

Online Hospitality and Tourism Education - Issues and Challenges

Abstract

The study attempts to understand students' apprehensions, satisfaction, and experience concerning online hospitality and tourism education (HTE) during the COVID-19 pandemic. Focused group discussions were conducted to gather student experiences implementing ICT in hospitality and tourism education. The group discussions were recorded, transcribed, and analyzed in search of themes to identify and validate the constructs to develop the questionnaire for the study. The questionnaire was then presented before the subject experts to cross-check the validity of constructs. Importance-Performance Analysis (IPA) was used to determine students' satisfaction by comparing students' perceptions to students' expectations. The study's findings show the importance of practical classes and labs and on-site instructor comments on students' overall satisfaction. Online teaching can complement traditional classroom teaching but cannot fully replace lab sessions with instructor feedback. Transitioning to an online platform requires effective tools and curriculum modifications to fill the gap in industry expectations regarding student employability. Online teaching has immense capability, but it cannot be generalized and requires subject-specific attention and feedback. Online education needs to keep evolving alongside contemporary classroom teaching to meet student expectations. Future research would concentrate on communication, interpersonal, and technology skills and their effect on the study's results.

Keywords: hospitality, tourism, Covid-19, online education, importance-performance analysis

1. Introduction

In today's world, online learning is commonly used in both teaching and learning. Because of the COVID-19 pandemic, all educational systems worldwide have to switch to online classes (Sari, 2020). Formal, informal, and non-formal hospitality and tourism education (HTE) was impacted significantly during the COVID-19 pandemic. Lockdown was a state-of-emergency procedure enforced during the pandemic by competent authorities wherein operations, including educational activities, are carried out from home using online or computer devices (Mishra et al., 2020; Sari, 2020). As a result, it was time to reconsider, revamp, and overhaul the educational system considering the unprecedented current situation (Mishra et al., 2020).

However, online education is not a new trend. Hospitality and tourism educational institutions earlier incorporated different educational delivery modes such as adjunct mode, mixed-mode, and complete online mode to reach out to the students (Harasim, 2000). The advent of Information and Communication Technology (ICT) has helped replace traditional teaching methods in hospitality and tourism programs (HTP) with technology-based tools and facilities for teaching and learning (Ghavifekr & Rosdy, 2015). ICT is enhancing and recreating the teaching methods in HTE through active learning and experiential learning (Kim & Jeong, 2018). Students also enjoyed the online class and felt that it benefited those with limited technology skills and shy students (Sari, 2020).

Shweta Chandra, PhD, Assistant professor, Department of Tourism and Hospitality Management, Jamia Millia Islamia, New Delhi, India; ORCID ID: <https://orcid.org/0000-0002-1724-0196>; e-mail: shweta.a.chandra@gmail.com

Aditya Ranjan, Corresponding author, Senior research fellow, Department of Tourism and Hospitality Management, Jamia Millia Islamia, New Delhi, India; ORCID ID: <https://orcid.org/0000-0003-1304-5489>; e-mail: adityaranjan@outlook.com

Nimit Chowdhary, PhD, Professor, Department of Tourism and Hospitality Management, Jamia Millia Islamia, New Delhi, India; ORCID: <https://orcid.org/0000-0002-7335-2379>; e-mail: nchowdhary@jmi.ac.in

However, a combination of practical components, business knowledge, and soft skills is the primary requirement for HTP (Patiar et al., 2017). While advancements in ICT have made possible the development of the learning and teaching tool for HTE, students' response is unknown whether they would consider it an effective means of bridging the gap between the traditional classroom and learning experience. Therefore, it becomes essential to find students' perception of students' effectiveness and satisfaction with online HTE.

The study was conducted during the Covid-19 lockdown when the educational institutions were abruptly closed down due to uncertainties over continuity of education. It was a forced transition in a limited period with little or no preparedness at both education imparters and receivers. The study highlights the implication of this sudden change, its impact on students' satisfaction, and challenges in continuing online education in HTE as a long-term planned strategy. The sample included 145 Indian students attending online hospitality and tourism courses. Importance-Performance Analysis (IPA) has been used to identify online education's essential parameters as perceived by the students and highlight their consequent performance and satisfaction, thus revealing the student concerns in online HTE. In IPA, the main attributes of the product or services are identified and subsequently rated on both the importance and satisfaction scale (Martilla & James, 1977).

2. Literature review

HTE has grown as a discipline with the evolution of the hospitality and tourism industry over the period. The hospitality and tourism industry has a complicated structure with a multidisciplinary and multi-component approach (Patiar et al., 2017). Hence, managers need a strong foundation of hospitality and tourism skills, management, and education to thrive in this complex environment (Formica, 1996).

2.1. Hospitality and tourism

The last two decades could be flagged as the flourishing time for the hospitality and tourism sector contributing to the global economy with US\$2.6 trillion. It has created 119 million jobs worldwide, contributing to one in every fifteen jobs. The hospitality and tourism sector in India received a cumulative FDI inflow of US\$ 15.61 billion between April 2000 and December 2020 (India Brand Equity Foundation, 2021). Moreover, the hospitality and tourism industry contributes 8.78% of total employment in India, catering to 5 million annual tourist arrivals and 562 million domestic tourists annually (Kumar, 2018). After a prolonged period of staggering presence and no defined structure, the hospitality and tourism industry finally carved a niche and has been recognized as a sector globally.

Hospitality and tourism are labor-intensive industries, which employ skilled, semi-skilled, and unskilled workers directly and indirectly. The progressive labor force with dynamic management, responsive government, and responsible society are the pillars of the tourism industry (Subbarao, 2008). Traditionally, hospitality and tourism drive the economy and the various backward and forward industry linkages with transport, handicrafts, manufacturing, horticulture, agriculture, adventure, sports, lodging, food, and construction (Kumar, 2018). It has emerged as a helpful tool for poverty alleviation, employment generation, and economic growth. The growth generated immense demand for trained professionals in the domain, igniting HTE. The growth of the hotel industry propelled by foreign and domestic tourism and business further created the demand for well-trained quality personnel. As a highly labor-intensive and service-focused industry, hospitality, tourism, and tourism-supported activities create a high proportion of employment and career opportunities for low-skilled and semi-skilled workers (Chang et al., 2020).

2.2. Hospitality and tourism education

Looking into hospitality and tourism constituents, it is a multidisciplinary, multi-component industry with different stakeholders and complex structures (Patiar et al., 2017). Hospitality and tourism have now

evolved as a proper discipline, and students study in a structured way worldwide. It has emerged as a good faculty in social science. The origin of HTE can be traced to Europe, where it was initiated to provide the industry with an entry-level position (O'Gorman, 2009). The hospitality and tourism industry is traditionally based on a solid routine operations background (Formica, 1996). Rapid growth and development of new destination tourism and travel industry turned the hospitality market highly competitive, making hospitality management education a critical requisite for managers to succeed in the complex and fierce market (Formica, 1996).

The internationalization of HTPs, foreign study courses, and the overall global perspective of HTE dramatically changed in the last few years (Kim & Jeong, 2018). The internationalization of HTPs in higher education has been identified as an important and effective educational development to respond to the challenges and contribute to students, faculty, curriculum development, and international alliances (Sangpikul, 2009). In the coming years, internationalization initiatives would likely continue with overseas partners through international articulation agreements and pathways such as studying abroad through summer courses and study tours offered by international university partners (Goh & King, 2020).

The world has recognized the importance of HTE to provide skilled and competent human resources that are practically different from educational institutions (Christou, 1999). HTE drives on training (Formica, 1996). The hospitality and tourism educational establishments have developed sandwiched courses incorporating industrial training to blend the theory with practical and experiential learning (Green & Sammons, 2014). The internships have become an integral part of HTE worldwide, and to the extent that some of the premier institutes have attached operational hotels (Lebruto & Murray, 1994). Currently, there are two popular models in HTE, one based on training through apprenticeship, and the other is the mixed approach of both academic and vocational elements (Scotland, 2006). The crux of HTE lies in satisfying customers through the delivery of quality service (Millar et al., 2010). HTE could be perceived as an amalgamation of academic, professional, craft knowledge and skills to address the needs of the hospitality and tourism industry (Subbarao, 2008). HTE needs to assist students in developing communications and interpersonal & soft" skills (Millar et al., 2010). However, the stakeholders indicate that students are often not prepared for the workplace and call on universities to produce more employable graduates by providing transferable skills that can be taken into the workplace (Patiar et al., 2017).

The vocational nature of hospitality and tourism management is ideal to utilize work-integrated learning to transfer classroom activities to the workplace (Spowart, 2011). Higher Education institutions offering HTPs have physical facilities that allow for technical skills such as reception proficiency, culinary methods, and customer service, which students will need in the workplace (Liçai, 2015). The main objective of hospitality and tourism management education is to provide the industry with high-caliber graduates equipped with relevant management competencies (Christou, 1999). Effective human resource management is critical in the hospitality and tourism industry (Kumar, 2014). So, in addition to the traditional classroom learning, there is a substantial component of practical work experience vital for the future success of hospitality and tourism management graduates (Tse, 2010). Live demonstration, practical, and internships aim to enhance students' practical skills and management competencies while providing a critical learning bridge between classroom theory and workplace practice (Dawson, 2020). Sandwith (1993) mentions delineating managerial competencies such as conceptual/creative, leadership domain, interpersonal administrative, and technical knowledge requirements among hospitality and tourism students. However, in the last decade, hospitality and tourism organizations and educators have been struggling with the need to integrate emerging technology into their classrooms and learning environments (Goh & King, 2020). Moreover, HTE is still struggling to match up to a competitive and changing environment, and there are gaps between professionals and educators in both industries (Patiar et al., 2017). The stakeholders still feel there is a lack of relevant competencies and skillsets.

2.3. E-learning / Online teaching

Face-to-face learning is evolving in HTE and is expanding as distance learning (Kim & Jeong, 2018). The adoption of computers and their use in education began in the 1970s; however, academics and educators had limited access to computer networks (Harasim, 2000). Mid 1980's witnessed various experimentation with online teaching and finally led to the beginning of online education (Kentnor, 2015). Non-credit "mini-courses" and executive training programs were the first online courses in 1981 (Boyd, 2016). E-learning is covered under an umbrella term of technology-based learning, including learning methodology using electronic media and technology, like the internet or intranet, video conferencing, or satellite broadcasts (Chopra et al., 2019). E-learning is the recent trend for enhancing academic and professional skills through the internet. India, for example, is the second-largest market of e-learning after the USA (Chopra et al., 2019).

The world, including India, is taking various initiatives to boost the progress of the distance education market through e-learning. Several government initiatives have been launched to spread hospitality and tourism digital literacy in India, including Digital India and Skill India. e-Basta (digital versions of school books), e-Education (all schools linked to the internet with free WiFi), and the development of pilot MOOCs (Massive Online Open Courses) are a few more examples. With the help of ICT, teaching and learning in HTE expands its reach and has gone beyond the restrictive school environment (Ghavifekr & Rosdy, 2015). Moreover, ICT empowers and assists hospitality and tourism teachers as per the global requirement by providing add-on supplements for better teaching and learning (Ghavifekr & Rosdy, 2015).

The e-learning empowered by ICT with its ample scope presents a promising platform (Paulsen, 2004). ICT enhanced interactivity, connectivity, and convergence have created an education delivery platform that enables students to receive and interact with educational materials and engage with teachers and peers in previously challenging ways (Sigala, 2002). A shift from the traditional classroom to an online teaching environment shifts collaborative and constructivist learning that requires more self-regulatory and self-control competencies (Sigala, 2002). The hospitality and tourism teaching-learning environment are affected by bonding and relationship among the students and the teachers (Kember & Leung, 2005). A suitable hospitality and tourism teaching environment focused on understanding, analytical skills, and self-learning clubbed with active participation, and appropriate assessment was the key to good learning (Kember & Leung, 2005). Moreover, the students exhibit various learning styles such as visual, auditory, reading/writing, and kinesthetics' (VARK) in the hospitality and tourism teaching-learning process (Zapalska & Brozik, 2006).

An essential component of online HTE is a simulation that helps students experience concepts and act out constructivist theories toward knowledge acquisition (Curta et al., 2015). Simulation is based on constructivism, where the learning happens through the reflection of personal experience (Douglas et al., 2008). Furthermore, computer-aided learning can enhance problem-solving skills, active participation, and interactivity help in knowledge and skill acquisition. Therefore, simulation is very effective in HTE. Some of the popular ones are CRASE (the Cornell Restaurant Administration Simulation Exercise), CHASE (Cornell Hotel Administration Simulation Exercise), CHESS (Competitive Hospitality Education Simulation Series), HOTS (Hotel Operational Training Simulation), and FIST (Foodservice Instructional Simulation Technique). Similarly, in tourism education, Computer reservation systems or central reservation systems (CRS), Airfare construction, ticketing, and itinerary costing require software that provides students with the necessary experience to integrate the activities in the real economy (Curta et al., 2015).

Simulations were an effective instructional tool for HTE that increased higher-order cognitive abilities among the students (Douglas et al., 2008). Furthermore, Students acknowledge using the Internet-based hospitality simulation to learn hospitality business concepts (Douglas et al., 2008). Role plays, an instrument for experiential learning, were always an essential part of HTE and facilitated students to involve themselves fully, integrate their observations logically, and then make decisions (Ruhanen, 2008).

However, e-learning and simulation in HTE present their challenges. How well e-learning and simulation work with the human involving situation is still to be explored. Another challenge of online education is the academic integrity of assessments and online learning experiences related to real-world situations of the hospitality and tourism industry, which comprise both high-stake professional and interpersonal elements (Smith et al., 2009).

2.4. Impact of Covid-19

The covid-19 pandemic has brought the educational industry to the brink of transformational crisis, giving rise to a host of unforeseen challenges and roadblocks. The COVID-19 pandemic has created the most significant disruption of education systems in human history, affecting nearly 1.6 billion learners in more than 200 countries (Pokhrel & Chhetri, 2021). Most colleges and universities have begun offering online education in response to the governments' mandate to continue teaching and learning (Bao, 2020; Sari, 2020). Studies have acknowledged that, while no one was prepared for such a transition, the change to online learning was essential to continue the teaching-learning process (Baber, 2020; Bao, 2020). Such a decision accelerated the educational institutions to adopt ICT platforms and methodologies that had not been used before.

Online teaching has emerged as a savior for educators and learners alike during the unprecedented global COVID pandemic (Basilaia & Kvavadze, 2020). The pandemic emphasized the importance of disseminating knowledge across borders, companies, and all of society. As a result, the global education system, including hospitality and tourism teaching, has changed dramatically (Maslen, 2020). However, not everyone is familiar with online teaching, as most instructors were unprepared for this sudden transition. Before the pandemic, MOOC programs offered options for enhancing the breadth and depth of HTE education delivery. It was believed that technology could mitigate the spatial barrier and render THE more accessible (Goh & Wen, 2020). Therefore, the HTE system was unprepared for such an emergency. That led to the simple re-implementation of conventional models borrowed from classroom-based or distance education, focused on passive transmission to be implemented in online teaching ineffective. Amidst such transformation, hospitality and tourism learning has taken a blow with the practical part/industrial exposures/OJTs of the curriculum worst hit.

2.5. Conceptual models of e-learning

New learning domain, characterized by a unique combination of education attributes with the aid of technology. Attributes such as group communication, place independence, time independence, and usage of multimedia and computer-mediated messages provide a conceptual framework for designing online courses (Harasim, 2000). Since the inception of e-learning, various frameworks such as Virtual-U, W (e) Learn, Online Human Touch (OHT), and communities of practice (CoP) were designed to enhance the innovative ways of teaching and learning with ICT. However, the principle of collaborative learning is seen as the most critical concept for online learning. Collaboration provides the social glue of a community that engages learners and motivates them to participate. Access to online education, breaking physical place-based barriers, and going beyond the geographic obstacles were seen as a remarkable benefit. The structural modeling approach to conceptualize the effectiveness of the e-learning portal from students' perspective revealed three dimensions, namely system quality, service quality, and information quality (Patiar et al., 2017). Further, the effectiveness of e-learning depends on net benefits and user satisfaction (Chopra et al., 2019).

World over, the governments are spending massively and have ambitious plans concerning e-learning (Palvia et al., 2018). Gradually various models on online teaching were developed that helped in understanding the various factors and contributed to making it more effective. Garrison et al. (1999) suggested the community of inquiry model for e-learning that explains online education as active learning environments or communities. The instructors and students are the key participants in the community to share ideas, information, and opinions (Deale, 2013). Integrating social presence, cognitive presence, and teaching presence are crucial for the online learning experience (Sun & Chen, 2016). Picciano (2017) suggested an integrated model of

blended learning that integrates in-person and online teaching. Such integrated learning would become the predominant mode of instruction at all levels of education. Bao (2020) mentions the five high-impact teaching practices to effectively deliver large-scale online education and advice for contingency plans for addressing possible problems. However, there is a need to further explore and investigate effective pedagogy for online HTE teaching and learning (Pokhrel & Chhetri, 2021).

2.6. Student satisfaction

Student satisfaction represents learners' perceptions of their educational experience (Alqurashi, 2019). Student satisfaction and learning are likely linked to their expectations of the overall usability of hospitality and tourism courses. Studies have been conducted to investigate the effects of online learning environments, including course structure, learner interaction, and instructor presence, concerning student perceptions of their learning and satisfaction (Gray & Diloreto, 2016). Student satisfaction, referring to student perceptions of learning experiences and perceived value of a course, is considered an important factor in explaining and predicting student learning in online settings (Kuo et al., 2013). Higher satisfaction leads to lower attrition rates, higher persistence in learning, and higher motivation in pursuing additional online courses (Koeske & Koeske, 1991). Online learner perspectives provide valuable information on the areas that matter to students and help institutions better understand their strengths and challenges in providing online programs (Kuo et al., 2013). Educational technology is an essential component of many higher education environments and a key determinant of students' experiential satisfaction. Interaction with the teacher is strongly associated with student satisfaction in online courses (Smith et al., 2008).

During online learning, a student uses ICT to communicate with the content, instructors, and other learners to receive help during the learning process to acquire information, construct personal meaning, and grow from the learning experience (Paulsen, 2004; Kuo et al., 2013). Moore (2014) mentions that instructor-learner interaction was the most crucial factor in student learning outcomes and satisfaction. Alqurashi (2019) mentions that learner-content and learner-instructor interactions are critical for student perceptions of learning and satisfaction, but learner-learner interaction is less significant. Cheng et al. (2016) found that more concrete, assurance, value, and empathy are the most important dimensions in students' satisfaction with online HTE. Baber (2020) found that online class engagement and online learning influence students' perceived learning, leading to student satisfaction. However, the COVID19 pandemic has compelled every hospitality and tourism educational institution to embrace online learning, although no one anticipated it. The abruptness of such change sparked a discussion about teaching-learning quality and student satisfaction.

3. Methodology

3.1. Research objectives

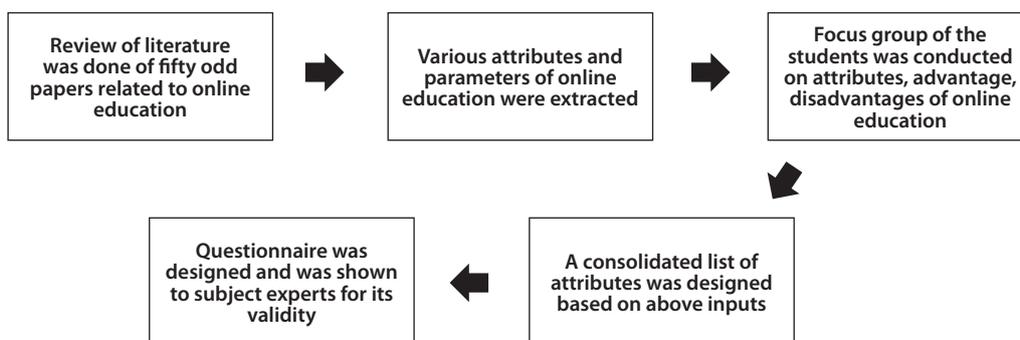
The literature review on online teaching and the multidisciplinary attribute of HTE established an understanding that online teaching cannot be generalized and must be analyzed and evaluated in the backdrop of subject curriculum and competencies. The various studies have shown that online education is very successful in some subjects, while others have limitations (Smith et al., 2009; Patiar et al., 2017). Such fact has compelled researchers to study online education in the context of hospitality and tourism. Secondly, the success of any teaching, whether face-to-face, blended, or online, is centered around students learning and how comfortable and satisfied he feels with the teaching. So, there is a need to assess online learning perceptions from the students' perspective and their sense of community in the virtual classroom environment (Kim & Jeong, 2018). To summarise, the study addresses the subject-specific gap in online hospitality and tourism college education from the student satisfaction point of view and attempts to find the answer with a focus on the following objectives-

- To identify the essential parameters of online education as perceived by the students
- To find out the performance of those parameters in online teaching, thus indicating satisfaction.
- To find out the weak areas and vital areas as perceived by the students concerning online education

3.2. Research method

Figure 1 outlines the research method for the study. First, a literature review was conducted on online teaching, hospitality and tourism, and education articles. Based on that, various attributes and parameters related to online teaching were extracted. Second, researchers have used focused group discussions to learn about student experiences implementing ICT in hospitality and tourism teaching (Breen, 2006). The purpose of focus group discussion (FGD) was to identify the gaps students perceive in online teaching and HTE. FGD aimed to validate the study's attributes derived from the literature review. Thirty students enrolled in different hospitality and tourism courses enrolled in different courses were considered for FGD. The FGD guideline was framed around the various attributes extracted from the literature review (Breen, 2006). The online platform was used to conduct focus group discussions, and discussions were recorded. Online focus group discussion proves beneficial as participants appeared to be more direct, responding to questions quickly, briefly, and concisely (Woodyatt et al., 2016). Students were divided into six groups, each comprising five students. Each discussion went on for most of 30 minutes. The group discussions were recorded, transcribed, and analyzed for themes across interviews to identify and validate the attributes.

Figure 1
Research framework for the study



A total of 32 HTE attributes were identified and validated from the previous research through focused group discussion. Researchers used these attributes to develop the questionnaire for the study. The questionnaire was then presented before the subject experts from education, tourism and hospitality disciplines to cross-check the validity of attributes. Based on the suggestions from experts' 26 attributes were finally considered for the study. The same 26 attributes were used to measure importance and satisfaction in the same questionnaire.

Demographic details such as age, gender, program enrollment, and approximate screen time included insights into the student indulgence in online HTE. The scale statements regarding importance and performance were measured in two sections with a five-point Likert-type scale (Martilla & James, 1977). The first section attempted to determine the importance of each online HTE attribute (1 = "Unimportant" and 5 = "Very important"). The second section attempted to determine the performance of the online HTE as perceived by the students (1 = "Strongly disagree" and 5 = "Strongly agree"). The questionnaire also had two open-ended questions regarding the advantages and disadvantages of online education.

The non-probability purposive sampling strategy was adopted to select students of different colleges from various hospitality and tourism courses. Data was collected through a structured questionnaire circulated through google forms. A total of 179 students from various courses participated and filled the questionnaire.

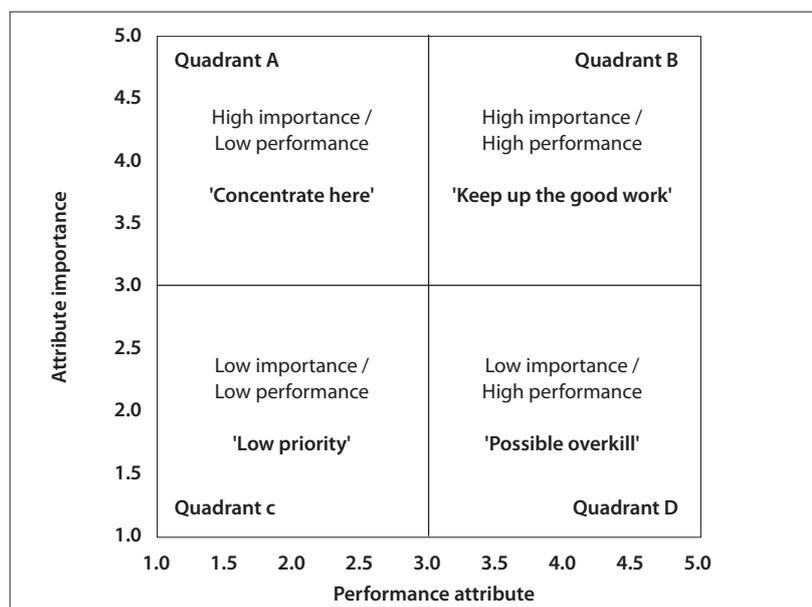
The data was further filtered, and any incomplete and inappropriate 34 responses were removed. Therefore, rightly filled 145 responses were finally considered for the analysis.

3.3. Analysis tools and methods

Statistical tools are the catalyst to convert the data into information. The data collected by the questionnaire was first coded and then entered into the software. All the analysis was done using IBM– SPSS software (Statistical Package for the Social Sciences). Importance-Performance Analysis (IPA), a method of determining consumer satisfaction by comparing customer perceptions to customer expectations, was used to analyze the data (Saputra & Gürbüz, 2021). IPA was first proposed and introduced by Martilla & James in 1977 as a tool by which to measure customer satisfaction with a product or service (Figure 2). The IPA follows a two-pronged approach and assumes that satisfaction is the outcome of two components– The Importance of the product attribute to the customer and the performance or satisfaction with the exitance of the feature or attribute (Martilla & James, 1977). The IPA has been widely used in hospitality and tourism research (Oh, 2001; Chang, 2017; Patiar et al., 2017). The main objective of the IPA is to diagnose the performance of different product attributes and compare it with the satisfaction rating of the customer. IPA is a two-dimensional grid that incorporates measurements of attribute importance and performance (Oh, 2001). The first step to conduct IPA is to identify the main attributes of the product or services and then get these rated by the customer both on the importance and satisfaction scale. This model works on the principle that if felt satisfaction is greater than perceived importance, positive disconfirmation means satisfaction. If the felt satisfaction is less than perceived importance, then it results in negative disconfirmation that is dissatisfaction. Performance Analysis in true sense is a expectation disconfirmation model based on customer satisfactions a function of importance.

The means are calculated for each importance and satisfaction and plotted on a graph after obtaining the rating. Each attribute gets a pair of coordinates plotted with the Y-axis as the importance and the X-axis as performance. The graph is divided into four quadrants based on the mean or median. Where there is an insufficient variation, or the importance ratings have a non-normal distribution pattern, it is recommended to use median values for the importance axis rather than mean values (Oh, 2001).

Figure 2
Importance performance matrix



Source: Martilla & James (1977).

When performance reviews exceed expectations ($P > E$), there is a constructive disconfirmation, and consumers are more likely to be happy. Conversely, customers are likely to be disappointed if negative disconfirmation ($E > P$) is there. Researchers may distinguish characteristics of positive disconfirmations ($P > I$) and negative disconfirmations ($I > P$) by incorporating the 45-degree diagonal line into IPA (Boley et al., 2017). Each quadrant attribute needs a different marketing strategy and planning to maximize the attributes to fall in Quadrant B and minimize the attributes in quadrant A.

4. Results and discussion

The data were collected from the students enrolled in various hospitality and tourism programs (Table 1). The collected data were coded and then was put to various statistical analyses.

Table 1
Sociodemographic characteristics of the sample

Course	Age			Total
	18 to 21 years	22 to 24 years	> 24 years	
Bachelors of hotel management	88	23	0	111
Bachelors of tourism and travel management	10	2	0	12
Master in tourism and travel management	0	4	0	4
Post graduate diploma in tourism and travel management	2	0	6	8
MBA executive tourism and travel	0	9	1	10
Total	100	38	7	145

In addition, the responses from the students enrolled in various hospitality and tourism courses ranging from graduate to master level were collected (Table 1). The data analysis revealed that most students were in the age bracket of 18 to 21 years (Table 1), constituting 69.0% of the total sample. However, the data was dominated by the graduation students comprising 76.6% of the total data.

A few other questions (Table 2) asked on attending online classes and the number of hours per week revealed interesting facts. It showed that 93.1% of the students attended online classes, with 55.2% spending 5 to 8 hours daily. A significant section of students, close to 56.6%, expressed dissatisfaction with respect online, followed by 28.3% who were unsure. However, a small portion of students, 15.2%, expressed satisfaction with online education.

Table 2
Student response to the online learning experience

Have you been attending online classes?	Frequency	Percent	Valid percent	Cumulative percent
No	10	6.9	6.9	6.9
Yes	135	93.1	93.1	100.0
Total	145	100.0	100.0	
What is the approximate time you attend online classes in a day?				
< 4 hours	59	40.7	40.7	40.7
> 8 hours	6	4.1	4.1	44.8
5 to 8 H	80	55.2	55.2	100.0
Total	145	100.0	100.0	
Are you enjoying learning online equally as a traditional classroom?				
Maybe	41	28.3	28.3	28.3
No	82	56.6	56.6	84.8
Yes	22	15.2	15.2	100.0
Total	145	100.0	100.0	

The mean values of importance and satisfaction of online HTE attributes were calculated (Table 3) and plotted on an IPA grid (Figure 3). After IPA analysis, the attributes were distributed into four quadrants (Figure 4).

Quadrant A- shows the Top Priority or Concentrate here section. It shows the factors which have high importance but have a low performance. It implies that these factors are important to the students, but their performance is not satisfying. Hence the education institutes need to work on these areas and improve them. The analysis shows that hospitality and tourism students are missing practical sessions and lab activities, which is a significant concern for dissatisfaction. The same has also been highlighted in the open-ended response of the students. On a practical aspect, the teachers back this finding as it requires systematic demonstration of the process in the presence of the students (Mishra et al., 2020).

Table 3
Importance and satisfaction of online hospitality and tourism education attributes

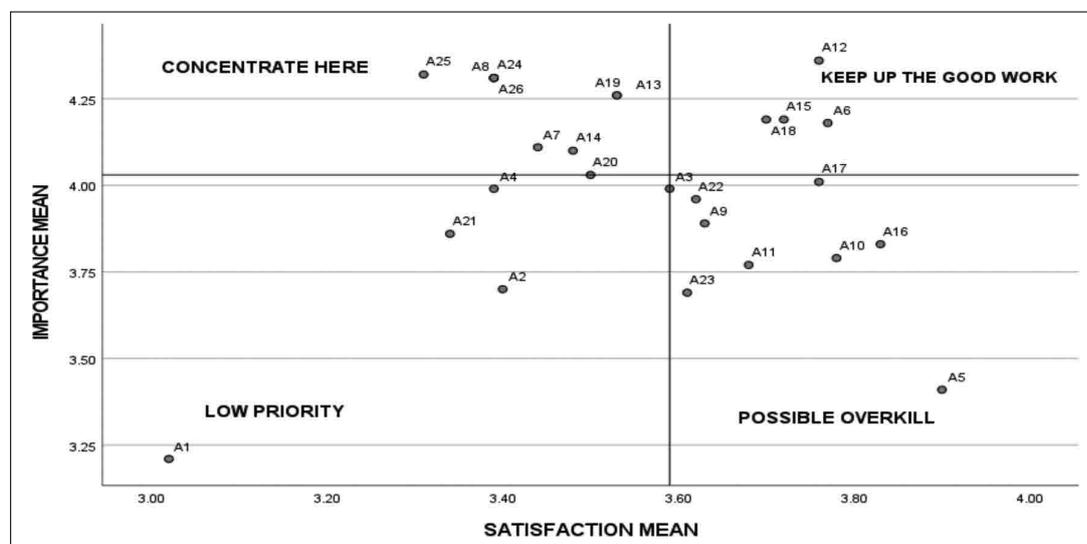
Attribute code	Attribute description	N	Importance		Satisfaction	
			Mean	Std. deviation	Mean	Std. deviation
A1	Online classroom environment	145	3.21	1.150	3.02	1.090
A2	Cooperation and social interaction	145	3.70	1.150	3.40	1.120
A3	Bonding and teamwork in class enhances understanding	145	3.99	0.930	3.59	1.150
A4	Lonely and secluded environment	145	3.99	1.170	3.39	1.000
A5	Structured and organized study material	145	3.41	1.040	3.90	1.140
A6	Innovative projects and practical	145	4.18	1.000	3.77	1.090
A7	Lab activities and instructor feedback	145	4.11	1.020	3.44	1.160
A8	Handholding during practical session	145	4.31	1.010	3.99	1.140
A9	Easy retrieval and reference	145	3.89	1.060	3.63	1.000
A10	Interaction with teacher	145	3.79	1.130	3.78	1.180
A11	Direct and timely feedback	145	3.77	1.090	3.68	1.000
A12	Convenience of asking questions	145	4.36	0.950	3.76	1.180
A13	Teachers' presence ensures attention	145	4.26	0.970	3.53	1.090
A14	Use of technology facilitate in learning	145	4.10	0.960	3.48	1.110
A15	Teachers' effectiveness in handling the class	145	4.19	0.990	3.72	0.980
A16	Teachers taught well	145	3.83	1.020	3.83	1.030
A17	Classroom ethics important for good learning environment	145	4.01	1.000	3.76	1.080
A18	Security of class conduct and environment	145	4.19	1.000	3.70	1.000
A19	Flexibility to attend class- time and place	145	4.26	0.970	3.53	1.090
A20	Option to cover up the missed classes	145	4.03	0.960	3.50	1.210
A21	Option to integrate education with work and family chores	145	3.86	1.120	3.34	1.140
A22	Attentiveness & proactive approach determines performance	145	3.96	1.070	3.62	0.940
A23	Breaks the barrier of shyness and fear faced	145	3.69	1.070	3.61	1.060
A24	Engagement and participation are very crucial to education	145	4.31	1.010	3.39	1.140
A25	Learning practical competencies and skills	145	4.32	1.010	3.31	1.140
A26	Campus experience	145	4.31	1.010	3.39	1.140

Students feel the teacher's virtual presence is not effective and could concentrate more in physical classes. The same has also come out as a concern of teachers in the qualitative study. Teachers were in a dilemma and unsure if students were actively present at that moment or sitting somewhere or switched on the computer for namesake; no clue about the participation (Mishra et al., 2020). Another reason pointed out by the students is the use of technology. Students highlighted that using advanced ICT facilities is to be promoted practically to handle this kind of learning situation better. Appropriate crucial teaching skill needs to be developed,

making a personalized learning experience for the students (Mishra et al., 2020). Teachers need to update and use appropriate content backed by technology for teaching.

The students also feel they have no flexibility to attend the class and cannot cover up the missed classes as fixed timetables are being followed. Such inflexibility is diluting the entire essence of online teaching. However, it may not be generalized as almost all the studies show that online teaching is time and place independent (Harasim, 2000). If the sessions are not recorded, the student may not be getting the full advantage, and the teaching is done within a fixed timetable. Campus experience is something that students miss very much, affecting their engagement in class, interaction with fellow students, and participation in activities. It was also noted as a significant factor in open-ended response. Students perceive that lack of social interaction is the most significant barrier in online education (Muilenburg & Berge, 2005).

Figure 3
Importance and satisfaction of HTE attributes.



Quadrant B- represents the Keep up the excellent work or Preserve achievement. The attributes in this quadrant have high importance and high performance. These are the things where students are satisfied and can be marked as strengths. The data analysis shows the high satisfaction of students regarding the convenience of asking the question as they are now on the virtual platform and have no inhibitions. They are satisfied with the way teachers handle the classes. The students also showed high performance regarding structures and organized study material and security related to classes. The students are also happy with the class environment and the classroom ethics.

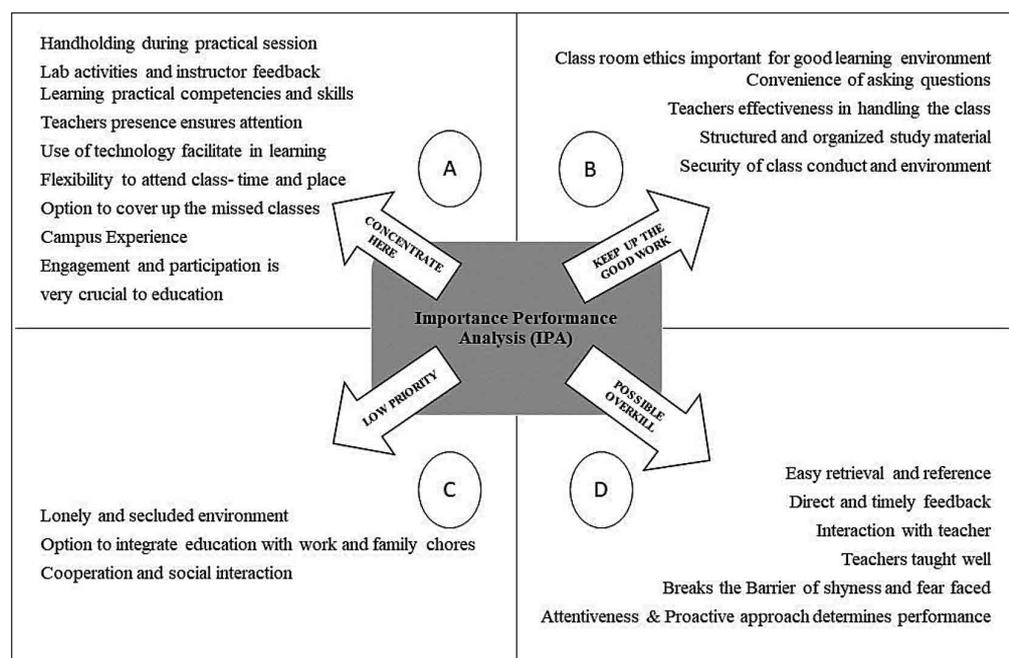
Quadrant C- shows the low priority attributes. It includes a lonely and secluded environment and balancing the work and family chores along with studying. These attributes are not crucial to the students, and they are not concerned about them. Cooperation and social interaction are also not important to them.

Quadrant D- is Possible overkill or resource overload section. It shows the attributes which are not crucial for students, but their implementation is high. These factors include timely feedback, interaction with the teacher, easy retrieval of study material, breaking the barriers of shyness and fear, and a proactive approach. The extreme performance could be because of the allocation of resources and excessive attention to these factors.

Online HTE deprives students of exposure to an actual organizational environment to learn management and interpersonal skills (Patiar et al., 2017). It also eventually damages the hospitality and tourism educational program and institution (Jenkins & Walker, 1994; Busby, 2001; Patiar et al., 2017). As a result, students are

disengaged from active learning and unprepared for their future careers due to a lack of practical experience in online HTE (Patiar et al., 2017).

Figure 4
Attributes in different and satisfaction quadrant



The analysis of two open-ended questionnaires further affirms the critical benefits and drawbacks of online HTE (Table 4). Technical glitches, adaptability, screen time overload, missing campus experience, and lack of learner-instructor interaction and practical components are some of the major drawbacks of online HTE. The response of open-ended questions also affirms the results of IPA. Most students feel that online HTE is beneficial as it affects the practical classes. However, students feel that e-learning has improved their technical skills, clarifies doubts, and proves to be financially beneficial.

Table 4
Analysis of open-ended question

Essential aspects of HTE that are suffering due to online education	Response count	Percentage
Practical	64	29.49%
Missing campus	53	24.42%
Missing grooming and personality	37	17.05%
Coordination and interactions	20	9.22%
Learning hampered due to technical issues / low connectivity/ low speed/ frequent disconnection	20	9.22%
Screen time overload	13	5.99%
Adaptability	10	4.61%
Benefits of online teaching for hospitality and tourism students		
Not beneficial as it is affecting the practical classes	21	30.88%
Flexibility	15	22.06%
Ease of clearing doubts	12	17.65%
Comfort	9	13.24%
Have improved the technical skills	6	8.82%
Money-saving	5	7.35%

The hospitality and tourism students reported that the primary sufferers due to online teaching are the practical and lab session (29.49%) followed by campus experience (24.29%). The study shows that students are missing out on developing grooming and personality skills (17.05%). Grooming is an ongoing practice, which can only be perfected over a lifetime. The looks, grooming, presentation, and self-expression are paramount in the hospitality industry. It aids in engaging guests, understanding them, leading to better guest involvement. Students also feel screen fatigue (5.99%) and lack interaction in online teaching (9.22%). Around 9.22% of the student also feel that that the learning is suffering due to technical issues.

5. Conclusion and suggestions for further research

This paper is intended to study the students' perception of the effectiveness and satisfaction of online HTE. The findings highlight the importance given to the practical component by the students wherein they consider practical sessions, lab activities, live on the spot instructor feedback essential, and the online education cannot come up their satisfaction. The hospitality and tourism institutes, therefore, should work towards this. Most hospitality programs have been designed to have face-to-face interaction with instructors and require interactions with peers as the main components in the learning. Therefore, it would be a mistake to take the curriculum and create it wholly online (Nair & George, 2016).

The use of technology forms the base of online education, but it has been revealed that students are not satisfied and are unaware of the technology. Hence hospitality and tourism institutes should create awareness about the digital platforms used through training, making students comfortable with the technology. Despite the drawbacks, the students like the organized and structured approach in online classrooms and find it easier to clear the doubts without hesitation and peer consciousness (Sari, 2020). The main drawback of the online education highlighted in the focus group and the survey is participation and engagement. Therefore, there is a need to investigate how to make online classes more interactive.

The HTE sector is already struggling with the significant gap in industry expectations regarding student employability. So, transition to an online platform poses an additional challenge and would require adequate tools and curriculum modifications. In addition, there have been concerns from multiple stakeholder groups about how effectively technologies compensate for the loss of social context of traditional hands-on learning (Nair & George, 2016).

Moreover, the students are increasingly missing the campus experience, which forms an integral part of their overall development. They miss out on their identity, association, and interaction with the hospitality and tourism institutions where they are enrolled (Samora, 2013). The uniqueness of digital online teaching platforms is the flexibility of any time, anywhere access which is being killed by following fixed timetables. It is suggested that hospitality and tourism institutes work towards flexible and open timetables with options to see the recordings that would further ensure the proper use of the online platform.

Online education has opened new frontiers and exposed us to an altogether new paradigm during the COVID-19 pandemic; however, the students still feel online education cannot become the "new normal." While there have been significant hurdles for educators, colleges, institutes, and governments regarding online learning, there are still many opportunities provided by the COVID-19 pandemic (Pokhrel & Chhetri, 2021). Many salient features of the online learning experience are shared across disciplines, while significant differences exist between disciplines (Smith et al., 2008). Online teaching has enormous potential. However, it cannot be generalized, and previous research shows a subject-specific response. For example, the students of classical subjects were happy and satisfied with the online system (Sari, 2020), whereas students registered dissatisfaction in nursing, hospitality, and tourism (Smith et al., 2009). Therefore, it is important to research online learning across disciplines, sort out what is unique to specific disciplines, and overcome and overcome

the unique challenges of disciplines with online learning. First, based on relatively objective evidence, disciplinary differences (hard versus soft and pure versus applied) are important factors in the design of online courses. Second, the distinction between pure versus applied courses may have more powerful implications for online course instructional designers (Smith et al., 2008).

With the high practical component in HTE, online education may address the theoretical aspect only, and the practical portion is ignored. Therefore, it is not effective as classroom teaching and can be used to supplement traditional classroom teaching. Moreover, with on-campus education and training, it was claimed that hospitality and tourism institution graduates do not have sufficient levels of qualities connected with emotional intelligence (Nair & George, 2016). The result shows that online classrooms widen the gap between industry requirements and what is taught in hospitality and tourism institutions.

Handholding during lab sessions with instructor feedback is crucial for acquiring skills. In addition, the kitchen practical requires physical presence and the senses of smell, touch, taste, and appeal as a part of learning. Virtual or online teaching can complement traditional classroom teaching but cannot fully replace it. Therefore, institutions should focus on the hybrid model combining the teacher and ICT (Jha & Shenoy, 2016), such as the Hyflex Model of teaching, using online platforms for theoretical inputs and physical labs for practical learning.

In developing and underdeveloped countries, the institutions should ensure a smooth transition to this new education-normal, easing the immediate and unfamiliar learning environment bringing down the anxiety that affects perceived online learning satisfaction. Covid-19 has presented an opportunity for institutions to auto-create a contingency plan or operating procedure for continuing education in unprecedented times. Online education should not be discontinued; instead, it should keep evolving alongside contemporary classroom teaching. Since HTE is somewhat complex (Green & Sammons, 2014), different tools such as VARK could be explored, and appropriate learning tools could be adopted to make the learning effective. The online modules could be developed using various online teaching models to emphasize task-based practical classes. At the same time, the hospitality and tourism curriculum should give due importance to management skills, including case studies, presentations, situation handling, demonstrations, panel discussions, and other innovative teaching methods in developing the students (Kumar, 2014).

The study has some limitations as well. Firstly, IPA highlights the importance of the HTE attribute. However, it does not address the utilities of absolute versus relative importance of the attributes (Oh, 2001). Secondly, HTE attributes were identified through focused group discussions of students. Many attributes are experiential by nature (Parasuraman et al., 1985), and students may not know how important a particular attribute is to their satisfaction until they experience the attribute (Oh, 2001). Thirdly, the research is limited to students' expectations about THE only. Future research should concentrate on communication, interpersonal, and technology skills and their effect on results. The study provides a foundation on students' perception of the effectiveness and satisfaction of online HTE. Finally, this investigation is a single study using cross-sectional data from hospitality and tourism students during the COVID-19 pandemic; the results and findings cannot apply to other subjects or situations. The relative importance of each of the identified attributes of HTE could be further utilized to develop a framework for enhancing student satisfaction.

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Appendix

Questionnaire of online hospitality and tourism education - Issues and challenges

I am Dr. Shweta Chandra, Assistant Professor at the Department of Tourism and Hospitality Management, Jamia Millia Islamia (a central university), New Delhi. With my colleague Mr. Aditya Ranjan and Prof. Nimit Chowdhary, I am conducting a survey regarding what students feel about online hospitality and tourism education and if it is a successful method of bridging the divide between the conventional classroom and the learning experience.

I would need only a few minutes of your time to fill out a questionnaire which forms a comprehensive part of our research. Your responses hold a great significance in our quest of data collection. Please find the questionnaire attached and feel free to add any additional comments.

We appreciate your assistance and look forward to receiving your response.

Thank you.

Section I

A. Please mention your full name _____

B. Select the appropriate age bracket *

- a. 18 to 21 years
- b. 21 to 24 years
- c. 24 years
- d. >24 years

C. Which gender you identify yourself with? *

- a. Male
- b. Female
- c. Prefer not to say

D. Mention the course you are perusing course _____

Section II

A. Please rate the importance of the following attributes with respect to online-teaching in hospitality and tourism courses. *

1- Highly Unimportant, 2- Unimportant, 3- Neutral, 4- Important, 5- Extremely Important

	Technological factors	Importance					Satisfaction				
		1	2	3	4	5	1	2	3	4	5
1	Online classroom environment										
2	Cooperation and social interaction										
3	Bonding and teamwork in class enhances understanding										
4	Lonely and secluded environment										
5	Structured and organized study material										
6	Innovative projects and practical										
7	Lab activities and instructor feedback										
8	Handholding during practical session										
9	Easy retrieval and reference										
10	Interaction with teacher										
11	Direct and timely feedback										
12	Convenience of asking questions										
13	Teachers' presence ensures attention										
14	Use of technology facilitate in learning										
15	Teachers' effectiveness in handling the class										
16	Teachers taught well										
17	Classroom ethics important for good learning environment										
18	Security of class conduct and environment										
19	Flexibility to attend class- time and place										
20	Option to cover up the missed classes										
21	Option to integrate education with work and family chores										
22	Attentiveness & proactive approach determines performance										
23	Breaks the barrier of shyness and fear faced										
24	Engagement and participation are very crucial to education										
25	Learning practical competencies and skills										
26	Campus experience										

F. Please rate the performance of the following attributes with respect to online-teaching in hospitality and tourism courses. *

1- Highly dissatisfied
2- Dissatisfied
3- Neutral
4- Satisfied
5- Highly Satisfied

B. Have you been attending online classes? *

- a. Yes
- b. No

C. What is the approximate time you attend online classes in a day? *

- c. < 4 hours
- d. 5 to 8 Hours
- e. >8 hours

D. Are you enjoying learning online equally as a traditional classroom? *

- f. Yes
- g. No
- h. Maybe

E. How would you rate online teaching with respect of tourism and hospitality on a scale of 1 to 10? *

1	2	3	4	5	6	7	8	9	10
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G. Please highlight top three essentials of tourism and hospitality teaching that has suffered due to online teaching? *

- i. _____
- ii. _____
- iii. _____

H. Please highlight top three benefits of online teaching in tourism and hospitality which have helped in enhancing learning? *

- i. _____
- ii. _____
- iii. _____