

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

Journal of Hospitality, Leisure, Sport & Tourism Education

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

Education research in tourism: A longitudinal study of 77 articles between 2008 and 2017

Jianwei Qian^{a,*}, Rob Law^b, Xinjian Li^c^a Communication University of Zhejiang, Hangzhou, China^b The Hong Kong Polytechnic University, Hong Kong SAR, China^c Beijing International Studies University, Beijing, China

ARTICLE INFO

Keywords:

Tourism education research
Longitudinal study
Content analysis

ABSTRACT

This study adopted a longitudinal approach to examine 77 articles on tourism education research published in the *Journal of Hospitality, Leisure, Sport & Tourism Education* between 2008 and 2017. Content analysis was used to analyze the profile, theory, method, and theme of these articles on tourism education. The majority of the articles were atheoretical, but a growing tendency for researchers to adopt theories from multiple disciplines to investigate educational issues in tourism is observable. Quantitative studies dominated throughout the period. The analysis of statistical techniques denotes that this research area is advancing toward sophistication. Teaching and learning methods, learning motivation, and course evaluation were identified as three major themes. Discussion is offered and suggestions posed based on these findings, in the hope of constantly improving the research quality of studies on tourism education.

1. Introduction

The steady growth of the economy in most countries in the world and the rapid globalization process indicate that the global tourism industry is facing a new round of opportunities for development. This development of tourism should be accompanied by the conscientious exploitation of natural and cultural resources, along with the support of qualified tourism talents. Conversely, relatively few “qualified tourism talents” are, in fact, working in the area of policy, planning, and development of tourism, and they are generally drawn from other disciplines without an appreciation of the challenges that tourism presents (Airey, Tribe, Benckendorff, & Xiao, 2015; Hsu, Xiao, & Chen, 2017). Hence, constantly upgrading the quality of tourism education to cultivate more human resource talent that can cater to the market demand has become a pivotal issue for the sustainable development of the industry. However, compared with other research areas in tourism, such as tourism economics, tourism geography, and tourism culture, education research in tourism has not attracted sufficient attention from academia and practitioners (Ayikoru, Tribe, & Airey, 2009; Palacios, 2010). This phenomenon may be attributed to the difficulty in publishing education articles in top tourism journals, which leads to the unwillingness of researchers to further explore this area. Despite the challenge, tourism educators should be confident and hopeful in changing the situation through unremitting efforts.

To help tourism educators improve the design of education-related studies and subsequent research quality, the present study conducts a longitudinal investigation of articles pertaining to education research in tourism. Review articles are occasionally criticized for failing to offer significant theoretical or methodological contributions to academia. However, top journals, such as the *Annals of Tourism Research*, continue to welcome and publish these articles, provided that certain state-of-the-art key issues are

* Corresponding author.

E-mail address: 821223168@163.com (J. Qian).

<https://doi.org/10.1016/j.jhlste.2019.02.003>

Received 19 December 2017; Received in revised form 10 November 2018; Accepted 12 February 2019
1473-8376/ © 2019 Elsevier Ltd. All rights reserved.

sufficiently clarified (Tribe & Xiao, 2011). Meanwhile, tourism researchers have constantly shown their interest in conducting review studies. Some such studies reviewed the paradigms, methodologies, or epistemologies common in tourism research (Luo & Deng, 2008; Xiao & Smith, 2006a, 2006b), whereas others targeted a particular research area in tourism (Buhalis & Law, 2008; Leung, Law, Van Hoof, & Buhalis, 2013; Nunkoo, Smith, & Ramkissoon, 2013).

This review explores the trend of education research in tourism, which is meaningful in assessing the effectiveness of tourism education and exploring the support that tourism education can offer to the development of the tourism industry. Specifically, the following research questions are addressed: (1) What is the basic profile of articles on tourism education? (2) How many articles are theoretical versus atheoretical, and what is the range of theories applied in the theoretical articles? (3) How many articles use qualitative, quantitative, and mixed-methods and what is the range of statistical techniques that are utilized in the quantitative and mixed-method articles? (4) How many research themes are examined in these articles?

2. Literature review

Tribe (2002) summarized five major research themes in tourism education research, based on the analysis of 47 articles published in the past century. Curriculum-related themes proved to dominate, accounting for 86% of the articles. These themes were succeeded by student progression; quality management; teaching, learning, and assessment; and learning resources. However, each of these areas received substantially less coverage than curriculum. Hsu et al. (2017) investigated tourism and hospitality education jointly between 2005 and 2014 by analyzing the content of 644 articles. On the basis of careful selection and in-depth discussion among researchers, they provided a detailed classification of research themes, identifying five meta-themes and thirty sub-themes. Teaching and learning top the themes, followed by student development. The gap between the top two themes is smaller in comparison with that in Tribe's (2002) study. Curriculum and programming are merely the third and fourth prevalent themes, respectively. Both studies adopt a longitudinal approach to examine education research in tourism and compare the evolution of research based on a five-year interval.

A well-timed review can update knowledge about research in a particular area because major research themes constantly evolve. Given that Hsu et al. (2017) targeted both tourism and hospitality education, and few scholars have examined patterns in tourism education research exclusively since Tribe's (2002) study, an updated review is timely. The current study focuses on the evolution of education research in tourism over the most recent period (2008–2017).

3. Methodology

The *Journal of Hospitality, Leisure, Sport & Tourism Education* (JoHLSTE) was chosen as the source of examined articles. According to the official website of the journal, the journal was founded in 1992 to encourage, heighten, and publish rigorous research and practice in every aspect of tertiary education in hospitality, leisure, sport, and tourism among education practitioners, such as teachers, policy makers, and corporate professionals. JoHLSTE has been indexed in SSCI for 10 consecutive years and is the only SSCI-indexed education journal in the field of tourism. Hence, the journal has been regarded as essential reading material among tourism educators and is highly popular in academia. Given these qualifications, it is logical to choose JoHLSTE to represent state-of-the-art of education research in tourism. Full-length articles from the journal were downloaded for the study. As Nunkoo et al. (2013) assert, theoretical foundations, research methodologies, and implications are better explored in full-length articles. The extracted time period for examination was set to cover 2008 to 2017 for two reasons. First, the SSCI index indicates that journals feature articles of high quality (Ketzler & Zimmermann, 2013). Thus, we selected articles from the year that JoHLSTE began being indexed by SSCI. Second, the present study explores recent developments in the examined area. Thus, the past 10 years was considered a viable timeframe for the realization of this aim. Finally, only articles that focused on tourism, or tourism in combination with other sectors, were selected for the final analysis because this study's focal point mainly rests on examining the state of education research in tourism.

The articles were investigated under the following categories:

- (1) Theories, which refer to whether an article utilizes a theory, a model, or a framework to design or guide the study. If the answer was yes, then the theory utilized in the article was identified.
- (2) Research approaches, to consider whether an article is based on qualitative, quantitative, or mixed-method approaches. The use of statistical techniques was also explored for the latter two approaches. In terms of research methods, the methodology section of each article was carefully read to extract method-related information. The figures and tables were scanned to obtain the statistical technique utilized in the article in detail.
- (3) Research themes, to analyze the focal topic in each article. Content analysis was used for the investigation because a systematic and objective analysis of previous studies could be conducted to guarantee the validity and reality of the research results (Leung et al., 2013). To identify the theories used in the articles, the researchers adopted three keywords in the search, namely, "theory," "model," and "framework" because these words are, in general, interchangeable in tourism research (Smith, Xiao, Nunkoo, & Tukamushaba, 2013). In terms of research themes, a brief analytical three-domain framework (learner-educator-practitioner) was generated on the basis of Dale and Robinson (2001), followed by a detailed review of the content in each article. Two researchers first themed and cross-checked these articles against one another to reach a consensus on the theme for each article. To comprehensively present the progress of education research in tourism, the 10-year period was divided into two timespans (2008–2012 and 2013–2017), and a comparison was made between the two.

Table 1
Sector focus in JoHLSSTE articles (2008–2017).

	2008–2012 (n = 32)		2013–2017 (n = 45)		2008–2017 (n = 77)	
	Freq.	%	Freq.	%	Freq.	%
Tourism only	18	56.3	25	55.6	43	55.8
Tourism with hospitality	8	25.0	18	40.0	26	33.8
Tourism with other sectors	6	18.7	2	4.4	8	10.4

4. Results and discussions

This section presents the results of each analysis and provides related discussion. Four subsections are created to address each research question, with the ultimate purpose of scrutinizing the nature and the progress of education research in tourism.

4.1. Article profiles

After a careful selection, 94 articles were identified as tourism-related education research. Articles that offered teaching or course design reflections (17 in total) were excluded from the final analysis. Of the remaining 77 articles, 69 mainly targeted one country or region as the examined area. The top areas were the UK (11 articles), Taiwan (10 articles), and the USA (7 articles). Five articles compared different situations in two areas and three articles investigated one topic in multiple areas. The majority of the articles (55) utilized students as research subjects. Other research subjects were teachers (7 articles), schools and courses (4 articles), and the industry (3 articles). Another eight articles concurrently examined more than one stakeholder. Students are the focal point of education. Thus, it is natural for them to become the foci of education research in tourism. However, increased attention should be accorded to teachers, schools, and the industry because teachers and schools influence the learning process of students, whereas students work in the industry. Moreover, teachers and schools also need to consider the demands of the industry.

These articles were categorized into three types, in terms of the sector of focus (Table 1). Articles that focused on tourism only in the two periods were the leading category, followed by articles that targeted the tourism and hospitality industries, and those that combined tourism with other sectors. The percentage of tourism-only articles was relatively stable at approximately 55% throughout the examined period. Articles that targeted tourism and hospitality industries rose over the period considered, while those that combined tourism with other sectors decreased. The rising percentage of the former may arise from the close relationship between the tourism sector and the hospitality sector; hence, many researchers conduct studies concerning both sectors. The connection between tourism and other sectors, such as leisure, recreation, and events, however, seems to be continuously eroding from the perspective of education research.

4.2. Use of theories

A comprehensive review of the theories used within a research area can be meaningfully conducted in light of unearthing the degree of theoretical sophistication in the area (Nunkoo et al., 2013). Table 2 illustrates that the number of atheoretical articles is slightly higher than that of theoretical ones during the entire period. This finding is due to the fact that atheoretical articles dominated education research in tourism in the first five-year period. The popularity of atheoretical articles may be attributed to the complexity and challenges which researchers face in developing and testing a theory. However, the second five-year period witnessed a significant increase of theory-based articles, which represents more than half of all examined articles (60.0%). This finding demonstrates that a growing number of studies have attempted to draw upon a solid theoretical or conceptual foundation to scrutinize various educational phenomena in tourism. However, compared with other research areas of tourism, such as the attitude of residents toward tourism, where all articles published in top journals are based on theories (Nunkoo et al., 2013), the percentage of theory-based articles in the education area requires further improvement. The trend to design research based on theories is natural in any research area. The current situation of education research in tourism shows that this research area is undergoing improvement.

In terms of theory use in the two five-year periods, only 7 theoretical articles (utilizing 8 theories) were published in the first period, most of which drew on psychology theories, such as conservation of resources theory, decision-making theory, and prospect theory. By contrast, 27 theoretical articles were published in the second period (utilizing 21 theories), which drew on diverse disciplines, employing theories from psychology, education, and sociology. Experiential learning theory (4 articles), self-determination theory (3 articles), self-efficacy theory (3 articles), cognitive dissonance theory (2 articles), and critical theory (2 articles) were the most popular. Experiential learning theory is a classical theory in education proposed by David Kolb in 1984 (Kolb, 2014). This theory emphasizes that knowledge is created during the learning process by transforming various experiences. Self-determination and self-efficacy theories focus on the generation of motivation under certain circumstances, whereas cognitive dissonance theory focuses on how an individual adjusts between conflicted attitudes. These three theories belong to the psychological discipline. Critical theory is complex, and is better conceptualized as a cluster of justice-based theories that critically analyze social phenomena to enlighten emancipate humankind. This theory has been widely adopted in social science research (Honneth, 2014).

Overall, 26 theories were deployed in 34 articles, and more researchers adopted theory-based approaches to the design of studies over time. This finding affirms the growing awareness toward the scientific use of theories among education researchers in tourism.

Table 2
Use of theories in JoHLSTE articles (2008–2017).

	2008–2012 (n = 32)		2013–2017 (n = 45)		2008–2017 (n = 77)	
	Freq.	%	Freq.	%	Freq.	%
Atheoretical	25	78.1	18	40.0	43	55.8
Theoretical	7	21.9	27	60.0	34	44.2
Career theory	1	14.3	–	–	1	2.9
Cognitive dissonance theory	–	–	2	7.4	2	5.9
Competency model	–	–	1	3.7	1	2.9
Conservation of resources theory	1	14.3	–	–	1	2.9
Creativity theory	–	–	1	3.7	1	2.9
Critical theory	–	–	2	7.4	2	5.9
Decision-making theory	1	14.3	1	3.7	2	5.9
Dialogic feedback model	–	–	1	3.7	1	2.9
Experiential learning theory	–	–	4	14.8	4	11.8
Expectancy theory	–	–	1	3.7	1	2.9
Feminism	1	14.3	1	3.7	2	5.9
Game theory	–	–	1	3.7	1	2.9
Generative theory of drawing construction	–	–	1	3.7	1	2.9
Grounded theory	1	14.3	–	–	1	2.9
Intercultural sensitivity model	1	14.3	–	–	1	2.9
Knowledge-exchange model	–	–	1	3.7	1	2.9
Learning motivation theory	1	14.3	1	3.7	2	5.9
Prospect theory	1	14.3	–	–	1	2.9
Self-determination theory	–	–	3	11.1	3	8.8
Self-efficacy theory	–	–	3	11.1	3	8.8
Stakeholder theory	–	–	1	3.7	1	2.9
Technology domestication theory	–	–	1	3.7	1	2.9
Theory of goal-directed behavior	–	–	1	3.7	1	2.9
Theory of planned behavior	–	–	1	3.7	1	2.9
Transformative learning theory	–	–	1	3.7	1	2.9
Unified theory of acceptance	–	–	1	3.7	1	2.9

Only one study used two theories to guide it in the first period, whereas three articles were based on more than one theory in the second period. This finding shows a new trend of using multiple theories to design education studies in tourism. This tendency may demonstrate the sophistication of this research area from another perspective.

4.3. Research approaches

Table 3 summarizes the research approach used in each article. Overall, the proportion of each approach is relatively stable, wherein quantitative articles are situated at the top (constantly over 50%). The disparity between qualitative and quantitative articles

Table 3
Research approaches and statistical techniques in JoHLSTE articles (2008–2017).

	2008–2012 (n = 32)		2013–2017 (n = 45)		2008–2017 (n = 77)	
	Freq.	%	Freq.	%	Freq.	%
Qualitative	11	34.4	14	31.1	25	32.5
Quantitative	16	50.0	26	57.8	42	54.5
Mixed-method	5	15.6	5	11.1	10	13.2
<i>Statistical techniques</i>	n = 21		n = 31		n = 52	
Analysis of variance	3	14.3	5	16.1	8	15.4
Analytic hierarchy process	–	–	2	6.5	2	3.8
Correlation analysis	4	19.0	3	9.7	7	13.5
Data envelopment analysis	1	4.8	–	–	1	1.9
Descriptive statistics	15	71.4	27	87.1	42	80.8
Factor analysis	5	23.8	11	35.5	16	30.8
Fisher's exact test	1	4.8	1	3.2	2	3.8
Latent growth curve test	–	–	1	3.2	1	1.9
Regression analysis	3	14.3	7	22.6	10	19.2
Structural equation modeling	–	–	7	22.6	7	13.5
T-tests	4	19.0	10	32.3	14	26.9
Torrance tests of creativity	–	–	1	3.2	1	1.9

is also expanding. This result is not surprising because tourism researchers in general prefer to adopt quantitative methods (Davies, 2003). In these studies, researchers typically generate hypotheses first and adopt different statistical techniques to test these hypotheses and refine existing theories. Qualitative articles ranked second and occupied nearly one-third of both periods. Content analysis and discourse analysis are the major methods in these qualitative articles. Diaries, policies, and publications are the most prevalent materials used for analysis, with discourse generation through interviews coming in next. These analyses aim to explore and unearth the themes and relationship underlying various education phenomena. Only a few articles deployed mixed-method research design. Morgan (1998) classifies the mixed-method approach into two categories; articles from JoHLSTE also follow this classification. Most articles deployed a concurrent design, wherein qualitative and quantitative data were jointly analyzed to examine a research topic (e.g., Goldenberg, Lee, & O'Bannon, 2010; Wang, Huyton, Gao, & Ayres, 2010; Wu, 2013). Other studies used a sequential design, wherein qualitative data were analyzed first to generate a quantitative instrument (e.g., Han & Yoon, 2015; Leong & Li, 2012).

The statistical techniques employed in the quantitative and mixed-method articles were subsequently analyzed. In 52 articles, 12 statistical techniques were identified. Statistical techniques merit a special review because many scholars argue that the level of statistical sophistication can be regarded as an indication of the scientific advancement of a discipline (Reid & Andereck, 1989; Crawford-Welch & McCleary, 1992; Palmer, Sese, & Montano, 2005). As shown in Table 3, descriptive statistics were the most commonly used technique and were used in around 80% of the articles. This finding is consistent with other studies that examine the popularity of different statistical techniques in tourism and hospitality (Nunkoo et al., 2013; Reid & Andereck, 1989). The importance of descriptive statistics can be attributed to its utility and convenience in presenting the basic information of collected data, which lays the foundation for further analyses. Factor analysis was the second most popular technique, which accounted for virtually 25% and 35% in the first and second period, respectively. This technique is useful in exploring the major dimensions of a construct by condensing tested items into a smaller number of components with pivotal information (Kline, 2014). Hence, factor analysis is also the basis for conducting a newly prevalent technique, namely, structural equation modeling (SEM). SEM integrates several techniques into one study and is widely adopted in tourism and hospitality studies (Nunkoo et al., 2013). Studies in the first five-year period did not adopt SEM at all, but in the second period, 7 articles took SEM as the analytical technique. This finding confirms that education research in tourism is keeping pace with mainstream tourism research in terms of statistical techniques. In JoHLSTE tourism studies, SEM was used to examine student acceptance of computer-assisted tourism education (Ali, Nair, & Hussain, 2016) and to identify the key factors in enhancing students' creativity in tourism classrooms (Liu, 2017).

The use of other statistical techniques, including correlation analysis and analysis of variance, was relatively stable in the examined periods. The percentage fell somewhere between 10% and 20%. In contrast, the use of *t*-test and regression analysis soared rapidly and the percentages for both increased by over 50% from the first period to the second period. The rest of the techniques were utilized once, except for analytic hierarchy process (AHP) and Fisher's exact test. Researchers chose these particular techniques based on their own research design. For example, the AHP is especially powerful in analyzing the decision-making process; thus, Tsai (2017) and Kim, Park, and Choi (2017) adopted AHP to explore the core abilities that tourism graduates should possess from the perspectives of the industry and students. Overall, the use of statistical techniques in tourism education research is progressing rapidly and has become a facilitator of further sound conclusions.

4.4. Research themes

Analysis and re-analysis identified eight major themes, which are presented in Table 4. Overall, teaching and learning methods, learning motivation, and course evaluation were the top themes, with their percentages ranging from 18.2% to 22.1%. No significant difference was found among the three themes. The percentages of the remaining five themes were all lower than 10%, which signifies relatively concentrated themes in tourism education research.

In the first period, course evaluation and learning motivation were the principal themes, and their combined percentage was close to 50%. Articles on course evaluation were concerned with the improvement of traditional course appraisal, and offered suggestions such as the introduction of a two-stage model to appraise program effectiveness (Chang, Chung, & Hsu, 2012) and the development of experience measurement in classroom (Stergiou & Airey, 2012). Learning motivation was largely pertinent to the reason why students chose to study tourism (Jiang & Tribe, 2009; Lee, Kim, & Lo, 2008; Walmsley, 2012). Teaching and learning methods (15.6%) and

Table 4
Themes of JoHLSTE articles (2008–2017).

	2008–2012 (n = 32)		2013–2017 (n = 45)		2008–2017 (n = 77)	
	Freq.	%	Freq.	%	Freq.	%
Course design	1	3.1	4	8.9	5	6.5
Course evaluation	8	25.0	6	13.3	14	18.2
Industry demand	3	9.4	3	6.7	6	7.8
Internship	2	6.3	5	11.1	7	9.1
Learning motivation	7	21.9	8	17.8	15	19.5
Teacher development	4	12.5	2	4.4	6	7.8
Teaching and learning environment	2	6.3	5	11.1	7	9.1
Teaching and learning methods	5	15.6	12	26.7	17	22.1

teacher development (12.5%) also attracted considerable scholarly attention. The research foci of teacher development in this period were more diversified than that in the latter period. In addition, the scholarly activities of teachers (O'Connor & Baum, 2008), work-life balance (Small, Harris, Wilson, & Ateljevic, 2011), and academic foci of future teachers (Chung & Petrick, 2011; Hu & Huang, 2011) were also addressed. Three articles discussed industry demand, which is geared to the objective of tourism education. However, teaching and learning environment, course design, and internship were less popular compared with other themes; their frequency of appearance was low. This low frequency does not mean these themes are less important. All themes can contribute to the cultivation of qualified human resources for the industry. This analysis simply reflects existing trends.

Teaching and learning methods were frequently discussed in the latter period, largely because of developments in information technology, which has enabled advanced and human-friendly techniques to be used in the classroom, such as virtual learning platforms (Deale, 2013) and geovisualization (Sigala, 2013). The theme of learning motivation ranked second, which suggests the indispensability of motivation in learning about tourism. Motivating students to learn well so that they will have continuous success the industry is a key issue in tourism education because a high turnover rate exists in the global tourism industry (Chalkiti & Sigala, 2010; Davidson, Timo, & Wang, 2010; Martin, Mactaggart, & Bowden, 2006). Course evaluation generally functions to assure the quality of teaching. Thus, the frequency of research on this topic remains high. Student assessment is also a key theme; it includes the appraisal of not only knowledge in tourism, but also general ability and knowledge (Hsu, 2014; Mair & Sumner, 2017). Furthermore, it focuses on the formation of environmental protection awareness (Hales & Jennings, 2017). In contrast to the first period, internship attracted more attention. Internship and industry demand are closely related because students' internship experience tends to influence their decision to work in the industry, which further affects the industry demand (Kim & Park, 2013). Furthermore, what students learn at school can sometimes not be directly applied to their internship and future career (Kim et al., 2017). Scholars are venturing into new means of coping with these situations by examining the relationship between internships and classroom learning (Stansbie, Nash, & Chang, 2016) and evaluating the influence of internships on students' willingness to work in the industry (Koc, Yumusak, Ulukoy, Kilic, & Toptas, 2014). More studies (4 articles) about course design appeared in the second period, as well. In terms of the teaching and learning environment, articles throughout the examined periods focused on the transcultural setting, such as examining the effect of a culturally diverse classroom setting (Barron & Dasli, 2010), tourism students' perception on an international destination (Harris, Lee, & Lepp, 2012), measurement of transformative learning during study abroad (Stone, Duerden, Duffy, Hill, & Witesman, 2017), and teaching philosophy in a transcultural setting (Witsel & Boyle, 2017).

5. Conclusion and limitations

This longitudinal study highlighted several key characteristics of tourism education research that will be helpful for designing future studies. First, there is a prevalence of single case area studies. Second, studies which focus on students as the research subjects tend to dominate. Moving beyond these parameters to study multiple case areas and to consider other populations of research subjects will help to develop the tourism education literature further. The use of theories and methods and the examination of research themes reflect the progress of education research in tourism. By summarizing existing trends, the present study hopes to contribute to the exploration of new topics and the utilization of new theoretical and methodological approaches in future tourism education research, by illustrating what ground has not yet been covered.

Several limitations are inherent in the present study. First, JoHLSTE may not represent the panoramic situation of education research in tourism, despite the fact that it is SSCI-indexed. Hence, additional search engines and journals should be included in future studies to validate the results. This study merely analyzed the statistical techniques that are utilized in quantitative and mixed-method articles without a detailed analysis of the analytical tools in qualitative articles. This approach is attributed to the fact that qualitative articles that were examined in this study mainly adopted content analysis and discourse analysis. Future studies may include more articles for examination, and the analytical tools in qualitative articles may thus be found to be more diverse as well. Finally, a timespan of 10 years is sufficient for addressing the current situation of tourism education research, but the timespan should be expanded to generate a more accurate analysis of the evolution of this research area.

Acknowledgement

This study is supported by the Soft Science Fund of Zhejiang (Grant No. 2019C35007).

Appendix. Summary of the examined articles in this study

	Authors	Use of Theories	Research Approaches	Research Themes
2008				
1	Beggs, Rose, and Goodwin	/	Quantitative: t-test	Comparison of students' and practitioners' perception on internships
2	Kasli and Avcikurt	/	Quantitative: descriptive statistics	Evaluation of tourism departments' website quality
3	Lee, Kim, and Lo	/	Quantitative: descriptive statistics/t-test/ factor analysis/analysis of variance	Analysis of students' motivation to study hospitality and tourism in university education
4	O'Connor and Baum	/	Qualitative: content analysis	Analysis of teachers' academic activities outside the classroom
2009				

1	Holmes and Papageorgiou	/	Qualitative: content analysis	Examination of students' perception of course assessment and feedback practices
2	Hornig, Teng, and Baum	/	Mixed: content analysis/factor analysis/confirmatory factor analysis	Evaluation of tourism, hospitality, and leisure programs' quality
3	Jiang and Tribe	Grounded theory	Qualitative: content analysis	Examination of students' attitude towards tourism careers
4	Kozak and Cosar	/	Quantitative: correlation analysis	Examination of the effect of students' decision strategies on their satisfaction of school choice
5	Munar and Montano	/	Mixed: survey content analysis/descriptive statistics	Analysis of the course design based on generic competences required by society
2010				
1	Barron and Dasli	Intercultural sensitivity model	Quantitative: descriptive statistics	Examination of the effect of culturally diverse classroom setting on students' performance
2	Busby and Gobson	/	Qualitative: discourse analysis	Examination of students' experience of overseas internship in tourism and hospitality
3	Goldenberg, Lee, and O'Bannon	/	Mixed: content analysis/descriptive statistics	Evaluation of the use of movies as a teaching tool
4	Lee and Wicks	/	Quantitative: descriptive statistics	Need analysis of technology training for destination marketing organizations
5	Uludag and Yaratan	Conservation of resources theory	Quantitative: descriptive statistics/correlation analysis/regression analysis	Examination of the effect of burnout on students' engagement in tourism studies
6	Wang, Huyton, Gao, and Ayres	/	Mixed: content analysis/descriptive statistics	Comparison of curriculum design for tourism programs between China and Australia
2011				
1	Aggett and Busby	/	Qualitative: discourse analysis	Identification of the reasons why students' participation in internship is declining
2	Chung and Petrick	/	Quantitative: descriptive statistics/regression analysis	Evaluation of doctoral students' research productivity
3	Hornig and Teng	/	Quantitative: descriptive statistics/confirmatory factor analysis	Comparison of quality measurement of hospitality, tourism, and leisure programs between Taiwan and US
4	Hsu and Lee	/	Quantitative: descriptive statistics/ <i>t</i> -test	Evaluation of the use of mobile phones to teach tourism English
5	Hu and Huang	/	Qualitative: content analysis	Examination of research topics among doctoral students in China
6	Min, Tang, and Yin	/	Quantitative: descriptive statistics	Prioritizing the emotional intelligence needs among tourism students
7	Small, Harris, Wilson, and Ateljevic	Feminism	Qualitative: content analysis	Examination of female teachers' perception on work-life balance in tourism
2012				
1	Becket and Brookes	/	Qualitative: content analysis	Examination of the effect of personalization on UK's hospitality, leisure, and sport higher education
2	Chang, Chung, and Hsu	/	Quantitative: descriptive statistics/data envelopment analysis	Evaluation of managerial efficiency of tourism and leisure programs in Taiwan
3	Garcia-Almeida, Hernandez-Lopez, Ballesteros, and Saa-Perez	/	Quantitative: factor analysis/correlation analysis/regression analysis	Examination of the effect of students' motivation and prior knowledge on successful knowledge assimilation
4	Ghany and Latif	/	Qualitative: discourse analysis	Evaluation of tourism and hospitality students' English level in Egypt
5	Harris, Lee, and lepp	/	Quantitative: descriptive statistics/Fisher's exact test	Examination of US tourism students' perception of Wales as a destination
6	Hsu	/	Qualitative: discourse analysis	Evaluation of the use of 3D simulation in tourism education
7	Lee, Yuan, Hwang, and Kim	Decision-making theory/prospect theory	Quantitative: descriptive statistics/ <i>t</i> -test/analysis of variance	Identification of doctoral students' criteria in choosing hospitality and tourism programs in US
8	Leong and Li	Learning motivation theory	Mixed: discourse analysis/analysis of variance	Analysis of needs and wants of English teaching improvement for tourism programs in Macau
9	Stergiou and Airey	/	Quantitative: factor analysis/correlation analysis	Measurement of students' experience in tourism management courses
10	Walmsley	Career theory	Qualitative: discourse analysis	Identification of the paths for students to enter tourism higher education
2013				
1	Choi and Kim	Self-determination theory/self-efficacy theory	Quantitative: descriptive statistics/factor analysis/regression analysis/ <i>t</i> -test	Examination of the relationship between the antecedents and career preparation behavior among students from different cultural backgrounds
2	Deale	Experiential learning theory	Qualitative: content analysis	Evaluation of the use of the online platform to enhance hospitality and tourism education
3	Huang	/	Qualitative: discourse analysis	Correlation analysis of international study experience and employability for tourism graduates
4	Huang, Backman, Chang, Backman, and McGuire	Self-determination theory	Quantitative: descriptive statistics/factor analysis/structural equation modeling	Evaluation of students' learning experience in a 3D virtual setting
5	Hu, Hornig, Teng, and Yen	Cognitive dissonance theory	Quantitative: descriptive statistics/ <i>t</i> -test	Evaluation of tourism students' low carbon awareness
6	Hsu	Self-determination theory	Quantitative: descriptive statistics/factor analysis/structural equation modeling	Effect of students' internship on their motivation to continue working in the field

7	Kalbaska, Lee, Cantoni, and Law	Cognitive dissonance theory	Quantitative: descriptive statistics/regression analysis	Evaluation of eLearning courses offered by destinations from travel agents' perspective
8	Kim and Park	/	Quantitative: descriptive statistics/t-test	Examination of the role of social experience in undergraduates' career perceptions via internships
9	Rodríguez-Anton, Alonso-Almeida, Andrada, & Pedroche	/	Quantitative: descriptive statistics/t-test/analysis of variance	Examination of university tourism programs' role in preparing students for their future tourism career
10	Ruhanen, Robinson, and Breakey	Knowledge-exchange model	Qualitative: discourse analysis	Evaluation of a tourism immersion internship from students' perspective
11	Sigala	Generative theory of drawing construction	Quantitative: descriptive statistics/analysis of variance	Measurement the effect of geovisualization on tourism education
12	Wu	/	Mixed: descriptive statistics/discourse analysis	Examination of the reason why ethnic students' intention to study tourism
2014				
1	Fong, Lee, Luk, and Law	Expectancy theory	Quantitative: descriptive statistics/t-test	Examination of students' choice of internship employers
2	Hsu	/	Quantitative: descriptive statistics/analysis of variance/latent growth curve test	Evaluation of tourism English teaching effect for non-English speaking hospitality and tourism students
3	Kim and Davies	Experiential learning theory	Qualitative: discourse analysis	Evaluation of student centered learning in an undergraduate tourism course from teachers' perspective
4	Koc, Yumusak, Ulukoy, Kilic, and Toptas	/	Quantitative: descriptive statistics/t-test/analysis of variance	Examination of the influence of internships on students' willingness to work in tourism and hospitality
5	Wu, Morrison, Yang, Zhou, and Cong	/	Quantitative: descriptive statistics/correspondence analysis	Examination of undergraduate tourism educators' academic backgrounds and the relationship between different aspects of the backgrounds
2015				
1	Alen, Dominguez, and Carlos	/	Mixed: thematic analysis/descriptive statistics	Evaluation of the effect of academic debates as a teaching method from students' perspective
2	Eurico, Silva, and Valle	/	Quantitative: descriptive statistics/factor analysis/structural equation modeling	Examination of graduates' satisfaction and loyalty towards tourism higher education
3	Han and Yoon	Theory of goal-directed behavior	Mixed: discourse analysis/descriptive statistics/factor analysis/structural equation modeling	Identification of the driving forces for students to enroll in hospitality and tourism graduate programs
4	Tasi, Horng, Liu, Hu, and Chung	/	Quantitative: descriptive statistics/factor analysis/structural equation modeling	Evaluation of the effect the learning environment has on students' learning motivation and knowledge sharing behavior
2016				
1	Adukaite, Zyl, and Cantoni	Self-efficacy theory/technology domestication theory	Qualitative: discourse analysis	Examination of the role of digital technology in tourism education from teachers' perspective
2	Ali, Nair, and Hussain	Unified theory of acceptance	Quantitative: descriptive statistics/factor analysis/structural equation modeling	Evaluation of students' acceptance and use of computer assisted collaborative classrooms
3	Kim, Jung, and Wang	Learning motivation theory	Quantitative: descriptive statistics/factor analysis/analysis of variance/correlation analysis	Comparison of students' perception on learning and working in hospitality and tourism among three Asian regions
4	Li and Liu	/	Quantitative: descriptive statistics/correlation analysis/regression analysis	Identification of the key factors in establishing a creative learning atmosphere in tourism and hospitality education
5	Semley, Huang, and Dalton	Dialogic feedback model	Qualitative: discourse analysis	Examination of teachers' feedback on learning development from students' perspective
6	Stansbie, Nash, and Chang	Experiential learning theory	Mixed: discourse analysis/Fisher's exact test	Examination of the relationship between internships and classroom learning
2017				
1	Bui, So, Kwek, and Rynne	Self-efficacy theory	Quantitative: factor analysis/regression analysis/t-test	Comparison of the effect of self-efficacy on academic performance between international and domestic students
2	Carnicelli and Boluk	/	Qualitative: discourse analysis	Examination of the use of service learning and transformative education in tourism education
3	Hales and Jennings	/	Qualitative: content analysis	Examination of tourism students' perception on sustainability
4	Juaneda, Herranz, and Montano	Decision-making theory	Quantitative: descriptive statistics/t-test/factor analysis	Identification of the reasons leading students to choose tourism as their major for a bachelor's degree
5	Kim, Park, and Choi	Competence model	Quantitative: analytic hierarchy process	Comparison of the perception on core competencies between tourism practitioners and students
6	Liu	/	Quantitative: descriptive statistics/factor analysis/regression analysis/structural equation modeling	Identification of the key factors in enhancing students' creativity through social capital and transformational leadership
7	Liu, Horng, Chou, and Huang	Creativity theory/game theory	Quantitative: descriptive statistics/t-test/torrance tests of creativity	Evaluation of the use of co-competition creativity course planning in developing students' creativity and awareness towards sustainability
8	Longart, Wickens, Ocana, and Llugsha	Stakeholder theory	Qualitative: content analysis/discourse analysis	Evaluation of a service learning project for tourism development from all stakeholders' perspective
9	Mair and Sumner	Critical theory	Qualitative: discourse analysis	Investigation on how tourism education can help students learn more in addition to specialized knowledge
10	Pappalepore and Farrell	Critical theory	Qualitative: discourse analysis	Evaluation of the use of the curriculum co-creation by both students and teachers

11	Rouzrokh, Muldoon, Torabian, and Mair	Feminism	Qualitative: memory-work analysis	Exploration of the critical pedagogy in tourism education
12	Sangpikul	/	Quantitative: descriptive statistics	Evaluation of the use of Plan-Do-Check-Act cycle to enhance tourism teaching and learning
13	Schaffer	/	Mixed: content analysis/descriptive statistics	Examination of the use of immersive visualization as a meaningful tool for experiential learning
14	Schott	Experiential learning theory	Qualitative: content analysis	Evaluation of the use of virtual fieldtrips in enhancing students' learning and
15	Stone, Duerden, Duffy, Hill, and Witesman	Transformative learning theory	Quantitative: descriptive statistics/t-test/correlation analysis/regression analysis	Measurement of transformative learning while studying abroad
16	Ting and Cheng	Theory of planned behavior	Quantitative: descriptive statistics/regression analysis	Measurement of the marginal effect of pro-environmental behavior through students' participation and guided learning
17	Tsai	/	Quantitative: analytic hierarchy process	Examination of tourism graduates' employability from travel agency managers' perspective
18	Witsel and Boyle	/	Qualitative: discourse analysis	Examination of the ontology of teaching in transcultural contexts

References

- Airey, D., Tribe, J., Benckendorff, P., & Xiao, H. (2015). The managerial gaze. *Journal of Travel Research*, 54(2), 139–151.
- Ali, F., Nair, P. K., & Hussain, K. (2016). An assessment of students' acceptance and usage of computer supported collaborative classrooms in hospitality and tourism schools. *Journal of Hospitality, Leisure, Sports and Tourism Education*, 18, 51–60.
- Ayikoru, M., Tribe, J., & Airey, D. (2009). Reading tourism education. *Annals of Tourism Research*, 36(2), 191–221.
- Barron, P., & Dasli, M. (2010). Towards an understanding of integration amongst hospitality and tourism students using Bennett's developmental model of intercultural sensitivity. *Journal of Hospitality, Leisure, Sports and Tourism Education*, 9(2), 77–88.
- Buhalis, D., & Law, R. (2008). Progress in information technology and tourism management: 20 years on and 10 years after the internet—the state of eTourism research. *Tourism Management*, 29(4), 609–623.
- Chalkiti, K., & Sigala, M. (2010). Staff turnover in the Greek tourism industry. *International Journal of Contemporary Hospitality Management*, 22(3), 335–359.
- Chang, T. Y., Chung, P. H., & Hsu, S. S. (2012). Two-stage performance model for evaluating the managerial efficiency of higher education: Application by the Taiwanese tourism and leisure department. *Journal of Hospitality, Leisure, Sports and Tourism Education*, 11(2), 168–177.
- Chung, J. Y., & Petrick, J. (2011). Doctoral students' research productivity: An analysis of publications in tourism and hospitality journals. *Journal of Hospitality, Leisure, Sports and Tourism Education*, 10(1), 63–71.
- Crawford-Welch, S., & McCleary, K. W. (1992). An identification of the subject areas and research techniques used in five hospitality-related journals. *International Journal of Hospitality Management*, 11(2), 155–167.
- Dale, C., & Robinson, N. (2001). The theming of tourism education: a three-domain approach. *International Journal of Contemporary Hospitality Management*, 13(1), 30–34.
- Davidson, M. C. G., Timo, N., & Wang, Y. (2010). How much does labour turnover cost? *International Journal of Contemporary Hospitality Management*, 22(4), 451–466.
- Davies, B. (2003). The role of quantitative and qualitative research in industrial studies of tourism. *International Journal of Tourism Research*, 5(2), 97–111.
- Deale, C. S. (2013). Incorporating second life into online hospitality and tourism education: A case study. *Journal of Hospitality, Leisure, Sports and Tourism Education*, 13, 154–160.
- Goldenberg, M., Lee, J. W., & O'Bannon, T. (2010). Enhancing recreation, parks and tourism courses: Using movies as teaching tools. *Journal of Hospitality, Leisure, Sports and Tourism Education*, 9(2), 4–16.
- Hales, R., & Jennings, G. (2017). Transformation for sustainability: The role of complexity in tourism students' understanding of sustainable tourism. *Journal of Hospitality, Leisure, Sports and Tourism Education*, 21, 185–194.
- Han, H., & Yoon, H. (2015). Driving forces in the decision to enroll in hospitality and tourism graduate program. *Journal of Hospitality, Leisure, Sports and Tourism Education*, 17, 14–27.
- Harris, J., Lee, S., & Lepp, A. (2012). England, whales and princess diana: A case study of US students' perceptions of wales. *Journal of Hospitality, Leisure, Sports and Tourism Education*, 11(2), 87–92.
- Honneth, A. (2014). *Disrespect: The normative foundations of critical theory*. Cambridge: John Wiley & Sons.
- Hsu, L. (2014). Effectiveness of English for specific purposes courses for non-English speaking students of hospitality and tourism: A latent growth curve analysis. *Journal of Hospitality, Leisure, Sports and Tourism Education*, 15, 50–57.
- Hsu, C. H. C., Xiao, H., & Chen, N. (2017). Hospitality and tourism education research from 2005 to 2014. *International Journal of Contemporary Hospitality Management*, 29(1), 141–160.
- Hu, R., & Huang, S. (2011). A review of doctoral thesis research in tourism management in China. *Journal of Hospitality, Leisure, Sports and Tourism Education*, 10(2), 121–125.
- Jiang, B., & Tribe, J. (2009). Tourism jobs-short lived professions: Student attitudes towards tourism careers in China. *Journal of Hospitality, Leisure, Sports and Tourism Education*, 8(1), 4–19.
- Ketzler, R., & Zimmermann, K. F. (2013). A citation-analysis of economic research institutes. *Scientometrics*, 95(3), 1095–1112.
- Kim, H. B., & Park, E. J. (2013). The role of social experience in undergraduates' career perceptions through internships. *Journal of Hospitality, Leisure, Sports and Tourism Education*, 12(1), 70–78.
- Kim, N., Park, J., & Choi, J. J. (2017). Perceptual differences in core competencies between tourism industry practitioners and students using Analytic Hierarchy Process (AHP). *Journal of Hospitality, Leisure, Sports and Tourism Education*, 20, 76–86.
- Kline, P. (2014). *An easy guide to factor analysis*. New York: Routledge.
- Koc, E., Yumusak, S., Ulukoy, M., Kilic, R., & Toptas, A. (2014). Are internship programs encouraging or discouraging? A viewpoint of tourism and hospitality students in Turkey. *Journal of Hospitality, Leisure, Sports and Tourism Education*, 15, 135–142.
- Kolb, D. A. (2014). *Experiential learning: Experience as the source of learning and development*. New Jersey: Financial Times Press.
- Lee, M. J., Kim, S. S., & Lo, A. (2008). Perceptions of hospitality and tourism students towards study motivations and preferences: A study of Hong Kong students. *Journal of Hospitality, Leisure, Sports and Tourism Education*, 7(2), 45–58.
- Leong, A. M. W., & Li, J. X. (2012). A study on English teaching improvement based on stakeholders' needs and wants: The case of the Faculty of International Tourism of the Macau University of Science and Technology (MUST). *Journal of Hospitality, Leisure, Sports and Tourism Education*, 11(1), 67–78.
- Leung, D., Law, R., Van Hoof, H., & Buhalis, D. (2013). Social media in tourism and hospitality: A literature review. *Journal of Travel & Tourism Marketing*, 30(1–2), 3–22.
- Liu, C. H. S. (2017). Remodelling progress in tourism and hospitality students' creativity through social capital and transformational leadership. *Journal of Hospitality, Leisure, Sports and Tourism Education*, 21, 69–82.

- Luo, Y., & Deng, J. (2008). The New Environmental Paradigm and nature-based tourism motivation. *Journal of Travel Research*, 46(4), 392–402.
- Mair, H., & Sumner, J. (2017). Critical tourism pedagogies: Exploring the potential through food. *Journal of Hospitality, Leisure, Sports and Tourism Education*, 21, 195–203.
- Martin, A., Mactaggart, D., & Bowden, J. (2006). The barriers to the recruitment and retention of supervisors/managers in the Scottish tourism industry. *International Journal of Contemporary Hospitality Management*, 18(5), 380–397.
- Morgan, D. L. (1998). Practical strategies for combining qualitative and quantitative methods: Applications to health research. *Qualitative Health Research*, 8(3), 362–376.
- Nunkoo, R., Smith, S. L. J., & Ramkissoon, H. (2013). Residents' attitudes to tourism: A longitudinal study of 140 articles from 1984 to 2010. *Journal of Sustainable Tourism*, 21(1), 5–25.
- O'Connor, N., & Baum, T. (2008). An investigation into the tourism and hospitality scholarly activity currently being undertaken in Irish higher education institutions. *Journal of Hospitality, Leisure, Sports and Tourism Education*, 7(2), 15–23.
- Palacios, C. M. (2010). Volunteer tourism, development and education in a postcolonial world: Conceiving global connections beyond aid. *Journal of Sustainable Tourism*, 18(7), 861–878.
- Palmer, A. L., Sesé, A., & Montaña, J. J. (2005). Tourism and statistics. *Annals of Tourism Research*, 32(1), 167–178.
- Reid, L. J., & Andereck, K. L. (1989). Statistical analyses use in tourism research. *Journal of Travel Research*, 28(2), 21–24.
- Sigala, M. (2013). Using and measuring the impacts of geovisualisation on tourism education: The case of teaching a service management course. *Journal of Hospitality, Leisure, Sports and Tourism Education*, 12(1), 85–98.
- Small, J., Harris, C., Wilson, E., & Ateljevic, I. (2011). Voices of women: A memory-work reflection on work-life dis/harmony in tourism academia. *Journal of Hospitality, Leisure, Sports and Tourism Education*, 10(1), 23–36.
- Smith, S. L. J., Xiao, H., Nunkoo, R., & Tukamushaba, E. K. (2013). Theory in hospitality, tourism, and leisure studies. *Journal of Hospitality Marketing & Management*, 22(8), 875–894.
- Stansbie, P., Nash, R., & Chang, S. (2016). Linking internships and classroom learning: A case study examination of hospitality and tourism management students. *Journal of Hospitality, Leisure, Sports and Tourism Education*, 19, 19–29.
- Stergiou, D. P., & Airey, D. (2012). Using the Course Experience Questionnaire for evaluating undergraduate tourism management courses in Greece. *Journal of Hospitality, Leisure, Sports and Tourism Education*, 11(1), 41–49.
- Stone, G. A., Duerden, M. D., Duffy, L. N., Hill, B. J., & Witesman, E. M. (2017). Measurement of transformative learning in study abroad: An application of the learning activities survey. *Journal of Hospitality, Leisure, Sports and Tourism Education*, 21, 23–32.
- Tribe, J. (2002). Research trends and imperatives in tourism education. *Acta Turistica*, 14(1), 61–81.
- Tribe, J., & Xiao, H. (2011). Developments in tourism social science. *Annals of Tourism Research*, 38(1), 7–26.
- Tsai, Y. H. (2017). Travel agency managers' perceptions of tourism industry employability. *Journal of Hospitality, Leisure, Sports and Tourism Education*, 20, 122–133.
- Walmsley, A. (2012). Pathways into tourism higher education. *Journal of Hospitality, Leisure, Sports and Tourism Education*, 11(2), 131–139.
- Wang, J., Huyton, J., Gao, X., & Ayres, H. (2010). Evaluating undergraduate courses in tourism management: A comparison between Australia and China. *Journal of Hospitality, Leisure, Sports and Tourism Education*, 9(2), 46–62.
- Witsel, M., & Boyle, A. (2017). The ontology of teaching in transcultural contexts: Four voices of competence. *Journal of Hospitality, Leisure, Sports and Tourism Education*, 21, 154–162.
- Wu, M. Y. (2013). "I would love to work in tourism, but...": Exploring the outcomes of an ethnic tourism education initiative. *Journal of Hospitality, Leisure, Sports and Tourism Education*, 12(1), 47–58.
- Xiao, H., & Smith, S. L. J. (2006a). The making of tourism research. *Annals of Tourism Research*, 33(2), 490–507.
- Xiao, H., & Smith, S. L. J. (2006b). Case studies in tourism research: A state-of-the-art analysis. *Tourism Management*, 27(5), 738–749.