

Hospitality Education and Industry Linkages: A Systematic Literature Network Analysis

Akhil Raj*, Rajeev Kumar A.D.†, Jithendran S‡

Abstract

The purpose of the study was to identify key themes, research gaps, and influential authors, as well as to examine the evolution of research and the quality and rigor of existing literature on hospitality education and its industry linkage. For this, a systematic literature network analysis, comprising a systematic literature review using the PRISMA framework, bibliometric analysis using R programming, network analysis, and thematic analysis was performed. The findings revealed that the most important clusters of research in this area are related to curriculum development, work-integrated learning, and industry partnerships. The review explored the importance of industry-academic collaboration, challenges, curriculum development, and employability as four main themes in the area of industrial linkage in hospitality education. As indicated by researchers, the review suggests the effectiveness of different approaches to industry-academia collaboration in hospitality education, the impact of industrial linkage on the quality of hospitality education in several regions, the role of technologies in enhancing the collaboration between academia and industry in hospitality education, and the development of a sustainable curriculum that incorporates

*Department of Commerce, S.D. College, Alappuzha Kerala;

Email id: akhilrajthevalakkara@gmail.com

† Department of Commerce, Government College, Ambalapuzha, Kerala;

Email: rad.gcl@gmail.com

‡ Department of Commerce, Government College, Ambalapuzha, Kerala;

Email: jithenair@gmail.com

environmental, social, and economic sustainability in hospitality education as future research areas.

Keywords: Hospitality Education, Tourism Industry, Industry Alignment, Industry Linkage, Industry Partnerships, Academia Collaboration

Introduction

Hospitality education plays a vital role in equipping students to meet the specific demands of the dynamic hospitality industry (Chon, 2019; Lee & Jang, 2018; Xiang et al., 2015). As a diverse sector, the hospitality industry encompasses various sub-sectors such as hotels, restaurants, events, tourism, and travel (Rashid, 2018). The industry's rapid growth has created greater demand for a skilled and knowledgeable workforce that can adapt to the changing needs (Bieger & Laesser, 2002; Tanford & Jung, 2018). Hospitality industry has evolved over the years, with a greater emphasis on the importance of education and training of its workforce (Chon, 2019). As a service-oriented industry, it requires skilled employees who can provide high-quality services to customers. The increasing competition in the industry also triggers the demand for well-trained professionals who can offer a competitive edge to their employers in terms of service delivery (Bieger & Laesser, 2002). Current literature on hospitality education and its industry linkage is vast and diverse, covering various aspects such as curriculum development, pedagogy, industry partnerships, and student outcomes (Lee & Jang, 2018; Xiang et al., 2015).

Given the rapid changes in the industry, it is imperative for hospitality education programs to keep pace with the changes and equip students with the needed knowledge, skills, and competencies to succeed in the industry (Hjalager, 2015). However, the gap between industry requirements and the skills of graduates remains to be a significant concern (Gallarza et al., 2011; Ismail, 2019), and a possible reason could be that the industry is evolving at a faster rate than the curriculum and pedagogical methods of hospitality education programs (Jain & Sharma, 2020). It highlights the need to continually update and refine hospitality education programs to match the changing demands of the industry and the job market (Park & Kim, 2020). Many studies have examined the relationship

between hospitality education and the industry, including the roles and responsibilities of educators, the skills and competencies required by graduates, and the challenges faced by both educators and industry practitioners (Gallarza et al., 2011; Park & Kim, 2020). A systematic literature review is an effective method for identifying the key themes, research gaps, and trends in the existing literature (Tranfield et al., 2003). Thus, a systematic review in the field of hospitality education can be handy in bridging the missing linkages with the industry demands. The insights gained from such a review can also guide the development of new curricula, pedagogical approaches, and industry practices. However, the need for a comprehensive and systematic review of the existing literature in the field, facilitating a better understanding of the current state of knowledge and revealing the research gaps, was not adequately attended. Therefore, a systematic literature network analysis (SLNA) of the articles related to hospitality education and its industry linkage was performed with the following specific objectives:

1. Identify the key themes and research gaps in the existing literature on hospitality education and its industry linkage.
2. Map out the relationships between different research areas and their respective contributions to the topic.
3. Examine the evolution of research in this area over time and identify trends and patterns.
4. Identify the most influential authors and their contributions to the topic.
5. Assess the quality and rigor of the research in this area, including the potential challenges or limitations.
6. Provide insights to researchers, educators, and policymakers to guide future research, curriculum development, and industry practices.

Research Methodology

The study adopted a Systematic Literature Network Analysis (SLNA) to examine the current status of research on the linkages between hospitality education and the industry. SLNA is a methodological approach that combines systematic literature

review, bibliometric analysis, and network analysis to identify the key themes, research gaps, and emerging trends in a specific field (Bastian et al., 2009). SLNA is a technique to identify, assess, and synthesize research to help make informed decisions (Thomas, 2020). This method is often used in healthcare to identify research gaps, evaluate existing research, and guide policy decisions (Chang, 2019). It is particularly beneficial when a decision or policy needs to be backed up by evidence from multiple sources (Cronin, 2018). The SLNA process involves three steps: a comprehensive literature search to identify relevant studies (Chang, 2019), the extraction of key data points from the literature (Cronin, 2018), and the analysis of the data points to generate insights and guide decision-making (Thomas, 2020).

As the first step in SLNA, a systematic review was performed to identify the relevant literature using the PRISMA framework, followed by stages such as identifying relevant studies, selecting the studies, extracting data, and synthesizing results. The inclusion criteria for the study were based on the relevance of the articles to the research objectives, the date of publication, and the type of research. The search for articles was made using the academic database, Scopus, with two primary and five contextual keywords to ensure all relevant articles were identified (Table 1). The search was conducted among the articles published in English between 1966 and 2022. Articles were screened using the inclusion criteria and removed the duplicates (Table 2).

As the second step, a bibliometric and network analysis using the R program was carried out, which summarizes the characteristics of the selected articles, such as the author, the year of publication, the type of research, and the journal in which it was published. The data were presented in tables and charts to provide a clear overview of the selected literature. Network analysis has become a popular tool for analyzing large and complex datasets (Borgatti et al., 2009). Network analysis is a method that allows the visualization and analysis of relationships between different entities, such as papers, authors, and keywords. In addition, in the context of literature reviews, network analysis can be used to identify the most important clusters of research and their interconnections, as well as the most influential authors and their contributions to the topic (Borgatti et

al., 2009; Xiang et al., 2015). A thematic analysis to identify the key themes that emerged from the selected articles was performed as the final step in the SLNA process. The themes were identified through inductive coding and presented in a network map, showing the relationships and connections between the themes. The network map was created using the R program and the ‘igraph’ package.

Table 1
Key terms used in the search strategy

Blocks	Keywords for search
Primary variable	"Hospitality Education" and "Industry Linkage"
Context	"Hospitality Education" AND "Industry Alignment", "Hospitality Education" AND "Tourism Industry", "Hospitality Education" AND "Industry Partnerships", "Hospitality Industry" AND "Academia Collaboration", "Tourism" AND "Hospitality Education"

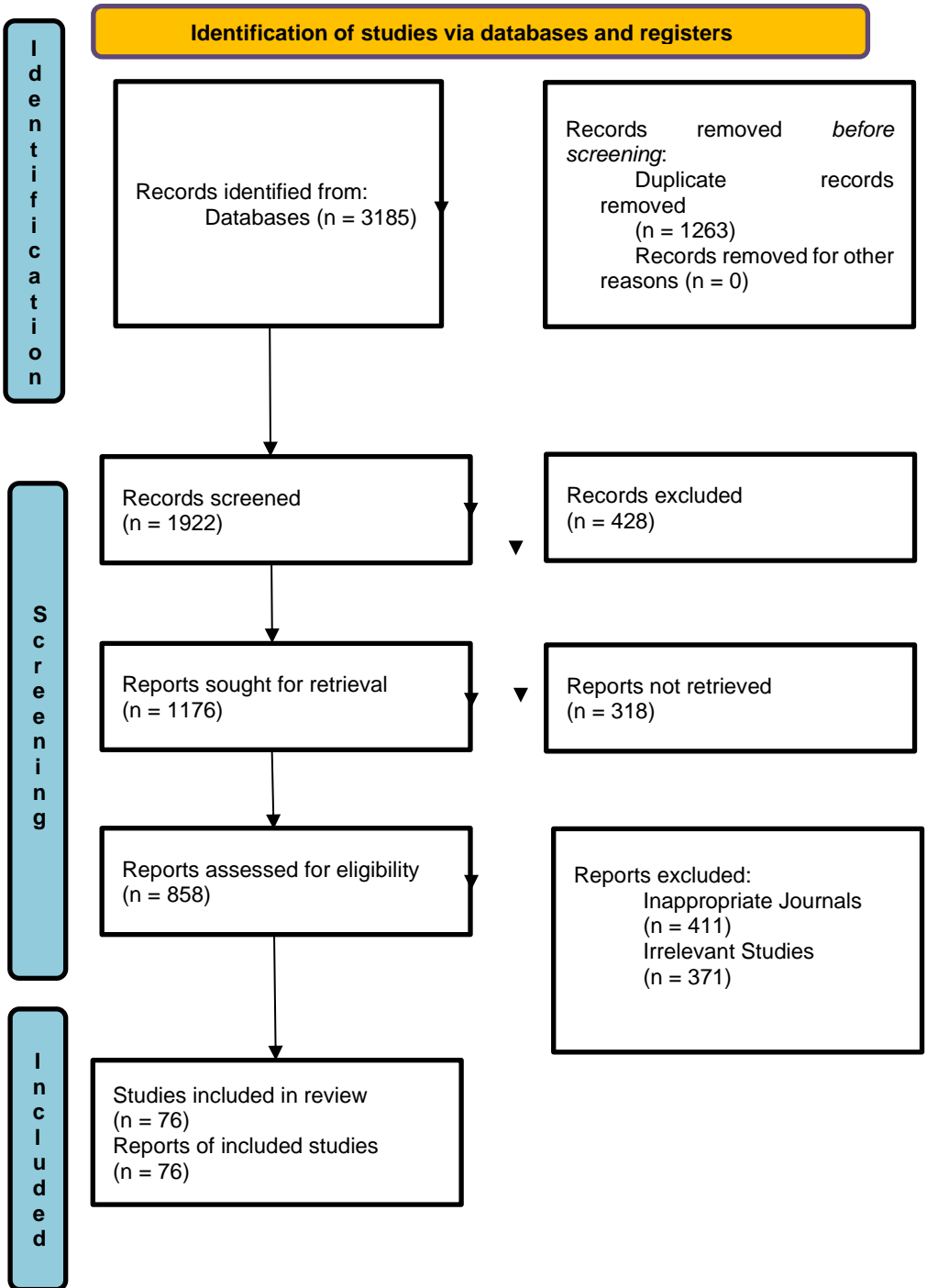
Source: Prepared by Researcher

Table 2
Inclusion and Exclusion Criteria

Inclusion Criteria
Article Published in peer Reviewed Journal
English language
Only Empirical papers
Exclusion Criteria
Book Chapters
Review
Conference papers
Conference Review
Articles outside the scope of study
Articles not available as full text

Source: Prepared by Researcher

PRISMA 2020 flow diagram for new systematic reviews which included searches of databases



3. Results and Discussion
3.1. Bibliometric and Network Analysis

Year	Number of Articles	Year	Number of Articles
2022	130	2011	63
2021	114	2010	58
2020	96	2009	56
2019	85	2008	48
2018	83	2007	46
2017	85	2006	46
2016	61	2005	38
2015	57	2004	36
2014	43	2003	28
2013	67	2002	23
2012	40	2001	23
		2000	18

Table 3: Year-wise Publication
 Source: Scopus Database – 2000 to 2022

Table 1 shows the year-wise number of articles published in the area of study over the period 2000 to 2022. The number of articles published in the field has been increasing over time, with a few exceptions. A significant increase in the number of articles published could be seen in the most recent years, 2020, 2021, and 2022, with 96, 114, and 130, respectively.

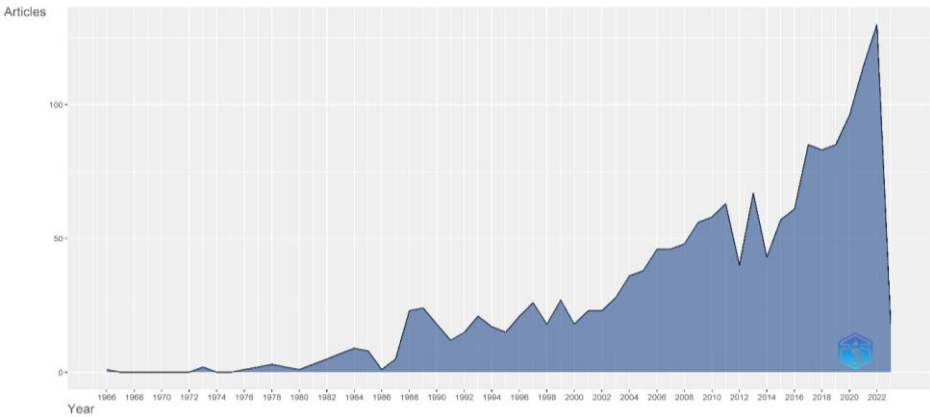


Fig 1: Distribution trend of the published articles

Sources	No. of Articles
Journal of Hospitality and Tourism Education	213
Journal of Hospitality Leisure Sport and Tourism Education	172
Journal of Teaching in Travel and Tourism	149
Journal of Hospitality and Tourism Research	118
International Journal of Contemporary Hospitality Management	109
Journal of Hospitality & Tourism Research	94
International Journal of Hospitality Management	55
Worldwide Hospitality and Tourism Themes	49
Cornell Hotel and Restaurant Administration Quarterly	25
Journal of Human Resources in Hospitality and Tourism	24
African Journal of Hospitality Tourism and Leisure	21
Sustainability (Switzerland)	21
Journal of Hospitality and Tourism Management	19
Tourism Management	16
Journal of Quality Assurance in Hospitality and Tourism	14
Hospitality and Society	12
Journal of Environmental Management and Tourism	12

Sources	No. of Articles
Journal of China Tourism Research	11
Asia Pacific Journal of Tourism Research	10

Source: Scopus Database – 2000 to 2022

Based on the number of articles published, the most relevant journal for bibliometric analysis in the hospitality and tourism field was the "Journal of Hospitality and Tourism Education" with 213 articles. The "Journal of Hospitality Leisure Sport and Tourism Education" and the "Journal of Teaching in Travel and Tourism" follow closely with 172 and 149 articles, respectively. Other journals that had a substantial number of articles include "Journal of Hospitality and Tourism Research," "International Journal of Contemporary Hospitality Management," and "Journal of Hospitality & Tourism Research."

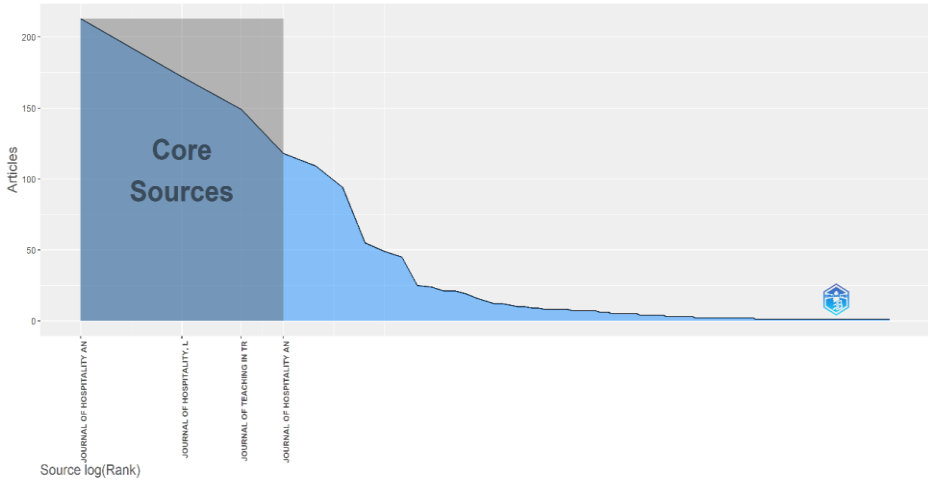


Fig 2: Bradford's Law

Figure 2 shows the application of Bradford's Law to a set of journals related to hospitality and tourism education. The law states that scientific literature on a subject can be divided into three zones, with each zone having a different number of articles. Zone 1 contains the most frequently published journals, Zone 2 includes journals that are published less frequently, and Zone 3 contains journals that are published even less frequently. In this case, the most relevant journals were in Zone 1, including the Journal of Hospitality and

Tourism Education, the Journal of Hospitality, Leisure, Sport and Tourism Education, and the Journal of Teaching in Travel and Tourism, which had the highest number of articles. The remaining journals were distributed across Zones 2 and 3, with a decreasing number of articles.

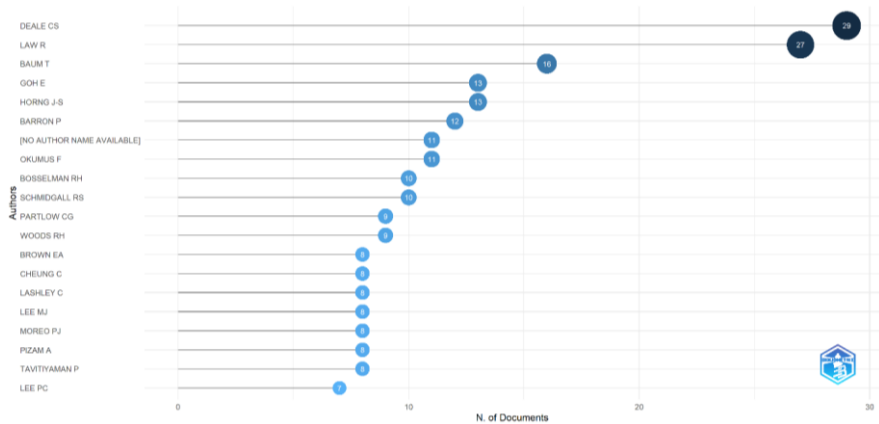


Fig 3: Most Relevant Authors

Figure 3 shows the number of articles published by different authors in the area of study, as well as the number of articles that have been fractionalized (divided among multiple authors). The authors were ranked in descending order by the total number of articles published, and the fractionalized articles are indicated as a percentage of the total. For example, Deale C S has published 29 articles, 18.12 of which have been fractionalized among multiple authors. The table can be used to identify the most prolific authors in the field, as well as those who have collaborated with others to produce a large number of articles.

relate to various topics in the fields of education, tourism, and hospitality, and the measures provide information on the importance of each node in the network based on its connections and position within the network. The table can be used to identify important topics and trends in research related to these fields.

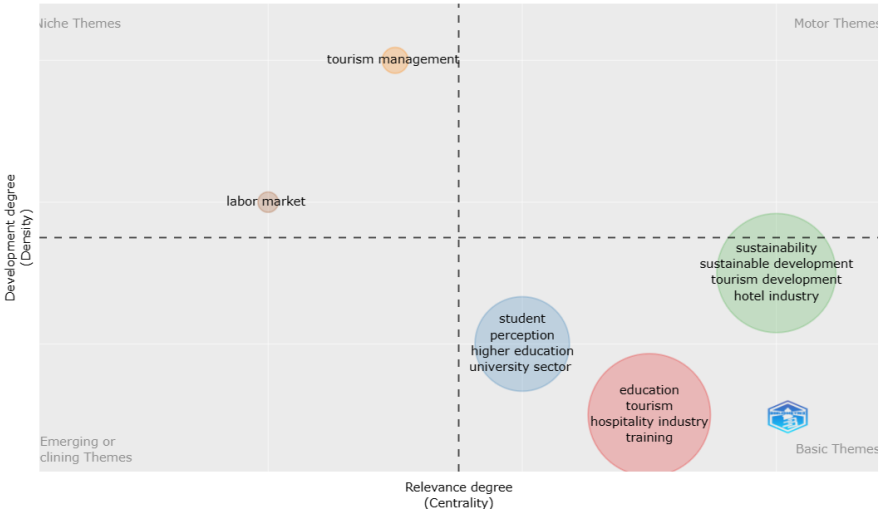


Fig 7: Thematic Map

The thematic map (Fig 7) identified five clusters: "education," "student," "sustainability," "tourism management," and "labour market." The "education" cluster contains words related to education, training, employment, and the hospitality industry, while the "student" cluster has terms related to students and higher education. The "sustainability" cluster contains terms related to sustainable development, tourism development, and environmental concerns. The "tourism management" cluster includes words related to management in the tourism industry, and the "labour market" cluster contains words related to the job market.

Thematic Analysis

As one of the largest industries, the hospitality industry significantly impacts the global economy. Hospitality education needs to play a crucial role in developing the human resources required to meet the industry's demands. This review explored the current state of hospitality education and its linkage with the industry based on four

main themes: the importance of industry-academic collaborations, challenges to industry linkage in hospitality education, curriculum development, and employability.

Importance of industry-academic collaboration

Industrial linkage is critical for hospitality educational institutions to keep abreast with industry trends and demands. In turn, it helps to equip students with the needed skill sets and knowledge to succeed in their careers. According to Deale et al., 2018, industry-academic collaboration can facilitate knowledge exchange, enhance employee skills, and provide students with practical experience. It can also enhance students' employability (Kalargyrou & Lin, 2016) and improve innovation by promoting creativity (Bangwal & Hegdde, 2019). Furthermore, such collaboration can improve the quality of products and services, enhance customer satisfaction, and improve the industry's competitiveness (Kumar & Rajani, 2017). According to Barron and Lawry (2019), industry-academic collaboration can bridge the skills gap by providing students with practical skills and experience and improving the quality of training. It can also enhance the performance of firms by enhancing competitiveness, innovation, and employee skills (Walmsley & Nachmias, 2018). Okumus and Law (2017) identified mutual benefits, trust, and effective communication as factors facilitating industry-academic collaboration in the hospitality industry. Chen (2017) reported that internships and job shadowing opportunities are the most effective methods of enhancing the relationship between industry and education.

Industry-academic collaboration can improve service quality by enhancing employee skills, promoting innovation, and improving customer satisfaction (Horng et al., 2019). Moreover, Weber and Zopiatis (2018) found that such collaboration can enhance sustainability by promoting innovation, enhancing employee skills, and improving stakeholder engagement. Lee et al. (2019) found that industry-academic collaboration can help small and medium-sized enterprises to overcome resource constraints and enhance their competitiveness. Abenova and Dzhanmuldaeva (2018) found that the collaboration can enhance tourism development by promoting innovation, enhancing employee skills, and improving the service quality. Deale and Maxwell (2018) reported that effective

collaboration requires shared goals and values, regular communication and feedback, and a willingness to learn from each other. According to Garcia and Marimon (2019), a collaboration between universities and the industry is crucial in aligning education with industry needs. Through such collaboration, educational institutions can tailor their curriculum and programs to reflect current trends and demands in the industry.

Challenges to Industrial Linkage in Hospitality Education

Literature provides evidence for the challenges that can impact the relationship between educational institutions and the hospitality industry. Iskakova et al. (2019) identified the lack of trust, the absence of incentives, and communication barriers as challenges to such collaboration in the hospitality industry. The reported barriers to effective partnership development were a lack of understanding of industry needs (Bangwal, 2012; Law, 2016), a lack of resources, time, and skills (Walmsley & Nachmias, 2015), and a lack of trust between industry and academia (Okumus et al., 2015). Similarly, a lack of industry support and a lack of resources (Horng, 2017), a lack of industry participation and collaboration, insufficient industry feedback (Lee et al., 2018, 2019), and limited opportunities for students to gain practical experience (Lee et al., 2018, 2019); Weber & Zopiatis, 2017) were also the challenges faced by hospitality education. Further, Weber and Zopiatis (2017) also identified a lack of industry involvement in curriculum development and insufficient faculty training as the major obstacles. Abdullah (2020) reported that a lack of funding, non-sufficient industry involvement and collaboration, and a lack of incentives for industry partners were the obstacles to industry-academia collaboration in hospitality education.

Employability and Industrial Linkage

Employability is a key consideration for students when choosing a hospitality education program. In their study, Han, Back, and Yoon (2021) found that practical training, industry experience, and networking opportunities were the most relevant factors influencing students' employability prospects. They suggested that hospitality education institutions should provide students with opportunities for industry experience, internships, and networking events to

enhance their employability. Academic experiences (Kim & An, 2019) and industry engagement (Jepsen & Rodwell, 2020) positively influence hospitality students' employability. A study by Gómez-Méndez et.al., (2019) established that employability positively moderates the relationship between knowledge management and organizational performance. Tahir and Liu (2020) developed a hospitality management curriculum focusing on practical and soft skills to enhance graduates' employability. Soft skills were found to be significantly contributed to the employability of graduates (Deale, 2017), and communication, leadership, and problem-solving were the most important employability skills for hospitality management students (Kalargyrou, 2019). The experiences from internships, work placements, and other experiential learning can help students gain practical skills, build networks, and develop a better understanding of the industry that can enhance their employability (Hjalager & Dahl, 2013). The work-integrated learning also significantly improves the employability of hospitality students as they have higher levels of confidence, communication skills, and problem-solving abilities (Rajani & Barron, 2018). Further, Horng and Weber (2019) highlighted the importance of internships, work-integrated learning, and industry-academia collaboration in enhancing the employability of hospitality graduates. Baum et al. (2016) pointed out that industry collaboration can develop graduates' interpersonal skills and provide exposure to diverse cultures and languages, enhancing their ability to work in a global industry.

Curriculum of Hospitality Education and Industrial linkage

The curriculum is a critical component of hospitality education programs, and should design to meet industry expectations. It should include practical training, theoretical knowledge, and soft skills development to prepare graduates to meet the industry demands (Cusack et.al., 2019). Airey and Tribe (2014) compared the teaching and learning of tourism, hospitality, and events (THE) subjects in different countries and emphasized the importance of industrial linkages for THE education's curriculum. Academics and industry professionals recognize the significance of industry linkage in the curriculum, though there is a need for more effective collaboration to enhance the quality of hospitality education (Duman, 2018). A study by O'Connell and Gnoth (2016) found that

hospitality education programs should focus on sustainability, innovation, and entrepreneurship to prepare graduates for the current and future needs of the industry. Go and Pine (2015) suggested that practical training should be an integral part of the curriculum and should design to provide students with hands-on experience in different areas of the industry, such as food and beverage, front office, and housekeeping. Likewise, Paraskevas et al. (2018) stated that educational institutions must focus on developing practical skills, such as problem-solving, critical thinking, and customer service, which are highly valuable in the industry.

Anand and Sen (2017) reported that the industrial linkage in the hospitality curriculum is weak in India and suggested a more proactive approach towards industry-academia collaboration. Gursoy and Lu (2019) recommended that industry partners must involve in curriculum development, guest lectures, and mentoring programs to facilitate collaborations. A study by Fidan and Kurt (2017) found that guest lectures and industry visits can enhance students' understanding of the industry and provide them with insights into current and future trends. In short, a collaboration between hospitality education institutions and the industry is essential to ensuring that the curriculum is relevant and reflective of industry trends and best practices.

Conclusion

The systematic literature network analysis highlighted the importance of the linkages between hospitality education and industry by delineating how it helps in preparing graduates to meet the growing demands of the industry. The review highlighted the significant barriers and challenges in effecting fruitful industry-academia collaborations. It also revealed the different ways and means to enhance the employability of hospitality students through industrial linkages. Finally, the review showed how collaboration with industry can enrich the curriculum and make it relevant and reflective of industry trends and best practices. As indicated by researchers, the review suggests the effectiveness of different approaches to industry-academia collaboration in hospitality education, the impact of industrial linkage on the quality of hospitality education in several regions, the role of technologies in enhancing the collaboration between academia and industry in

hospitality education, and the development of a sustainable curriculum that incorporates environmental, social, and economic sustainability in hospitality education as future research areas.

References

- Abdullah, S. (2020). Industry-Academia Collaboration in Hospitality Education: An Overview of Challenges and Opportunities. *Journal of Hospitality and Tourism Education*, 32(2), 114-124.
- Abenova, M., & Dzhanmuldaeva, D. (2018). Industry-academic collaboration as a driver of tourism development. *Journal of Tourism, Heritage & Services Marketing*, 4(2), 23-29.
- Airey, D., & Tribe, J. (2014). The state of Tourism and Hospitality Education in Higher Education Institutions. *Journal of Hospitality, Leisure, Sport & Tourism Education*, 15, 1-7.
- Anand, N., & Sen, S. (2017). An exploratory study of industrial linkage in hospitality education in India. *Journal of Teaching in Travel & Tourism*, 17(4), 284-298.
- Bangwal, D. (2012). Challenges and opportunities in hospitality and tourism higher education in India. *International Journal of Management Research and Reviews*, 2(10), 1669-1680.
- Bangwal, D. P., & Hegdde, S. S. (2019). Industry-academia collaboration: A study of Indian hospitality education sector. *Journal of Hospitality and Tourism Management*, 38, 81-90.
- Barron, P., & Lawry, M. (2019). Industry-academic collaboration in hospitality management education: A review of current literature. *Journal of Hospitality, Leisure, Sport & Tourism Education*, 25, 100-110.
- Bastian, M., Heymann, S., & Jacomy, M. (2009). Gephi: An open source software for exploring and manipulating networks. *International AAAI Conference on Weblogs and Social Media*.
- Baum, T., Deery, M., Hanlon, N., & Lockstone-Binney, L. (2016). Graduate skills and attributes in the 21st century: what is the evidence? *Higher Education Research & Development*, 35(2), 215-228.

- Bieger, T., & Laesser, C. (2002). Education and training in tourism: A review with emphasis on Switzerland. *Journal of Hospitality & Tourism Education*, 14, 40-48.
- Borgatti, S. P., Mehra, A., Brass, D. J., & Labianca, G. (2009). Network analysis in the social sciences. *Science*, 323(5916), 892-895. <https://doi.org/10.1126/science.1165821>
- Chang, Y. (2019). Systematic literature network analysis: A review. *Journal of Data and Information Science*, 4(3), 1-25.
- Chen, Y. (2017). Enhancing hospitality education through industry partnerships. *Journal of Hospitality & Tourism Education*, 29(1), 22-30.
- Chon, K. (2019). Hospitality education and the future of hospitality industry. *Journal of Hospitality and Tourism Management*, 40, 1-5.
- Cronin, P. (2018). Systematic literature network analysis: An introduction to the methodology. *Synthese*, 195(6), 2411-2431.
- Cusack, M., Dixon, H., Fishwick, L., Kilgour, M. A., & Whitelaw, P. A. (2019). Hospitality higher education: An analysis of the practical component of the undergraduate curriculum. *Journal of Hospitality and Tourism Management*, 38, 62-71.
- Deale, C. (2017). The role of soft skills in enhancing graduate employability. *Journal of Education and Work*, 30(4), 417-429.
- Deale, C. S., & Maxwell, G. A. (2018). Industry-academic collaboration in hospitality education. *Journal of Hospitality, Leisure, Sport & Tourism Education*, 22, 33-41.
- Deale, C. S., Zietsman, H. L., & Kleynhans, R. (2018). An industry-driven approach to curriculum development: A case study of the School of Tourism and Hospitality at the University of Johannesburg. *Journal of Hospitality and Tourism Management*, 35, 1-8.
- Duman, T. (2018). Understanding the Gap between the Industry and the Academy: A Critical Review of the Hospitality and Tourism Literature. *Journal of Hospitality & Tourism Education*, 30(1), 14-24.

- Fidan, G., & Kurt, G. (2017). The role of guest lectures and industry visits in hospitality education. *Journal of Hospitality, Leisure, Sport & Tourism Education*, 21, 77-85.
- Gallarza, M. G., Saura, I. G., & Arribas, A. E. (2011). The value of tourism and hospitality higher education from the perspectives of graduates and employers. *Tourism Management*, 32(5), 1004-1019.
- Garcia, M., & Marimon, F. (2019). Industry-academic collaboration in higher education institutions: A review of the literature. *Journal of Hospitality, Leisure, Sport & Tourism Education*, 25, 1-10.
- Go, F., & Pine, R. (2015). Hospitality education: Perspectives on curriculum and instruction. *Journal of Hospitality and Tourism Education*, 27(4), 171-181.
- Gómez-Méndez, R., Castillo-Castillo, A., & Montes-Sancho, M. J. (2019). Knowledge management and organizational performance: The moderating effect of employability. *Journal of Business Research*, 96, 157-168.
- Gursoy, D., & Lu, L. (2019). Collaborating with industry in hospitality and tourism education: A review of practices and challenges. *Journal of Hospitality, Leisure, Sport & Tourism Education*, 25, 41-51.
- Han, H. J., Back, K. J., & Yoon, H. (2021). An empirical study of factors influencing hospitality students' employability. *Journal of Hospitality, Leisure, Sport & Tourism Education*, 28, 100344.
- Hjalager, A. M. (2015). Learning and talent development in tourism: The roles of education and workplace learning. *Journal of Hospitality, Leisure, Sport & Tourism Education*, 16, 91-100.
- Hjalager, A. M., & Dahl, T. (2013). Skills, labour and employability in Danish hospitality. *Journal of Hospitality and Tourism Management*, 20, 43-52.
- Horng, J. S. (2017). Industry-University Partnerships in Hospitality and Tourism Education: The Case of Taiwan. *Journal of Teaching in Travel & Tourism*, 17(3), 180-199.

- Hornig, J. S., & Weber, K. (2019). Internships and work-integrated learning in hospitality education: Enhancing student employability. In D. D. Woo, & A. J. Sim (Eds.), *Handbook of Hospitality Education* (pp. 165-180). Springer.
- Hornig, J. S., Liu, C. H., Hsu, C. H., & Chen, M. Y. (2019). Industry-academic collaboration and service innovation in the hospitality industry: The mediating role of employee skills. *Journal of Hospitality and Tourism Management*, 39, 86-94.
- Iskakova, A., Konysbekova, A., & Dosmukhambetova, R. (2019). Industry-university collaboration in the hospitality industry: challenges and opportunities. *Journal of Tourism and Hospitality Management*, 7(3), 49-58.
- Ismail, M. A. (2019). Graduates' employability and the gap with industry expectations: The case of hospitality graduates in Egypt. *Journal of Hospitality and Tourism Education*, 31(4), 182-192.
- Jain, N., & Sharma, A. (2020). Hospitality education curriculum development for the next decade. *Journal of Hospitality, Leisure, Sport & Tourism Education*, 27, 100232.
- Jepsen, D. M., & Rodwell, J. (2020). The importance of industry engagement in enhancing hospitality students' employability. *Journal of Hospitality, Leisure, Sport & Tourism Education*, 27, 100244.
- Kalargyrou, V. (2019). Hospitality management students' employability skills: perspectives from industry professionals. *Journal of Hospitality, Leisure, Sport & Tourism Education*, 24, 18-28.
- Kalargyrou, V., & Lin, L. (2016). Enhancing hospitality students' employability skills through academic and industry collaboration. *Journal of Hospitality, Leisure, Sport & Tourism Education*, 19, 39-48.
- Kim, M., & An, J. (2019). Examining hospitality students' perceptions of academic experiences and employability. *Journal of Hospitality, Leisure, Sport & Tourism Education*, 25, 1-9.

- Kumar, A., & Rajani, R. (2017). The role of industry-academic collaboration in hospitality education: A review. *Journal of Tourism and Hospitality Management*, 5(1), 1-10.
- Law, R. (2016). Teaching and learning in hospitality and tourism in Asia: a critique of the literature. *Journal of Hospitality & Tourism Education*, 28(3), 137-147.
- Lee, H. A., Min, J. C., & Lee, J. S. (2018). Developing Industry-Academic Cooperation Strategies for the Sustainable Growth of Small and Medium-Sized Enterprises in the Tourism Industry. *Sustainability*, 10(11), 3897.
- Lee, J. S., Lee, H. A., & Min, J. C. (2019). Identifying the Key Success Factors for Industry-Academic Cooperation in the Tourism Industry. *Sustainability*, 11(17), 4767.
- Lee, J., & Jang, S. (2018). An exploratory study on the current status and future directions of hospitality education. *Journal of Hospitality, Leisure, Sport & Tourism Education*, 22, 1-11.
- O'Connell, J. F., & Gnoth, J. (2016). Hospitality higher education and the tourism and hospitality industry: A need for integration? *Journal of Hospitality, Leisure, Sport & Tourism Education*, 19, 17-26.
- Okumus, F., & Law, R. (2017). Collaborative relationships between academia and the hospitality industry: An exploratory study. *Journal of Hospitality and Tourism Education*, 29(3), 117-125.
- Okumus, F., Altinay, L., & Roper, A. (2015). Collaboration and partnerships in tourism education. *Journal of Hospitality, Leisure, Sport & Tourism Education*, 17, 29-39.
- Paraskevas, A., Altinay, L., & Altinay, M. (2018). Developing hospitality managers' skills: Insights from the corporate sector. *International Journal of Hospitality Management*, 70, 41-50.
- Park, J., & Kim, Y. (2020). Challenges and opportunities of hospitality and tourism education in the age of the fourth industrial revolution. *Journal of Hospitality, Leisure, Sport & Tourism Education*, 27, 100244.

- Rajani, N. B., & Barron, P. (2018). Exploring the impact of work-integrated learning on hospitality graduates' employability. *Journal of Hospitality and Tourism Management*, 35, 39-47.
- Rashid, M. (2018). Hospitality and tourism education: Challenges and opportunities. *Tourism Management Perspectives*, 25, 112-121.
- Tahir, M., & Liu, A. M. M. (2020). Redesigning the hospitality management curriculum to enhance graduates' employability. *Journal of Hospitality, Leisure, Sport & Tourism Education*, 26, 100228.
- Tanford, S., & Jung, D. (2018). The role of hospitality education in shaping future leaders. *Journal of Hospitality, Leisure, Sport & Tourism Education*, 22, 53-60.
- Thomas, J. G. (2020). Systematic literature network analysis: A tutorial. *Communications of the Association for Information Systems*, 47, 87-104. <https://doi.org/10.17705/1CAIS.04705>
- Tranfield, D., Denyer, D., & Smart, P. (2003). Towards a methodology for developing evidence-informed management knowledge by means of systematic review. *British Journal of Management*, 14(3), 207-222. <https://doi.org/10.1111/1467-8551.00375>
- Walmsley, A., & Nachmias, S. (2015). Challenges and strategies for developing industry links in tourism and hospitality higher education. *Journal of Hospitality, Leisure, Sport & Tourism Education*, 16, 48-57.
- Walmsley, A., & Nachmias, S. (2018). The impact of industry-academic collaboration on firm performance: A case study of the hospitality industry. *Journal of Hospitality and Tourism Management*, 34, 1-8.
- Weber, K., & Zopiatis, A. (2017). Industry-Academia Collaboration in Hospitality and Tourism Education. In D. Dredge, M. A. Schott, & M. M. Fesenmaier (Eds.), *Tourism Education: Global Issues and Trends* (pp. 161-180). Channel View Publications.

- Weber, K., & Zopiatis, A. (2018). Industry–Academia Collaboration in Tourism and Hospitality: A Literature Review. *Journal of Hospitality & Tourism Research*, 42(7), 1041-1068.
- Xiang, Y., He, Y., & Yang, K. (2015). Network analysis of scholarly articles in the field of educational technology in China. *Computers & Education*, 81, 49-60.
- Xiang, Z., Du, Q., Ma, Y., & Fan, W. (2015). A comparative analysis of major online review platforms: Implications for social media analytics in hospitality and tourism. *Tourism Management*, 46, 70-87.