

# Impacts of COVID-19 Pandemic on Hospitality and Tourism Students

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## ABSTRACT

Tourism education is part of the complex tourism system as it provides professionally trained and qualified employees for the industry. Given the severe impacts of COVID-19 on tourism and the interconnected relationship between tourism education and the industry, the pandemic might have altered hospitality and tourism (HTM) students' perceptions toward the sector and, subsequently, their career intention. Against this backdrop, this study explores the pandemic's impacts on HTM students by analyzing the degree of change in their perceptions toward tourism and the effect of that potential perceptual change on their career intention before and after COVID-19. The study used a quantitative research design's retrospective pretest-posttest (RPP) model. Cluster sampling was used to draw the study sample, which comprised HTM students enrolled at several major HTM educational institutions in Malaysia. Descriptives were used to analyse the respondents' profile and program enrollment data, a t-test was used to examine the respondents' pre- and post-COVID-19 tourism perceptions, and correlation was used to explore the relationship between perception and career intentions. Key findings suggest that after COVID-19, HTM students have become less optimistic about the tourism industry and have lowered tourism-career intention after graduation. Additionally, such skills and knowledge as professional attitude and disciplinary skills might have become more critical and relevant. These findings underscore the importance of restoring HTM students' confidence and trust in tourism education and industry.

**Keywords:** *COVID-19, Education, Hospitality and Tourism, Students' Perceptions, Career Intention*

## 1.0 INTRODUCTION

Tourism education is one of the essential cornerstones of the tourism industry. It supplies professionally trained and qualified individuals who will become the sector's backbone (Kunwar, 2018). Furthermore, the tourism industry is a labor-intensive service industry that thrives on excellent customer service; thus, the industry must have a pool of well-trained and qualified employees (Jiang & Tribe, 2009; Unguren, Kacmaz & Kahveci, 2015). Effective and quality tourism education and training, thus, serve the ultimate purpose of creating professionally trained and qualified human resources required by the tourism industry (Hjalager & Andersen, 2001; Lo, 2005; Unguren & Huseyinli, 2020).

Before the outbreak of the COVID-19 pandemic, the tourism industry was growing tremendously. This growth simultaneously increased the demand for tourism education (Airey & Tribe, 2005). Nonetheless, since the rage of the pandemic in early 2020, things have changed rapidly and dramatically. The tourism industry is one of the hardest-hit economic sectors. Most countries have implemented unprecedented global travel restrictions and stay-at-home orders to contain the novel coronavirus. With those lockdown and slowdown preventive measures, countries have closed their borders, domestic and international flights have been suspended, and tourism activities (along with many other activities) have been halted. In short, due to COVID-19, international tourism has reached an abrupt standstill (WTTC, 2020; UNWTO, 2020; Gössling, Scott & Hall, 2020).

Tourism education and the tourism industry are closely interconnected. Whatever happens in the industry impacts the education system and vice versa. The changes caused by COVID-19 to the tourism industry have resulted in changes to tourism education and the possible implications for current and future generations of students, graduates, and industry employees (Bilsland, Nagy and Smith, 2020; Tiwari, Seraphin and Chowdhary, 2020). Nonetheless, the interrelated relationship between tourism education and the tourism industry tends to be overlooked (Seraphin & Yallop, 2021). As a result, the former receives little attention while the latter focuses substantially on tourism-related research.

Within the context of COVID-19, a lot of research has been done to examine the impact of the pandemic on the tourism industry. Still, only a dearth of research has been conducted to explore the effects of COVID-19 on tourism education. Given this research gap, several researchers such as Baum & Hai (2020), Bilsland et al. (2020), Tiwari et al. (2020), Unguren & Huseyinli (2020), Seraphin & Yallop (2021), and Ye & Law (2021) have called for the need to investigate the impact of COVID-19 on tourism education.

Given the severity of the impacts of COVID-19 on the tourism industry, the interconnected relationship between tourism education and the tourism industry, and the research gap on the effects of the pandemic on tourism education, the current study seeks to analyze the impacts of COVID-19 on tourism education from HTM students' perspective. Specifically, it aims to achieve the following research objectives and questions:

Research objectives:

- 1) To gauge the degree of change in HTM students' perceptions toward the tourism industry and the effect of that potential perceptual change on their career intention before and after COVID-19.
- 2) To examine the skills and knowledge that HTM students deem vital and relevant to their study post-COVID-19.

Research questions:

- 1) What will be the degree of change in HTM students' perceptions toward the tourism industry and the effect of that potential perceptual change on their career intention before and after COVID-19?
- 2) What skills and knowledge will HTM students deem vital and relevant to their study post-COVID-19?

Regarding the second part of the first research objective, which looks at the relationship between HTM students' perceptions of the tourism industry and their career intention after graduation, the research proposes the following hypothesis:

H1: A positive relationship exists between HTM students' perceptions of the tourism industry and their career intention after graduation.

This study is significant because it may contribute to the scant literature on COVID-19 impacts on tourism to advance the understanding of this area of research. Moreover, this study will be practical in highlighting the reasonable measures that tourism educators, government, and industry practitioners can take on the future of tourism education after COVID-19.

## **2.0 LITERATURE REVIEW**

### **2.1 Tourism Education and Tourism Industry**

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Before COVID-19, the demand for tourism education was growing in parallel with the tremendous growth of the tourism industry (Airey & Tribe, 2005). Colleges and universities provide tourism education. It involves hands-on or practical classes (such as using industry-specific computer reservation systems, cooking, serving, housekeeping, and so on), field trips, industrial training, and close communications with the industry. Tourism education provides the backbone of the tourism industry (Kunwar, 2018) by supplying a well-trained and qualified workforce (Hjalager & Andersen, 2001). On this note, effective and quality tourism education and training are essential in creating a pool of talented employees required by the tourism industry (Unguren & Huseyinli, 2020). Lo (2005) pointed out that the ultimate purpose of tourism education is to provide professionally trained talents to the tourism industry.

The relationship between tourism education and the tourism industry is two-way in that whatever happens in the tourism industry affects the tourism education system and vice versa (Tiwari et al., 2020). Tourism education provision follows the industry's trend (Kunwar, 2018). Alas, this two-way relationship and the fact that tourism education is a crucial part of the entire tourism system tend to be forgotten (Seraphin & Yallop, 2021).

Within the context of COVID-19, the changes caused by the pandemic to the tourism industry resulted in the ensuing changes to the tourism education and training systems and the possible implications for work-integrated learning internship placements for the future generation of students, graduates, and industry professionals (Bilsland et al., 2020). Considering the closely interconnected relationship between tourism education and the tourism industry, Kunwar (2018) stressed that tourism education must grow in parallel with the tourism industry so it can provide valuable support to the industry.

Given that whatever happens in the tourism industry affects tourism education (and vice versa) and the devastating impacts of COVID-19 on the tourism industry, the effects of COVID-19 on tourism education can be devastating as well. Baum and Hai (2020) reported that the pandemic had intensified concerns associated with high annual turnover rates in the tourism industry (Dogru, Mody, Suess, McGinley & Line, 2020), resulting in job insecurity, seasonality of work, low wages, and preference for the cheaper workforce (Robinson, Martins, Solnet & Baum, 2019). Even before COVID-19, several prior studies that examined the attitudes and career plans of tourism students revealed that the majority of tourism students do not want to work in the tourism industry after graduation due to the structural characteristics of the sector (i.e., job insecurity, work seasonality, limited career opportunities, stressful and demanding working conditions) (Aksu & Koksall, 2005; Jiang & Tribe, 2009; Richardson, 2009; Richardson & Butler, 2012; Wu, Morrison, Yang, Zhou & Cong, 2014; Unguren & Huseyinli, 2020).

## **2.2 Tourism Industrial Perceptions and Career Intention**

Although the tourism industry has been applauded for the many positive economic and socio-cultural benefits that it brings to a significant number of nations across the globe, society, by and large, still holds a somewhat negative perception of the industry. Several researchers (such as Aksu & Koksall, 2005; Kusluvan & Kusluvan, 2000; Walmsley, 2004; Roney & Oztin, 2007; Jiang & Tribe, 2009; Richardson, 2009; Richardson & Butler, 2012; Tiyce, Hing, Cairncross & Breen, 2013; Hwang, Lee, Park, Chang & Kim, 2014) have highlighted the typical negative views of the tourism sector including low social reputation and prestige, limited career opportunities, low wages, lack of job security as well as stressful and demanding working conditions. Nevertheless, despite negative perceptions toward the tourism industry, HTM education is one of the most pursued majors at colleges and universities. This situation is usually explained by the enrollment in an HTM program as a last resort by students who fail to be placed at any programs of any university (Keles, 2018), as well as the relatively low entry requirements to pursue an HTM degree compared to other disciplines (Ramakrishnan & Macaveiu, 2019).

HTM students' perceptions of the tourism industry will influence their career intention in the sector (Unguren & Huseyinli, 2020). For example, Aksu and Koksall (2005) stated that those students who have willingly and knowingly chosen to study in an HTM program have a positive attitude towards the industry and will most likely want to work in the tourism sector after graduation. In contrast, those students who unwillingly and unknowingly enroll in an HTM degree usually perceive the industry negatively and thus do not wish to pursue a tourism career after graduation (Jiang & Tribe, 2009; Richardson, 2009; Richardson & Butler, 2012; Wu et al., 2014).

COVID-19 may have heightened the negative perceptions of the tourism industry. Tiwari et al. (2020) expressed their concern that the current situation of joblessness in the tourism sector can potentially discourage future students from enrolling in a tourism/hospitality educational program.

### **2.3 Skills and Knowledge Post-COVID-19**

According to Tiwari et al. (2020), in the aftermath of COVID-19, three specific skills and knowledge areas will become particularly essential for HTM students, namely 1) innovation and creative skills that emphasize the innovative and creative aspects of tourism education, such as digital awareness, digital knowledge, and digital marketing (Batra, 2016); 2) academic courses that emphasize emerging concepts such as health and safety, crisis management, risk management, business continuity, and resilience for tourism and hospitality industry; and 3) Vocational skills that encompass communication proficiency, Information Technology skills, analytical thinking, creativity, and social interaction skills. These skills are already essential even before the pandemic, as shown by some prior researchers such as Tan and Morgan (2001) and Ayikoru et al. (2009).

## **3.0 METHODOLOGY**

### **3.1 Research Design**

The current quantitative study systematically investigated the impact of COVID-19 on tourism education before and after the pandemic by collecting quantifiable data and performing statistical tests for data analysis. It employed the retrospective pretest-posttest (RPP) model to gauge the extent to which HTM students' perceptions of the tourism industry changed before and after COVID-19 and the subsequent effect of that perceptual change on HTM students' tourism career intention. The reasons for using an RPP model were 1) the researcher couldn't go back to pre-COVID-19 time to collect the pre-pandemic data, and 2) A RPP model has been recommended by several researchers/statisticians such as Howard et al. (1979), Bray, Maxwell and Howard (1984), Moore and Tananis (2009), and Little et al. (2019) as a better alternative to reduce response shift bias that usually occurs in the TPP design.

Using the RPP method, respondents were not given a pretest questionnaire. Instead, they completed the online questionnaire only during the posttest, during which they were requested to report their current perceptions toward the tourism industry and career intention and, simultaneously, retrospectively think back to the time before COVID-19 about their perceptions toward tourism and career intention.

### **3.2 Sampling**

The study population was undergraduate students enrolled in HTM programs in Malaysia. Unfortunately, the researcher could not find official statistics on Malaysia's entire HTM student population. However, one certain thing is that many universities and colleges offer HTM programs at various levels across the nation (IDP Connect (2003) estimated the number to be about 43). Therefore, to draw the study sample, the researcher divided the HTM student population based on some identifiable characteristics, including their location, institutions, program types, and program level. Thus, using cluster sampling, the final study sample consisted of students enrolled in Diploma in Tourism Management at eight universities and colleges in Sabah, East Malaysia. At the end of the data collection period, 409 students completed the online questionnaire and were included in the data analysis.

### **3.3 Instrument**

The online questionnaire used for the research was created using Google Forms and consisted of four sections: Section A consisted of 5-point Likert-scale items probing into the respondents' perceptions toward the tourism industry (job security and stability, career opportunities, versatility of skills and knowledge, business/entrepreneurial opportunities, international mobility, and reputation and prestige) and career intention (planning to work in the tourism industry after graduation, and seeing a bright future working in the industry) before COVID-19; Section B comprised nominal and ordinal items about the respondents' demographic profile (gender, institution, program enrolled, current semester of study and work experience) and program enrolment information (decision to study in a hospitality and tourism program and reasons for studying in a hospitality and tourism); Section C had the same items as in Section A, but the questions/items

were to explore the respondents' perceptions toward the tourism industry and career intention after COVID-19; and Section D that consisted of multiple Likert-scale items asking the respondents to rank the skills and knowledge in tourism education in terms of importance and relevancy post-COVID-19.

The researcher referred mainly to the works of Aksu & Koksak (2005), Jiang & Tribe (2009), Richardson (2009), Richardson & Butler (2012), Wu et al. (2014), and Unguren & Huseyinli (2020) in designing the questionnaire.

### 3.4 Data Collection

Data collection took place from February 2021 until May 2021. The researcher sent an email to the program coordinators at the chosen eight universities and colleges with a request to help share the online questionnaire with their Diploma in Tourism Management students. A follow-up email was sent in April 2021 due to a low response rate in the initial data collection phase. Data collection stopped when responses from all the eight institutions were received, and the number of respondents reached 400, a sample size large enough to represent a population of 1 million (Krejcie & Morgan, 1970).

### 3.5 Data Analysis

Data analysis was executed using IBM SPSS Statistics 26.0. Descriptives were used to analyze respondents' profile and program enrolment data, a t-test was used to examine the respondents' pre- and post-COVID-19 tourism perceptions, and correlation was used to explore the relationship between perception and career intention. Eta squared was used to calculate the effect size of the changes on the respondents' perceptions before and after COVID-19 using the following formula (Pallant, 2016). Cohen's (1988) guidelines were referred to interpret the eta squared values, where .01 = small effect, .06 = moderate effect, and .14 = large effect.

$$\eta^2 = \frac{t^2}{t^2 + N - 1}$$

To interpret the strength of the relationship between perception and career intention in correlation, the researcher referred to Cohen's (1988) guidelines where  $r=.10$  to  $.29$  (small),  $r=.30$  to  $.49$  (medium), and  $r=.50$  to  $1.0$  (large).

## 4.0 RESULTS AND DISCUSSION

### 4.1 Respondents' Profile and Program Enrolment

Table 1 presents the respondents' profile and program enrolment information. Three-quarters of the respondents were female (74.8%), and the remaining were male (25.2%). The response rate from each of the chosen eight institutions was as follows: Universiti Teknologi MARA Sabah (28.9%), Asian Tourism International College (17.1%), University College Sabah Foundation (15.4%), Almacrest International College (14.7%), Kinabalu Commercial College (10.5%), Cosmopoint College (7.8%), MSU College Sabah (4.4%) and Geomatika College (1.2%). More than a quarter (32.5%) of the respondents were in their first year of study (semester 1 and semester 2), almost half (47.7%) were in their second year (semester 3 and semester 4), and the rest (19.8%) were in their final year.

Regarding the respondents' decision to enroll in the tourism program was concerned, most of them (70%) chose to study in the program willingly and knowingly. The program was their top choice of an educational program to pursue at the tertiary level. The remaining respondents (30%) enrolled in the program unwillingly and did not know what to expect from the program. A diploma in tourism management was offered to them based on their previous academic qualifications from high school or equivalent.

Those respondents who pursued the program willingly and knowingly indicated the following top reasons for their pursuit: the tourism industry offered social and cultural interaction opportunities (64.8%), abundant job opportunities in the tourism industry (57.9%), international career and mobility opportunities in the tourism industry (53.1%), interest in tourism (36.9%) and versatile skills and knowledge gained from a tourism educational program (32.8%).

**Table 1: Respondents' Profile and Program Enrolment**

Gender	Female	74.8%	The decision to enroll in the tourism program	Chose willingly & knowingly; top choice	69.2%
	Male	25.2%		Didn't choose willingly & knowingly; what was offered	30.8%
Institution	UiTM Sabah	28.9%	Top reasons for enrolling in the tourism program	Social & cultural interaction	64.8%
	ATIC	17.1%		Attractive job opportunities	57.9%
	UCSF	15.4%		International career/movement opportunities	53.1%
	Almacrest	14.7%		Interest	36.9%
	KCC	10.5%		Adaptable tourism skills	32.8%
	Cosmopoint	7.8%		Plan to start a tourism business	18.3%
	MSU Sabah	4.4%		An alternative career in tourism	14.2%
	Geomatika	1.2%		Some tourism work experience	6.6%
Current semester	1 and 2	32.5%			
	3 and 4	47.7%			
	5 and above	19.8%			

#### 4.2 Respondents' Perceptions toward the Tourism Industry Pre- and Post-COVID-19

Table 2 presents the t-test results on the respondents' perceptions of the tourism industry before and after COVID-19. There was a statistically significant decrease in all the variables used to examine the respondents' perceptions of the tourism industry, all with  $\eta^2$  values higher than .14, signifying a large effect or a substantial change in the respondents' perceptions of the tourism industry before COVID-19 and after COVID-19. In the order of  $\eta^2$  values, the t-test results for the respondents' perceptions toward the tourism industry before COVID-19 and after COVID-19 were as follows: career opportunities ( $M_{\text{before}}=4.60$ ,  $M_{\text{after}}=2.92$ ,  $p<.001$ ,  $\eta^2=0.51$ ), job security ( $M_{\text{before}}=4.58$ ,  $M_{\text{after}}=3.04$ ,  $p<.001$ ,  $\eta^2=0.49$ ), international movement ( $M_{\text{before}}=4.58$ ,  $M_{\text{after}}=2.98$ ,  $p<.001$ ,  $\eta^2=0.49$ ), entrepreneurial opportunities ( $M_{\text{before}}=4.59$ ,  $M_{\text{after}}=3.22$ ,  $p<.001$ ,  $\eta^2=0.43$ ), reputation and prestige ( $M_{\text{before}}=4.52$ ,  $M_{\text{after}}=3.11$ ,  $p<.001$ ,  $\eta^2=0.41$ ), and adaptable skills and knowledge ( $M_{\text{before}}=4.61$ ,  $M_{\text{after}}=3.52$ ,  $p<.001$ ,  $\eta^2=0.32$ ).

After COVID-19, HTM students' perceptions of the tourism industry might have been tainted by the brutal realities that hit the industry since the start of the pandemic in early 2020. Specifically, the results show students' less optimistic perceptions of the tourism industry concerning career opportunities, job security, international movement, entrepreneurial opportunities, reputation and image, and the applicability of skills and knowledge acquired from a tourism degree to industries or fields outside the industry. COVID-19 has negatively impacted the first three areas more severely than the others. This situation is unfortunate given that job opportunities and international movement were two of the top three reasons for the respondents to enroll in an HTM program.

This reduced optimism is not utterly incomprehensible, given that the tourism industry was one of the hardest-hit industries during the COVID-19 pandemic outbreak. Since COVID-19 began, we have been constantly bombarded with news and reports on the oscillations in the numbers of new daily COVID-19 cases and deaths around the world, more job losses in multiple sectors, implementation of stricter travel restrictions, further closures of national and international borders, and a sustained period of losses in tourist arrivals and receipts. The entire situation is almost like a vicious cycle going round and round with no clear vision of the cycle's end.

At the time of writing, Malaysia has reached a record new high in the number of new infections, where the daily average is reported to be more than 19,600 daily (Reuters, 2021). COVID-19 has cost 12,000 job losses in the Malaysian tourism industry, equivalent to 6% of the industry's workforce since March 2020 (Ganesan, 2021). To the researcher's knowledge, many people who used to work in the tourism industry after COVID-19 have moved on to do different jobs such as delivery, insurance, farming, and small business activities like selling flowerpots homemade delicacies, handmade crafts, and so on.

As Tiwari et al. (2020) observed, the state of joblessness in the tourism sector could dissuade potential students from enrolling in an HTM educational program. To illustrate this impact, the number of new students enrolled in the tourism/hospitality programme at UiTM Sabah in the semester after COVID-19

(October 2020 – February 2021) was 128, down by 41% compared to the semester before COVID-19 (October 2019 – February 2020, 189 new students). Although there may be several possible explanations for the decline, it is difficult to rule out COVID-19 as one of the plausible reasons.

**Table 2: T-test results on respondents' perceptions toward the tourism industry pre- and post-COVID-19**

Items	Before COVID-19		After COVID-19		<i>t-value</i>	<i>P</i>	$\eta^2$
	M	SD	M	SD			
<b>Perception toward tourism<sup>1</sup></b>							
Job security	4.58	.828	3.04	1.472	19.962	.000	0.49
Career opportunities	4.60	.863	2.92	1.505	20.552	.000	0.51
Adaptable skills & knowledge	4.61	.815	3.52	1.462	13.853	.000	0.32
Entrepreneurial opportunities	4.59	.847	3.22	1.482	17.612	.000	0.43
International movement	4.58	.915	2.98	1.426	19.819	.000	0.49
Reputation & prestige	4.52	.960	3.11	1.511	16.840	.000	0.41

<sup>1</sup>Measured on a scale of optimism where 1 – very low optimism and 5 – very high optimism

### 4.3 Effect of Respondents' Perceptual Change on Their Tourism Career Intention

Table 3 presents the correlation results on the respondents' perceptual change effects on their career intention pre- and post-COVID-19. Before the pandemic, there was a medium, positive correlation between the respondents' perception and career intention ( $r=.36$ ,  $n=409$ ,  $p<.0005$ ), with positive perceptions associated with high career intention. However, after the pandemic, the correlation between perception and career intention is more significant with  $r=.50$ . This result indicates that after COVID-19, the way by which HTM students perceive the tourism industry has a more profound influence on their intention to pursue a tourism job after graduation. Thus, the hypothesis of the study (there is a positive relationship between HTM students' perceptions toward the tourism industry and career intention) is accepted.

In other words, reduced optimism toward the tourism industry may have resulted in students' lowered career intention. This finding is aligned with the viewpoint of several prior researchers such as Coetzee and Schreuder (2002), Janes, Wisnom and Pybus (2003), and Unguren and Huseyinli (2020) that students' perceptions or attitudes toward the tourism industry are a significant determinant in whether they will pursue a career in the tourism industry after graduation. Following COVID-19, students may be less driven to work in the tourism industry after graduation. This may be attributable to the student's need for job security, something that the tourism industry cannot promise or guarantee due to the industry's susceptibility to external factors that can shake employment security without warning.

**Table 3: Correlation results in respondents' perceptual change in their tourism career intention pre- and post-COVID-19**

Total Perception Pre-COVID-19		Career Intention Pre-COVID-19
	Pearson Correlation	.358
	Sig. (2-tailed)	.000
	N	409
Total Perception Post-COVID-19		Career Intention Post-COVID-19
	Pearson Correlation	.502
	Sig. (2-tailed)	.000
	N	409

### 4.4 Respondents' Perceived Important Skills and Knowledge Post-COVID-19

Table 4 presents the skills and knowledge areas in tourism education that the respondents perceived as essential and relevant in the aftermath of COVID-19. Four critical skills and knowledge areas were included: generic skills, disciplinary skills, professional attitude, and career planning skills. Based on the total mean score values, the respondents ranked the importance and relevancy of these skills and knowledge areas post-COVID-19 in the following order: professional attitude (total mean score = 26.97), disciplinary skills (total mean score = 22.41), generic skills (total mean score = 17.96), and career planning skills (total mean score = 17.83).

In the aftermath of COVID-19, it is understandable that HTM students would consider professional attitude more critical and relevant after the pandemic. Professional attitude incorporated such skills and knowledge as independent learning, professional ethics and morals, analytical thinking and reflection, stress management, dedication to work, stability, and resilience. In addition, COVID-19 has undoubtedly put a spotlight on such issues as uncertainty, instability, stress, and crisis that have affected not only the tourism workforce but also tourism students. Thus, after the pandemic, skills and knowledge about managing stress independently and professionally during times of an acute crisis, building resiliency so one would rebound from a critical or stressful time, and sticking to one's career or industry during or after a crisis might have become more urgent than, for example, learning a second or foreign language skill or developing a self-marketing skill.

Moreover, as the results indicate, such disciplinary skills and knowledge as risk and crisis management, digital skill, business/entrepreneurial skill, and health and safety measures are deemed essential and relevant after COVID-19. The pandemic has much to do with risk, crisis, and health and safety issues. Additionally, the pandemic has forced many businesses, including those in the hospitality and tourism industry, to drastically shift from a traditional, brick-and-mortar business model to an online, technology-driven business design. This shift may have prompted the urgency of building or improving digital and innovation skills among tourism investors/businesses. This shift might persist long into the future of the tourism industry. Tiwari et al. (2020) underscored the importance of tourism educators to incorporate such skills and knowledge as digital knowledge, creativity and innovation, vocational know-how, crisis management, business resilience, and health and safety in the tourism curriculum design in the aftermath of COVID-19.

**Table 4: Respondents perceived essential skills and knowledge post-Covid-19**

Generic skills	Mean	SD
a. Communication/social-interaction skill	4.60	.764
b. Teamwork skill	4.62	.764
c. Second/Foreign language skill	4.44	.858
d. Physical stamina	4.30	.868
<b>Total scale score</b>	<b>17.96 (Mean = 4.49)</b>	
Disciplinary skills		
a. Industry-specific system skill	4.44	.835
b. Risk and crisis management skills	4.52	.786
c. IT skill	4.47	.825
d. Business/entrepreneurial skill	4.37	.866
e. Health and safety measures	4.61	.756
<b>Total scale score</b>	<b>22.41 (Mean = 4.48)</b>	
Professional attitude		
a. Independent learning	4.50	.811
b. Professional ethics and moral	4.59	.772
c. Analytical thinking & reflection	4.51	.792
d. Stress management	4.41	.862
e. Dedication to work	4.54	.792
f. Stability and resilience	4.42	.810
<b>Total scale score</b>	<b>26.97 (Mean = 4.50)</b>	
Career planning skills		
a. Understanding of professional trends	4.50	.802
b. Self-marketing skill	4.44	.847
c. Lifelong-learning skill	4.46	.822
d. International perspective	4.43	.805
<b>Total scale score</b>	<b>17.83 (Mean = 4.46)</b>	

*Measured on a scale of importance where 1 – unimportant and 5 – very important*



## 5.0 CONCLUSION

The current study systematically investigated the impact of COVID-19 on tourism education before and after the pandemic. Specifically, it sought to gauge the degree of change in HTM students' perceptions toward the tourism industry and the effect of that potential perceptual change on their intention to pursue a tourism job after graduation. A major finding suggests a significant reduction in HTM students' confidence and trust in the tourism industry, which is indicated by a substantial change in the way HTM students perceive the tourism industry, particularly regarding career opportunities, job security, and international movement. Another key finding shows that after COVID-19, the way HTM students perceive the tourism industry has a more profound influence on their intention to pursue a tourism job after graduation. Moreover, it was discovered that such skills and knowledge areas as professional attitude and disciplinary skills might have become more critical and relevant in the aftermath of COVID-19. The significance of these skills and knowledge areas might have been driven by the pandemic's issues, such as health and safety, risk and crisis, digital skills stress management, business resilience, and so on.

In view of these findings, the current study calls for a due emphasis on rebuilding HTM students' confidence and trust in the tourism industry overall and in tourism education specifically, given the vital role that HTM students play in supplying a pool of knowledgeable, skilled, and professionally trained human resources for the industry.

One of the ways to restore HTM students' confidence and trust in the tourism industry is to restore the tourism industry to its glorious pre-pandemic level as much as possible. In Malaysia, domestic tourism has been revived significantly, and international tourism restarted when the Malaysian government opened its international borders in April 2022. Nonetheless, the road to recovery will be extended. It is predicted that tourism recovery will be slow and gradual in 2022 and 2023 and that the Malaysian tourism sector is only expected to recover fully in 2024. Moreover, there are challenges impeding the fast recovery of tourism in Malaysia, including labour shortages, China's continued closure of borders (China is one of the top three tourism markets for Malaysia), rising costs of transportation and food due to higher global commodity prices, and relatively low traveller confidence. These challenges are beyond the control of the Malaysian government. Thus, it is perhaps a question of time before a full recovery is within grasp. Still, despite the forecast of slow tourism recovery, the Malaysian government has been taking proactive measures to increase the number of tourism arrivals, as outlined in the Tourism Strategic Plan 2022–2026, which highlights six strategic directions, including boosting domestic tourism, forging smart partnerships, enhancing tourism promotion (online and offline), optimising strategic communication or media engagement, implementing travel bubble, and undertaking strategic transformation (Tourism Malaysia, 2022).

COVID-19 might have prompted a re-examination of the skills and knowledge needed to work in the tourism industry post-COVID-19. What will be the more relevant and valuable skills and knowledge needed for a thriving tourism career after the pandemic? To answer this question, the researcher suggests collaborating with tourism educators and industry practitioners to discuss the most relevant and valuable tourism skills and knowledge after COVID-19. Furthermore, several scholars in the same area of investigation have highlighted the importance of equipping HTM students with digital, innovative, and vocational skills. These skills will not only make tourism education robust during the recovery phase of the pandemic, but they will also provide the competitive and survival skills to work in the tourism industry after COVID-19.

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