the same (Compeau, Higgins & Huff, 1999; Thompson, Compeau & Higgins, 2006). In context to the technology, Eastin and LaRose (2000) have defined the term as individual's confidence with respect of using online technologies thereby defining the positive linkage between the two (Bandura, 1986; Yuen & Ma, 2008; Sánchez & Hueros, 2010; Eastin & LaRose, 2000). Polly, McGee, and Sullivan (2010) defined the term as the value associated with technology in pedagogy. Accordingly, the faculties with high self-efficacy level with technology are more likely to have intent for its usage and adaptability (Buchanan, Sainter & Saunders, 2013; Gong, Xu, & Yu, 2004). Similarly Bayhan, Olgun, and Yelland (2002); and Jones (2004) through their study realized that faculties with lower self efficacy and confidence even hesitate and don't use technology like computer systems and online teaching practices (Celik & Yesilyurt, 2013; Chiu & Churchill, 2016). Thus, faculty who believe they are self reliant and have good efficacy towards usage of a new technology as a pedagogical aid are more likely to adopt and use technology in their teaching practices (Blackwell et al., 2014; Kenny et al., 2012). In the light of above discussions the first hypothesis of the current study has been framed as given below:

H1: There exists a significant relationship between faculty's self-efficacy and intentions to use the technology by them.

Taking up the next level, perceived ease of use are considered to have relevance with process of technology usage among individuals (Davis, 1993). In 1989 Davis has explained the term a level to which an individual believe that utilizing a specific system requires less or no efforts. In other words, perceived ease of use determines cognitive efforts of people toward learning and using the technology allied to education (Yang et al., 2012). On the other hand, perceived ease of use has been referred to as perception among people with respect to the usage of new technology that levy less physical and mental pressure or is stress free (Suki & Suki, 2011). The linkage between perceived ease of usage and behavioral intention has been significantly identified by Bayhan, Olgun and Yelland (2002). Accordingly it has been defined as a level to which the potential user anticipates the target system to be free of exertion thereby determining the behavioral intention amongst them (Venkatesh, 2000; Mun & Hwang, 2003; Liao & Lu, 2008; Nair & Das, 2012). Therefore given the above discussions the second hypothesis for the current study has been framed and given below:

H2: Perceived ease of use has a significant impact on faculty's intention to use the technology for imparting education.

According to Eraqi et al. (2011), faculty's play a pivotal role where they generally preferred traditional teaching for service-sector students, specifically those associated in hospitality and tourism programs thereby giving the structural aspects as constraints for technology adoption for imparting education. Furthermore the research conducted by Buchanan et al., in 2013 acknowledged the structural factors associated with the technology adoption in educational institution. Other than given psychological dimensions like self-efficacy and perceived ease of usage; other facilitating and restraining factors that are suppose to mediate or moderate the relationship for behavioral intentions needs to be taken care (Garrison, 2000; Buchanan et al., 2013). Accordingly, such structural constraints and conditions are supposed impart a direct influence on user intentions and overall behavior (Venkatesh et al., 2003). In other words, even with good and high self-efficacy with technology and having the perception of easy usability and knowledge with the technology or internet sources an individual may get discouraged more easily by constraints and obstacles in their performance and this will further results in lowering their intentions to use technology (Teo, 2009). The above discussions laid the foundation of the third hypothesis for the present study and have been given below:

H3: There is a mediation effect of structural constraints in Technology adoption and intention to use.

RESEARCH METHODOLOGY

Scale Development

Based on the literature supporting the Technology adoption model and its successful inclination with in educational system in tourism and hospitality education system, we framed an extended TAM model for current research (Fig. 1). Accordingly, the parameters for establishing the relationship between the targeted dimensions original measurement scales framed by Davis, (1989; 1993) for TAM were modified and utilized keeping the other relevant literature in the related areas that define self efficacy, perceived ease of use and behavioral intention/intention to use (like Huang et al., 2007; Lee et al., 2004; Iqbal & Bhatti, 2017; Urbany, Bearden, Kaicker & Smith-de Borrero 1997; Park et al., 2008; Venkatesh & Davis, 2000; Gong et al., 2004; Ajjan & Hartshorne, 2008; Chiu & Churchill, 2016). As far as structural constraints are concerned the scale was framed with the inclination of studies conducted by Ngai et al. (2007), Teo (2009), Lim and Khine (2006), Buchanan et al. (2013). Figure-1 represents the proposed model prepared and studied for the present study.

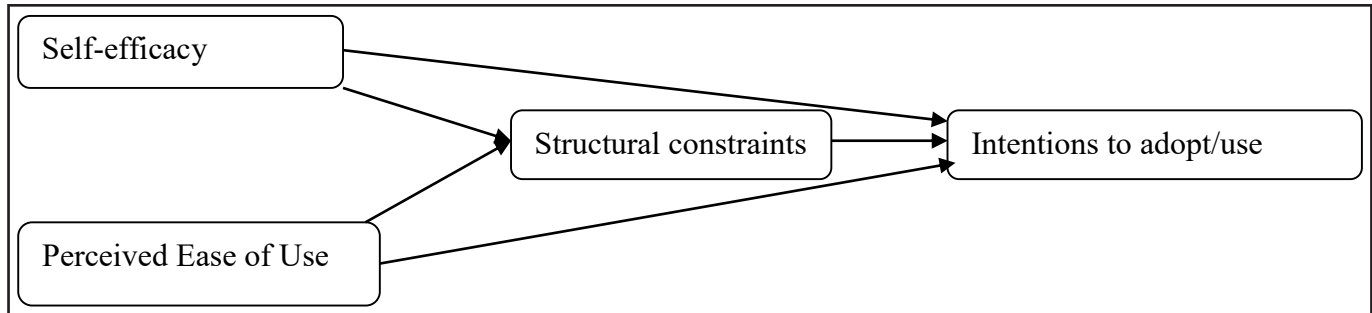


Fig. 1: Proposed Model for the Study

METHOD

Structural equation modeling (SEM) approach has been applied to draft a model that depicts the relationships between the selected variables in this research including Self efficacy, perceived ease of use and behavioral intentions and structural constraints. Data were collected through using an online survey questionnaire encompassing questions related to demographics and multiple items for each dimension proposed in the research model. The influence of independent variables self-efficacy and perceived ease to use on dependent variable intention to adopt/use was studied using a cross-sectional survey method.

Research Sample and Data Collection

The sample has taken from only selective Northern region of India including Jammu and Kashmir, Chandigarh, Delhi, Punjab and Himachal Pradesh and the responses were retained online. Since the exact population was not available, about 500 sample size was targeted as this has been suggested as standardized for justifying the basic criterion of the research by Krejcie & Morgan (1970) that for indefinite population more than 358 sample size can be taken. Total 355 responses were analyzed. Out of 355 total respondents who have participated for the study, 201 (56.6%) respondents were male and 152 (42.8%) respondents were females. Further a question was asked about the age of the respondents and the results of the analysis indicated that 175 (49.3%) respondents were between the age of 18 to 30 years, 124 respondents (34.9 %) were between the age bracket of 31 to 45 years, 50 (14.1 %) respondents were between the age group of 45 to 60 and 6 (1.7%) respondents were above 60 years of age. Out of total 355 respondents 158 (44.5%) were not married and 197 (55.5 %) respondents were married. One question was also asked for the academic qualification of the respondents and 88 (24.8 %) respondents were having

academic qualification below 12th standard, 177 (48.7%) respondents were graduates, 75 (21.1%) respondents were post graduate and 19 (5.4 %) were having higher education degrees.

DATA ANALYSIS

Factor Analysis

Before testing the hypothesized model researchers(s) run the exploratory factor analysis to check the validity and pattern of the construct. Exploratory factor analysis with principle component analysis with varimax rotation was applied. The sample adequacy Kaiser-Meyer-Olkin (KMO) resulted in .808, the value found to be sufficient for the further data analysis (Hair et al., 2010), the result of KMO is provided in table-1. The exploratory factor analysis resulted in four factors which explain 62% of variance of study. The result of Cronbach alpha and factor loading are presented in table-2. Two items from factor of self-efficacy was deleted due to low factor loading naming If have only reference manuals for usage and If have seen someone else using it before. One item from the factor ease to use was also deleted due to low factor loading naming teaching using online software is easy for me and two items was deleted from the factor of intention to use naming and there is limited availability of University resources that supports the use of technology-enhanced teaching practice.

Table 1: Results of KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.808
Bartlett's Test of Sphericity	Approx. Chi-Square	2838.743
	df	190
	Sig.	.000

Table 2: Results of Factor Analysis and Dimension Validity

Rotated Component Matrix					
	Component				Cronbach alpha
	1	2	3	4	.763
Self Efficacy					
If have enough of time	.600				
If the setup has the built-in facility for assistance	.684				
If someone explain me how to do it first	.653				
If have used a similar software	.701				
Ease to Use					.668
I can easily become skillful in using the software		.747			
Online teaching software is clear and understandable.		.777			
I found online teaching aids easy to use.		.812			
Intention to Use					.711
I intend to use online teaching software in future			.824		
I intend to use online teaching software in my subject area as often as possible.			.662		
I am willing to adopt the online method as pedagogical aid as much as possible			.730		
Structural Constraints					.783
There is limited support available (e.g., technical and/or admin.) for new methods				.767	
Online teaching/pedagogical methods causes additional work-load to my responsibilities				.794	
Teaching innovation is a relatively low in online methods for my course/subject				.816	
I lose possession of my materials in online teaching				.816	
Online teaching process has limited my time for teaching de-velopment				.829	

Table 2 depicts the results of factor analysis and Cronbach alpha the values of the item and the dimension are acceptable for the further analysis (Hair et al., 2010). The exploratory factor analysis resulted in four factors.

Factor 1: Self Efficacy: The first factor of the scale carries four items. Six items were in the dimension of self-efficacy, two items were removed due to low loading. After factor analysis the dimension carries for items to measure the individual belief

in his ability to use technology for the classes. The items included in the factor are If have enough of time, If the setup has the built-in facility for assistance, If someone explain me how to do it first and If have used a similar software.

Factor 2: Ease to Use: The second factor of the scale is ease to use. The facto consists of three items after deleting one item due to low factor loading. The items measure the measure the understanding of individual for online teaching and wither they find it easy or difficult. The thee item included in the present factor are I can easily become skillful in using the software, Online teaching software is clear and understandable, I found online teaching aids easy to use.

Factor 3: Intention to Use: The third factor is intention to use; the factor contains three items after deleting one item. The factor measure individual intention to use the online teaching the three item contain in the factor are I intend to use online teaching software in future, I intend to use online teaching software in my subject area as often as possible. I am willing to adopt the online method as pedagogical aid as much as possible.

Factor 4: Structural Constraints: The factor 4 has five items after deleting two items. The items measures the constraints face in online leaching related to the technical support, equipment's and faculty creativity and development. The

five items included in this factor are There is limited support available (e.g., technical and/or admin.) for new methods, Online teaching/pedagogical methods causes additional workload to my responsibilities, Teaching innovation is a relatively low in online methods for my course/subject, Teaching innovation is a relatively low in online methods for my course/subject and Online teaching process has limited my time for teaching development.

Confirmatory Factor Analysis (CFA)

After identifying the underlying structure of scale through exploratory factor analysis, confirmatory factor analysis was run to check uni-dimensionality, so that existence of single construct underlies the set of measures and set of items making an instrument can be known (Hafiz Abdul & Shaari, 2013). First order CFA was run on each dimension separately. The first fit measured in first order CFA is Chi-square (Bentley, 2011), as it an effective and traditional method to evaluate the model, the larger value of chi-square indicated the badness of fit and the smaller value is indicator of good fit. Kline (2015) suggested that the value of χ^2/df between 2 to 5 is an indicator of reasonable fit. Apart of chi-square CFI, GFI, AGFI, RMSEA, CMID/DF is also checked to measure the fitness of model (Byrne, 2001). The cut of value for Comparative fit index (CFI) should be ≥ 0.95 , Adjusted goodness of fit index (AGFI) should be ≥ 0.90 , Goodness of fit index (GFI) should be ≥ 0.90 and Root mean squared error of approximation (RMSEA) should be ≤ 0.08 (Byrne, 2010). RMSEA which shows the bad fit should be lower them 0.9 (Hu & Bentler, 1999).

First order CFA was run for Self-efficacy, Ease to use, Structural constraints and intention to use dimensions. All the models are showing good fit will required cut of values. Figure x1 shows the result of CFA for self-efficacy, on the basis of threshold criteria, the model self-efficacy dimension found to be good fit. The dimension has four items and the loading of each item is above .4. The model for self-efficacy indicates value of CFI=.913; GFI=.952; NFI=.906; RMSEA=.073 and CMID/DF 4.11 all the values are significantly acceptable value. The figure x2 shows the result for the dimension of ease to use; the dimension has three items and all the items showing significance in explaining the model. The model for ease of use indicates value of CFI=.962; GFI=.960; NFI=.933; RMSEA=.0681 and CMID/DF 4.25. The figure x3 shows the result of Structural constraints the dimension has five items and all the items showing significance in explaining the model. The model of Structural constraints use indicates value of CFI=.951; GFI=.909; NFI=.922; RMSEA=.0625 and CMID/DF 3.74. Figure - 4 shows the result of intention to use; the

dimension has three items all the items showing significance in explaining the model. The model of Structural constraints use indicates value of CFI=.922; GFI=.951; NFI=.937; RMSEA=.0785 and CMID/DF 4.37 (refer figure-1, 2, 3 and 4)

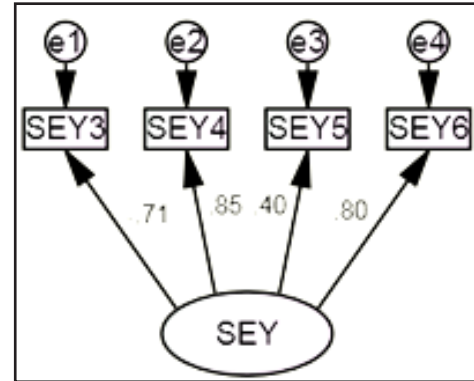


Fig. 1: Self Efficacy

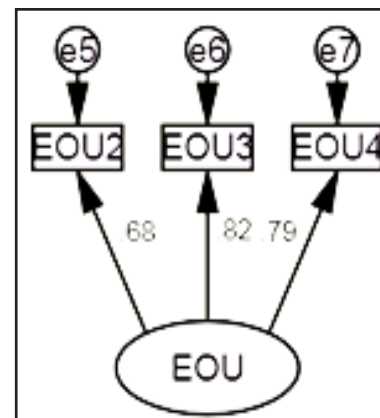


Fig. 2: Perceived Ease of Use

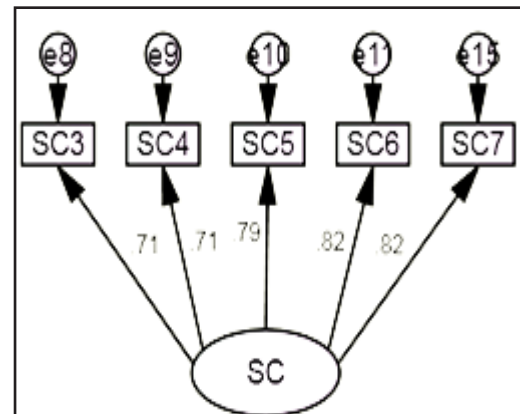


Fig. 3: Structural Constrains

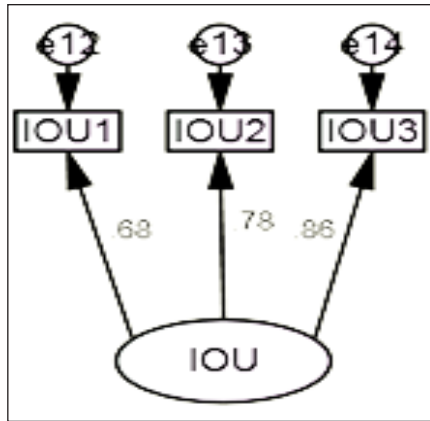


Fig. 4: Intention to Adopt/Use

Structural Equation Model

The results of confirmatory factor analysis were used for the scale approving and validity. After CFA hypothesis model was tested through structural equation modeling. Cunningham (2008) explained Structural equation modeling “as a technique to evaluate the goodness of fit of the hypothesized model based on the theoretical model”. The present study test the hypothesis model with two independent variable (Self-efficacy and Ease to use) one dependent variable (Intention to use), the model also has one mediating variable (structural constraints). Direct paths and indirect path between independent and dependent variable will be tested. To check the appropriateness of the model, the study assesses the goodness of fit for the model and the results are presented in the Table 3.

Maximum likelihood method was chosen for obtaining the suitable parameters. Regression weights of different relationship between variables and the level of significance are investigated. The relationship between all the variables was found to be significant. The result infers a direct significant positive impact of self-efficacy on intention to use ($\beta = 0.434$; $p = 0.014$) and also a direct significant positive effect of ease to use on intention to use ($\beta = 0.791$; $p = 0.003$) the figure-5 shows the direct effect of independent variable on dependent variable. All the path of the model are significant and the cut of value of acceptable. Table-4 shows the result of SEM for direct effect.

Table 3: Model1 Fit Indices

	$\Delta\chi^2/df$	RMSEA	NFI	CFI	GFI
Model	1.49	0.061	.95	.91	.97

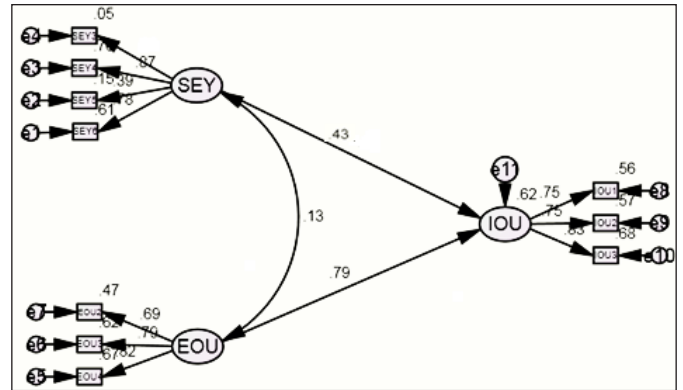


Fig. 5: Model1 for SEM Analysis for Testing Direct Impact of Self Efficacy (SEY) and Ease of Use (EOU) on Intention to Use

After analyzing the direct effect mediating model was run in which structural constraints was incorporated as the mediating variable. Bootstrapping samples was used to test the mediation model (Preacher & Hayes, 2008). When the structural constructs was included in model no direct effect of self-efficacy and ease to use was found on intention to use online teaching platform. The entire insignificant path has been removed to achieve the optimal model (Fig. 6) with good indices.

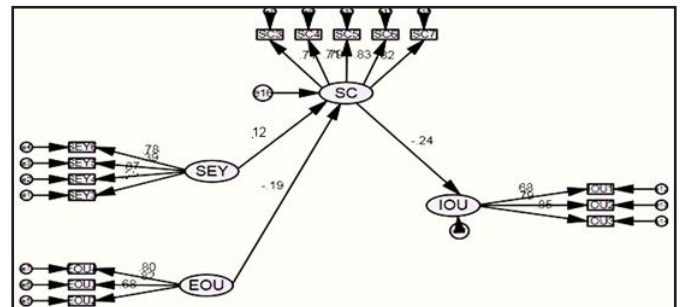


Fig. 6: Test Results for Model 2 Explaining the Mediating role of Structural Constraints in TAM

Table 4: Model 2 Test Results

	Dependent Variable (Intention to use)
Independent variable	Indirect effect via (structural constraints)
Self efficacy	.117
Ease to use	-.220

The full model was compared to the alternative model where the direct path between self-efficacy and intention to use and direct path among ease to use to intention to use separately.

The full model fit the data better compared to the alternative models. The result infers a significant mediating impact of structural constraints between self-efficacy and intention to use online classes and ease to use and intention to use online classes. The fit indices for the mediating model $\Delta\chi^2$ is 3.77, CMIN/df=1.862, CFI=0.913, GFI=0.922, RMSEA=0.040, and SRMSR=0.0282. Based on full model it can be predicted that structural constraints plays mediating role between and it also infers that structural constraints reduces the intention to use online classes.

CONCLUSION

Technology advancements have been vanguard source for many educational organizations in this COVID-19 situation yet it has also been critical for organizations. New technology adoption and processes requires complex management that requires training insights and effective research initiatives. The present research contributes to the understanding of tourism and hospitality education system with reference to faculty behavior towards the technology adoption practices and address to draw more theoretical framework to analyze the technology adoption process by faculties working in hospitality and tourism domains (Sumak, Hericko & Pusnik, 2011). Though, current research goes ahead with customary TAM by incorporating dimensions reflecting the tourism and hospitality faculties' perceptions with technology adoption and by putting up the implicit postulations in preceding research given Buchanan et al. (2013) where the dimension for structural constraints have been identified as an another factor for technology adoption practices and here in our current research the same has been tested and found mediating the relationship between that no other factors affect the relationship between perception and adoption behavior.

SEM analysis revealed that the relationship between self-efficacy and intentions for future use is significantly mediated by structural constraints associated with it reflecting the lack of technological support, training and insufficient understanding with respect to technology insinuation in tourism and hospitality pedagogy (Heart & Pliskin, 2002; Wang & Wang, 2008). Overall the results have been found consistent with the numerous researches conducted in the past like Buchanan et al. (2013); Huang et al., (2007); Bayhan, et al., (2002); Saroia & Gao, (2019). With respect to hospitality sector, the acceptance of technology remains dependent on organization's competency to analyze its premeditated value (Wang & Qualls, 2007). Thus it is suggested that for tourism education system and technological adoption practices where technological training and digital familiarity programs needs to be implemented as structural factors induces a significant impression on online pedagogical system in India. And in fact should be implemented specifically with respect to such

situation (like lockdown and pandemic) where adaptability requires a fast track approach. Also this can be taken as an example for further to draft out the strategic management approach to risk and emergency situations.

IMPLICATIONS

The research serves a novel aspect with respect its contribution to theoretical and practical scenario. The current research aimed to analyze the significant factors that determine faculty behavior intention to technology adoption. The research contributes towards the literature in numerous aspects. However, most of the researches are found in field of technology adoption and education and learning with more thriftily developed nations, and not in developing economies (Venkatesh & Davis, 2000; Boyle et al., 2016) like India, that too in such prevailing situations of pandemic the institutions to make their faculties to adopt the technology with in no time and this is specifically with the case in higher education, where the research on technology adoption and improvement in tourism and hospitality pedagogy is not much available (Cuffy et al., 2012; Adukaite, van Zyl & Cantoni, 2016). Moreover where most of the studies discuss about the TAM model with respect to the education sector the current research help in understanding the role of structural constraints in defining the technology adoption practices by faculties specifically in tourism and hospitality segment thereby adding the theoretical dimension to the available literature supported by the research conducted by Buchanan et al. (2013).

Furthermore, the present research also depicts practical implications. The concerned research proves beneficial useful to other educationalists in developing nations, especially in dealing with the tourism and hospitality services (Adukaite et al., 2016). To draw the positive influence of technology for learning, faculties should be served with training and knowledge based opportunities for familiarization with applications. These trainings may help teachers and faculties to acknowledge the function and value technology in imparting education opportunities.

LIMITATIONS AND FUTURE RESEARCH

Like any other research, this study is also consisted of certain limitations. Firstly, the sample was taken from only selective Northern region of India including Jammu and Kashmir, Chandigarh, Delhi, Punjab and Himachal Pradesh and the responses were retained online. Thus, results cannot be generalized as the study is taken up tourism and hospitality segment and results may vary with other educational domains. It is due to the pandemic and lockdown in the country, time, distance and legal constraints also served

as limitation to the study. In future, empirical research is suggested to test the model to draw more conclusive results and reliability of the model while comparing the private and government authorized institutions and also demographic distributions. Also like any model, this model further can be extended with other identified factors in future research that could provide an incremental understanding towards the adoption of technology adoption in the context of tourism and hospitality education segment.

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RESEARCH INSTRUMENT/ QUESTIONNAIRE USED FOR THE PRESENT STUDY

This questionnaire is being undertaken as a part of Academic Research. Please feel confident and be fully assured that all of your answers will be treated with strict confidentiality and used only for academic purpose.

Age: 25-34 35-44 45 above

Marital Status: Single Married Divorced/Separated

Academic Position: Teaching Assistant/Lecturer Assistant Professor

Associate Professor Professor

Items	SD	DA	Neutral	Agree	SA
Self Efficacy					
I can complete my job using online module					
If have only reference manuals for usage					
If have seen someone else using it before					
If have enough of time					
If the setup has the built-in facility for assistance					
if someone explain me how to do it first					
If have used a similar software					
Ease of use					
I think....					
Teaching using online software is easy for me.					
I can easily become skillful in using the software					
Online teaching software is clear and understandable.					
I found online teaching aids easy to use.					
Intentions to Use					
I intend to use online teaching software in future					
I intend to use online teaching software in my subject area as often as possible.					
I am willing to adopt the online method as pedagogical aid as much as possible					
Structural Constraints					
There is limited availability of resources					
There is limited availability of University resources that supports the use of technology-enhanced teaching practice					
There is limited support available (e.g., technical and/or admin.) for new methods					
Online teaching/pedagogical methods causes additional workload to my responsibilities					
Teaching innovation is a relatively low in online methods for my course/subject					
I lose possession of my materials in online teaching					
Online teaching process has limited my time for teaching development					