



## Assessing Competencies, Career Adaptability, and Employability of Senior Students in Hospitality and Tourism Program after the COVID-19

Woraprat Yoelao<sup>1\*</sup>, Paramet Damchoo<sup>2</sup> and Janrapee Kemthong<sup>3</sup>

<sup>1\*,2,3</sup>Faculty of Business, Economics and Communications, Naresuan University, Thailand

(Received: December 26, 2023; Revised: March 5, 2024; Accepted: March 29, 2024)

### Abstract

The hospitality and tourism sector are constantly evolving, which compels educators to evolve in turn to meet industry needs by ensuring that students are exposed to, a curriculum which equips them with the necessary skills and competencies demanded. This study examines the perception of senior hospitality and tourism students to determine which competencies affect their career adaptability and to assess whether such adaptability will in their view lead to employability after the post-COVID-19. A mixed-methods approach is followed, using a structural model demonstrating that interpersonal skills, conceptual/creative, and technical skills are requirements leading to career adaptability, while the capacity for administrative and leadership skills exerted no influence on adaptability. Importantly, career adaptability significantly affects perceptions of employability. The findings therefore support educators in developing courses and strategies to effectively teach hospitality and tourism students in the post-COVID-19 era.

**Keywords:** 1) Competency 2) Career adaptability 3) Perceived employability 4) Hospitality and tourism education 5) Post COVID-19

---

<sup>1\*</sup> Lecturer, Department of Tourism; E-mail: worapraty@nu.ac.th (Corresponding Author)

<sup>2</sup> Lecturer, Department of Tourism; E-mail: parametd@nu.ac.th

<sup>3</sup> Lecturer, Department of Tourism; E-mail: janrapeek@nu.ac.th



## Introduction

The hospitality and tourism sector were severely adversely affected worldwide by the recent COVID-19 pandemic. Disruption on this scale has never previously been seen, when taking into consideration the decline in the number of tourists, the need to cancel all kinds of events, the dramatic effects upon employment, and the financial problems faced by businesses which rely on visitors (UNWTO, 2020). It was indicated by the World Travel & Tourism Council that the pandemic might reduce global tourism revenues by as much as USD 4.7 trillion in 2020, while almost 200 million hospitality sector workers would lose their jobs (World Travel & Tourism Council, 2021). Thailand, similar to other countries, experienced a dramatic decline in tourism due to COVID-19. The country declared a state of emergency on March 25<sup>th</sup> 2020, and the closure of the borders followed on April 3<sup>rd</sup>. As a consequence, there were no foreign arrivals in Thailand until September 30<sup>th</sup>, when a limited number of flights began to operate albeit under very restrictive conditions. During the first 11 months of 2020 there was an 81.4% fall in visitor numbers, with the Chinese and Indians showing large reductions at 87.7 and 85.5%, respectively. Financially, Krung Sri Research suggested that the losses to the Thai economy from absent tourists would be around THB 1.5 trillion for 2020, given that the country earned THB 1.9 trillion in 2019 (Lunkam, 2021).

Researchers argued further that the pandemic has had the effect of weakening the status of tourism and hospitality employees, as

inequality, insecurity, and exploitation through working contracts and conditions become widespread (Baum, et al., 2020, pp. 2813-2829). The problems facing workers in this sector are also becoming increasingly apparent to tourism students, who should become the future employees. Businesses have been forced to close due to travel restrictions, and the demand for travel has fallen while governments have imposed onerous restrictions in order to protect citizens' health. It is anticipated that because of the severity of the pandemic, the recovery in the travel sector may be slow (Krishnan, et al., 2020). This outlook may result in students feeling less confident in their potential futures in hospitality and tourism industry, leading to a lack of commitment to their studies (Zhong, et al., 2021, pp. 194-206). Meanwhile, Ayertey Odonkor, et al. (2011, pp. 29-39) pointed out that if the tourism sector can attract qualified and capable employees, it will be more likely to adapt effectively to the current situation, and will survive more easily (Tiwari, Seraphin and Chowdhary, 2020, pp. 313-338). For example, the skills and competencies that are necessities after the pandemic and which competencies affect students' career adaptability and the likelihood of student career path. Institutes and stakeholders should be concerned with the new curriculum.

The media have focused on the problems, and the topic has become the subject of academic research, few studies have specifically examined how tourism education will be affected by the pandemic (Seraphin and Yallop, 2020, p. 5; Joshi and Gupta, 2021,

pp. 622-635; Xu, et al., 2022, pp. 278-290; Chen, et al., 2023, p. 27128; Tavitiyaman, Tsui and Ng, 2023, pp. 1-12; Wang, Cheung and Zhai, 2024, pp. 24-37). It is worthy of note that problems which have an impact upon the tourism sector as a result of COVID-19 will indirectly also affect the education sector, and to some extent the same is true in reverse, although these links are sometime overlooked (Seraphin and Yallop, 2020, p. 22). One example would be the growing need for sustainability in tourism, which has resulted in curriculum changes as well as novel approaches to pedagogy (Ali, Murphy and Nadkarni, 2017, pp. 159-172; Hales and Jennings, 2017, pp. 185-194; Camargo and Gretzel, 2017, pp. 101-117).

Earlier studies, such as Brown (2017, p. 8) and Walsh (2016, pp. 58-79) have revealed that students make career decisions on the basis of the opportunities available for them in different fields, and their own personal interests in different sectors. The impact of COVID-19 is likely to have adverse consequences in making the tourism sector less attractive to prospective students as they make those career decisions. This decision-making process must be addressed by educators in the hospitality and tourism sector, since traditional assumptions about the sector may no longer be relevant, and empirical data prior to the pandemic may no longer provide an accurate overview of the current situation, necessitating updates. It has been argued by Sisson and Adams (2013, pp. 131-145) that curriculum development in the hospitality field must ensure that graduates are equipped with the necessary skills and knowledge to succeed within the sector. Sandwith

(1993, pp. 43-62) suggested that a competency domain model could be used to determine job performance requirements, with the resulting job profiles then guiding the design and development of training program. For example, conceptual/creative, leadership, interpersonal, administrative, and technical skills. Notably, several variables can influence the capacity of educational institutions to meet the needs of hospitality businesses.

Furthermore, the development of students' skills and knowledge is crucial for career adaptability (Pan, et al., 2018, pp. 14-26). Karatepe and Olugbade (2017, pp. 337-355) and Wang, Cheung and Zhai (2024, pp. 24-37), argued that few studies have been carried out to examine career adaptability in the hospitality sector, although Ocampo, et al. (2020, p. 2) suggested research which investigates career adaptability in different circumstances and at different times. Significant changes have taken place in the operation and management of tourism businesses following the pandemic, and it is therefore the case that new graduates must be equipped with different skills to those of their predecessors in order to meet the needs of employers in a changing business environment and in order to match their own expectations (Shariff and Abidin, 2015, pp. 423-424). Teng (2008, pp. 76-86) made the point that students' employability following graduation might be better understood through a clearer understanding of student attitudes to enhancing competencies and learning new skills (Tavitiyaman, Tsui and Ng, 2023, p. 3). For tertiary educational institutions, graduate employability is key metric which allows



performance of the program to be assessed (Tavitiyaman, Tsui and Ng, 2023, pp. 3-4). The National Youth Commission (2006, p. 1) reported that many colleges are concerned about the need to equip their graduates with the skills required to find employment and develop satisfying careers (Wang and Tsai, 2014, pp. 125-135). It was noted by Hirschi (2012, pp. 369-383) that career competencies are vital for students if they are to effectively manage their future careers, while they must also be able to adapt quickly to the expectations placed upon them in their working roles (Saraswati, et al., 2021, pp. 3562-3568). Meanwhile, Rudolph, et al. (2017, pp. 17-34) suggested that career confidence is positively associated with career adaptability, while both attributes are important if students are to boost their employability, achieve their career goals, and overcome the difficulties they may face (Monteiro, Taveira and Almeida, 2019, pp. 1187-1199).

Accordingly, this research employed the competency domain model by Sandwith (1993, pp. 43-62) to examine student perceptions of the competencies they acquire in their hospitality and tourism studies, both on a theoretical basis within the classroom and in practice during their internship periods in the field, which effecting on their career adaptability and the likelihood of finding work. Therefore, this study seeks to investigate the perceptions of senior tourism and hospitality students of which competency after COVID-19 contributes significantly to career adaptability and determine whether a realized career adaptability enhances the perceived employability. The findings from the research may guide tourism

education stakeholders in shaping their future educational strategies to develop the competencies required in the hospitality sector. The outcomes of the research may also shape the management and implementation of the strategies developed. Educators might also seek ways to make use of a range of learning platforms to support their students in developing career adaptability and employability.

## Literature Review

### 2.1 Hospitality and Tourism Education

A majority of tourism activities were canceled during the COVID-19 pandemic (Susskind and Vines, 2020, p. 2), with severe consequences faced by all industry stakeholders, including those in tourism education. Working conditions and opportunities changed significantly, affecting the plans of students wishing to enter the sector upon completion of their studies (Xu, et al., 2022, pp. 278-290). In the education sector, it has been revealed that online courses can be delivered effectively, providing the added advantage of flexibility (Goh and Sigala, 2020, pp. 156-165; Lei and So, 2021, pp. 148-162). The pandemic caused many courses to switch to online modes at very short notice, utilizing platforms such as Zoom or Microsoft Teams (Tavitiyaman, Ren and Fung, 2021, pp. 2-4). In planning ahead for tourism education, however, it is important to consider how the industry might change in the coming years, and how this will affect the required competencies of future graduates (Shah, Chowdhury and Gupta, 2021, pp. 359-379).

The pandemic has created challenges for educators in hospitality and tourism to determine what should be taught to learners to ensure that they will perform effectively in the post-COVID-19 working environment (Sharma, Thomas and Paul, 2021, pp. 2-9). Higgins-Desbiolles (2021, pp. 156-169) argued that educators might consider the effects of a social force able to develop and transform the hospitality industry. In addition, educational institutions might address their curricula and teaching strategies by focusing more strongly on debates and case studies to develop critical thinking as well as the requisite knowledge and practical skills to foster the creation of novel solutions and improved operational management approaches in the current circumstances (Benjamin, Dillette and Alderman, 2020, pp. 476-483).

### **Career Competency in Hospitality and Tourism**

McLagan and Suhadolink (1989, p. 77) describe competency as “an area of knowledge or skill that is critical for producing key output internal capabilities that people bring to their jobs (or) capabilities which may be express in a broad, even infinite array of on-the-job behaviors”. Competencies enable staff to work productively (Dessler, 2008, p. 81) and develop their careers (Wang, 2013, pp. 994-1016). Hayes (1979) cited in Moore, Cheng and Dainty (2002, pp. 314-319) explained that competency permits the blending of personal attributes, knowledge, social roles, and communication to perform to a high standard in the workplace. Competency can, therefore, be described as a mix of personal qualities, such

as motives or values, with exogenous qualities, such as professional skills or knowledge, which are required in order to carry out one’s working duties to a high standard (Wang and Tsai, 2014, pp. 125-135).

Sandwith (1993, pp. 43-62) described five job competency categories which can strengthen working performance and enhance career development prospects. These categories can inform training programs as follows: 1) Conceptual/creative-cognitive skills are linked to understanding one’s work and developing effective novel ideas for implementation; 2) Leadership skills allow one to act upon one’s ideas; 3) Interpersonal skills are required to communicate and share ideas effectively with others, through various channels and including negotiation abilities and the capacity to resolve conflicts; 4) Administrative skills are necessary to manage the people and the finances of an organization, and 5) Technical knowledge and skills are necessary in order to carry out the work itself. In addition, it was explained by Bocciardi, et al. (2017, pp. 67-82) that career competencies support workers in discovering alternative career paths, allowing them to increase their value within the labor market through greater career adaptability. Alkhemeiri, Khalid and Musa (2020, pp. 285-300) also investigated career competencies, finding that career adaptability and career competencies are directly associated. It was also pointed out by Saraswati, et al. (2021, p. 3565) that the links between career competencies and career engagement are mediated by career adaptability. The current study, therefore, examines



these connections linking student competencies and their career adaptability.

H1: Students' perceptions of career competency have a positive effect on their career adaptability toward employability.

### **Career adaptability in hospitality and tourism**

Super and Knasel (1981, pp. 194-201) provided the definition of career adaptability as "readiness to cope with changing work and working conditions" (p. 195), while Savickas (1997, pp. 247-259) added that career adaptability can be a form of psychological support which helps people to overcome difficulties they face along their career paths, and allows an individual to shape the development of his/her own career. Individuals exhibiting strong career adaptability are better equipped to overcome psychological or social challenges. If it is necessary to manage occupational difficulties, an individual may be able to strengthen their own career adaptability to better address their circumstances (Savickas and Porfeli, 2012, pp. 661-673). Savickas and Porfeli (2012, p. 665) suggest considering career adaptability in different dimensions, such as 1) Concern, where a forward-looking perspective seeks to predict future tasks; 2) Control, in which the individual directly manages their own development and opportunities; 3) Curiosity, whereby different roles and future opportunities are explored, and 4) Confidence, in which obstacles are overcome, problems are solved, and career goals achieved. These listed dimensions can be considered as resources for career adaptability that help each individual to manage and respond to change and are factors which

can be controlled internally by the individuals themselves (Savickas and Porfeli, 2012, p. 667).

Career adaptability has been examined by numerous authors (Safavi and Karatepe, 2018, pp. 1112-1133; Rasheed, et al., 2020, pp. 98-107; Lee, Xu and Yang, 2021, pp. 1-10). Career adaptability was shown by Lee, Xu and Yang (2021, p. 2) to support employees in managing difficult situations, while proactivity is a vital aspect of developing career adaptability. Furthermore, social support in the workplace can moderate the indirect association connecting proactivity and turnover intention which is related to career adaptability. Xu (2021, p. 12) conducted a survey among employees and students, determining that career adaptability is useful in solving the problems linked to the initial decisions about careers, as well as the decisions which follow as an individual's career progresses (Wang, Cheung and Zhai, 2024, pp. 24-37). Khalid and Ahmad (2021, pp. 1035-1054) studied the links between career adaptability and employability among undergraduate students in the UAE, discovering that the aspects of career adaptability include factors such as critical thinking, solving complex problems, managing people, creativity, and coordination. Park and Park (2020, pp. 469-488) add that career adaptability can be enhanced by the students' own interest in particular fields of study or specific courses (Tavitiyaman, Tsui and Ng, 2023, pp. 1-12).

A number of studies have shown the links between employability perceptions and career adaptability (Rudolph, et al., 2017, pp. 17-34; Wang, Cheung and Zhai, 2024, pp. 24-37; Tavitiyaman, Tsui and Ng, 2023, pp. 1-12), find-

ing positive connections between the career adaptability of students and their confidence in finding work. Pan, et al. (2018, pp. 14-26) also reported that the relationship between job seeking success and student proactivity was mediated by career adaptability (Tavitiyaman, Tsui and Ng, 2023, p. 8).

H2: Students' perceptions of career adaptability have a positive effect on their perceived employability.

### Perceived employability in hospitality and tourism

Employability has been defined by the Centre for Employability of the University of Central Lancashire (UK) as having the knowledge, skills, and personal qualities that make it more likely that an individual will find satisfactory work (Pool and Sewell, 2007, pp. 277-289). Bernstron, Drange and Mamelund (2019, pp. 234-248) described employability as a worker's understanding of their own employment prospects, which is linked to the career adaptability which enables them to find new working opportunities beyond their existing work. The worker may have an understanding of their employment potential with current or future

employers, and this understanding will have its roots in both contextual and human factors (Naderiadib Alpler and Arasli, 2020, pp. 1-13). Meanwhile, Qureshi, et al. (2016, pp. 349-358) argued that perceived employability is one way to assess the effectiveness of universities or higher education institutions (Tavitiyaman, Tsui and Ng, 2023, p. 3). Rothwell, et al. (2008, pp. 1-12) explained that perceived employability refers to the perception that a student will be capable of finding work commensurate with their qualifications (Chen, et al., 2023, pp. 1-14). According to Tomlinson, et al. (2018, pp. 4-22), students must have the ability to assess their own employment prospects during the course of their careers, so employability is therefore an important component of career development (Fugate, et al., 2021, pp. 266-298). Indeed, many researchers have started to measure career success through employability rather than traditional measures (Lo Presti and Pluviano, 2016, pp. 192-211). When students' progress into employment upon completion of their studies, ongoing employment is crucial as they build their careers (Chen, et al., 2023, pp. 1-14).

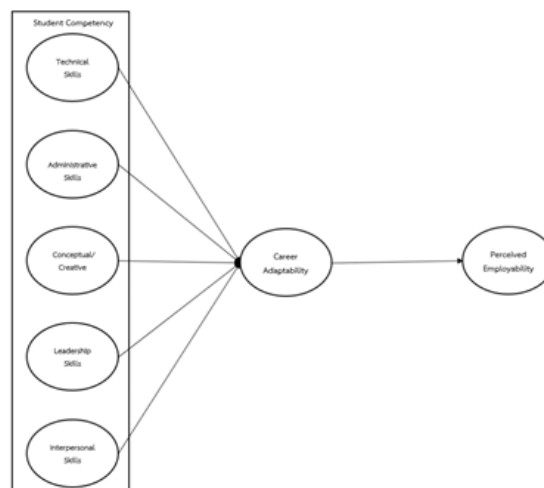


Figure 1 Research Framework



## Methodology

In this investigation into the perceptions of competencies of hospitality and tourism students following the pandemic, both quantitative and qualitative approaches were included. The qualitative approach was used to examine post-pandemic career competency, a qualitative approach was followed involving (1) analysis of documents online concerning student competencies, (2) in-depth interviews with experts in the industry, and (3) panel reviews from experts. These methods were necessary since the literature alone is not sufficient to fully identify all of the relevant student competencies.

In the early stages, 24 items were selected from the literature concerning student competencies, with key attributes drawn from the literature encompassing the competencies of students in tourism and hospitality (Xu, et al., 2022, pp. 278-290; Spowart, 2011, pp. 169-181; Kim and Jeong, 2018, pp. 119-122; Ferreras-Garcia, Sales-Zaguirre and Serradell-López, 2019, pp. 64-80; Siow, et al., 2021, pp. 270-287). For the development of further student competencies, interviews were conducted with eight professionals from the industry who had at least ten years of direct experience in tourism and hospitality. The involvement of experts with different backgrounds is intended to ensure that a wide range of perceptions of student competencies should be presented, and therefore this study included the opinions of airline staff, event planners, hoteliers, and tour company representatives. Furthermore, four students were recruited for interviews in order to help identify any further areas of concern. The interviews sought to evaluate

attributes which had been mentioned in the review of the literature, and to identify competencies which the industry would require in order to recover after the pandemic. A majority of the responses were in concurrence with issues previously raised, but five novel items were also developed: “business trends”, “how to deal with Thai people”, “revenue management”, “brands and marketing”, and “social relationships.” In all, 29 measures were included in the form of statements which could be evaluated for analysis. These statements were then assessed by an expert panel to ensure a high standard of content validity (Robert and DeVellis, 2003, pp. 23-41).

The experts included three executives from the tourism and hospitality sector, and three academics whose expertise lay in the same fields. They were requested to evaluate the items in terms of applicability and to express any concerns which might have arisen. Following this assessment, 29 student competencies were selected for further use. In the case of career adaptability, four items were evaluated on the basis of a scale originally developed by Savivkas and Porfeli (2012, pp. 661-673). The items included examples such as “overcome obstacles.” Meanwhile, perceived employability was evaluated in the context of three selected items on the basis of a scale created by Rothwell, et al. (2008, pp. 1-12) and Wittekind et al. (2010, pp. 566-586). The assessment included items measuring issues such as “easily notice job opportunities in my chosen field.” A 7-point Likert scale was used for the measurement, using a range from 1 = strongly disagree to 7 = strongly agree.

## Data Collection

Data were gathered as a means to investigate students' competency, career adaptability, and perceived employability. The study population comprised hospitality and tourism undergraduates participating in internships as part of their courses. This approach allowed a sample population to be selected for the evaluation of the learning experience of the students along with the effectiveness of the internships and the development of skills and competencies (Cooper and Schindler, 2014, p. 43).

The online survey was distributed via email to the head of the tourism department which provides the hospitality and tourism program. The online survey link was sent to senior hospitality and tourism undergraduates. Chiang Mai University, Kasetsart University, Naresuan University, Burapha University, the University of Phayao, and Khon Kaen University were conducted. Data were gathered during the period from October 2023 to November 2023. From the initial target group of 500 students, 415 responses were obtained, which resulted in 372 data sets being accepted following filtering to remove incomplete information. Among the 372 participants, 24.3 per cent were male, and 75.7 per cent were female. The majority of participants, 45.7 per cent are studying hotel management, followed by tourism management (31%), MICE management (12.4), and Airline Business (11%), respectively.

## Results

### Exploratory Factor Analysis for Student Competency

EFA was conducted with principle axis factoring alongside oblique rotation techniques to establish the dimensionality of student competencies in hospitality and tourism studies. EFA confirmation involved the use of the Kaiser-Meyer-Olkin (KMO) sampling adequacy measure along with Bartlett's sphericity test. A KMO value of 0.896 was achieved, which is considered "good" by Kaiser (1958, pp. 187-200). The result of Bartlett's sphericity test was 6,152.27 ( $p < 0.001$ ), which indicated the suitability of the factor analysis.

Any items for which the factor loading and communalities did not exceed 0.5 could be deleted (Hair, et al., 2010, p. 662). Additionally, all factor loadings are significant and higher than 0.5, except one item in the interpersonal relationship dimension with a loading of 0.488. However, it still exceeded the cutoff point 0.4 recommended by (Wu and Yang, 2018, pp. 2037-2055; Hair, et al., 2019, pp. 275-290). Verification of a screen plot was also carried out in order to establish the necessary number of dimensions, keeping only those dimensions with eigenvalues greater than 1. Following a review of all items using the aforementioned criteria, none were eliminated, and there were no examples of cross-loading when considering the primary and secondary loading for the factors specified (Hair, et al., 2019, pp. 275-290). As shown in Table 1, the five dimensions in question comprised "Technical skill," "Administrative skills," "conceptual and Creative," "Leadership," "Interpersonal skills," all of which were shown to exhibit acceptable reliability (Nunally, 1978, pp. 97-146).

**Table 1** EFA results for Student Competency

Statement	Factor Loading	Cronbach's Alpha
<b>Technical Skills</b>		
Computer software and application, knowledge, technology	0.771	0.94
Data analysis, negotiation	0.817	
Marketing, Finance, Accounting	0.793	
Administrative	0.604	
Writing	0.759	
Foreign languages	0.611	
Safety/ Crisis management	0.766	
<b>Administrative Skills</b>		
Digital marketing	0.687	0.95
Marketing Communications	0.683	
Revenue Management	0.654	
Business trends	0.775	
Branding and Marketing	0.881	
<b>Conceptual/Creative</b>		
Problem Solving	0.817	0.958
Critical thinking	0.577	
Flexibility	0.562	
Communications	0.752	
Work as a team	0.685	
Able to plan, coordinate, and Organization	0.669	
<b>Leadership</b>		
Creativity	0.716	0.65
Emotional intelligence	0.726	
Leadership	0.661	
Attention to detail	0.700	
Self-confidence	0.726	
Positive mindsets	0.742	
Self-care/wellness	0.730	
<b>Interpersonal</b>		
Time management	0.681	0.928
Assumption of responsibility and decision making	0.780	
How to handle with Thai people	0.560	

Statement	Factor Loading	Cronbach's Alpha
Social Relationship	0.488	
<b>Career Adaptability</b>		
Perform task efficiently	0.875	0.954
Take care of the tasks and do them well	0.913	
Work up to my ability	0.898	
Overcome obstacles	0.873	
<b>Perceived Employability</b>		
Easily notice job opportunities in my chosen field	0.801	0.892
Is easier for me to find a new job if I leave the company	0.905	
Find another job once I start searching	0.877	

**Measurement and structural model testing**

Through the application of the student competency dimensions identified for the hospitality and tourism sector, a conceptual model could be created, encompassing competency, career adaptability, and perceived employability. CFA testing was performed for the validity verification of the measurement model, and the 29-item five-dimensional structure was duly verified. A majority of the dimensions exhibit composite reliability coefficients (CR) exceeding 0.7, confirming that the reliability is suitable for each of the constructs (Nunnally, 1978, pp. 97-146). In addition, the standardized factor loading in every case was greater than 0.5, which was the minimum threshold (Ford, et al., 1986, pp. 291-314). The

indices for goodness-of-fit, such as chi-squared ( $\chi^2$ ) = 735.379, df = 341, Relative Chi-Square ( $\chi^2/df$ ) = 2.157, NFI = 0.913, TLI = 0.942, CFI = 0.951, RMSEA = 0.074, and RMR = 0.047, confirmed the theoretical suitability of the measurement model. The statistically significant factor loading for each item at  $p < 0.05$  confirmed the convergent validity of the model based on t-values exceeding 1.96 and AVE (average variance extracted) values exceeding 0.5 for all constructs (Anderson and Gerbing, 1988, p. 411; Fornell and Larcker, 1981, pp. 39-50) (Table 2). Validity was confirmed as the AVE for each of the dimensions exceeded 0.5 and also exceeded the squared correlation coefficients under the representative constructs (Table 3).

**Table 2** CFA results for Student Competency

Statement	Factor Loading	AVE	CR
<b>Technical Skills (TS)</b>			
Computer software and application, knowledge, technology	0.831	0.694	0.941
Data analysis, negotiation	0.845		
Marketing, Finance, Accounting	0.855		
Administrative	0.773		



Statement	Factor Loading	AVE	CR
Writing	0.872		
Foreign languages	0.830		
Safety/ Crisis management	0.846		
<b>Administrative Skills (AS)</b>			
Digital marketing	0.922	0.794	0.951
Marketing Communications	0.925		
Revenue Management	0.928		
Business trends	0.891		
Branding and Marketing	0.811		
<b>Conceptual/Creative (CC)</b>			
Problem Solving	0.881	0.799	0.960
Critical thinking	0.922		
Flexibility	0.893		
Communications	0.900		
Work as a team	0.921		
Able to plan, coordinate, and Organization	0.855		
<b>Leadership (LS)</b>			
Creativity	0.891	0.802	0.966
Emotional intelligence	0.912		
Leadership	0.925		
Attention to detail	0.811		
Self-confidence	0.935		
Positive mindsets	0.944		
Self-care/wellness	0.868		
<b>Interpersonal (IP)</b>			
Time management	0.800	0.732	0.85
Assumption of responsibility and decision making	0.860		
How to handle with Thai people	0.927		
Social Relationship	0.860		
<b>Career Adaptability (CA)</b>			
Perform task efficiently	0.900	0.842	0.955
Take care of the tasks and do them well	0.950		
Work up to my ability	0.914		
Overcome obstacles	0.915		

Statement	Factor Loading	AVE	CR
<b>Perceived Employability (PE)</b>			
Easily notice job opportunities in my chosen field	0.780	0.743	0.896
Is easier for me to find a new job if I leave the company	0.902		
Find another job once I start searching	0.910		

**Table 3** Correlations and Descriptive Statistics

	Mean	SD	AVE	CR	MT	BM	CC	LS	IR	CA	PE
TS	5.872	0.888	0.694	0.941	0.833						
AS	5.967	0.936	0.794	0.951	0.643	0.891					
CC	6.154	0.913	0.799	0.960	0.491	0.640	0.893				
LS	6.118	0.951	0.802	0.966	0.470	0.577	0.635	0.895			
IP	6.134	0.881	0.732	0.850	0.405	0.543	0.591	0.630	0.855		
CA	6.273	0.875	0.842	0.955	0.330	0.312	0.400	0.381	0.462	0.914	
PE	5.576	1.071	0.743	0.896	0.321	0.303	0.259	0.298	0.300	0.358	0.861

CR = Composite reliability; AVE = Average variance extracted; MT = Management-Technology; BM = Brand – Marketing; CC = Creative -Communication; LS = Leadership; IR = Interpersonal Relationship; CA = Career Adaptability; PE = Perceived Employability

SEM (Structure Equation Modeling) was carried out in order to identify the competencies which affected career adaptability, and also to assess the extent to employability was in line with the hypothesis direction. The goodness-of-fit measures presented Chi-Square ( $\chi^2$ ) = 929.135, df = 502, Relative Chi-Square ( $\chi^2/df$ ) = 1.851,  $p < 0.00$ , NFI = 0.907, TLI = 0.946, CFI = 0.954, RMSEA = 0.064, and RMR = 0.760, showed that among the five competencies in the structural model, Interpersonal skills ( $t = 3.549$ ,  $\beta = 0.733$ ,  $p < 0.001$ ), Conceptual/Creative ( $t = 2.560$ ,  $\beta = 0.501$ ,  $p < 0.001$ ), and technical skills ( $t = 1.284$ ,  $\beta = 0.366$ ,  $p = < 0.001$ ) had a positive effect upon career adaptability whereas Brand/Marketing ( $t = -1.203$ ,  $\beta = -0.385$ ,  $p > 0.1$ ) and Leadership ( $t = -1.977$ ,  $\beta = -0.471$ ,  $p > 0.1$ ) were shown not to be significant. Thus, hypothesis H1, students' perception of

career competency to career adaptability was partially supported. Finally, career adaptability ( $t = 9.680$ ,  $\beta = 0.642$ ,  $p = < 0.01$ ) was shown to be a strong predictor of the perceived employability of students, indicating that hypothesis H2 was supported. On one hand, hospitality and tourism management competency could account for 55% of the career adaptability variance, and in turn career adaptability could account for 41% of the variance in perceived employability.

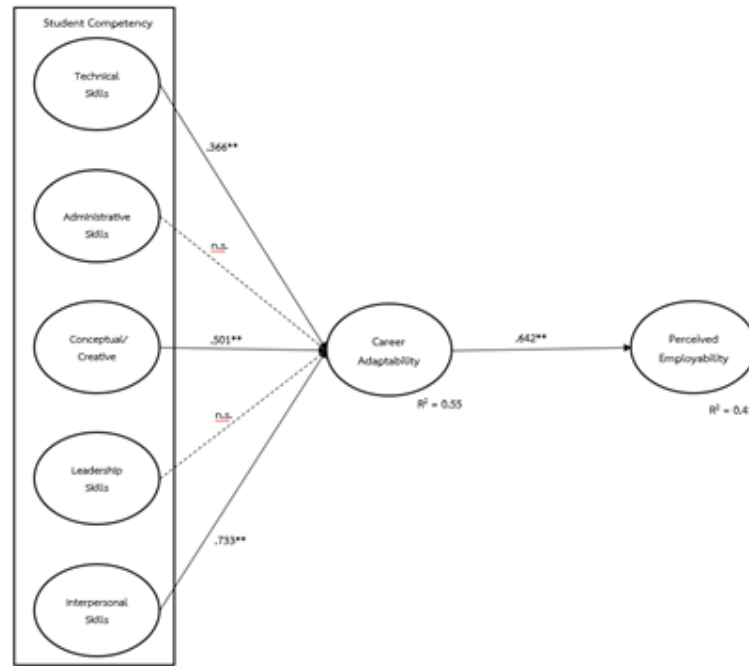


Figure 2 Result of the structural model

Table 3 The thresholds used for model validity (Kline, 2005; Hair, et al, 2006)

Fit indices	Acceptable level	Measurement model
$\chi^2$		929.135
df		502
CMIN ( $\chi^2/df$ )	< 5	1.851
RMSEA	< 0.08	0.064
CFI	$\geq 0.90$	0.954
TLI	$\geq 0.90$	0.946
NFI	$\geq 0.90$	0.907
RMR	$\geq 0.08$	0.760

Table 4 Results of research hypotheses testing

Variable	CA			PE			Result of Research Hypotheses
	TE	DE	IE	TE	DE	IE	
CA	-	-	-	0.642**	0.642**	-	Supported
TS	0.366**	0.366**	-	0.235**	-	0.235**	Supported
AS	-0.385	-0.385	-	-0.247	-	-0.247	Not Supported
CC	0.501**	0.501**	-	0.321**	-	0.321**	Supported
LS	-0.471	-0.471	-	-0.302	-	-0.302	Not Supported
IP	0.733**	0.733**	-	0.470**	-	0.470**	Supported



## Discussion

### Theoretical Considerations

This study sought to examine which student competencies are directly linked to hospitality and tourism career adaptability and whether such adaptability contributed to enhanced perceived employability. An increasing number of studies have been carried out to address the question of how students respond to the challenges they face following graduation in a less certain post-pandemic environment.

Earlier works have taken a conventional approach to evaluate hospitality and tourism curricula (Sigala and Baum, 2003, pp. 367-376; Sisson and Adams, 2013, pp. 131-145; Wang and Tsai, 2014, pp. 125-135; Kim and Jeong, 2018, pp. 119-122), with a majority focusing on content, and then analyzing feedback drawn from various stakeholders via different methods. Such studies have not, however, considered the major changes resulting from the pandemic. Following the earlier outbreak of SARS, Law (2006, pp. 53-59) argued that the core curriculum followed by many hospitality programs should be reviewed and reconsidered (Xu, et al., 2022, pp. 278-290). Similar suggestions would apply in the situation after COVID-19 (Ye and Law, 2021, pp. 428-436). Since there are always external factors affecting the hospitality environment, it is necessary to constantly review and update curricula in response. Accordingly, the student perspectives of necessary career competencies will be important in shaping curricula following the pandemic. This research revealed that interpersonal skills had a stronger relationship with career adaptability than

other underlying factors, possibly due to the fact that interpersonal skills encompass the crucial elements of decision-making, managing customers, and basic social skills, all of which are crucial in the hospitality sector where customer relations forms the foundation for the industry (Sisson and Adams, 2013, pp. 131-145). The findings also make it abundantly clear that graduates of hospitality and tourism programs must be aware that interpersonal skills should be applied with both guests and colleagues. This finding concurred with the results of Tas, et al. (1996, pp. 90-96) whose work studied a Korean hospitality training institution. Interpersonal abilities and relationships with staff are therefore considered vital for career success, while conceptual and creativity skills could be considered the second most important from the student perspective, in line with the findings of Kay and Russette (2000, pp. 52-63) whom reported that it is important to use creativity to adapt to changes and to build a working knowledge of the product or service on offer. It is therefore necessary to work as a team in problem solving to ensure that customers receive service of the highest standard. In the case of entry-level staff, it was argued by Tesone and Ricci (2006, pp. 65-80) that teamwork was critical, along with communication skills and strong listening and writing abilities. Xu, et al., (2022, pp. 278-290) also reported teamwork and critical thinking as vital skills to be covered in tourism education. For technical skills, it has been claimed that technology must be a major part of the curriculum, and that internships must cover industry-specific software applications to be effective in pre-



paring students for their careers (Mandabach, VanLeeuwen and Bloomquist, 2001, pp. 49-56). In the post-pandemic era, Xu, et al. (2022, pp. 278-290) argued that AI, VR, and Big Data will be increasingly important and widely utilized in the tourism sector and must therefore be a part of students' education in hospitality.

There is no significant effect upon career adaptability from administrative skills, even though it is understood that the tourism sector is one of the key growth areas within the global economy. As a result, there are increasing numbers of hospitality education courses which seek to provide sufficient graduates to meet the demand of this industry for a qualified labor pool. Entrepreneurship was studied by Daniel, Costa and Costa (2017, pp. 65-72), who found that a majority of students believe that management skills, with administration and marketing are vital for most students. Educators should therefore focus on entrepreneurship through the development of non-cognitive entrepreneurial skills to enhance student awareness. However, leadership skills were not shown to improve students' perspectives in terms of competency. Earlier work, however, has found leadership skills to be valuable in boosting the social and professional lives of graduates (Amiriazadeh, et al., 2010, pp. 168-172). Accordingly, students should seek to engage with various student organizations or activity clubs in order to gain leadership experience. These activities allow students to develop a wide range of skills, including leadership. Such opportunities should be provided by educators in tourism because they support students in laying the founda-

tions for later career success (Kim and Jeong, 2018, pp. 119-122).

This research also examined how career adaptability affects the links between competency and employability, finding that those students whose skill levels were high would consider themselves readily employable within the tourism sector, especially as their career adaptability develops. Confidence by be increased through career adaptability, along with an element of control over the individual's working circumstances (Rudolph, et al., 2017, pp. 17-34). Confident students are more likely to remain with their employer as a means to further develop their careers, with advances often dependent on additional skills including interpersonal skills, conceptual/creativity, and technological abilities. All of these factors will enhance both career adaptability and perceived employability.

### **Managerial Considerations**

From a practical viewpoint, this study notes that student skills can only be enhanced through advances in hospitality and tourism curriculum design. First of all, the required competencies must be determined in a rapidly changing business environment, and then the curriculum must ensure that new graduates are equipped with those requisite skills. Notably, interpersonal competencies are crucial for strengthening social relationships. For instance, through student affairs, it is possible to engage in volunteer activities, or to serve as student staff at events on campus which provides useful experience thus boosting motivation, knowledge, and career potential. Accordingly, students take the skills from student activities

and develop them in the form of career adaptability.

Conceptual/Creativity skills are also vital in boosting the competency of students. It has been shown that classroom learning can support cognitive processes involving prior knowledge, but it is also possible for educators to make use of workshops or training to boost professional skills which will help students in problem solving and develop their critical thinking abilities. Teamwork is also vital for new graduates due to ongoing cultural changes. The areas identified as most significant in career development were therefore communication abilities and the capacity to adapt to changing circumstances. This concurs with Spowart (2011, pp. 169-181) who argued that soft skills are vital for the workplace, and therefore these should be a key part of the tourism curriculum.

In the case of technical skills for hospitality and tourism, one problem is that the skills can be rather specific to certain aspects of the industry, such as the need to use specific software at work, such as hotel property management systems. Educational institutions might need to provide the required software for students to use prior to starting their internships. Accordingly, students practice the skills they need in order to increase their career adaptability (Spowart, 2011, pp. 169-181) and employability, leading to eventual career success (Tavitiyaman, Tsui and Ng, 2023, pp. 1-12).

While administrative skills were not listed as an influence upon students, they are important at a moderate level for career success in the hospitality sector (Min, et al., 2016, pp. 10-20). Following the COVID-19 pandemic, it is

likely that there will be increasing demand for marketing skills among tourism graduates due to the need to counter restrictions imposed by the pandemic, so this will be necessary in the job market. Furthermore, leadership skills have no significant influence upon students, although earlier studies have confirmed that leadership abilities are beneficial for individuals in terms of their personal and social lives (Amiriazadeh, et al., 2010, pp. 168-172). Educators can deliver leadership experiences for students by allowing them to become engaged in activities or events which require management. Leadership camps can also be organized by educational institutions to boost the leadership abilities of graduates.

In conclusion, interpersonal skills are crucial, because hospitality is both labor-intensive and focuses on the customer, so students must be equipped to deal with customers effectively, with good decision-making skills as well as creativity and communication skills. In addition, critical thinking must be developed along with organization, management, and the ability to utilize technology. Familiarity with different types of software and applications is important, as is the ability to use foreign languages to support career adaptability (Zhang, et al., 2019, pp. 545-559). Students may also learn through their work and from their own errors (Alkhemeiri, et al., 2021, pp. 285-300). In addition, subject matter covered in class or through work experience under the guidance of expert practitioners or lecturers can be valuable in enhancing career adaptability. Training or counseling offered by educational institutions would also be valuable for students in



assisting them when choosing a career and making progress in their chosen field (Tavitiyaman, Tsui and Ng, 2023, pp. 1-12). This study found that hospitality and tourism courses should have carefully considered curricula which are revised regularly to meet the needs of students, thus ensuring that they are well equipped to embark upon their careers with the necessary skills and knowledge.

### **Limitations and Suggestions for Future Work**

The limitations in this work include the fact that the data were gathered within several universities where the curricula on offer might not have been the same when considering

the subjects taught, and this might therefore adversely affect the responses made by students according to their own situations. Future studies might therefore establish criteria for respondents to avoid this issue. Furthermore, the respondents were senior students in hospitality and tourism programs, whose practical experience was limited to short internships, amounting to just two months, and with no actual work experience in the sector. For this reason, students may lack awareness of exactly which skills the industry requires. Future work might consider examining the issue of skills requirements from the students' point of view by comparing responses before and after completing internships.

### **Bibliography**

- Ali, A., Murphy, H. C. and Nadkarni, S. (2017). Sustainable development and hospitality education: Employers' perspectives on the relevance for graduate employability. **Journal of Teaching in Travel & Tourism**, 17(3), 159-172.
- AlKhemeiri, A. K., Khalid, K. and Musa, N. (2021). The role of career competencies and proactive personality in early-career employee career adaptability. **European Journal of Training and Development**, 45(4/5), 285-300.
- Anderson, J. C. and Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. **Psychological Bulletin**, 103(3), 411.
- Amiriazadeh, M., Jaafari, P., Ghourchian, N. and Jowkar, B. (2010). College student leadership competencies development: A model. **International Journal for Cross-Disciplinary Subjects in Education**, 1(3), 168-172.
- Ayertey Odonkor, A., Asiedu-Nketiah, K., Ato Brown, E. O. and Mamun Miah, M. (2011). Human capital development and economic growth in Nigeria. **European Journal of Business and Management**, 3(9), 29-39.
- Baum, T., Mooney, S. K., Robinson, R. N. and Solnet, D. (2020). COVID-19's impact on the hospitality workforce—new crisis or amplification of the norm?. **International Journal of Contemporary Hospitality Management**, 32(9), 2813-2829.
- Benjamin, S., Dillette, A. and Alderman, D. H. (2020). "We can't return to normal": Committing to tourism equity in the post-pandemic age. **Tourism Geographies**, 22(3), 476-483.



- Bernstrøm, V. H., Drange, I. and Mamelund, S. E. (2018). Employability as an alternative to job security. **Personnel Review**, 48(1), 234-248.
- Bocciardi, F., Caputo, A., Fregonese, C., Langher, V. and Sartori, R. (2017). Career adaptability as a strategic competence for career development: An exploratory study of its key predictors. **European Journal of Training and Development**, 41(1), 67-82.
- Brown, S. D. (2017). Meta-analysis and evidence-based career practice: Current status and future directions. **Integrating theory, research, and practice in vocational psychology: Current status and future directions**, 82.
- Camargo, B. A. and Gretzel, U. (2017). What do tourism students know about sustainability and sustainable tourism? An exploratory study of Latin American students. **Journal of Teaching in Travel & Tourism**, 17(2), 101-117.
- Chen, H., Wu, Y., Jiang, L., Xu, B., Gao, X. and Cai, W. (2023). Future orientation and perceived employability of chinese undergraduates: a moderated mediation model. **Current Psychology**, 42(31), 27127-27140.
- Cooper, D. R. and Schindler, P. (2014). **Business research methods** (12<sup>th</sup> ed.). New York: McGraw-hill.
- Dacre Pool, L. and Sewell, P. (2007). The key to employability: developing a practical model of graduate employability. **Education+ training**, 49(4), 277-289.
- Daniel, A. D., Costa, R. A., Pita, M. and Costa, C. (2017). Tourism Education: What about entrepreneurial skills?. **Journal of Hospitality and Tourism Management**, 30, 65-72.
- Dessler, G. (2008). **Human Resources Management** (10<sup>th</sup> ed.). Upper Saddle River: Pearson Prentice Hall.
- DeVellis, R. F. and Thorpe, C. T. (2021). **Scale development: Theory and applications**. Thousand Oaks: Sage publications.
- Ferreras-Garcia, R., Sales-Zaguirre, J. and Serradell-López, E. (2020). Competences in higher education tourism internships. **Education Training**, 62(1), 64-80.
- Ford, J. K., MacCallum, R. C. and Tait, M. (1986). The application of exploratory factor analysis in applied psychology: A critical review and analysis. **Personnel psychology**, 39(2), 291-314.
- Fornell, C. and Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. **Journal of marketing research**, 18(1), 39-50.
- Fugate, M., Van der Heijden, B., De Vos, A., Forrier, A. and De Cuyper, N. (2021). Is what's past prologue? A review and agenda for contemporary employability research. **Academy of Management Annals**, 15(1), 266-298.
- Goh, E. and Sigala, M. (2020). Integrating Information & communication Technologies (ICT) into classroom instruction: Teaching tips for hospitality educators from a diffusion of innovation approach. **Journal of Teaching in Travel & Tourism**, 20(2), 156-165.



- Hair, J. F., Anderson, R. E., Babin, B. J. and Black, W. C. (2010). **Multivariate data analysis: A global perspective** (7<sup>th</sup> ed.). Upper Saddle River: Pearson.
- Hair Jr, J., Page, M. and Brunsveld, N. (2019). **Essentials of business research methods**. New York: Routledge.
- Hales, R. and Jennings, G. (2017). Transformation for sustainability: The role of complexity in tourism students' understanding of sustainable tourism. **Journal of Hospitality, Leisure, Sport & Tourism Education**, 21, 185-194.
- Higgins-Desbiolles, F. (2021). Socialising tourism for social and ecological justice after COVID-19. In **Global Tourism and COVID-19** (pp. 156-169). Madrid: Routledge.
- Hirschi, A. (2012). The career resources model: An integrative framework for career counsellors. **British Journal of Guidance & Counselling**, 40(4), 369-383.
- Joshi, V. A. and Gupta, I. (2021). Assessing the impact of the Covid-19 pandemic on hospitality and tourism education in India and preparing for the new normal. **Worldwide Hospitality and Tourism Themes**, 13(5), 622-635.
- Kaiser, H. F. (1958). The varimax criterion for analytic rotation in factor analysis. **Psychometrika**, 23(3), 187-200.
- Karatepe, O. M. and Olugbade, O. A. (2017). The effects of work social support and career adaptability on career satisfaction and turnover intentions. **Journal of Management & Organization**, 23(3), 337-355.
- Kay, C. and Russette, J. (2000). Hospitality-management competencies: Identifying managers' essential skills. **Cornell hotel and restaurant administration quarterly**, 41(2), 52-63.
- Khalid, K. and Ahmad, A. M. (2021). The relationship between employability skills and career adaptability: A case of undergraduate students of the United Arab Emirates. **Higher Education, Skills and Work-Based Learning**, 11(5), 1035-1054.
- Kim, H. J. and Jeong, M. (2018). Research on hospitality and tourism education: Now and future. **Tourism Management Perspectives**, 25, 119-122.
- Krishnan, V., Mann, R., Seitzman, N. and Wittkamp, N. (2020). **Hospitality and Covid-19: How long until “no vacancy” for US hotels?**. Retrieved February 24, 2024, from, <https://www.mckinsey.com/~media/McKinsey/Industries/Travel%20Transport%20and%20Logistics/Our%20Insights/Hospitality%20and%20COVID%2019%20How%20long%20until%20no%20vacancy%20for%20US%20hotels/Hospitality-and-COVID-19-How-long-until-no-vacancy-for-US-hotels-vF.pdf>
- Law, R. (2006). A perspective on SARS and education in hospitality and tourism. **Journal of Teaching in Travel & Tourism**, 5(4), 53-59.
- Lee, P. C., Xu, S. T. and Yang, W. (2021). Is career adaptability a double-edged sword? The impact of work social support and career adaptability on turnover intentions during the COVID-19 pandemic. **International Journal of Hospitality Management**, 94, 102875.



- Lei, S. I. and So, A. S. I. (2021). Online teaching and learning experiences during the COVID-19 pandemic - A comparison of teacher and student perceptions. **Journal of Hospitality & Tourism Education**, 33(3), 148-162.
- Lo Presti, A. and Pluviano, S. (2016). Looking for a route in turbulent waters: Employability as a compass for career success. **Organizational Psychology Review**, 6(2), 192-211.
- Lunkam, P. (2021). **Industry Outlook 2021-2023: Hotel Industry**. Retrieved February 24, 2024, from, <https://www.krungsri.com/en/research/industry/industry-outlook/services/hotels/io/io-hotel-21>
- Mandabach, K. H., VanLeeuwen, D. and Bloomquist, P. (2001). Hospitality technology education: Student successes in mastering the hidden curriculum. **Journal of Hospitality & Tourism Education**, 13(1), 49-56.
- McLagan, P. A. and Suhadolnik, D. (1989). Models for HRD practice. **Training and Development Journal**, 43(9), 49-59.
- Min, H., Swanger, N. and Gursoy, D. (2016). A longitudinal investigation of the importance of course subjects in the hospitality curriculum: An industry perspective. **Journal of Hospitality & Tourism Education**, 28(1), 10-20.
- Monteiro, S., Taveira, M. D. C. and Almeida, L. (2019). Career adaptability and university-to-work transition: Effects on graduates' employment status. **Education Training**, 61(9), 1187-1199.
- Moore, D. R., Cheng, M. I. and Dainty, A. R. (2002). Competence, competency and competencies: performance assessment in organisations. **Work study**, 51(6), 314-319.
- Naderiadib Alpler, N. and Arasli, H. (2020). Can hindrance stressors change the nature of perceived employability? An empirical study in the hotel industry. **Sustainability**, 12(24), 10574.
- National Youth Commission, Executive Yuan. (2006). **Investigation of employability of college graduates**. Taiwan: Author.
- Nunnally, J. C. (1978). An overview of psychological measurement. In B. B. Wolman (Eds.), **Clinical diagnosis of mental disorders: A handbook** (pp. 97-146). Boston: Springer.
- Ocampo, A. C. G., Reyes, M. L., Chen, Y., Restubog, S. L. D., Chih, Y. Y., Chua-Garcia, L., et al. (2020). The role of internship participation and conscientiousness in developing career adaptability: A five-wave growth mixture model analysis. **Journal of Vocational Behavior**, 120, 103426.
- Pan, J., Guan, Y., Wu, J., Han, L., Zhu, F., Fu, X. and Yu, J. (2018). The interplay of proactive personality and internship quality in Chinese university graduates' job search success: The role of career adaptability. **Journal of Vocational Behavior**, 109, 14-26.
- Park, S. and Park, S. Y. (2020). Career adaptability of South Korean engineering students: Personal and contextual influencing factors. **European Journal of Training and Development**, 44(4/5), 469-488.



- Qureshi, A., Wall, H., Humphries, J. and Balani, A. B. (2016). Can personality traits modulate student engagement with learning and their attitude to employability?. **Learning and Individual Differences**, 51, 349-358.
- Rasheed, M. I., Okumus, F., Weng, Q., Hameed, Z. and Nawaz, M. S. (2020). Career adaptability and employee turnover intentions: The role of perceived career opportunities and orientation to happiness in the hospitality industry. **Journal of Hospitality and Tourism Management**, 44, 98-107.
- Robert, D. F. and DeVellis, R. F. (2003). Scale development: Theory and applications. **Journal of International Academic Research**, 10(2), 23-41.
- Rothwell, A., Herbert, I. and Rothwell, F. (2008). Self-perceived employability: Construction and initial validation of a scale for university students. **Journal of Vocational Behavior**, 73(1), 1-12.
- Rudolph, C. W., Lavigne, K. N. and Zacher, H. (2017). Career adaptability: A meta-analysis of relationships with measures of adaptivity, adapting responses, and adaptation results. **Journal of Vocational Behavior**, 98, 17-34.
- Safavi, H. P. and Karatepe, O. M. (2018). High-performance work practices and hotel employee outcomes: The mediating role of career adaptability. **International Journal of Contemporary Hospitality Management**, 30(2), 1112-1133.
- Sandwith, P. (1993). A hierarchy of management training requirements: The competency domain model. **Public Personnel Management**, 22(1), 43-62.
- Saraswati, S., Nugraheni, E. P., Putra, E. M. and Wiratomo, G. H. (March 7-11, 2021). Career competence and career engagement: The mediating roles of career adaptability. In **The 11<sup>th</sup> Annual International Conference on Industrial Engineering and Operations Management** (pp. 3562-3568). Singapore: IEOM Society International.
- Savickas, M. L. (1997). Career adaptability: An integrative construct for life-span, life-space theory. **The career development quarterly**, 45(3), 247-259.
- Savickas, M. L. and Porfeli, E. J. (2012). Career Adapt-Abilities Scale: Construction, reliability, and measurement equivalence across 13 countries. **Journal of Vocational Behavior**, 80(3), 661-673.
- S raphin, H. and Yallop, A. C. (2021). **Overtourism and tourism education**. London: Routledge.
- Shariff, N. M. and Abidin, A. Z. (2015). Developing an index of the Malaysian tourism and hospitality graduates competencies. **International Journal of Business and Society**, 16(3), 422-435.
- Shah, C., Chowdhury, A. and Gupta, V. (2021). Impact of COVID-19 on tourism and hospitality students' perceptions of career opportunities and future prospects in India. **Journal of Teaching in Travel & Tourism**, 21(4), 359-379.



- Sharma, G. D., Thomas, A. and Paul, J. (2021). Reviving tourism industry post-COVID-19: A resilience-based framework. **Tourism Management Perspectives**, 37, 100786.
- Sigala, M. and Baum, T. (2003). Trends and issues in tourism and hospitality higher education: Visioning the future. **Tourism and Hospitality Research**, 4(4), 367-376.
- Siow, M. L., Lockstone-Binney, L., Fraser, B., Cheung, C., Shin, J., Lam, R., et al. (2021). Re-building students' post-covid-19 confidence in courses, curriculum and careers for tourism, hospitality, and events. **Journal of Hospitality & Tourism Education**, 33(4), 270-287.
- Sisson, L. G. and Adams, A. R. (2013). Essential hospitality management competencies: The importance of soft skills. **Journal of Hospitality & Tourism Education**, 25(3), 131-145.
- Spowart, J. (2011). Hospitality students' competencies: Are they work ready?. **Journal of Human Resources in Hospitality & Tourism**, 10(2), 169-181.
- Super, D. E. and Knasel, E. G. (1981). Career development in adulthood: Some theoretical problems and a possible solution. **British Journal of Guidance and Counselling**, 9(2), 194-201.
- Susskind, D. and Vines, D. (2020). The economics of the COVID-19 pandemic: An assessment. **Oxford Review of Economic Policy**, 36(Supplement1), S1-S13.
- Tas, R. F., LaBrecque, S. V. and Clayton, H. R. (1996). Property-management competencies for management trainees. **Cornell Hotel and Restaurant Administration Quarterly**, 37(4), 90-96.
- Tavitiyaman, P., Tsui, B. and Ng, P. M. L. (2023). Effect of Hospitality and Tourism Students' Perceived Skills on Career Adaptability and Perceived Employability. **Journal of Hospitality & Tourism Education**, 1-12.
- Tavitiyaman, P., Ren, L. and Fung, C. (2021). Hospitality students at the online classes during COVID-19—How personality affects experience?. **Journal of Hospitality, Leisure, Sport & Tourism Education**, 28, 100304.
- Teng, C. C. (2008). The effects of personality traits and attitudes on student uptake in hospitality employment. **International Journal of Hospitality Management**, 27(1), 76-86.
- Tesone, D. V. and Ricci, P. (2006). Toward a definition of entry-level job competencies: Hospitality manager perspectives. **International Journal of Hospitality & Tourism Administration**, 7(4), 65-80.
- Tiwari, P., Séraphin, H. and Chowdhary, N. R. (2021). Impacts of COVID-19 on tourism education: Analysis and perspectives. **Journal of Teaching in Travel & Tourism**, 21(4), 313-338.
- Tomlinson, J., Baird, M., Berg, P. and Cooper, R. (2018). Flexible careers across the life course: Advancing theory, research and practice. **Human Relations**, 71(1), 4-22.
- UNWTO. (2020). **Impact of COVID-19 on global tourism made clear as UNWTO counts the cost of standstill**. Retrieved February 24, 2024, from, <https://www.unwto.org/news/impact-of-covid-19-on-global-tourism-made-clear-as-unwto-counts-the-cost-of-standstill>



- Walsh, K. (2016). Applying career concepts to strengthen the work-attitudes of service professionals. **The Service Industries Journal**, 36(1-2), 58-79.
- Wang, D., Cheung, C. and Zhai, X. (2024). Effects of career adaptability and career optimism on career intention of tourism and hospitality students. **Tourism Review**, 79(1), 24-37.
- Wang, Y. F. (2013). Constructing career competency model of hospitality industry employees for career success. **International Journal of Contemporary Hospitality Management**, 25(7), 994-1016.
- Wang, Y. F. and Tsai, C. T. (2014). Employability of hospitality graduates: Student and industry perspectives. **Journal of Hospitality & Tourism Education**, 26(3), 125-135.
- Wang, D., Cheung, C. and Zhai, X. (2024). Effects of career adaptability and career optimism on career intention of tourism and hospitality students. **Tourism Review**, 79(1), 24-37.
- Wittekind, A., Raeder, S. and Grote, G. (2010). A longitudinal study of determinants of perceived employability. **Journal of Organizational Behavior**, 31(4), 566-586.
- World Travel & Tourism Council. (2021). **WTTC research reveals global Travel & Tourism sector suffered a loss of almost US\$45 trillion in 2020 due to the impact of COVID-19**. Retrieved February 20, 2024, from, <https://wtcc.org/news-article/global-tand-t-sector-suffered-a-loss-of-almost-us4-trillion-in-2020>
- Wu, B. and Yang, W. (2018). What do Chinese consumers want? A value framework for luxury hotels in China. **International Journal of Contemporary Hospitality Management**, 30(4), 2037-2055.
- Xu, J., Tavitiyaman, P., Kim, H. J. and Lo, S. K. J. (2022). Hospitality and tourism higher education in the post-COVID era: Is it time to change?. **Journal of Hospitality & Tourism Education**, 34(4), 278-290.
- Xu, H. (2021). Career decision-making from a dual-process perspective: Looking back, looking forward. **Journal of Vocational Behavior**, 126, 103556.
- Ye, H. and Law, R. (2021). Impact of COVID-19 on hospitality and tourism education: A case study of Hong Kong. **Journal of Teaching in Travel & Tourism**, 21(4), 428-436.
- Zhang, W., Guan, X., Zhou, X. and Lu, J. (2019). The effect of career adaptability on career planning in reaction to automation technology. **Career Development International**, 24(6), 545-559.
- Zhong, Y., Busser, J., Shapoval, V. and Murphy, K. (2021). Hospitality and tourism student engagement and hope during the COVID-19 pandemic. **Journal of Hospitality & Tourism Education**, 33(3), 194-206.