



ELSEVIER

Contents lists available at [ScienceDirect](https://www.sciencedirect.com)

Journal of Hospitality, Leisure, Sport & Tourism Education

journal homepage: www.elsevier.com/locate/jhlste

Hospitality and tourism management student satisfaction with their majors and career readiness amid the COVID-19 pandemic

Chanmi Hong^{a,*}, Inna Soifer^a, Harold Lee^b, Eun-Kyong (Cindy) Choi^a,
Tanya Ruetzler^a

^a Department of Nutrition and Hospitality Management, The University of Mississippi, P.O. Box 1848, University, MS, 38677, USA

^b College of Merchandising, Hospitality and Tourism, University of North Texas, 1155 Union Circle, #311100, Denton, TX, 76203-5017, USA

ARTICLE INFO

Keywords:

Perceived career readiness
Self-efficacy
Student satisfaction with major
Perceived curriculum
Campus support

ABSTRACT

The COVID-19 pandemic outbreak impacted hospitality and tourism management (HTM) program offerings that typically attract students, such as experiential learning courses, field trips, and internships, which were canceled or postponed. This transition has raised concerns about whether student satisfaction with their major and their perceived career readiness were impacted by the modified curriculum. Therefore, this study investigates how perceived curriculum, campus support, and self-efficacy affect HTM student satisfaction with the major and career readiness during the COVID-19 pandemic. Consequently, perceived curriculum, campus support, and self-efficacy positively influenced student satisfaction with their major. Self-efficacy has a positive impact on career readiness.

1. Introduction

The COVID-19 pandemic has severely affected the hospitality industry, thus influencing students' career decisions and willingness to continue pursuing hospitality degrees (Seyitoğlu et al., 2022). Moreover, the hospitality labor shortage of 2022, combined with the nationwide trend of declining student enrollment, is prompting questions about the recruitment and retention of hospitality program students (American Hotel and Lodging Association, 2022; Weissman, 2021). Therefore, higher education institutions feel the urgency to create relevant academic programs that meet industry and student needs (Griffin, 2021), which means producing high-quality graduates for hospitality businesses while simultaneously ensuring student satisfaction with their chosen course of studies and campus environment.

Traditionally, higher education is associated with in-person learning (Galvis, 2018), but the COVID-19 pandemic has prompted many institutions to adopt other modalities, such as virtual and hybrid instruction. This transition has raised concerns about instructional quality, despite demonstrated flexibility and accessibility of remote instruction (Bart, 2008). Additionally, hospitality management program offerings that typically attract students, such as experiential learning courses, field trips, internships, and others, have been canceled or postponed during the COVID-19 pandemic (Zhong et al., 2021). Therefore, whether hospitality student satisfaction with their major and their perception of being prepared to thrive in the industry are affected by the modified curriculum remains an open question.

* Corresponding author.

E-mail addresses: chong1@go.olemiss.edu (C. Hong), harold.lee@unt.edu (H. Lee), echoi2@olemiss.edu (E.-K.(C. Choi), ruetzler@olemiss.edu (T. Ruetzler).

<https://doi.org/10.1016/j.jhlste.2023.100434>

Received 9 January 2023; Received in revised form 3 April 2023; Accepted 6 April 2023

Available online 7 April 2023

1473-8376/© 2023 Elsevier Ltd. All rights reserved.

Previous research suggests that in addition to a well-developed curriculum and instructional effectiveness, a student-centered campus is a significant determinant of student satisfaction (Elliott, 2002). However, during the COVID-19 pandemic, students' expectations evolved, anticipating student support services to operate in a hybrid mode and provide more flexibility (Reale, 2022). As a result, many universities have been redesigning their student support systems. However, there is still limited understanding of how campus support contributes to student satisfaction with their chosen major and student perception of career readiness during the COVID-19 pandemic.

Recently, student self-efficacy has emerged as an influential factor affecting student satisfaction with their majors and their academic and professional success (Van Dinther et al., 2011). Self-efficacy can be defined as students' belief in their ability to succeed in reaching their goals (Schunk & Mullen, 2012). Considering the transition to online learning during the COVID-19 pandemic, and the changing learning environment, the question of whether the role of student self-efficacy has changed has emerged. To fill these gaps, this study aims to investigate how perceived curriculum, campus support, and self-efficacy affect hospitality and tourism management student satisfaction with the major and their career readiness during the COVID-19 pandemic. The results of this study should provide hospitality educators with insights to increase hospitality program competitiveness and navigate new challenges of student recruitment and retention in the context of post-pandemic recovery.

2. Literature review

2.1. The impact of the Covid-19 pandemic on hospitality/tourism management students

The COVID-19 pandemic has inflicted the significant disruption in hospitality and tourism education. Many of hospitality hands-on experience courses, including culinary lab classes, guest lectures, class field trips, study abroad programs, professional work experiences, and internship programs, were suspended or canceled during the COVID-19 pandemic (Zhong et al., 2021). Due to these limitations, hospitality students have encountered fear or concern for their continuous education. In order to overcome this crisis, the direction of hospitality and tourism education is necessary to adopt innovative methods to provide a better education system for students due to COVID-19 (Benaraba et al., 2022).

The virtual meeting-based learning method has completely shifted the academic learning mechanism in hospitality and tourism. All in-person hospitality and tourism courses during the pandemic were converted into a virtual or hybrid format to meet continuous student learning outcomes (Dopson et al., 2021). Researchers have reported contradictory findings on the effectiveness of virtual learning. According to Dziuban et al. (2015), the students' positive satisfaction has been influenced by the virtual learning environment as far as practical e-learning tools are provided. The previous studies indicated that students were proficient at utilizing virtual learning platforms such as Zoom, Microsoft Teams, and Google Meet (Annaraud & Singh, 2017; Patiar et al., 2017). Additionally, a recent study suggested that students had higher learning satisfaction with their online delivery methods (Choi et al., 2021). In contrast, Zhong et al. (2021) reported students raised the issue of limited learning and interaction with their academic community and industry outreach. Furthermore, young adults' stress and negative emotions have increased due to economic and social stressors during the COVID-19 pandemic (Shanahan et al., 2022). As such, the pandemic has contributed to student concerns about starting their careers in the hospitality and tourism industry. It is uncertain how the pandemic has impacted students' willingness to pursue their hospitality and tourism degrees and seek their future careers in the hospitality and tourism industry throughout such a global crisis.

2.2. Perceived curriculum and career readiness

Moore (2006) broadly defined curriculum as all learning interaction planned and guided by a school that students can carry out in groups or individually through instructional content, materials, resources, and processes for evaluating the attainment of educational objectives. Similarly, Alexakis and Jiang (2019) claimed that "curriculum refers to a program of study as defined by the set of required and elective courses/classes that a student must take at an institution of higher education to graduate with an earned academic degree" (p. 2). This study follows this definition; however, measuring the quality of a curriculum objectively is challenging. To overcome this, researchers have often relied on students' perceived curriculum to evaluate it (Lee et al., 2022). Therefore, the current study measures students' perception of the curriculum, building on the practices of previous research.

Higher education institutions spend countless amounts of time and effort on curriculum development to meet college student satisfaction (Prakash, 2018). To enhance students' learning satisfaction, the curriculum is vital to meeting students' needs and wants (Farahmandian et al., 2013; Hunter et al., 2022; Martirosyan, 2015). Supporting this notion, Martirosyan (2015) and Farahmandian et al. (2013) identified a positive relationship between perceived curriculum and student satisfaction. Specifically, once students recognize that the curriculum's organization and delivery are useful, they are satisfied with their education experience (Gibson, 2010). Similarly, DeShields et al. (2005) found that business students have higher satisfaction when they perceive that the major curriculum equips them with future employment prospects. Given the previous findings, the current study assumes that perceived curriculum positively affects student satisfaction with the major.

As a student's ultimate goal is to gain employment in their desired field of employment, schools should properly educate and train their students to be ready for their future career. A high-quality curriculum enhances students' beliefs about their career readiness (Ajao et al., 2022; Jackson, 2019; Lee et al., 2021). An effective curriculum contains advanced academic, technical, and problem-solving skill sets to enhance students' career readiness (Lee et al., 2021). In other words, various coursework should not only cover the background or knowledge of course subjects, but also provide opportunities for students to improve various skills, including critical thinking, problem solving, and written and oral communication skills (Alshare & Sewailem, 2018). Considering the above

literature reviews on perceived curriculum, satisfaction, and career readiness, the following hypotheses are proposed.

H1. Perceived curriculum positively influences student satisfaction with their major.

H2. Perceived curriculum positively influences career readiness.

2.3. Campus support

Higher education institutions offer various services and resources to contribute to the personal, academic, and professional development of their students. The extensiveness of such services and resources varies by institution, but common services include academic advising, counseling, mentorship, tutoring, career planning, financial aid, scholarships, study abroad program, and highly-experienced staff member (Grant-Vallone et al., 2003; Lee et al., 2016). Numerous studies revealed that such student supportive services, defined as campus support in this study, enhance students' feeling of campus belonging (Thompson et al., 2007), academic success (Hassan, 2014; McKinney et al., 2006), mental and physical health (Shin & Steger, 2016), and satisfaction with the university (Hassan, 2014; Hu et al., 2012).

In the pre-COVID-19 era, several studies uncovered that campus support increases student satisfaction with their major. Specifically, Tessema et al. (2012) found that academic advising positively affects student satisfaction with the major. Blau et al. (2019) showed a similar finding that career center service for job opportunity, advising quality, and support from faculty increase major satisfaction. The COVID-19 pandemic was unexpected; consequently, a number of campuses shutdown not to spread virus and protect faculty, staff, and students' health. Nevertheless, universities have put tremendous effort into altering such services remotely or online by adopting synchronous communication tools, such as Zoom and Google Meets (Wang & Houdyshell, 2021). Zhong et al. (2021) asserted student support services are even more crucial for student academic satisfaction by making students feel secure in an unstable educational environment in a crisis situation. Bae et al. (2022) supported this notion by proving that financial support from university enhanced hospitality and tourism management student satisfaction with the major during the COVID-19 pandemic. Based on these previous findings, this study anticipates that campus support positively affects student satisfaction with the major.

Additionally, the importance of campus support has been reported in students' career decision-making amid the COVID-19 pandemic (Zhong et al., 2021). Specifically, Zhong et al. (2021) illustrated that campus support services contribute to having a positive psychological status for hospitality and tourism students, which positively influences clear career goals and pathways even in challenging circumstances. Furthermore, Guo and Ayoun (2022) argued that campus support is pivotal to hospitality students because hospitality students largely depend on the faculties' experience and advice in their career decision, indicating that students perceive campus support as the primary source of acquiring information. Following this view of previous research, the following hypotheses are formulated in this study.

H3. Campus support positively influences student satisfaction with their major.

H4. Campus support positively influences career readiness.

2.4. Self-efficacy

Self-efficacy refers to "one's belief of self-ability to complete a task or achieve a specific outcome" (Guo & Ayoun, 2022, p. 17). This individual's subjective judgment affects individuals' physiological, behavioral, and psychological responses (Brown, 2002; Schönfeld et al., 2017). When people have strong self-efficacy, their efforts, patience, and flexibility tend to be higher (Bandura, 1986) because self-efficacy enables them to realize how much effort they will put into a task, how long they will persevere while facing challenges, and how resilient they will be in challenging circumstances (Van Dinther et al., 2011).

In a more specific approach to students' context, Schunk and Mullen (2012) define self-efficacy as students' belief in their capacity to plan and implement the actions necessary to learn and satisfactorily accomplish tasks and assignments. In other words, students with high self-efficacy tend to maintain a relaxed attitude and mind to cope well with difficult situations, and they are more likely to make decisions with confidence that they can complete any task (Mahmud et al., 2019; Park et al., 2018). Studies have found that students' self-efficacy plays a pivotal role in increasing their satisfaction with their major in various academic disciplines (Kim & Lee, 2014; Komaraju et al., 2014; Lent et al., 2007; Park et al., 2018). For example, Kim and Lee (2014) uncovered that students with high self-efficacy tend to have a high degree of satisfaction with their major. In a similar vein, Komaraju et al. (2014) demonstrated that psychology students with high self-efficacy are more likely to be satisfied with their major. Park et al. (2018) also confirmed the positive impact of self-efficacy on nursing students' satisfaction with their major. In the hospitality and tourism field, Bae et al. (2022) identified similar findings that self-efficacy positively influenced student satisfaction with the hospitality and tourism program. Overall, these studies consistently indicated that self-efficacy is an important predictor of student satisfaction with their major. Hence, the current study assumes that high self-efficacy elevates hospitality and tourism management students' satisfaction with their major.

In addition to student satisfaction with their major, previous studies have also indicated that student's self-efficacy positively influences students' career readiness (Guo & Ayoun, 2022; Mahmud et al., 2019). Specifically, Mahmud et al. (2019) asserted that students' self-efficacy is closely related to their career readiness because self-efficacy allows students to evaluate themselves positively regarding career-related abilities such as knowledge level, planning skill, and problem-solving ability. By contrast, students with lower self-efficacy tend to feel a lack of such skills and confidence in their careers. Similarly, in the hospitality context, Guo and Ayoun (2022) revealed that those with high self-efficacy, which is mainly established by education and previous industry work experience, are more willing to work in the hospitality industry. As previous studies consistently indicate the positive impact of self-efficacy on students'

satisfaction with their major and students' career readiness, the current study develops the following two hypotheses.

H5. Self-efficacy positively influences student satisfaction with their major.

H6. Self-efficacy positively influences career readiness.

Figure 1 depicts the proposed conceptual framework.

3. Methodology

3.1. Data collection

The target sample for this study was hospitality and tourism undergraduate students studying in the United States, who are 18 years old or older. To recruit survey participants, 10 hospitality and tourism programs located throughout the country were contacted and asked to participate in the study. Universities, which were representative of the east, southeast, west, and southwest regions of the country, were selected based on the authors' affiliations with them. Contacts were sent an introductory, informational letter and a link to the survey which was administered via Qualtrics. As a result, six programs agreed to share the survey invitation with their students. Faculty members at the programs received two email reminders to encourage their students' participation. The online survey was open from April to July 2022. Out of 136 responses collected, there were 8 insincere answers and 11 responses that failed to answer an attention check question and therefore were excluded. Thus, a total of 117 responses were utilized for further analysis. Given that Bentler and Chou (1987) recommended five individuals for each estimated parameter (i.e., $5 \times 22 = 110$), this study satisfied a minimum sample size and confirmed sufficient sample size to conduct the structural equation modeling. This study has been reviewed by the Institutional Review Board (IRB), and ethical approval was issued by IRB in April 2022.

3.2. Measurements

Based on the review of the existing literature (i.e., Artino & McCoach, 2008; Edman & Brazil, 2009; Hu et al., 2012; Lee et al., 2021; Lent et al., 2007; National Survey of Student Engagement, 2022), the measurement items were developed and slightly modified to fit this study context (See Table 2). A self-administered questionnaire comprised three sections of screen questions, research constructs, and socio-demographic information. Two screening questions were first asked to ensure that respondents' age (i.e., 18 years old or older) and their major. A seven-point Likert scale (1 = strongly disagree to 7 = strongly agree) was used to measure five components in the first part of the survey, namely perceived curriculum, campus support, self-efficacy, satisfaction with their major, and career readiness. In the last part of the survey, respondents were instructed to provide socio-demographic information, such as gender, age, ethnicity, career plan, employment status, and academic level.

3.3. Data analysis

Using AMOS 26, this study followed the two-step approach recommended by Anderson and Gerbing (1988) to analyze the collected data. After a confirmatory factor analysis was conducted to ensure the reliability and validity of the measurement items, structural equation modeling was used to evaluate six hypotheses. Prior to the primary data analysis, a normality test was conducted using SPSS 27. Consequently, skewness (minimum: 1.589, maximum: 0.100) and kurtosis (minimum: 0.833, maximum: 4.024) were confirmed by showing the values scattered between the acceptable ranges of ± 2 and ± 5 , respectively (Bentler, 1995).

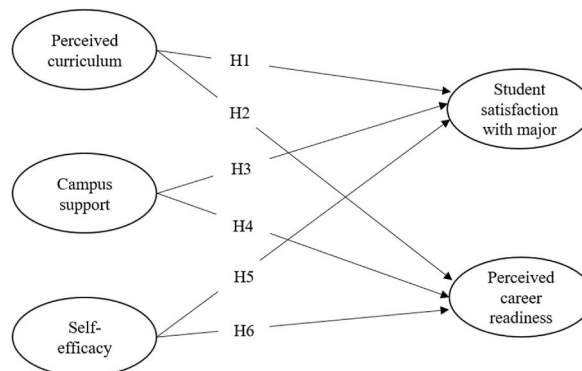


Fig. 1. The proposed conceptual framework.

4. Results

4.1. Respondents' profile

Table 1 describes the socio-demographic information of the respondents in this study. Of 117 respondents, 93 were female (82.1%), and 19 were male (16.2%). The majority of respondents were under 25 years old (76.1%) and 60% of respondents were Caucasian. In terms of academic level, most of the respondents were either seniors (52.1%) or juniors (38.5%). Additionally, 38.5% of respondents indicated they have a part-time job in the hospitality and tourism industry, and 30.8% had full-time job, followed by unemployed (29.1%). Regarding their career plan, 75.2% of respondents reported plan to obtain a career in the hospitality and tourism industry, and 17.9% wanted to pursue a higher degree in graduate school.

4.2. Results of confirmatory factor analysis (CFA)

To evaluate the measurement model, this study conducted CFA by testing the underlying structure of constructs. Consequently, the measurement model illustrated acceptable fit statistics, with $\chi^2_{(199)} = 286.584$, $p < .001$, $\chi^2/df = 1.440$, CFI = 0.941, TLI = 0.932, RMSEA = 0.062 (90% CI: 0.045–0.077), SRMR = 0.060. As seen in Table 2, all factor loadings of the measurement items were confirmed at the significant level ($p < .001$), ranging from 0.585 to 0.925. As the next step, the construct validity was checked. Table 3

Table 1
Profile of respondents ($N = 117$).

Characteristics	Category	<i>n</i>	%
Gender	Male	19	16.2
	Female	96	82.1
	Missing	2	1.7
Age	Less than 25 years	89	76.1
	25–29	10	8.5
	30–34	5	4.3
	Over 35 years	9	7.7
	Missing	4	3.4
Ethnicity	Caucasian	71	60.7
	African American	9	7.7
	Hispanic	21	17.9
	Asian	10	8.5
	Other	4	3.4
	Missing	2	1.7
Academic level	Freshman	3	2.6
	Sophomore	6	5.1
	Junior	45	38.5
	Senior	61	52.1
	Missing	2	1.7
Working experience	Full time	36	30.8
	Part time	45	38.5
	No working experience	34	29.1
	Missing	2	1.7
Future plan	Seek a career in the hospitality and tourism industry	88	75.2
	Graduate school	21	17.9
	Postpone graduation	1	0.9
	Other	5	4.3
	Missing	2	1.7
Current university	University of North Texas	44	37.6
	Metropolitan State University of Denver	35	29.9
	University of Mississippi	28	23.9
	California State University, Chico	6	5.2
	New Mexico State University	3	2.6
	Oklahoma State University	1	0.9

Table 2
Measurement items and standardized factor loadings.

Items	Standardized factor loadings	References
<i>Perceived curriculum</i>		
The hospitality management curriculum in my program is tailored to this specific industry context.	.729	Lee et al. (2021)
The curriculum in my program is consistent with the international hospitality trend.	.776	
The curriculum in my program has appropriate and vertical connections to fulfill the functions of career readiness.	.894	
Industry partners serve as advisors to ensure the curriculum is relevant and current.	.739	
The curriculum helps me have a diverse skill set.	.807	
<i>Campus support</i>		
This university provided support to help students succeed academically during the Covid-19 pandemic.	.788	Edman & Brazil (2009); Hu et al. (2012); National Survey of Student Engagement (2022)
This university provided opportunities to be involved socially during the Covid-19 pandemic.	.742	
This university provided support for your overall well-being (i.e., recreation, health care, counseling) during the Covid-19 pandemic.	.855	
This university helped me manage my non-academic responsibilities (i.e., work and family) during the Covid-19 pandemic.	.690	
College staff members possessed a warm and friendly attitude during the Covid-19 pandemic.	.738	
members have been available for help outside of class during the Covid-19 pandemic.	.656	
When I need help in my studies, the school academic personnel always provide me with appropriate assistance during the Covid-19 pandemic.	.846	
<i>Self-efficacy</i>		
I can perform well in my college life.	.755	Artino & McCoach (2008)
I am confident I can do an outstanding job in my academic life.	.745	
I am sure I can understand the most difficult material in my coursework.	.829	
Even with distractions, I am confident I can learn the material in my coursework.	.765	
<i>Student satisfaction with major</i>		
I am overall satisfied with my academic life in hospitality management.	.793	Lent et al. (2007)
I am overall satisfied with the coursework provided in my program.	.899	
I enjoy the level of intellectual stimulation in my courses.	.765	
<i>Perceived career readiness</i>		
I am ready to start a job in the hospitality industry.	.850	Bang et al. (2021); Jackson (2019); Lee et al. (2021)
I am prepared to begin working in the hospitality business.	.925	
I am available to start my career in the hospitality industry.	.585	

Note. $\chi^2_{(199)} = 286.584, p < .001, \chi^2/df = 1.440, CFI = 0.941, TLI = 0.932, RMSEA = 0.062$ (90% CI: 0.045–0.077), SRMR = 0.060.

Table 3
Validity analysis.

	CR	AVE	MSV	PC	CS	SE	SAT	CR
PC	.893	.626	.412	.791 ^a				
CS	.906	.581	.264	.387 ^b	.763			
SE	.857	.600	.359	.221	.346	.774		
SAT	.860	.674	.412	.655	.514	.621	.821	
CR	.837	.640	.229	.260	.352	.468	.403	.800

Note. CR (Composite reliability), AVE (Average variance extracted), MSV (Maximum shared variance), PC (Perceived curriculum), CS (Campus support), SE (Self-efficacy), SAT (Student satisfaction with major), CR (Perceived career readiness).

^a Square root of average variance extracted (values on the diagonal).

^b Heterotrait-monotrait (HTMT) ratio of correlations.

describes the results of the construct validity of the measurements. Specifically, composite reliability (CR) coefficients fell between .837 and .906, which indicates good internal consistency of the five constructs (Hu & Bentler, 1999). Convergent validity was also confirmed by checking the average variance extracted (AVE) and factor loadings of each construct. The AVEs dispersed between .581 and .674, surpassing the minimum threshold of 0.05. Moreover, the discriminant validity of each construct was acceptable by identifying that AVEs were greater than the squared inter-construct correlations (Fornell & Larcker, 1981). The AVEs were also higher than the maximum shared variance (MSV). In addition, the heterotrait-monotrait (HTMT) ratio of correlations, a more conservative tool than Fornell and Larcker’s criterion, was used to confirm the discriminant validity of the constructs. As a result, none of the HTMT ratios demonstrated values higher than the suggested threshold of 0.85 by Henseler et al. (2015), which suggests no validity issue in the

current study.

4.3. Structural equation model (SEM) and hypotheses test

SEM was performed for hypothesis testing after CFA. The model fit was acceptable with $\chi^2_{(200)} = 286.620, p < .001, \chi^2/df = 1.433, CFI = 0.942, TLI = 0.933, RMSEA = 0.061$ (90% CI: 0.044–0.076), SRMR = 0.060. Fig. 2 displays the results of the hypotheses testing. As illustrated in Table 4, perceived curriculum ($\beta = 0.457, p < .001$), campus support ($\beta = 0.143, p < .05$), and self-efficacy ($\beta = 0.551, p < .001$) positively affected student satisfaction with major, showing H1, H3, and H5 were supported. However, no significant impact of perceived curriculum ($\beta = 0.082, p = .366$) and campus support ($\beta = 0.150, p = .052$) on perceived career readiness were found, which indicated failing to support H2 and H4. Instead, self-efficacy had a positive impact on perceived career readiness ($\beta = 0.466, p < .001$), supporting H6.

5. Discussion and implications

5.1. Key findings

This study investigated hospitality and tourism management students' satisfaction with their major and their career readiness amid the COVID-19 pandemic. The findings of this study demonstrated that students' self-efficacy is the most important predictor of their satisfaction with the major, followed by perceived curriculum and campus support. This result is consistent with the previous studies (e.g., Kim & Lee, 2014; Komarraju et al., 2014; Lee et al., 2021; Lent et al., 2007; Park et al., 2018), which shows that students with higher self-efficacy tend to be more satisfied with the major. In particular, this finding corroborates the assertion of Lee et al. (2021) that self-efficacy encourages hospitality and tourism management students to maintain their commitment to their majors in the face of the COVID-19 pandemic.

In addition, one of the significant findings in this study is that perceived curriculum positively affects students' satisfaction with the major. This result aligns with the results of previous studies (Ayanbode et al., 2022; Farahmandian et al., 2013; Martirosyan, 2015; Zhou et al., 2021), which proved that perceived curriculum quality or various course offerings plays an important role in students' satisfaction with their major. This finding confirms that a redesigned curriculum for the crisis situation still contributes to student satisfaction with the major.

Moreover, this study confirmed the positive impact of campus support on student satisfaction with their hospitality and tourism management major, which indicates that university-level support can be a source of students' satisfaction with their major in an unpredictable learning environment. The current finding corresponds with an existing study conducted by Tessema et al. (2012), which proved that a university level of support enhanced college students' satisfaction with the major. As such, this study shows that campus support is still an important predictor of student satisfaction with the major regardless of service delivery format (e.g., remote, face-to-face, hybrid) during the COVID-19 pandemic.

Regarding career readiness, the current study identified the positive impact of students' self-efficacy on career readiness, which agrees with the extant findings (e.g., Guo & Ayoun, 2022; Lee et al., 2021; Mahmud et al., 2019), illustrating that self-efficacy increases students' career readiness and career ambitions for a major-related career. This finding implies that self-efficacy helps students feel prepared for a hospitality career.

Surprisingly, the results of this study revealed that perceived curriculum had no significant impact on career readiness, which does not support the earlier findings (e.g., Jackson, 2019; Lee et al., 2021; Martinez et al., 2017). This inconsistency may be explained by the fact that hospitality program curriculums lacked hands-on classes, such as internships, field trips, and culinary lab, during the

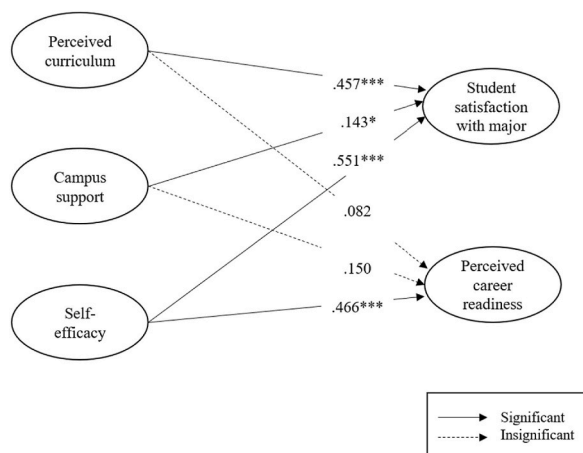


Fig. 2. Results of structural equation modeling.

Table 4
Structural estimates.

Hypotheses			Coefficients	t-values	Decision	
H1	Perceived curriculum	→	Student satisfaction with major	.457	4.988***	Supported
H2	Perceived curriculum	→	Perceived career readiness	.082	.903	Not supported
H3	Campus support	→	Student satisfaction with major	.143	2.197*	Supported
H4	Campus support	→	Perceived career readiness	.150	1.945	Not supported
H5	Self-efficacy	→	Student satisfaction with major	.551	4.782***	Supported
H6	Self-efficacy	→	Perceived career readiness	.466	3.644***	Supported

Note. * $p < .05$, *** $p < .001$.

COVID-19 pandemic, which are included in the original curriculum, or shifted into virtual format (Duncan, 2020).

Furthermore, the present study found that campus support insignificantly influences students' career readiness during the COVID-19 pandemic. This finding is inconsistent with the previous studies, which demonstrated the positive role of campus support in students' career decision-making (e.g., Zhong et al., 2021). A possible explanation for this might be that campus support services (e.g., writing center, career center, counseling) are voluntary, indicating that students should engage by themselves. For example, a survey conducted by Inside Higher ED in 2021 revealed that only 15% of students took advantage of the campus support services during the COVID-19 pandemic, but they evaluated the experience negatively (Ezarik, 2021). The survey identified the reason for students not to use the service was the online offering, and they preferred the traditional in-person services.

5.2. Theoretical implications

This study has several meaningful implications for the hospitality and tourism education literature. Notably, the current study adds to the growing body of literature on hospitality and tourism management student behavior in the face of a crisis situation, such as the COVID-19 pandemic. Moreover, by conducting an empirical study, previous qualitative findings on the hospitality and tourism management students' response toward the COVID-19 pandemic (e.g., Guo & Ayoun, 2022) were reinforced. In particular, this study contributes to the limited knowledge on hospitality and tourism management students' satisfaction with their major and career readiness during the COVID-19 pandemic. Although hospitality and tourism management programs value the symbiotic link between theory and practice, opportunities to apply theory to a practical environment were limited during the pandemic. Thus, the perception and behavior of the students who experienced different curriculum and university operations under the severe crisis provide new insights into existing knowledge.

Additionally, to the best of our knowledge, this is the first study to focus perceived career readiness of the hospitality and tourism management students who experienced the dramatic changes to their learning environment during the COVID-19 pandemic. Although their learning experience largely differs from students who receive face-to-face learning, little research has examined the students' perceived career readiness. Therefore, by providing a new understanding of perceived career readiness during the COVID-19 pandemic, this study made a unique empirical contribution to extant student career readiness literature in the hospitality and tourism management field.

Furthermore, this study provides the first comprehensive assessment of student satisfaction with their major and career readiness with micro-meso-macro levels of aspects. Specifically, individual level of attributes, self-efficacy, and departmental level, program curriculum, and university level, campus support, were explored as predictors to investigate diverse levels of aspects influencing student behavior related to their major loyalty and career decision-making, which helps full understanding of the hospitality and tourism students.

5.3. Practical implications

This study revealed several significant findings which may inform hospitality management program design and serve as a reference for the program directors and other stakeholders involved in the curriculum development. Perceived curriculum, campus support, and self-efficacy were important indicators of student satisfaction with their major. Hospitality management administration should focus on these critical domains when conducting curriculum reviews and redesigning student support services.

First, the study results showed that perceived curriculum positively influenced student satisfaction with their major. Therefore, hospitality programs should educate the students on how the courses they are taking are designed to meet the industry's needs in line with the current trends. That could be done by communicating the relevance of program outcomes, course learning objectives, and content to students' professional goals. Moreover, faculty members should explain to the students how collaborative projects, written assignments, and oral presentations contribute to soft skills development. Also, inviting industry professionals as guest speakers can attest to the relevancy of the topics discussed. Another suggestion would be to invest in designing online courses with experiential learning and laboratory component, typically high-stakes ones for hospitality degrees, for seamless pivoting in case of a crisis similar to the COVID-19 pandemic.

Second, the study results indicated that campus support has a positive impact on student satisfaction with their major. When designing student support services for the post-pandemic era, hospitality programs should include academic support and well-being support stemming from the challenges of the COVID-19 pandemic. For example, the U.S. Department of Education offers grants

under the umbrella of the Federal TRIO programs to higher education institutions aiming to increase college retention and graduation rates (U.S. Department of Education, n.d.). Among services eligible for grant aid are academic tutoring, counseling for personal, career, and educational information, mentoring programs, and others (U.S. Department of Education, n.d.). In line with the current study findings, such support services contribute to student satisfaction with the chosen major. Therefore, academic advisors and faculty members should encourage students to utilize student support services by distributing flyers, inviting student support staff to classes, and otherwise making students aware of such programs developed to support their professional and personal success.

Finally, the study results confirmed that self-efficacy was the strongest factor affecting student satisfaction. Thus, hospitality programs should promote building a culture of self-efficacy as part of the courses through frequent guidance and feedback, faculty members' supporting behavior, and other techniques such as peer modeling (Ahmad & Safaria, 2013).

Moreover, the study results showed that perceived self-efficacy was the only significant factor affecting student career readiness. That finding is essential for hospitality programs because, according to the self-determination theory, fulfilling one's self-efficacy and self-actualization affects the individual's motivation, and faculty and staff play a crucial role in boosting it (Deci & Ryan, 1985). Therefore, frequent guidance and feedback, the ability to observe others in the educational setting, and mastery in achieving short-term goals contribute to students' confidence in their ability to succeed in their chosen career path (Ahmad & Safaria, 2013). Thus, hospitality programs must pay attention to this vital educational outcome helping students to develop a stronger sense of self-efficacy, which, in turn, reinforces their perception of career readiness. That could be done by increasing awareness of student self-efficacy among faculty members and student support staff by hosting workshops and creating learning communities. Furthermore, a hospitality program may consider mentoring seminars for students to increase self-efficacy and contribute to their future career success.

5.4. Limitations and future studies

Despite its meaningful findings, this study has limitations. The current study explored students' satisfaction with the major and career readiness during the COVID-19 pandemic as a cross-sectional study. However, universities' strategies and policies to manage the COVID-19 pandemic have changed during three years. Thus, longitudinal study would provide more in depth understanding of how students' satisfaction with the major and career readiness have shifted over time. Moreover, as this study focused on the individual, departmental, and campus levels of aspects affecting students' satisfaction with the major and career readiness, other influential factors, such as family and peer support and academic motivation, exist. Thus, further research is recommended to consider additional aspects which could affect students' satisfaction with the major and career readiness. Additionally, the current study measured perceived career readiness instead of subjective knowledge and skills. It might provide different outcomes if career readiness is measured using objective knowledge and skills.

References

- Ahmad, A., & Safaria, T. (2013). Effects of self-efficacy on students' academic performance. *Journal of Educational, Health and Community Psychology*, 2(1), 22–29.
- Ajao, H., Alegbeleye, D., & Westfall-Rudd, D. (2022). Curriculum design in an agricultural education program in Nigeria: Towards advancing career readiness. *Advancements in Agricultural Development*, 3(2), 17–30.
- Alexakis, G., & Jiang, L. (2019). Industry competencies and the optimal hospitality management curriculum: An empirical study. *Journal of Hospitality and Tourism Education*, 31(4), 210–220.
- Alshare, K., & Sewailem, M. F. (2018). A gap analysis of business students' skills in the 21st century: A case study of Qatar. *Academy of Educational Leadership Journal*, 22(1), 1–22.
- American Hotel and Lodging Association. (2022). *2022 Midyear state of the industry report*. <https://www.ahla.com/sites/default/files/AHLA%20Midyear%20SOTI%20Report%202022.pdf>.
- Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, 103(3), 411–423.
- Annaraud, K., & Singh, D. (2017). Perceptions of hospitality faculty and students of massive open online courses (MOOCs). *Journal of Hospitality and Tourism Education*, 29(2), 82–90.
- Artino, A. R., & McCoach, D. B. (2008). Development and initial validation of the online learning value and self-efficacy scale. *Journal of Educational Computing Research*, 38(3), 279–303.
- Ayanbode, O. F., Fagbe, A., Owolabi, R., Oladipo, S., & Ewulo, O. R. (2022). Students' interactions, satisfaction and perceived progress in an online class: Empirical evidence from Babcock university Nigeria. *Cogent Education*, 9(1), 1–21.
- Bae, J. I. S., Park, H., & Kim, T. J. (2022). Factors influencing student satisfaction and intention to stay in the hospitality and tourism program. *Journal of Teaching in Travel & Tourism*, 1–29.
- Bandura, A. (1986). *Social foundations of thought and action* (Englewood Cliffs).
- Bart, M. (2008). Distance education—Measuring the benefits and costs. *Faculty Focus*. <https://www.facultyfocus.com/articles/online-education/distance-education-measuring-the-benefits-and-costs/>.
- Benaraba, C. M. D., Bulaon, N. J. B., Escosio, S. M. D., Narvaez, A. H. G., Suinan, A. N. A., & Roma, M. N. (2022). A comparative analysis on the career perceptions of tourism management students before and during the COVID-19 pandemic. *Journal of Hospitality, Leisure, Sports and Tourism Education*, 30, Article 100361.
- Bentler, P. M. (1995). *EQS 6 structural equations program manual*. Multivariate Software.
- Bentler, P. M., & Chou, C. P. (1987). Practical issues in structural modeling. *Sociological Methods & Research*, 16(1), 78–117.
- Blau, G., Williams, W., Jarrell, S., & Nash, D. (2019). Exploring common correlates of business undergraduate satisfaction with their degree program versus expected employment. *The Journal of Education for Business*, 94(1), 31–39.
- Brown, D. (2002). *Career choice and development*. John Wiley & Sons.
- Choi, J. J., Robb, C. A., Miffl, M., & Zainuddin, Z. (2021). University students' perception to online class delivery methods during the COVID-19 pandemic: A focus on hospitality education in Korea and Malaysia. *Journal of Hospitality, Leisure, Sports and Tourism Education*, 29, Article 100336.
- Deci, E. L., & Ryan, R. M. (1985). *Self-determination and intrinsic motivation in human behavior*. Plenum Press.
- DeShields, O. W., Kara, A., & Kaynak, E. (2005). Determinants of business student satisfaction and retention in higher education: Applying Herzberg's two-factor theory. *International Journal of Educational Management*, 19(2), 128–139.

- Dopson, L. R., Lee, P. C., Lee, M. J., & Lara, A. (2021). Perceived importance of career engagement initiatives in hospitality education. *Journal of Hospitality and Tourism Education*, 34(4), 291–299.
- Duncan, N. (2020). *Culinary education in the age of COVID* (FSR. fsmagazine.com/non-commercial/culinary-education-age-covid).
- Dziuban, C., Moskal, P., Thompson, J., Kramer, L., DeCantis, G., & Hermsdorfer, A. (2015). Student satisfaction with online learning: Is it a psychological contract? *Online Learning*, 19(2), 1–15.
- Edman, J. L., & Brazil, B. (2009). Perceptions of campus climate, academic efficacy and academic success among community college students: An ethnic comparison. *Social Psychology of Education*, 12(3), 371–383.
- Elliott, K. M. (2002). Critical determinants of student satisfaction. *Journal of College Student Retention: Research, Theory & Practice*, 4(3), 271–279.
- Ezarik, M. (2021). *Next steps, new directions emerge for life beyond college: Part 2. Inside Higher ED*. <https://www.insidehighered.com/news/2021/09/22/survey-campus-career-center-supports-during-pandemic>.
- Farahmandian, S., Minavand, H., & Afshardost, M. (2013). Perceived service quality and student satisfaction in higher education. *Journal of Business Management*, 12(4), 65–74.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50.
- Galvis, Á. H. (2018). Supporting decision-making processes on blended learning in higher education: Literature and good practices review. *International Journal of Educational Technology in Higher Education*, 15(1), 1–38.
- Gibson, A. (2010). Measuring business student satisfaction: A review and summary of the major predictors. *Journal of Higher Education Policy and Management*, 32(3), 251–259.
- Grant-Vallone, E., Reid, K., Umali, C., & Pohlert, E. (2003). An analysis of the effects of self-esteem, social support, and participation in student support services on students' adjustment and commitment to college. *Journal of College Student Retention: Research, Theory & Practice*, 5(3), 255–274.
- Griffin, W. C. (2021). The future of hospitality education: A reflection. *Journal of Hospitality & Tourism Research*, 45(5), 939–941.
- Guo, Y., & Ayoun, B. (2022). Starting a career during a global pandemic: Telling stories of hospitality management graduates' decision making. *Journal of Hospitality and Tourism Education*, 34(1), 15–32.
- Hassan, K. E. (2014). Investigating conditions for student success at an American university in the Middle East. *Higher Education Studies*, 4(5), 62–74.
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115–135.
- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, 6(1), 1–55.
- Hu, Y. L., Ching, G. S., & Chao, P. C. (2012). Taiwan student engagement model: Conceptual framework and overview of psychometric properties. *International Journal of Research Studies in Education*, 1(1), 69–90.
- Hunter, A., Griller Clark, H., Mason-Williams, L., & Gagnon, J. C. (2022). Curriculum, instruction, and promoting college and career readiness for incarcerated youth: A literature review. *American Journal of Orthopsychiatry*, 92(4), 418–428.
- Jackson, D. (2019). Student perceptions of the development of work readiness in Australian undergraduate programs. *Journal of College Student Development*, 60(2), 219–239.
- Kim, D. J., & Lee, J. S. (2014). Influence of ego-resilience and self-efficacy on satisfaction in major of nursing student. *The Journal of Korean Academic Society of Nursing Education*, 20(2), 244–254.
- Komarraju, M., Swanson, J., & Nadler, D. (2014). Increased career self-efficacy predicts college students' motivation, and course and major satisfaction. *Journal of Career Assessment*, 22(3), 420–432.
- Lee, K., Chuang, N. K., Lee, S. A., & Israeli, A. A. (2021). How COVID-19 influences the future of service management professions. *Journal of Hospitality and Tourism Insights*, 5(3), 2514–9792.
- Lee, M. J., Huh, C., & Jones, M. F. (2016). Investigating quality dimensions of hospitality higher education: From students' perspective. *Journal of Hospitality and Tourism Education*, 28(2), 95–106.
- Lee, P. C., Yoon, S., & Lee, M. J. (2022). Are you ready? Perceived career readiness attributes of the hospitality management students. *Journal of Hospitality and Tourism Education*, 34(3), 157–169.
- Lent, R. W., Singley, D., Sheu, H. B., Schmidt, J. A., & Schmidt, L. C. (2007). Relation of social-cognitive factors to academic satisfaction in engineering students. *Journal of Career Assessment*, 15(1), 87–97.
- Mahmud, M. I., Noah, S. M., Jaafar, W. M. W., Bakar, A. Y. A., & Amat, S. (2019). The career readiness construct between dysfunctional career thinking and career self-efficacy among undergraduate students. *Strategies*, 7(1), 74–81.
- Martinez, R. R., Baker, S. B., & Young, T. (2017). Promoting career and college readiness, aspirations, and self-efficacy: Curriculum field test. *The Career Development Quarterly*, 65(2), 173–188.
- Martirosyan, N. (2015). An examination of factors contributing to student satisfaction in Armenian higher education. *International Journal of Educational Management*, 29(2), 177–191.
- McKinney, J. P., McKinney, K. G., Franiuk, R., & Schweitzer, J. (2006). The college classroom as a community: Impact on student attitudes and learning. *College Teaching*, 54(3), 281–284.
- Moore, A. (Ed.). (2006). *Schooling, society and curriculum*. Routledge.
- National Survey of Student Engagement [NSSE]. (2022). NSSE 2022 U.S. English version <https://nsse.indiana.edu/nsse/survey-instruments/us-english.html>.
- Park, H. S., Yun, J. M., Lee, S. N., Lee, S. R., & Lee, M. S. (2018). The relationship between self-efficacy, major satisfaction and career decision level of nursing students. *Journal of Health Informatics and Statistics*, 43(1), 35–45.
- Patiar, A., Ma, E., Kensbock, S., & Cox, R. (2017). Hospitality management students' expectation and perception of a virtual field trip web site: An Australian case study using importance–performance analysis. *Journal of Hospitality and Tourism Education*, 29(1), 1–12.
- Prakash, G. (2018). Quality in higher education institutions: Insights from the literature. *The TQM Journal*, 30(6), 732–748.
- Reale, J. M. (2022). *Reimagining student services: Providing support in a hybrid world*. University Business. <https://universitybusiness.com/hybrid-student-services-support-suny-polytechnic-institute/>.
- Schönfeld, P., Preusser, F., & Margraf, J. (2017). Costs and benefits of self-efficacy: Differences of the stress response and clinical implications. *Neuroscience & Biobehavioral Reviews*, 75, 40–52.
- Schunk, D. H., & Mullen, C. A. (2012). Self-efficacy as an engaged learner. In S. L. Christenson, et al. (Eds.), *Handbook of research on student engagement* (pp. 219–235). Springer.
- Seyitoglu, F., Atsız, O., Kaya, F., & Taş, S. (2022). The two-way perspective of tourism undergraduates towards (post-) virtual world: The future of tourism, and vocational development and career. *Journal of Hospitality, Leisure, Sports and Tourism Education*, 31, Article 100400.
- Shanahan, L., Steinhoff, A., Bechtiger, L., Murray, A. L., Nivette, A., Hepp, U., ... Eisner, M. (2022). Emotional distress in young adults during the COVID-19 pandemic: Evidence of risk and resilience from a longitudinal cohort study. *Psychological Medicine*, 52(5), 824–833.
- Shin, J. Y., & Steger, M. F. (2016). Supportive college environment for meaning searching and meaning in life among American college students. *Journal of College Student Development*, 57(1), 18–31.
- Tessema, M. T., Ready, K., & Yu, W. (2012). Factors affecting college students' satisfaction with major curriculum: Evidence from nine years of data. *International Journal of Humanities and Social Science*, 2(2), 34–44.
- Thompson, D. E., Orr, B., Thompson, C., & Grover, K. (2007). Examining students' perceptions of their first-semester experience at a major land-grant institution. *College Student Journal*, 41(3), 640–649.
- U.S. Department of Education. (n.d.). *Student support services program*. <https://www2.ed.gov/programs/triostudsupp/index.html>.
- Van Dinther, M., Dochy, F., & Segers, M. (2011). Factors affecting students' self-efficacy in higher education. *Educational Research Review*, 6(2), 95–108.

- Wang, C. X., & Houdyshell, M. (2021). Remote academic advising using synchronous technology: Knowledge, experiences, and perceptions from students. *NACADA Journal*, 41(2), 40–52.
- Weissman, S. (2021). *Not coming, not staying*. Inside Higher Ed. <https://www.insidehighered.com/news/2021/09/15/new-federal-data-confirm-enrollment-declines#:~:text=College%20and%20university%20enrollment%20nationwide%20fell%20by%20651%2C774,Department%20of%20Education%E2%80%99s%20National%20Center%20for%20Education%20Statistics>.
- Zhong, Y., Busser, J., Shapoval, V., & Murphy, K. (2021). Hospitality and tourism student engagement and hope during the COVID-19 pandemic. *Journal of Hospitality and Tourism Education*, 33(3), 194–206.
- Zhou, X., Chai, C. S., Jong, M. S. Y., & Xiong, X. B. (2021). Does relatedness matter for online self-regulated learning to promote perceived learning gains and satisfaction? *The Asia-Pacific Education Researcher*, 30(3), 205–215.