A study of work-integrated learning experience of hospitality and tourism management students in Guangdong under the COVID-19 pandemic

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Abstract

Purpose – This paper aims to explore students' work-integrated learning experience. Particularly, students' application of knowledge and improvement of multiple skills in work-integrated learning, their influence on positive industry image change due to the COVID-19 pandemic, and students' desired career prospect were explored.

Design/methodology/approach – A questionnaire survey with valid responses from 168 undergraduate students in hospitality and tourism management was conducted in four colleges/universities in Guangdong, China in 2021. PLS-SEM method was used to analyze the data.

Findings – It was found that students' multiple skills had improved through application of knowledge in work-integrated learning. Skill improvement helped form positive industry image change and shape future career prospect. However, such positive industry image change did not impact students' career prospect directly.

Originality/value – Today, work-integrated learning has become one of the most valuable opportunities for students in hospitality and tourism management to gain industry experience. However, recent literature has largely examined the negative impacts of COVID-19, whereas few studies have examined the positive aspects of work-integrated learning.

Keywords Work-integrated learning, COVID-19, Positive industry image change, Career prospect

Paper type Research paper

Introduction

Today, the hospitality and tourism (H & T) industry has suffered considerably due to the ongoing COVID-19 outbreak, more specifically, owing to the social distancing requirement and various prevention and quarantine measures that have been adopted in different countries (Kaushal and Srivastava, 2021). Domestic and international mobility has been affected. Meanwhile, this situation affects students' view of their study choice in H & T management, their internship/work-integrated learning (WIL), as well as their perceived future career (Joshi and Gupta, 2021). Despite the obvious negative impacts of COVID-19, limited studies have

indicated that students have also held a positive image toward the industry or even optimistic career prospect in certain senses (Reichenberger and Raymond, 2021; Shah *et al.*, 2021). Unfortunately, similar academic endeavors are still scarce, particularly when related to the understanding of WIL.

Many studies have acknowledged the important role of WIL in helping students apply the knowledge and theories they have learned from classes to work situations (Bilsland *et al.*, 2020). Students are expected to improve multiple skills in real-world situations at workplaces (Kaushal and Srivastava, 2021). However, despite the existing knowledge about the connection between WIL experience in the H & T industry and students' career prospect with the expected improvement of multiple skills (Govender and Wait, 2017), few have investigated whether students have changed their perception of the industry through such experience under the COVID-19 context. Moreover, despite the negative impacts triggered by this unexpected global crisis, students' in-depth thinking and analysis toward a potential positive image change of the industry may also be somewhat generated based on the belief that the COVID-19 crisis will bring opportunities for the industry development in the future (Brouder, 2020). Therefore, our study would contribute to the literature by examining the interrelationships among students' multiple skill improvement through WIL in relation to their application of school knowledge, the positive industry image change, and desired career prospect.

Literature review

H & T work-integrated learning

With the nature of high susceptibility to extreme events (Khan *et al.*, 2021; Shah *et al.*, 2021; Zhong *et al.*, 2021), the labor market of H & T industry is heavily affected by COVID-19, causing a mass withdrawal of low-skilled and entry-level workers and the rise of technology adoption (Huang *et al.*, 2021). Cooperation among different stakeholders, especially the industry practitioners and the education institutes, is vital to the alleviation of talent outflow and unemployment issues.

To make H & T students industry-ready, an experiential learning program, WIL, has been established in higher education institutions (Nyanjom *et al.*, 2020). It offers students an opportunity to build up their capability and employability skills by merging and applying knowledge and theories that they have learned from traditional classes to real-world situations, including internships, fieldwork placements, simulations, and collaborative projects operated through industry and community connections. With support from the industry, a wide range of practical work experience and job positions has been provided. Students can absorb, learn, and apply various skills and knowledge in both breadth and depth from the allocated jobs or those that they have sourced from the market. Thus, it provides students with a valuable understanding of the industry, offers a market advantage in competitive work (Bilsland *et al.*, 2020), and offers students a long-term career aspiration (Robinson *et al.*, 2016). Therefore, WIL enhances students' confidence level and capability by equipping them with the required skills.

Multiple skills improved from application

When designing H & T program learning outcomes, it is of utmost importance that multiple skills and relevant theories are embedded so that students are able to put theory into practice during WIL/internships. According to Kaushal and Srivastava (2021), developing multiple skills for H & T workers is an effective way to help reduce layoffs and retain employees. Equipping employees with multiple skills not only enhances business performance but also fosters positive job commitment and attitudes.

As a service-oriented industry, customer-staff interaction is essential for high-quality services given to H & T guests. Staff performance and their interaction with guests can

heavily affect the customers' feedback (Losekoot *et al.*, 2018). Communication is also important in the development of colleague relationships which is conducive to positive workplace atmosphere, staff motivation, and staff morale. This becomes more important given the challenging work environment and market demands during COVID-19.

Meanwhile, language skills and service skills can also be developed and improved during H & T's WIL. Apart from English or any other local and international languages that have been acquired in the higher education institutions, WIL also provides students with exposure to professional language in the workplace, enhancing their professionalism and allowing them to communicate well with local and international guests (Sonnenschein *et al.*, 2019). Proper use of professional language can portray a positive image of a renowned H & T business. Consequently, this is considered to be crucial to business recovery and image re-building due to COVID-19.

In the context of COVID-19, H & T customers' needs and behavioral trends are ever-changing. The ability to identify the problems that guests are facing and to create a corresponding action plan to resolve them are vital. In general, problem-solving skills can be developed via placements. WIL can provide such experience and problem-based learning opportunities when confronting customer service problems and crisis management skills (Sonnenschein *et al.*, 2019). Thus, it helps students develop creative solutions to problems (Losekoot *et al.*, 2018).

Teamwork is also an essential component of soft skills that H & T students are required to learn. It facilitates the efficiency and effectiveness of peer collaboration and the distribution of the tasks in the industry. Losekoot *et al.* (2018) revealed that internships increase students' awareness of the importance of teamwork. Upon completion of practical work experience, students will realize that mutual understanding and mutual assistance between co-workers are vital.

In summary, although the knowledge, theories, and skills have been embedded in H & T programs and classes at higher education institutions, WIL is expected to provide dynamic contexts for application. It is worth noting that the meaning and scope of multiple skills required and expected in today's H & T industry have also been constantly changing and updating due to COVID-19. These changes and updates have been considered and incorporated in relevant H & T programs as well (Sigala, 2021). Therefore, the following hypothesis was proposed:

H1. The application of knowledge and theories learned from classes helps improve students' multiple skills during work-integrated learning.

Desired career prospect
Kusluvan and Kusluvan (2000) defined career prospect as one of the attributes that influences the perception of future opportunities and the hope for revenue that one can receive in the industry. In the H & T industry, the desired career prospect is dependent upon one's perceptions of the job which are influenced by the nature of work, social status, and work values. These are the main factors shaping staff's attitude and perception of the industry (Wan *et al.*, 2014). Profoundly, improving the employees' skills is conducive to having a skilled and qualified workforce, and this meanwhile enhances their perception of career prospect (Govender and Wait, 2017). With the development and improvement of employability skills, the experienced, skilled, and qualified staff are capable of adapting to different workplaces, forming good relationships with customers, fellow colleagues, and managers (Nguyen *et al.*, 2021). It also equips staff with the ability to work in high-skilled jobs which can bring promotion opportunities, pay rises, and social status enhancement. Consequently, skill improvement can prepare employees for competitive advantage enhancements in the labor market and as the foundation of establishing a positive

perception of career prospect. Particularly, it positively affects workers' confidence, perceived capability, and commitment to work in the industry and further facilitates effective business operation and performance (Wan *et al.*, 2014). The following hypothesis was thus proposed.

H2. A positive correlation exists between students' skill improvement through work-integrated learning and desired career prospect.

Positive (H & T) industry image change due to COVID-19

Previous literature has overwhelmingly discussed COVID-19's negative impacts on the H & T industry. They implied that the industry is sensitive and fragile, and its vulnerability is reflected in its susceptibility to various crises (Zhong *et al.*, 2021). Different crises will influence the industry development, business performance, and destination economies among others. Throughout history, various influential crises have included infectious diseases (e.g., severe acute respiratory syndrome (SARS)), natural disasters (e.g., earthquake or tsunami), economic crises (e.g., the financial crises of 2007 and 2008), terrorists (e.g., Iraq, Afghanistan.), and social incidents (e.g., anti-government movement) (Yang *et al.*, 2011; Rossello *et al.*, 2017; Tse *et al.*, 2018). Today, COVID-19 has severely affected the global economy and H & T industry (Gossling *et al.*, 2020). The industry has almost come to a standstill, thereby affecting both the supply and demand sides of the industry for a prolonged period of time.

Other than the negative influences, COVID-19 has positive implications to trigger industry changes and updates. For example, more technology and innovations are expected for future industry development. Hotels may consider adopting delivery robots, luggage-carrying robots, robot butlers, all-robotic staff, mobile apps, digital keys, and so on (Rai, 2017; Zhang, 2020). Meanwhile, an increasing demand exists for using augmented reality (AR) applications (Shin and Jeong, 2021) and virtual reality (VR) technologies (Yung *et al.*, 2021) in marketing practices and product development. Some of these technological adaptations and innovations may substitute part of human labor forces and may demand higher-level multiple skills of manpower for the remaining duties (Shah *et al.*, 2021). H & T organizations will offer more tailor-made training for future employees to acquire richer knowledge and higher technology literacy (Huang *et al.*, 2021; Sigala, 2021).

Furthermore, crisis management and risk prevention are other popular themes of future development (Zhong *et al.*, 2021). Given that many existing tourists and industry consumers may still be unwilling to travel or dine out due to the fear of COVID-19 and the perceived risk of infection (Zhong *et al.*, 2021), the other counterparts still retain high demand for relevant services offered in the industry. For example, hygiene and cleanliness applications may become increasingly important for future service, marketing, and management endeavors (Jiang and Wen, 2020; Majeed and Ramkissoon, 2020). Stringent health and safety measures should be incorporated into an updated crisis management plan for the efforts of prevention and preparedness.

The H & T industry has entered a transformational stage (Abbas *et al.*, 2021). The future industry should arguably develop and strengthen its sustainability policies and practices and fully utilize this chance to reshape its sustainable and socially responsible image (Orindaru *et al.*, 2021). Tsai (2021) explicitly highlighted that for many businesses and governments, using resources more effectively without increasing waste is an important sustainable development goal. Local and regional destinations, natural areas and parks, and short-haul travel with lower environmental impacts are expected to be important in tourism resilience and recovery (OECD, 2020). In addition, hotels and accommodations will strategically develop further in redesigning their products to attract environment-conscious guests and future new demands. Reduced touching has been recognized to possibly translate into "less exposure to contaminations" (Killion, 2021). Similar sustainable innovations can also be expected to be used in the food and beverage sector (Koster, 2021).

Although previous studies have also attempted to pay extra attention to the positive COVID-19 impacts that trigger industry developments and updates, whether H & T students as future industry employees, have acknowledged the positive influence and generated a positive industry image change because of their WIL or internship are issues that still await further research. Furthermore, whether this positive industry image influences students' desired career prospect needs to be investigated. Our study filled the research gap with the following two hypotheses:

H3. Skill improvement through work-integrated learning affects students' perception of positive industry image change.

H4. Positive industry image change leads to students' desired career prospect.

Conceptual framework
Finally, the conceptual framework was proposed (Figure 1). The application was hypothesized to pave the way for multiple-skill improvement because of WIL. With various skills improved, students were hypothesized to form desired career prospect as well as generate positive industry image changes due to COVID-19. Positive industry image change was also assumed to influence desired career prospect.

Methods
Measures
All measures were adopted from the literature. For example, the perceived "application" (two items) and "skill improvement" (six items) scales were adapted from Xu *et al.* (2022). They represent two important aspects of WIL experience in H & T industry. The attitude of "positive industry image change" (six items) was developed from different previous studies that have been made to understand COVID-19 and its impact on H & T industry. These studies included those of Kaushal and Srivastava (2021); Shah *et al.* (2021); Sigala (2020) and Wen *et al.* (2019). Finally, the predicting outcome is students' "desired career prospect" (ten items) in the industry, and its scale was derived from Wan *et al.* (2014). All major measures employed a seven-point Likert scale (from "1" to "7" indicating "strongly disagree" to "strongly agree"). Their other profile information was also collected. English was back-translated into Chinese, with advice and input from three scholars and two hospitality/tourism-related industry experts. Slight changes were further made after pilot tests involving 10 H & T degree students. The questions were uploaded to a well-known online survey platform in China: ebdan.net.
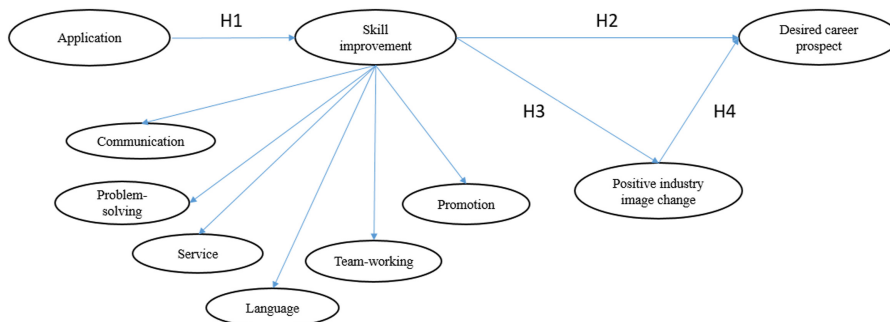

Figure 1.
Conceptual
Framework

Survey procedure

Six renowned colleges/universities in Guangdong Province, China with H & T-related majors were contacted and four agreed to support and assist the project. Another four colleges/universities in other provinces/cities (i.e., Beijing, Shanghai, and Sichuan provinces) in China were also contacted but declined our invitation. The target population of this study was undergraduate students specializing in H & T management in China during the period of study. Purposive sampling (Teeroovengadum and Nunkoo, 2018) was adopted to satisfy the research purpose in this study. With the consent of program leaders and lecturers, the online version of survey questionnaires was created and distributed to their students who majored in hotel/hospitality, tourism, or event (conference, exhibition, etc.). The e-link of the survey was sent to different classes through the WeChat system, mainly a Chinese multi-purpose messaging and social media application. The students were informed about the background of this survey, their participation would be voluntary in nature, and their responses were treated with strict confidentiality. Thus, the survey was for research purposes only and students were free to withdraw from participation at any time.

A screening question on whether the survey respondent has completed either fully or partially an internship or work-integrated education/learning during university/college studies was asked. Those who answered "no" to this question (i.e., those who did not start their internship or did not need to fulfill internship requirements) were screened out. The remaining qualified respondents were requested to read the instructions of the questionnaire (including research objectives, how confidentiality is ensured, voluntary nature of participation and right to withdraw, the time commitment for the survey, the affiliation of the research project, etc.) and provide informed consent. They were then asked to answer which specific industry sector s/he has been working for in internship or work-integrated education/learning (e.g., hotel/accommodation, restaurant/catering, attraction/theme park, event). Based on their recall, they were asked to reflect on their learning experience, such as their obtained and improved multiple skills, their perception of the industry image change, and desired career prospect.

Data analysis

Various statistical techniques were applied to test the research objectives and hypotheses. SPSS 27 was used to explore the demographic characteristics of respondents. SmartPLS software 3.0 was adopted to analyze data using partial least squares (PLS) structural equation modeling (SEM). Given the fact that data collection is becoming more challenging today which may result in a lower response rate, smaller sample size was assumed at the end for which PLS-SEM was considered appropriate owing to its less stringent assumptions on sample size and normality (Hair *et al.*, 2016). In our study, we followed a widely adopted sample size rule, i.e., "10-times rule" (Kock and Hadaya, 2018) that the sample size determined should be greater than at least 10 times of the model links connecting to any latent variable in the research model. In our research model, the greatest number of links for a given latent variable (e.g., "desired career prospect") was expected to be 10, thus determining a minimum sample size of 100.

Owing to the reflective research model proposed, a consistent bootstrapping method was adopted to examine both measurement and structural models (Hair *et al.*, 2016). Composite reliability, convergent validity, and discriminant validity were also tested. We followed a stringent threshold of outer model loading requirement (Henseler *et al.*, 2009); thus, any items with loading lower than 0.7 were dropped. Composite reliability should meet the requirement of 0.7 to be considered as satisfactory (Hair *et al.*, 2016). The average variances extracted (AVE) of different constructs were reported, and those greater than 0.5 were considered satisfactory to reach the convergent validity (Hair *et al.*, 2016). Concerning the discriminant validity, the HTMT (Heterotrait-monotrait) method (Henseler *et al.*, 2009) was adopted, and the threshold ratio was 0.85 (Kline, 2011) to satisfy the discriminant validity requirement.

Findings

Sample

Approximately 335 H & T degree/sub-degree students were approached based on the feedback from the program leaders or lecturers who helped distribute the survey, and 64 students turned out to be unqualified as they failed to pass the screening question of completing an internship or WIL program either completely or partially. The final sample size was 168 (Table 1) with a valid response rate of 50.1 percent. It also exceeded the expected minimum sample size of 100. Out of the 168 valid samples, 78.6 percent were female, which was considered representative of the H & T college student population (Tavitiyaman *et al.,* 2021). A total of 60.7 percent of the respondents majored in hotel/hospitality areas, followed by those who majored in tourism (25.6 percent) or event management (13.7 percent). They previously engaged in internships in a variety of sectors, including hotel/accommodation (36.3 percent), restaurant/catering (33.3 percent), event (14.3 percent), attraction/theme park (9.5 percent), travel agency (1.2 percent), and others (5.4 percent).

Measurement model

Measurement model testing was conducted with 1,000 sample bootstrapping (Table 2). Three items ("It is easy for me to find jobs directly within the H & T field", "Finding a good H & T job for me requires many social networks and relationships", "I can make more money in the H & T industry than in other sectors") with low loadings were eliminated. The other remaining items were confirmed with factor loadings higher than 0.7. The composite reliability statistics ranged from 0.928 to 0.955. The AVE figures were between 0.656 and 0.865. Thus, reliability and convergent validity for each construct turned out to be highly satisfactory as recommended by Fornell and Larcker (1981). According to Table 3, the HTMT ratios for each pair of constructs were below 0.85. Thus, discriminant validity was also not a problem in our study.

Structural model and hypothesis testing

The final step is structural model testing (Figure 2). The SRMR statistic (SRMR = 0.079) indicated satisfactory model fit. Predictive power was assessed by referring to R square values for each dependent variable. The recommended threshold was considered as 0.2 in consumer behavior research (Hair *et al.,* 2016). In our study, the predictive power for both "positive industry image change" and "skill improvement" turned to be the highest (R square = 0.521), followed by "desired career prospect" (R square = 0.428). It eventually suggests that 42.8 percent of the

	Frequency	Valid Percent
Gender		
Male	36	21.4%
Female	132	78.6%
Major		
Hotel/hospitality	102	60.7%
Tourism	43	25.6%
Event	23	13.7%
Work-integrated learning sector		
Attraction/theme park	16	9.5%
Travel agency	2	1.2%
Hotel/accommodation	61	36.3%
Restaurant/catering	56	33.3%
Event (Conference, exhibition, etc.)	24	14.3%
Others	9	5.4%

Table 1.
Sample profile (N=168)

	Item	Loading	Composite reliability	AVE
Application	Could apply skills	0.939	**0.928**	**0.865**
	Could apply concepts/theories	0.921		
Skill improvement	Communication	0.820	**0.928**	**0.682**
	Problem-solving	0.807		
	Service	0.804		
	Language	0.846		
	Team-working	0.844		
	Promotion	0.832		
Positive industry image change (due to COVID-19)	Cost control becomes more important	0.881	**0.955**	**0.782**
	Technology is expected to be used more	0.865		
	Innovation will be adopted more	0.905		
	Crisis management becomes more important	0.810		
	Social corporate responsibility will be taken more	0.905		
	Sustainability policies and practices will be developed more	0.934		
Desired career prospect	To study H & T management at the university level is a correct investment for my career development	0.863	**0.930**	**0.656**
	I can make good money by working in the H & T industry	0.823		
	Working in the H & T industry provides me with a secure future	0.807		
	It is necessary for me to have a university degree to work in the H & T industry	0.734		
	It is easy to find my desirable job in the H & T field	0.736		
	The advantages of working in the H & T industry outweigh the disadvantages for me	0.870		
	Promotion opportunities are satisfactory to me in the H & T industry	0.825		

Table 2.
Measurement model test (1000 sample bootstrapping)

	Mean	Standard Deviation	Application	Skill improvement	Positive industry image change	Desired career prospect
Application	4.52	1.39	1			
Skill improvement	5.04	1.06	0.720	1		
Positive industry image change	5.35	1.12	0.436	0.722	1	
Desired career prospect	4.37	1.20	0.771	0.653	0.464	1
Note: 7-point Likert scale						

Table 3.
Discriminant validity test using Heterotrait-Monotrait Ratio (HTMT)
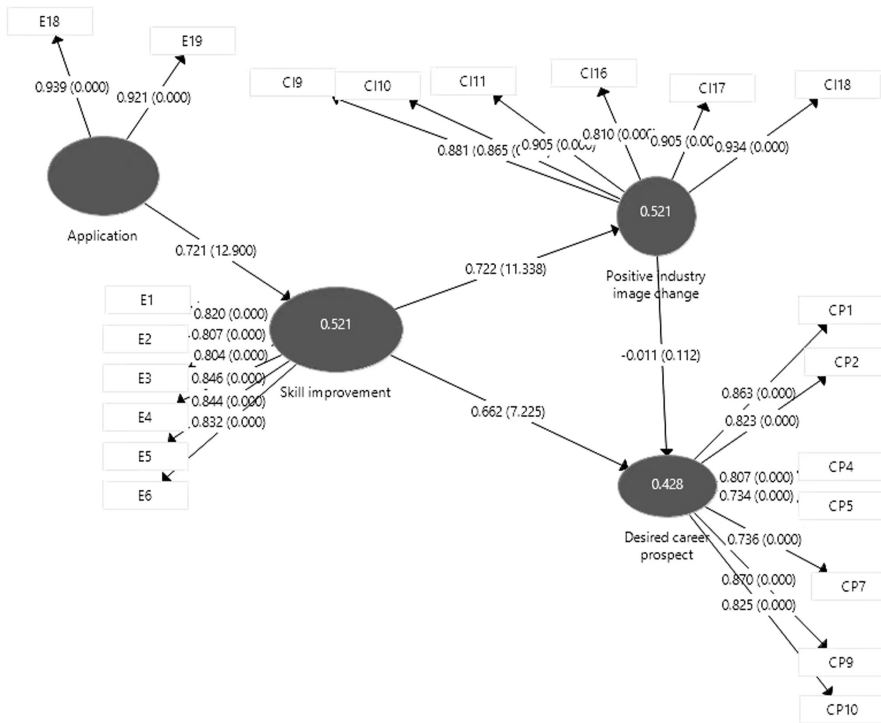
variance for the final predicting outcome (i.e., desired career prospect) could be explained in our structural model.

Subsequently, the following hypothesis testing (Table 4) was undertaken. The effect of "application" on "skill improvement" was significant ($\beta = 0.721$; t value = 12.900; $p < 0.001$), thus supporting H1. The relationship between "skill improvement" and "desired career prospect" was also significant ($\beta = 0.662$; t value = 7.225; $p < 0.001$), thus supporting H2. Moreover, the "skill improvement" was also found to exert a significant effect on "positive industry image change" ($\beta = 0.722$; t value = 11.338; $p < 0.001$), thus supporting H3. However, the positive relationship between "positive industry image change" and "desired career prospect" was not found ($\beta = -0.011$; t value = 0.112; $p > 0.05$), thus rejecting H4. A further

		Standardized coefficient	t-value	Hypothesis test result
H1	Application => Skill improvement	0.721	12.900***	Supported
H2	Skill improvement => Desired career prospect	0.662	7.225***	Supported
H3	Skill improvement => Positive industry image change	0.722	11.338***	Supported
H4	Positive industry image change => Desired career prospect	−0.011	0.112	Rejected
*** significant at .001 level				

round of f square tests was made to further supplement the path analysis. The significance values for all tests were less than 0.05 except that of the relationship concerning H4.

Discussion and implications

The COVID-19 pandemic has affected the H & T sector and its higher education (Kaushal and Srivastava, 2021). This study aimed to explore students' WIL experience during the COVID-19 pandemic, its perceived influence on the change of industry image, and desired career prospect in H & T.

Based on this study, students witnessed their WIL experience during the COVID-19 pandemic on the applications of knowledge and theories learned in class. This notion is ideal because some knowledge and theories in H & T management are subjective (e.g., communication, service, and language), and hands-on work experience are particularly necessary that can directly enrich students' constructive understanding and learning.

The results further suggested that students' perceptions of the applications of learned knowledge and skills helped improve their capabilities and competence in terms of professionalism and personal development. Students have obligations to learn and improve their technical (e.g., problem-solving, service, promotion) and interpersonal (e.g., communication, languages, teamwork) skills in their WIL. This aligns with previous findings by Kaushal and Srivastava (2021) and Losekoot *et al.* (2018), that is, the H & T industry requires talents with multiple skills. Particularly, soft skills are beneficial for students over the long term, because they may or may not pursue their careers in H & T sectors. Thus, students can explore interesting areas for training during WIL to gain sufficient new knowledge and skillsets for broader job opportunities.

With sufficient work experience and training received, students indicated that their career prospect in H & T remains optimistic in many senses. In China, given the relaxation of social distancing policies and rules, customers and local tourists have traveled more, while enjoying H & T products and services. As a result, students acknowledged many changes in the work environment and the industry features during the pandemic (Shah *et al.*, 2021), accepted the steady business recovery, had a positive perception of industry change, and considered working in this sector after graduation.

When students improve their skills through WIL, a certain degree of positive industry image change is expected. During COVID-19, additional skills and innovative knowledge have been emphasized in H & T management and operations, as compared to traditional ones in the history of H & T management and operational practices. While improving skills, students can experience the ongoing positive industry changes, particularly in terms of cost control, technology adoption, crisis management, corporate social responsibility, and sustainability, that have greatly redefined the nature of today's H & T industry. These findings are similar to those of previous studies (Huang *et al.*, 2021; Sigala, 2021). For example, many organizations have followed social distancing policies and introduced new safety and hygiene measures to enhance corporate social responsibility. Technological advancement has also been implemented (e.g., kiosk counters for self-check-ins and self-check-outs for airlines and hotels). Such positive image changes and business action plans are well embraced by students.

Surprisingly, the relationship between positive industry image change and desired career prospect is insignificant, which contradicts the study findings of Shah *et al.* (2021). Many students perceived that they were facing a gloomy industry scenario, which might last for a foreseeable future, thus finding a job in the industry had not been very promising. Moreover, H & T industry situations are uncertain during the period of study, and students could be undecided regarding job hunting or future plans after graduation. Furthermore, some students may consider further study as an alternative.

With the ongoing COVID-19 pandemic, challenges pertaining to WIL and career uncertainties will remain. Thus, other than theoretical implications, some managerial implications are also proposed. First, core theories, theories, knowledge, and soft skills are necessary to H & T students. Given that the nature of H & T businesses includes human relationships and hospitable services (Khan *et al.*, 2021), students should be able to learn, apply, correct, develop their hard and soft skills, and build competence during their undergraduate study. Once students gain substantial understanding of the nature of H & T sector, their perceived industry will change accordingly. Consequently, their career growth and development will also be optimistic.

Secondly, promoting the value of WIL as a platform to enhance skills and attract potential employees is encouraged (Losekoot *et al.*, 2018). Virtual internships with supplementary classroom learning experience can be created and designed to fit the current COVID-19 pandemic situation (Park and Jones, 2021) and help students gain sufficient knowledge and training experience during their studies. In the meantime, during WIL or internship, H & T organizations can provide other opportunities for students to improve skills such as those related to technology and innovation, crisis management, social corporate sustainability, and policies. It is believed that more uncertainties and risks may affect the H & T sector again in the foreseeable future. Thus, students or future employees should be professionally equipped in managing H & T crises.

Thirdly, to promote desired career prospect, H & T organizations can restructure job responsibilities and employment benefits to recruit potential talents and maintain career commitment, for example, offering opportunities of promotion, transfer to other properties, learning and training opportunities, and building work-life balance within the organization's culture (Wan *et al.*, 2014).

Lastly, given that the H & T industry has long been a pillar industry for many economies, including Hong Kong as a cosmopolitan city, respective governments are encouraged to line up with selected H & T programs in higher education institutes with industry players to develop a talent program to enhance students' career prospects for the benefit of industry and social sustainability. Seamless collaboration is pivotal to the revitalization of H & T economy, which can be achieved by nurturing future talents through WIL. Financial support and corresponding public policies may be a potent incentive to encourage participation.

Conclusion

Given the continuous presence of the COVID-19 pandemic, the question remains whether the perturbed H & T industry has affected students' industry image change and desired career prospects. This study found that students still have a positive perception of internship experience and industry change, thereby contributing to the literature, which merely focuses on the negative impacts of COVID-19. Such a perception enables students to apply H & T knowledge and theories to improve their skill competence. Students' perceived skill improvement will lead to more desired career prospects in H & T industry.

This study has several limitations. The sample size of students was only limited to Guangdong province, China. Thus, generalization may only be applied in similar H & T programs and curriculum development. Meanwhile, given the different travel restrictions and quarantine measures among different countries, the generalizability to other settings may be reduced. During the COVID-19 situation, many companies in China could not offer normal business experiences to interns, leaving some structural relationships among concepts in this study possibly being unstable under different circumstances. Furthermore, the respondents who have work-integrated experience were invited to participate in this study, but the period of internship experience (e.g., number of hours of work experience) was not assessed. The duration of internship can affect students' perception of the industry change and career prospects. Further research can explore this phenomenon in different regions, in which the COVID-19

situation may vary in terms of severity level. Future comparison is also recommended, for example, amongst before, during, and after COVID-19, when testing variables of interest such as positive industry image change.

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