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TRACING TOURISM BUSINESS RESEARCH TRENDS IN SCOPUS-INDEXED JOURNALS USING CORPUS-BASED AND JUDGEMENT-BASED APPROACHES

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ABSTRACT

Tourism research trends reveal the directions of research in the tourism industry contributing to the advancement and modernisation of research frameworks, avoiding delays, and generating academic benefits. This study proposed an alternative approach for analysing research trends in tourism. The proposed analytical approach integrated both corpus-based and judgement-based methodologies, offering an additional means of tracking trends in tourism research and complementing traditional statistical methods, systematic reviews, and bibliometric analyses. To conduct our analysis, we utilised the Tourism Research Abstract Corpus (TRAC), which comprises language data from research abstracts published in the top-10 Scopus-indexed journals in the first quartile (Q1) from 2013 to 2022, totalling 8,304 research abstracts containing 1,352,388 running words. The corpus-based approach involving keyword analysis, lexical profiling, and lemmatisation was applied to identify the major trends in tourism research. Subsequently, we utilised the judgement-based approach involving common and irrelevant keyword removal, as well as theme categorisation, to further elucidate these trends. Our findings highlighted keywords reflecting trends in tourism research each year, categorised into five themes: research topics, research intentions, related concepts, research participants, and research methods. Researchers should take into account these insights when designing studies, adapting methodologies, and in keeping abreast of evolving trends in the discipline.

Keywords: Research trends; tourism research trends; SCOPUS-indexed journals; corpus-based approach; judgement-based approach

1. INTRODUCTION

In the realm of academic disciplines, various factors contribute to the creation of research studies. It is crucial for researchers to disseminate their completed studies through publication, thereby fostering substantial engagement with a broader audience (Meebangsai et al., 2023). Another major rationale for interrogating research findings is to address emerging issues or to enhance existing aspects to make them more

effective and efficient. Consistently, researchers specialising in various fields of knowledge, including the tourism industry, strive to conduct research studies. Research in the field of tourism can help solve diverse issues and promote various aspects related to tourism, such as economic, social, cultural, technological, and environmental considerations, as well as the needs of the tourists and communities in those destinations. Therefore, research in the tourism business is of great importance to and influences the global tourism industry. According to António Guterres (2023), the UN World Tourism Organization Secretary-General, tourism contributes to advancement as one of the most important sectors in the global economy, wielding substantial influence in fostering cultural connections, creating novel prospects, and promoting sustainable development. As a result, scholars worldwide have heightened their research efforts in the field of tourism. Nonetheless, uncertainty persists regarding the awareness of global researchers concerning the current issues, which issues require immediate resolution, and whether research findings are being actively generated to address these concerns. Another issue is whether the researchers who have been engaged in producing such research previously have been aware of and compared their specific areas of interest with global tourism research trends (TRTs). Research trends (RTs) signify the directions or prevailing themes in research at a given time. The identification of RTs allows for various conclusions to be drawn for future research endeavours (Leiras et al., 2014). The study of TRTs is one important aspect aiding researchers in comprehending the tourism issues that arise in different periods. In the context of tourism research, TRTs serve to inform researchers about prevailing trends and awareness regarding problems proposed for resolution. In addition, TRTs identify issues that still require more appropriate solutions. Furthermore, TRTs enable the prediction of potential future challenges in tourism. Therefore, the current study explored trends in tourism research across various research-related areas, including topics, intentions, concepts, participants, and methods, through the proposed alternative approaches that combine a corpus-based approach with a judgement-based approach. The goal was to identify the TRTs that have garnered interest over the past decade (2013–2022).

2. LITERATURE REVIEW

Noteworthy factors in studying TRTs include the sources of data for analysis, the analytical methods applied, and the desired trends for exploration.

2.1 Sources of data for TRT analysis

The initial factor, which serves as the primary data source for analysis, is that the study of RTs typically entails an examination of widely acknowledged and internationally accepted published media (Phoocharoensil, 2023). This encompasses well-known books, book chapters, master's and doctoral theses, full-text articles, and abstracts (Tazik & Khany, 2019; Thumvichit, 2020; Park & Park, 2017). Notably, certain studies investigate RTs by analysing extensive data from alternative sources such as social media and online literature databases like Web of Science (Cai et al., 2024; Li & Law, 2020; Thelwall, 2008). Within these diverse media sources, journal articles and abstracts are dynamic and are consistently updated, providing the most up-to-date and comprehensive reflection of RTs. However, upon comparing journal articles and abstracts, it becomes evident that journal articles, due to their extensive content, may contain a considerable amount of irrelevant material that does not entirely capture RTs. In contrast, abstracts are succinct, focused, and incorporate essential content, rendering them more effective in presenting and reflecting RTs. The abstract is an integral and essential component of general research articles, holding equal importance for both authors and readers. It functions as a succinct summary of research articles (Weil, 1970), playing a crucial role in the dissemination of academic knowledge and the exchange of research information (Peacock, 2002). The abstract is the primary section (after reading the title) that readers should familiarise themselves with because it includes informative elements, such as the research purpose, key points, methodology, and results. Consequently, researchers frequently examine abstracts more than other sections of research articles (Nicholas et al., 2003). The abstract's purpose is to enhance accurate knowledge and understanding, given its pivotal role in determining whether reading the entire article will contribute to a reader's knowledge (Belcher, 2009). Thus, the abstract serves as the initial point where a reader decides whether to proceed with the remaining parts of the article. Additionally, it serves as an indicator of the reception and dissemination of research ideas. Lorés (2004) emphasises that, especially during national and international conferences, abstracts serve as the primary gateway to influence qualified individuals in selecting articles or deciding on participation in presenting their academic expertise on a specific stage. This underscores the particular relevance and credibility of research abstracts in research articles published in international journals, especially those indexed in SCOPUS. These abstracts are appropriately crafted according to research and scholarly standards, encompassing crucial information that reflects the essence of the research article. Abstracts in internationally published research articles, often containing pivotal information, thus serving as

representative elements of research articles and can be used for analysing TRTs. For these reasons, the current study chose to analyse the research abstracts of tourism-related research articles to discern TRTs.

2.2 Analytical methods for tracing TRTs

In the realm of data analysis, various methods and analytical techniques can be applied to trace RTs. Examples include bibliometric analysis (Ali et al., 2019; Yang et al., 2023), scientometric analysis (Cai et al., 2024), co-word analysis (Hoz-Correa et al., 2018), and co-citation analysis (Liu & Hu, 2021). Often, the analysis of RTs begins with the compilation of a corpus, followed by the examination of data derived from that corpus. However, the corpus-based approach to data analysis offers diverse methods and is adaptable in numerous ways. This adaptability is apparent when considering the various methods and techniques used in the aforementioned studies on RT. A literature review and exploration of corpus-related research revealed four more corpus-based methods suitable for analysing RTs. These four methods include frequency, keyword analysis (Clarke et al., 2022), lexical profiling, and concordance analysis.

Often, frequency analysis and keyword analysis are compared due to their shared reliance on considering frequency as a fundamental factor. Nonetheless, they have differences. Frequency, explicitly referred to as absolute frequency, holds paramount importance in the realm of language studies (Lindquist & Levin, 2018). In language studies across diverse contexts, the frequent usage and prominent appearance of a word in a specific text signify its importance and potential relevance to that particular field (Arunvong Na Ayutthaya et al., 2022). However, the limitation of solely depending on frequency in language analysis lies in the fact that high-frequency words often encompass function words and general terms used in everyday life, rather than those specific to a particular discipline (Scott & Tribble, 2006). In contrast to absolute frequency, keyword analysis, precisely denoted as relative frequency, does not inherently anticipate a high frequency; instead, it identifies an unusually high or low frequency of a word in the target corpus compared to the reference corpus (Laosrirattanachai & Laosrirattanachai, 2021). Typically, the reference corpus represents general English and is extensive, such as the British National Corpus (BNC) (Laosrirattanachai & Ruangjaroon, 2021; Scott, 2001). To conduct keyword analysis, the evaluation applies the log-likelihood (LL) statistical measure. As a result, words identified as 'key' are important as they encapsulate the essence of specific discourses (Culpeper & Demmen, 2015).

The subsequent analytical approach is lexical profiling. This method involves examining distinct sets of vocabulary, specifically the profiles essential for understanding various discourses (Nurmukhamedov & Webb, 2019). The primary objective of lexical profiling is to categorise words in the target corpus into different profiles by comparing them with a reference word list, with each word only being assigned to one profile (Laosrirattanachai & Laosrirattanachai, 2023). This method is efficient in eliminating irrelevant or out-of-scope words from the compiled corpus (Meebangsai et al., 2023; Rungrueang et al., 2022). Generally, a corpus comprises a substantial amount of language data, with function words being prevalent in English. Thus, the application of the lexical profiling method aids in the elimination of sets of function words. This saves researchers from having to manually analyse the extensive dataset, resulting in a refined collection of words that are more likely to be relevant to the study's scope.

The ultimate method is the analysis of concordances. A concordance serves as a reference tool in the fields of linguistics and lexicography, providing an instance of a word used in a text or a set of texts along with its immediate context or the words surrounding it (Sinclair, 1991). Typically, it indicates the word's position within the text, allowing users to observe its usage in different contexts (Anthony, 2022). Concordances are widely utilised in text analysis, especially within the realm of corpus linguistics, where extensive collections of texts (corpora) are systematically examined to discern language usage patterns. By scrutinising a word's concordance, linguists and researchers can gain insights into its collocations, syntactic structures, and semantic nuances across diverse contexts (Jones, 2022). Investigating concordance lines enables researchers to examine collocations or lexical bundles occurring around keywords, facilitating the determination of whether those words are associated with and indicative of RTs or not.

Nevertheless, when considering analytical methods, all three methods are deemed suitable for data analysis based on different objectives. Based on conducting a pilot study, we observed that absolute frequency alone cannot effectively extract keywords, as the obtained words often comprise function words or general terms that do not adequately reflect TRT. Therefore, the current study applied the corpus-based approach, encompassing keyword analysis and lexical profiling, to generate a keyword list for tracing TRTs.

To the best of our knowledge, previous analyses of RTs have often stemmed from either a corpus-based approach or a judgement-based approach. Relying solely on one analytical method may yield an incomplete representation of RT. Depending solely on the corpus-based approach and statistical methods may result in research outcomes lacking accurate interpretation, without considering human judgement. Conversely, conducting analyses solely through a judgement-based approach presents challenges and heavy burdens for researchers. Furthermore, statistical approaches to RT analysis pose considerable difficulties for

researchers lacking a statistical background (Pojanapunya & Todd, 2018). Therefore, for practical reasons, we propose that researchers apply both the corpus-based approach and the judgement-based approach in their analyses to obtain the most accurate and reliable information. It is recommended to start with the corpus-based approach before incorporating the judgement-based approach in the final evaluation stage.

2.3 RT themes for exploration

RTs can be categorised into various themes. Other studies related to the analysis of RTs have investigated multiple issues, such as research participants, research methods, research topics, authors, authors' affiliations (with a focus on nationality analysis), authors' status (such as professor, researcher, or student), the number of published articles, and cited authors or articles (Crosthwaite et al., 2023; Hyland & Jiang, 2021; Lei & Liu, 2019a, 2019b; Ma & Kim, 2014; Nusair, 2020; Phoocharoensil, 2023; Wang et al., 2022; Todd, 2021). The selection of a theme for study depends on the research objectives, determining which RT aspects need examination. For example, if a research project aims to explore which country's researchers publish the most and receive the highest research citations, it would analyse authors' affiliations and cited authors or articles. Conversely if the research aims to investigate RTs that inform readers about the guidelines for creating highly interesting research work, it might focus on different themes, such as studying research methods.

In the current study, we aimed to generate valuable data for global tourism researchers, providing insights into the RTs of interest and that can serve as inspiration, extension, or creative input for individual researchers. Thus, five main themes were considered that consistently attract attention in analysis: research topics, research intentions, related concepts, research participants, and research methods.

One crucial aspect that needs emphasis and that is often overlooked or not explicitly clarified in studies exploring RTs is the provision of a clear definition for the term *research trends*. A literature review revealed that frequently, studies on RTs analyse trends in various aspects, considering relative frequency as a major criterion and often concluding the analysis based on the frequency count as RTs for that specific domain. Although from our perspective, while evaluating solely on the basis of frequency may be rational, for example, in the case of research participants, for certain aspects, especially in the realm of research topics, relying solely on frequency analysis may not be the sole indicator capable of defining RTs. Issues studied with a low frequency can also be considered research trends, as without research in less-explored areas, apart from those extensively studied, research cannot provide knowledge for problem-solving or the development of new issues beyond the existing problems. This is confirmed by one of the criteria for considering research articles for publication in global academic journals, where research must generate new knowledge or present new perspectives. Therefore, the current study used a precise definition of RTs as research topics that deviate substantially, either receiving high or low interest. Since research topics that receive high interest are what researchers focus on and help define the clear direction of that particular domain, research topics with unusually low interest may represent new and intriguing issues, potentially signifying or inspiring new research topics that will garner more interest in the future.

This research explored TRTs concerning research topics, research participants, and research methods by analysing the abstracts of internationally recognised tourism academic journals, specifically the top 10 indexed in SCOPUS in Q1 during the past decade (2013–2022). This exploration utilised a mixed-methods approach, involving both corpus-based and judgement-based approaches. The findings were expected to benefit researchers in the tourism industry, enabling them to study, derive benefits, predict RTs, and provide guidance for future research endeavours. Based on the background and previously identified research gaps, the current study sought to address the following research questions.

1. Which research topics, research intentions, research concepts, research participants, and research methods have garnered interest in tourism research articles each year from 2013 to 2022?

2. What are the top-10 research topics, research participants, and research methods that have received attention and are part of TRTs in the past 10 years (2013–2022)?

3. RESEARCH METHODOLOGY

This study traced trends in tourism research based on the use of a combination of corpus-based and judgement-based approaches as a viable alternative to traditional systematic reviews, which are known for being time-consuming and resource-intensive (Tricco et al., 2017). The current research methodology involved two primary components: the compilation of TRAC and the subsequent analysis of data. These pivotal steps are outlined below.

3.1 Corpus compilation

In corpus-based research, the initial crucial step is to compile a corpus. The current study opted to collect data from abstracts of research articles published in tourism journals indexed in the SCOPUS database. Specifically, the top 10 journals with the highest CiteScore in Q1 were selected. Journals in the SCOPUS database, especially those in the top 10 of Q1, are considered representatives of internationally recognised journals due to their broad acceptance and rigorous article selection criteria (Todd, 2021). These journals contribute new knowledge on contemporary topics, making them highly credible based on large numbers of citations. In fact, aside from the content of the abstract, the keywords listed beneath it can also reflect RTs. However, due to journal policies that typically limit the number of keywords to between three and five, many terms that have the potential to indicate research trends are omitted. In comparison, abstracts, with their comprehensive nature, encapsulate the core content and key findings of research articles, thereby providing more extensive information for analysis. For this reason, the current study considered only the abstracts, without including the keywords in the analysis. Notably, the current research originally aimed to analyse trends in tourism business research over the past 10 years up to the end of 2023. However, during the data collection and analysis for research in 2023, several academic journals had not fully disseminated research articles for the entire year, and SCImago has not announced the top 10 international academic journals in Q1. Therefore, the data were collected from 2013 to 2022. The examination of the data revealed variations in the number of published research articles each year, influenced by factors such as the number of issues per journal and the differing review times for each article. To achieve balance in the corpus, researchers typically choose to set data collection schedules to have a comparable number and size of data sources. However, in the current study, all abstracts of published research articles within the specified timeframe were included to provide the most comprehensive reflection of annual TRTs. Using the aforementioned method, we compiled the TRAC, consisting of 8,304 research abstracts and 1,352,388 tokens. The information presented in Table 1 below provides a detailed overview.

Table 1: TRAC information

Year	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total
Articles	451	308	309	748	941	652	1,176	1,300	1,285	1,134	**8,304**
Tokens	70,962	43,471	49,303	122,849	156,347	104,579	187,505	211,195	211,672	194,505	**1,352,388**

3.2 Data analysis and research instruments

In the data analysis, a crucial aspect that needs clear definition is the unit of word counting to be considered. In vocabulary-related research, the commonly applied units for analysis include type, lemma, and word family. However, when counting technical words, it is more appropriate to use word type as a unit, as not all members of a lemma or word family share the same level of technicality (Chung & Nation, 2003). The current study specifically focused on analysing trends in tourism research, where the technical terms used in abstracts could reflect the research's trends and topics. Therefore, this research opted to analyse words in the type unit. The data analysis comprised two main steps, outlined as follows.

3.2.1 Corpus-based approach

The initial consideration involved determining the desired number of final keywords that would represent the TRTs. The top 10 research trend keywords that have undergone various stages might possibly be deemed complete. However, setting an overly rigid number of keywords may result in the exclusion of relevant ones within the RTs that fell outside the top 10. Potentially, such omissions could impact the research outcome, hindering an accurate reflection and identification of TRTs. To address this concern, the current research did not prescribe a predefined number of keywords to be obtained in the final stage. Instead, it began by assessing the initial 300 keywords from the keyword analysis, subsequently analysing these 300 keywords through each subsequent stage until reaching the final step. This approach allowed for variation in the number of obtained keywords for each year, ensuring a comprehensive reflection of TRTs.

3.2.1.1 Keyword analysis

The consideration of selecting words based on absolute frequency may yield biased results due to variations in the length and writing styles of each abstract, as well as differences in vocabulary usage. Lengthy abstracts or those authored by individuals prone to repetitive language may lead to inflated absolute frequency values, potentially resulting in the exclusion of important keywords in shorter abstracts that still reflect TRT. Furthermore, as defined in this study, RTs are characterised as movements in research that involve issues of unusually high or low interest. Keyword analysis is a statistically appropriate method widely applied for analysis because importantly, it compares words in the target corpus (TRAC in the current study) with words

in the reference corpus (BNC in the current study). Words in TRAC having unusually high or low relative frequency values compared to BNC will have notably high LL values (Laosrirattanachai & Laosrirattanachai, 2024). Consequently, the use of keyword analysis facilitates the generation of a keyword list in accordance with the research design's requirements. The program Key-BNC (Graham, n.d.) was utilised to facilitate the analysis of LL values by comparing the frequency of words in TRAC with those in BNC. Notably, the top 300 keywords with the highest LL values were then considered in the subsequent stages of analysis.

3.2.1.2 Lexical profiling

After the keyword analysis, there was a high likelihood that a large number of words that had passed through the first step predominantly included academic words (such as *overlap, sequence*, and *imply*) and function words (such as *among* and *on*). These words cannot effectively indicate TRTs. Therefore, lexical profiling was applied to filter out such academic and function words. However, academic words contained in the Academic Word List (AWL) (Coxhead, 2000) that are commonly used in research writing consist of words that may or may not reflect TRTs. Hence, the AWL needed adjustments to make it suitable for use as a reference word list in this study. Thus, subsequently, words, such as the *attitude*, *practitioner*, and *trend*, with the potential to reflect TRTs were removed from the AWL. In this study, the adjusted AWL, after the completion of modifications, is referred to as the Adjusted Academic Word List (A-AWL). The AntWordProfiler programme (Anthony, 2024a) was used to conduct lexical profiling, with the A-AWL and Function Word List (FWL) (Nation, 2018) serving as the reference word lists. Words that passed through the keyword analysis but did not appear in the A-AWL and FWL would be considered in the subsequent stage.

3.2.1.3 Lemmatisation

In the realm of linguistics and language processing, a lemma pertains to the foundational or canonical manifestation of a word. It represents the form of a word as found in the dictionary and is applied to encompass all inflected forms of that word. For example, both the singular noun *attitude* and its plural form *attitudes* would be lemmatised to be associated with the same lemma, namely *attitude*. Lemmatisation is the procedure of reducing a word to its lemma, entailing the removal of inflections or variations to condense the word to its fundamental or dictionary form. This technique is commonly implemented in natural language processing tasks to standardise and analyse text data, facilitating the identification of relationships and patterns within the language. In the current study, after passing the preceding steps, and before proceeding to judgement-based approach, the keywords were assessed to determine whether they had a technical meaning. If a keyword were identified as technical, it would be retained in the type unit. However, if a keyword was not deemed to be technical, similar words within the same lemma group would be lemmatised.

3.2.2 Judgement-based approach

The use of a corpus-based approach in data analysis facilitates the rapid analysis of a large amount of data and helps organise the data, eliminating irrelevant information. However, language analysis still relies on a judgement-based approach for a comprehensive examination, including the verification of accuracy and the analysis of some data that cannot be done through the corpus-based approach, enhancing the overall precision of the analysis. Hence, after completing the data analysis with the corpus-based approach, the judgement-based approach was used to further analyse the data in the next stage. The judgement-based approach applied in the analysis consisted of two steps: 1) removing common and irrelevant keywords; and 2) categorising themes. More reliable decision-making in both aspects can be achieved by involving experts in the field of tourism business, particularly those with experience in conducting research related to the tourism industry. Therefore, the authors collaborated with a tourism business research expert to review and assess these two aspects. This expert has extensive experience, having published over 20 research papers on tourism business in English and serving as a reviewer for academic research in the field. With this background the expert had a thorough understanding of research methodologies as well as the specialised terms essential for this domain that were instrumental in identifying irrelevant terms and categorising keywords into appropriate themes.

3.2.2.1 Removing common and irrelevant keywords

General and irrelevant keywords were excluded to enhance the precision of the analysis as they did not contribute value to the examination (António & Rita, 2023). In this context, the term 'common' does not refer to keywords in general contexts but rather denotes common keywords within the field of tourism, such as the terms *tourism, travel*, and *hospitality*. Furthermore, irrelevant keywords are keywords that do not address trends in tourism but are often used in abstracts, including terms such as *finding, purpose,* and *background*, along with any names of researchers cited in in-text citations within the abstract. However, although this step is termed a judgement-based approach, we recommend conducting a corpus-assisted analysis with the aid of concordance analysis for more in-depth examination because evaluating keywords

without considering the surrounding linguistic context may lead to misinterpretations. Therefore, all the keywords obtained from the previous steps were analysed using the AntConc programme (Anthony, 2024b) to explore concordance lines, complementing the use of a judgement-based approach. Figure 1 shows for an example of using concordance lines to analyse the term '*CRM*'.

Left Context	Hit	Right Context
restaurants and casino. Originality/value Given the increased demand on	CRM	in the hospitality industry, the paper contributes to extend
eratures by investigating antecedents affecting consumers' responses toward the	CRM	in the stigmatized companies or brands.
what has been done in practice to integrate RM and	CRM	compared with the theoretical approach, proposes an integration framework
In recent years, the concept of customer relationship management (	CRM)	has undergone a major change from being a strategy
which is known as social customer relationship management (SCRM) or	CRM 2.0.	Hence, this study develops and proposes a conceptual model
study aims to investigate consumer responses to cause-related marketing (	CRM)	implemented by socially stigmatized industries, especially in fast food
because it seems that there is no systematic RM and	CRM	integration within the Hong Kong hotel industry, relevant decision-
for integration influence the hotel's potential for RM and	CRM	integration. Research Limitations/implications Only the perspectives of revenue
t extent Hong Kong hotels have integrated customer relationship management (	CRM)	into their revenue management (RM) practices at individual customer
and brand loyalty. This paper brings significant contributions to hospitality	CRM	literature and marketing communication theory. It serves as a

Figure 1: Example of concordance lines

3.2.2.2 Categorising theme

Keywords that had undergone all the aforementioned steps were categorised into themes. The current study used a judgement-based approach to classify keywords extracted from research abstracts published annually spanning the period 2013–2022 into five main themes: research topics, research intentions, related concepts, research participants, and research methods. The precise delineation of these five themes was based on the following criteria. Research topics were the primary focus of a study, extending beyond the scope of the remaining four themes, such as *Airbnb* and *agritourism*. Research intentions pertained to the researchers' purposes in conducting the study, which may involve activities such as *investigation* and *evaluation*. Related concepts denoted theories, concepts, or approaches associated with the research, often constituting crucial elements giving rise to each specific study. Research participants consisted of individuals or groups of interest involved in the study, such as *tourists* and *employees*. Research methods encompassed the approaches used in the study, including the research framework applied in the analysis or testing in the research study.

Once keywords had been sorted according to the theme for each year, those within each theme from each year were further scrutinised to determine the TRTs that had endured, continued to attract interest, diminished, or received reduced attention.

4. FINDINGS

In this section, the research results are presented in two parts: 1) the results of the TRAC analysis, which will be described based on the steps involving the use of corpus-based and judgement-based approaches; and 2) the research findings that correspond to the two research questions.

4.1 Keywords derived from TRAC analysis utilising corpus-based and judgement-based approaches

After analysing the data through the various predefined steps, the numbers of keywords by year are shown in Table 2.

Table 2: Keywords derived from TRAC analysis

Approach	Years									
	2013	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**
Corpus-based										
Tokens	70,962	43,471	49,303	122,849	156,347	104,579	187,505	211,195	211,672	194,505
Types	6,678	5,270	5,447	8,538	9,774	7,872	10,131	10,648	11,212	10,984
Keyword analysis	300	300	300	300	300	300	300	300	300	300
Lexical profiling	230	227	224	220	225	218	212	210	214	210
Lemmatisation	199	198	188	184	185	184	172	175	181	173

Table 2: Keywords derived from TRAC analysis (continued)

Approach	Years									
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Judgement-based										
Word removal	108	111	104	101	111	104	99	99	105	98
Research themes										
Research topics	64	73	65	64	75	60	62	60	67	64
Related concepts	12	8	10	5	5	10	7	7	8	8
Research intentions	7	7	8	8	9	9	9	9	8	9
Research participants	16	15	14	14	15	13	14	16	14	14
Research methods	9	8	7	10	6	12	7	7	8	3

Table 2 presents an aggregate of the TRT analysis using both corpus-based and judgement-based approaches. Comparing over the 10-year period, it was evident that research articles have experienced an increase in publications, resulting in a higher number of tokens. Through corpus-based analysis, commencing with keyword analysis, each year yielded 300 keywords selected based on the highest LL values. Table 3 shows examples of the top-20 words with the highest LL values, along with their frequencies in the corpus.

Table 3: Examples of top-20 words with the highest LL values, along with their frequencies

Word type	Frequency	Log likelihood
tourism	1,732	16,879.673
study	1,940	10,513.105
hospitality	708	6,529.115
destination	528	4,453.211
tourists	526	4,193.436
research	1,014	3,893.839
hotel	735	3,585.754
online	375	3,322.758
results	727	3,100.009
findings	480	3,056.564
behaviour	273	2,957.455
customer	488	2,791.929
perceived	410	2,720.875
tourist	370	2,504.034
satisfaction	395	2,476.610
employees	430	2,188.107
hotels	340	2,162.627
model	519	2,024.288
paper	558	1,980.869
brand	309	1,938.060

Subsequently, following the lexical profiling step by filtering A-AWL and FWL words, it was found that the number of keywords from 2013 to 2022 ranged from 210 to 230, which reduced to 172 to 199 after lemmatisation. The next step involved filtering out irrelevant keywords, leaving 98 to 111 keywords related to the study. Then, these keywords were categorised into different themes for each year, revealing that the number of words in the research topics theme was the highest, while related concepts, research intentions, and research methods had similar counts. Notably, research topics had more keywords than other themes, likely due to the diverse focus of research topics compared to other themes.

4.2 RQ1: Which research topics garnered interest in tourism research articles each year from 2013 to 2022?

After obtaining the results from all the aforementioned steps, we categorised all keywords into themes and presented them based on the following sections. The TRT analysis results for each theme in each year are presented based on showcasing the final keywords for each theme. Notably, the comprehensive list of keywords is available in an Appendix.

4.2.1 Research topics

Table 4: Research topics 2013–2022

Year	Keywords
2013	hotel, destination, sustainability, satisfaction, perception, performance, attribute, service, impact, heritage
2014	hotel, destination, sustainability, behaviour, satisfaction, perception, online, environment, impact, marketing
2015	hotel, destination, online, satisfaction, sustainability, perception, behaviour, brand, performance, website
2016	destination, behaviour, satisfaction, hotel, perception, online, sustainability, service, experience, factor
2017	destination, hotel, perception, satisfaction, online, Airbnb, impact, experience, behaviour, relationship
2018	destination, hotel, online, perception, behaviour, satisfaction, impact, brand, experience, sustainability
2019	destination, hotel, online, satisfaction, behaviour, brand, perception, service, impact, loyalty
2020	destination, hotel, online, behaviour, perception, satisfaction, brand, service, Airbnb, attribute
2021	COVID, hotel, pandemic, behaviour, destination, perception, online, impact, satisfaction, sustainability
2022	COVID, behaviour, destination, pandemic, service, perception, hotel, online, brand, Airbnb

As indicated by the research results in Section 4.1, it was evident that *research topics* was the theme with the highest number of keywords, making it impractical to display all keywords in the results table. Therefore, the top-10 keywords with the highest LL values for each year are presented in Table 4, with a noticeable pattern emerging regarding the prevalence of research topics. Furthermore, diverse themes emerged, based on categorising the subjects of interest among international researchers publishing research papers. These themes encompassed: topics related to tourism or service industries, such as *destination*, *heritage*, and *hotel*; concerns related to service providers, such as *performance*, *attributes*, *brand*, *service*, and *impact*; issues pertaining to customers, such as *satisfaction*, *perception*, *behaviour*, *loyalty*, and *experience*; and auxiliary topics such as *sustainability*, *online*, and *website*.

Nevertheless, the highlighted keywords underscored the enduring prominence of TRTs as a recurring top-ranking subject over the ten-year period studied. Furthermore, these TRT-related themes not only signified substantial interest but also served as guiding principles for addressing challenges and advancing global tourism-related initiatives. Notably, in the top-10 keywords with the highest LL values from 2013 to 2022, certain keywords surfaced in 2021 that were particularly intriguing and indicative of the heightened interest in TRTs, such as *COVID* and *pandemic*. This observation underscored the profound impact of the global spread of COVID-19 on the international tourism industry.

In addition to these aspects, the term *Airbnb* (denoting an online platform connecting property owners seeking to rent out their properties, particularly homes or rooms within their homes, with travellers in search of short-term accommodation) garnered attention and was featured prominently as a research topic. The inclusion of *Airbnb* among the forefront research topics underscored its relevance and the potential for researchers to explore its contributions to the tourism sector through studies conducted in various regions or countries.

Nonetheless, there was a plethora of other research topics that have garnered considerable interest. A comprehensive exploration of TRTs, coupled with an analysis of pertinent trends, can inspire researchers to conceive innovative research ideas that align with their specific contexts and countries. Detailed information on TRTs within the *research topics* theme is provided in the Appendix.

4.2.2 Research intentions

Table 5: Research intentions 2013–2022

Year	Keywords
2013	analysis, development, examination, exploration, investigation, survey, test
2014	analysis, development, examination, exploration, investigation, survey, test
2015	analysis, development, enhancement, examination, exploration, investigation, survey, test
2016	analysis, development, enhancement, examination, exploration, investigation, survey, test
2017	analysis, development, enhancement, evaluation, examination, exploration, investigation, survey, test
2018	analysis, development, enhancement, evaluation, examination, exploration, investigation, survey, test
2019	analysis, development, enhancement, evaluation, examination, exploration, investigation, survey, test
2020	analysis, development, enhancement, evaluation, examination, exploration, investigation, survey, test
2021	analysis, development, enhancement, examination, exploration, investigation, survey, test
2022	analysis, development, enhancement, evaluation, examination, exploration, investigation, survey, test

Research intentions pertain to the purposes behind the researchers' study. The comprehensive collection of keywords associated with research intentions over the past decade presented in Table 5 identified

that this theme had the least pronounced changes of the five themes considered. This was because the intentions of most researchers exhibited similar patterns, and the keywords reflecting research intentions encompassed the purposes of researchers in conducting studies. Nevertheless, an interesting observation was that, starting from 2015, researchers began to show increased interest in research aimed at *enhancing* specific aspects. Similarly, in 2017, there was a notable shift towards research genuinely *evaluating* specific matters, leading these keywords to enter the top-300 keywords with the highest LL values. Also notable was that each research project did not necessarily have only one research intention, as many researchers tended to create diverse research works using various formats and research intentions to obtain the most credible research outcomes possible. Therefore, these diverse research intentions could serve as excellent options to assist researchers in designing comprehensive research projects, ensuring a well-structured and reliable research design.

4.2.3 Related concepts

Table 6: Related concepts 2013–2022

Year	Keywords
2013	aesthetic, CAT, CEBs, CSR, CWB, eWOM, LMX, MDV, PPGIS, PPT, TFL, TSL
2014	CRM, CSF, CSR, DBE, DMBE, STTA, TCB, WWOOF
2015	BCTM, CRM, CSR, EMS, ERB, Guanxi, HBPS, SCSAs, TCE, VSB
2016	CRM, CSR, eWOM, LMX, PCSP
2017	CRM, CSR, eWOM, LMX, proximity
2018	competency, CRM, CSR, eWOM, FBMCs, HPWPs, p2p, RSTD, TPB, WOM
2019	CRM, CSR, DMOs, eWOM, p2p, TPB, WOM
2020	CSR, DMOs, DSR, eWOM, p2p, PCSP, prosocial
2021	CBBE, CSR, efficacy, eWOM, holistic, p2p, transformative, WOM
2022	CSR, efficacy, eWOM, GHRM, HRM, p2p, SDGs, transformative

Although there were not necessarily as many keywords associated with related concepts as for research topics, nevertheless, the keywords reflecting related concepts were highly diverse, as shown in Table 6. These concepts served as another factor that effectively reflected TRTs, indicating which concepts were of interest or emerging in each period and could be applied to address issues, promote development, and enhance tourism in various aspects. Some related concepts were versatile and applicable in different situations, potentially yielding positive outcomes, leading to their appearance in more than one year. Examples included *eWOM* (electronic Word of Mouth), *WOM* (Word of Mouth), *p2p* (Peer-to-Peer Accommodation), *CSR* (Corporate Social Responsibility), *CRM* (Customer Relationship Management), and *LMX* (Leader-Member Exchange). Related concepts generally appear in research papers in abbreviated forms due to their often-lengthy full names. The complete names of related concepts are provided in an Appendix. Researchers should consider the enduring nature and versatility of related concepts when designing studies and developing strategies for addressing tourism-related challenges. The recurrence of certain concepts over multiple years suggests their sustained importance, urging further exploration and in-depth investigation.

4.2.4 Research participants

Table 7: Research participants 2013–2022

Year	Keywords
2013	attendee, consumer, customer, employee, frontline, Gen Y, geotraveller, guest, guide, hotelier, manager, operator, stakeholder, tourist, traveller, visitor
2014	Australian, Chinese, consumer, customer, employee, guest, host, hotelier, manager, marketer, stakeholder, tourist, traveller, visitor, voluntourist
2015	Asian, Chinese, consumer, customer, employee, entrepreneur, guest, hotelier, manager, marketer, stakeholder, tourist, traveller, visitor
2016	Chinese, consumer, customer, employee, entrepreneur, frontline, manager, marketer, operator, stakeholder, supervisor, tourist, traveller, visitor
2017	attendee, chef, Chinese, consumer, customer, employee, guest, host, manager, marketer, provider, stakeholder, tourist, traveller, visitor
2018	Chinese, consumer, customer, employee, entrepreneur, frontline, guest, manager, marketer, stakeholder, tourist, traveller, visitor

Table 7: Research participants 2013–2022 (continued)

Year	Keywords
2019	Chinese, consumer, customer, employee, frontline, guest, host, incivility, manager, marketer, stakeholder, tourist, traveller, visitor
2020	Chinese, consumer, customer, employee, entrepreneur, frontline, guest, host, incivility, manager, marketer, provider, stakeholder, tourist, traveller, visitor
2021	Chinese, consumer, customer, employee, entrepreneur, frontline, guest, host, incivility, manager, stakeholder, tourist, traveller, visitor
2022	consumer, customer, employee, entrepreneur, frontline, guest, host, incivility, manager, marketer, policymaker, stakeholder, tourist, traveller

Table 7 provides the keywords associated with research participants, which can be categorised into three major groups: two for those directly involved, consisting of service providers and service users; and one for those indirectly involved. Keywords reflecting research participant trends in the service provider group included *employee, hotelier, marketer, frontline* (worker), *manager, stakeholder, operator, supervisor, chef,* and *host*. Keywords specifying service users as research participants included *Asian, Chinese, consumer, customer, employee, guest, tourist, traveller, visitor,* (event) *attendee, stakeholder*, and *incivility* (customer). The last group was research participants indirectly involved, such as *policymakers* and *stakeholders*. Notably, there was relatively limited research on the group of participants indirectly involved, potentially due to this group being more challenging to control and it being influenced by external factors. However, at the same time, the keywords reflecting research participants indirectly involved underscored their relevance, as they are crucial factors that can address and develop various issues. Researchers can recognise the value of investigating all participant groups comprehensively, considering both direct and indirect involvement, to gain a holistic understanding of the dynamics within the tourism industry. This insight could guide the design of inclusive studies that contribute to more effective strategies for enhancing tourism experiences and resolving related challenges.

4.2.5 Research methods

Table 8: Research methods 2013–2022

Year	Keywords
2013	CFA, interview, LESI, logit, model, PLS-SEM, questionnaire, regression, ZMET
2014	interview, model, quantitative, questionnaire, RETS, RevPAR, VEP, sample
2015	CTR, interview, model, quantitative, questionnaire, regression, sample
2016	CFA, conjoint, interview, IPA, model, quantitative, questionnaire, regression, sample, SEM
2017	CFA, interview, model, questionnaire, regression, sample
2018	Bayesian, fsQCA, interview, model, netnography, PLS-SEM, quantitative, questionnaire, regression, RevPAR, sample, systematic
2019	content, interview, model, PLS-SEM, quantitative, regression, sample
2020	CFA, interview, model, PLS-SEM, quantitative, regression, sample
2021	content, fsQCA, interview, model, PLS-SEM, quantitative, regression, sample
2022	interview, model, quantitative

Table 8 illustrates them any popular keywords used in data analysis within research methods, including *CFA* (Confirmatory Factor Analysis), *PLS-SEM* (Partial Least Squares Structural Equation Modelling), *interview*, *model*, *quantitative* (method), *questionnaire*, *regression* (analysis), and *sample*. In addition, there were some interesting data analysis methods that although not consistently ranked in keyword analysis in recent years, provided valuable alternative options for research methodology. Examples included *LESI* (Lodging Executives Sentiment Index), *logit* (model), *ZMET* (Zaltman Metaphor Elicitation Technique), *RETS* (Resident Empowerment through Tourism Scale), *SEM* (Structural Equation Modelling), *fsQCA* (Fuzzy-set Qualitative Comparative Analysis), *Bayesian* (method), netnography, *VEP* (Volunteer-Employed Photography), and *content* (analysis).

One notable observation was that the number of research methods in 2022 was considerably lower compared to previous years. Upon examining the keyword analysis data, it became evident that keywords reflecting research methods still appeared in 2022, much like in preceding years. However, their LL values were not sufficiently high to place these keywords within the top-300 rankings. This may have resulted from certain keywords being within the top-300 but excluded because they did not align with TRTs. Examples included Gregorian calendar years, such as 2020 (ranked 137th), 2019 (ranked 203rd), 2021 (ranked 211th),

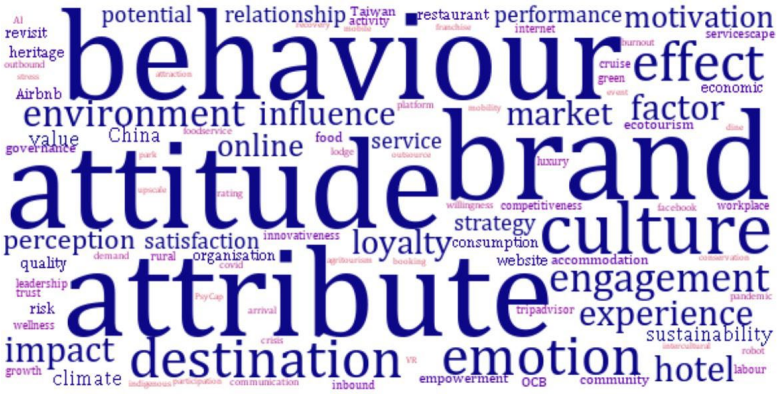
and 2018 (ranked 214th). The appearance of these Gregorian calendar years led to the exclusion of certain keywords reflecting research methods that had been present in previous years from the top-300 rankings. Consequently, these keywords reflecting research methods were not included in the final keyword set.

The implications of this observation suggest a potential shift in research method focus or a change in keywords over the years. Researchers should consider the evolving landscape and adapt their methodologies accordingly. This underscores the importance of refining research methodologies and staying attuned to evolving trends in the tourism field.

4.3 RQ2: What are the top 10 research topics, research participants, and research methods that have received attention and are part of TRTs in the past 10 years (2013–2022)?

After obtaining the keywords for each theme in each year, we summarised the final set of keywords to obtain an overview of which keywords frequently had appeared in TRTs over the past decade. The results of this summarisation are shown in Figure 2 based on corpus-based and judgement-based approaches.

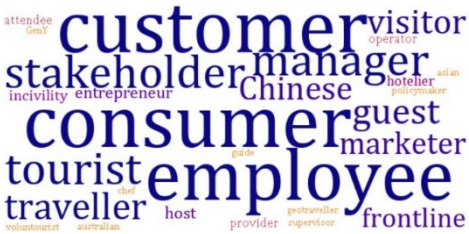
Research topics



Research intentions

Related concepts

Research participants



Research methods

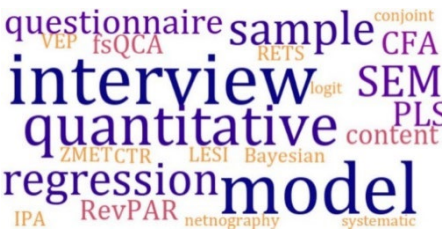


Figure 2: Overall TRTs 2013–2022

The summary of TRTs, segmented by themes during 2013–2022, was portrayed in word clouds, in which larger-sized keywords signify a greater prevalence in TRTs over these years. In summary, the keywords that had garnered major interest over the past 10 years for each theme were as follows. For the research topics theme, TRTs had considerable attention, especially in keywords such as *attribute*, *attitude*, *behaviour*, and *brand*. For the research intentions theme, the keywords drawing considerable interest were *analysis*, *development*, and *examination*. Related concepts attracting attention in research included *eWOM*, *CRM*, *CSR, WOM*, *LMX*, *TPB*, *p2p*, *PCSP*, and *DMOs*. Participants receiving substantial interest in research encompassed *customer*, *consumer*, *employee*, *stakeholder*, *tourist*, and *manager*. Lastly, commonly used research methods included *interview*, *model*, *quantitative*, *SEM*, and *regression analysis*.

From all the themes, research topics emerged as the theme with the highest number of keywords, ranging from 60 to 75 terms. In addition to the keywords shown in Table 4, there are also many other interesting terms, such as *culture, engagement, emotion, value, risk, crisis, growth*, *climate* and various trends in tourism research. These included *cruise*, *event*, *TripAdvisor*, *agritourism*, *green tourism*, *wellness tourism*, *AI*, *Facebook*, *robot*, *internet*, and *innovativeness*. These terms effectively reflected TRTs over the 10 years, indicating the continuous development and introduction of new and interesting topics. The field of tourism research remained updated to meet the demands of the times, allowing researchers to study and apply the insights gained from these TRT developments to address the challenges or situations in their respective countries.

Novice researchers or those with limited research experience can delve into the findings of this research and start by developing research projects within TRTs that have previously gained popularity. This is because research works concerning TRTs have become popular and so are abundant and can be easily located, read, studied, and referenced. For experienced researchers, we recommend concentrating on less-discussed aspects of TRTs and launching research in those specific areas. This would broaden the boundaries of knowledge and understanding related to these less-explored aspects of TRTs, thereby contributing to new insights in academia and research. Additionally, such efforts would fortify the existing knowledge and understanding of research in the field of tourism business, offering more valuable contributions.

5. DISCUSSION, STUDY LIMITATIONS, AND RECOMMENDATIONS

5.1 Discussion

Within the domain of tourism research, TRTs serve as a valuable instrument for informing researchers about the present trends and insights related to issues presented for resolution. Furthermore, such research identifies challenges that require more sophisticated solutions. In addition, knowledge of TRTs aids in the anticipation of potential challenges within the realm of tourism, as well as presenting alternatives for research method analysis, emphasising the use of corpus-based and judgement-based approaches (which are linguistic methods and are more straightforward for analysis compared to statistical methods), in addition to systematic reviews (Ma & Kim, 2014; Phoocharoensil, 2023) or bibliometric analysis (Ali et al., 2019; António & Rita, 2023; Cai et al., 2024; Nusair, 2020; Park & Park, 2017; Yang et al., 2023). This proves advantageous for researchers or individuals interested in studying RTs without an extensive background in advanced statistics.

Rather than advocating for the use of just one approach, the current study supports the integration of corpus-based and judgement-based approaches to achieve maximum efficiency and credibility in analysis. This arises from the recognition that relying solely on either a corpus-based or a judgement-based approach is inadequate for comprehensive data analysis due to the inherent limitations of each method. A corpus-based approach utilises authentic, empirical data obtained from texts or spoken language to identify patterns, frequencies, and usage in real-world contexts (Baker, 2006; Dang, 2020; Scott & Tribble, 2006). While this method provides valuable insights into actual language use, it has its shortcomings. Often, corpus analysis necessitates interpretation, with its purely data-driven nature perhaps failing to account for contextual, pragmatic, or semantic intricacies that are essential in certain analyses. In contrast, a judgement-based approach relies on the intuition of researchers or the expertise of specialists to explore language phenomena (Wood, 2020). This method is particularly advantageous for examining theoretical constructs, rare forms, or hypothetical scenarios that may not be represented in a corpus (Meunier, 2020). However, it is susceptible to subjective biases, as individual interpretations may not consistently reflect broader linguistic patterns or norms (Wray, 2002). Furthermore, often it lacks empirical validation, which can raise questions about the generalisability of its findings. Additionally, when dealing with large datasets, a judgement-based approach can become excessively demanding, potentially overwhelming researchers and impacting the consistency of their analysis (Nation, 2016). By combining the corpus-based and judgement-based approaches, their respective limitations can be mitigated. Corpus datasets offer a solid empirical foundation, anchoring analysis in real-world usage, while judgement-based insights provide depth, particularly in cases where corpus evidence is limited or ambiguous. For example, corpus data can reveal usage trends, which then can be further refined and interpreted through expert judgement to better understand their implications. Conversely, initial hypotheses generated through judgement-based methods can be tested and validated using corpus data to ensure their accuracy and relevance. Thus, researchers can achieve a more balanced, reliable, and detailed understanding by integrating these approaches.

Based on the research findings from the current study, research topics emerged as the theme with the highest number of keywords, leading to the presentation of the top-10 keywords with the highest LL values for each year. The analysis of these top keywords revealed a discernible pattern in the prevalence of research topics, showcasing diverse themes related to tourism and service industries, service providers, customer

concerns, and auxiliary topics. Despite there was clear diversity in the persistent prominence of TRTs as a recurring top-ranking subject over the ten years. These TRT themes not only reflected substantial interest but also served as guiding principles for addressing challenges and advancing global tourism-related initiatives. Overall, the current research not only captured the evolving landscape of research topics in tourism but also shed light on the enduring relevance of TRTs and emerging areas of interest, particularly influenced by global events such as the COVID-19 pandemic. Research intentions (the purposes behind a study) were the theme with the least changes among the five themes studied over the past decade. This stability stemmed from similar patterns in researchers' intentions, reflected in the associated keywords. Notably, since 2015, there has been an increased popularity in research intentions, with some concepts, such as enhancement and evaluation, entering the top-300 keywords. The analysis revealed that related concepts played a vital role in capturing the dynamic landscape of TRTs, offering versatile and enduring elements that contributed to the ongoing discourse. Their recurrent presence and adaptability underscored their relevance in shaping research and in understanding the evolving dimensions of tourism. The analysis of research participants revealed distinct groups, with direct participants (service providers and users) receiving more attention than those indirectly involved. While the latter group presents challenges in terms of research control, the identified keywords highlighted their importance in addressing and developing solutions for various issues. In terms of popular keywords in research methods and data analysis, common keywords included CFA, PLS-SEM, interview, model, quantitative, questionnaire, regression, and sample. Additional methods, such as LESI, logit, ZMET, RETS, SEM, fsQCA, Bayesian, netnography, VEP, and content analysis, offered diverse alternatives in research methodology. Researchers should consider these findings in their approach to designing studies, adapting methodologies, and staying attuned to changing trends in the field.

The current study can be regarded as interdisciplinary research since it used a corpus-based approach, which is a linguistic research method, to analyse data in the field of tourism business research. This constitutes a cross-disciplinary approach, wherein one discipline is utilised to benefit another, serving as a bridge between one discipline and another, offering perspectives for scholars and researchers from different disciplines to learn about both the scientific and linguistic methodologies. This approach not only fosters interdisciplinary learning but also provides insights into how scientific and linguistic methods can be beneficially applied across various academic disciplines. Therefore, researchers from various fields can use the corpus-based approach as an alternative method to trace the RTs in their respective disciplines.

5.2 Study limitations

The primary limitation of this study was the data collection timeframe, as the target journals analysed were those published between 2013 and 2022. This decision was made because the 2023 journals had not yet appeared in SCImago at the time of data collection. While SCImago updated its records to include all Scopus-indexed journals in April 2024, the research abstracts analysed in the current study were restricted to publications available prior to this date. Another limitation was that due to the work undertaken in move analysis that examined the move structures of a substantial number of abstracts, it was evident that the moves or components present in these abstracts varied. For example, some abstracts consisted of a brief background and the importance of the study, its purposes, research methodology, results, and implications, while others only presented objectives, results, and implications (Bhatia, 1994; Hyland, 2000; Martin, 2003; Swales, 1990). Consequently, the three crucial factors analysed in this research, research topics, research participants, and research methods may not have all appeared in every abstract examined in this study. However, a condition set for the selection of abstracts that required them to include all three components may have resulted the exclusion of a substantial number of abstracts and hindered the reflection of important TRTs. Therefore, this research opted to collect the abstracts of all research articles that had been published within specified journals and time frames to obtain the most comprehensive data reflecting TRTs.

5.3 Recommendations for further studies

Future researchers should be encouraged to extend the data collection timeframe to include more recent publications, particularly those indexed after 2023. By incorporating the latest records available in SCImago, studies can ensure a more up-to-date and holistic analysis of research trends and practices. Furthermore, adopting a dynamic approach to data collection, such as integrating rolling updates of indexed journals, could provide a continuous and accurate reflection of developments in academic publishing. Second, to overcome the variability in the move structures of abstracts, future studies should consider designing methodologies that categorise abstracts based on the presence or absence of specific components. For example, separate analyses could be conducted for abstracts that included all three crucial components research topics, participants, and methods and for those that do not. Such an approach would allow for a nuanced understanding of how different structural patterns impacted the analysis of trends and thematic representations. Lastly, researchers could analyse TRTs in specific regions to compare their own TRTs with

global trends. Additionally, the comparative advantage of analysing RTs through abstracts instead of full-text articles lies in the language used. For example, if a research article is published nationally, the language may be either English or the native language of that national journal. However, the common requirement for research articles published at both the national and international levels is that the abstract must be written in English. This ensures that researchers in the future can use corpus-based and judgement-based approaches to analyse abstracts for tracing RTs in various fields.

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APPENDIX

Keywords	Explanation	Year(s)
Research topics		
accommodation		2014–2015, 2017, 2019–2021
activity		2013, 2015–2018
adventure		2013
agritourism		2017, 2021
AI	Artificial Intelligence	2020–2022
Airbnb		2013, 2017–2022
arrival		2017–2019
attitude		2013–2022
attraction	Tourist attraction	2016–2017
attribute	Destinations' attributes	2013–2022
Australia		2014
behaviour		2013–2022
benchmark		2015
blog		2014
booking		2015, 2022
brand		2013–2022
burnout		2015, 2019, 2021
BYOB	Bring-Your-Own-Bottle	2013
career		2015
casino		2017
China		2013–2021
climate	Climate change	2013, 2015–2022
CO2		2014
coastal		2014
communication		2016, 2021, 2022
community		2013–2014, 2016–2018, 2022
competitiveness		2015–2019
conservation		2014, 2017
consumption		2013–2017, 2019–2022
coronavirus		2021
covid		2020–2022
crisis		2013, 2021–2022
crowdfunding		2020
cruise		2014, 2016–2018, 2021
culture		2013–2022
demand	Tourism demand	2014, 2016–2017
destination		2013–2022
digital		2022
dine		2021–2022
disability		2013
economic		2013–2018, 2020
ecosystem		2022
ecotourism		2013, 2015–2018, 2022
effect		2013–2022
emission		2014
emotion		2013–2022
empowerment	Employee empowerment	2013–2014, 2016–2017, 2020–2022
engagement		2013–2022
environment		2013–2022
ethic		2017
event		2017, 2021
experience		2013–2022
Facebook		2015–2016, 2020
facilitator	Tourism facilitator	2015
factor		2013–2022
fairness	Price fairness	2013
familiness		2014
festival		2017
flamenco		2014
food		2016–2017, 2019–2022
foodservice		2013, 2017, 2022
frame		2022
franchise		2017, 2019

Keywords	Explanation	Year(s)
game		2013
gastronomy		2022
geopark		2014
governance		2013–2015, 2017–2018, 2022
green		2014, 2018, 2021–2022
growth		2014–2015, 2017–2018
Halal		2019
HEFP	Hotel eco-friendly programs	2014
heritage		2013, 2015–2021
homestay		2014
hotel		2013–2022
HR	Human Resource	2015
impact		2013–2022
inbound		2014, 2017–2019, 2021
indigenous		2013, 2016
influence		2013–2022
innovativeness		2016–2019, 2022
Instagram		2021
intercultural		2014–2015
internet		2013–2016
interpersonal		2015
labour		2013, 2016–2017, 2019
landscape		2013
leadership		2019–2022
local		2017
lodge		2013, 2019–2020
loyalty		2013–2022
luxury		2016, 2018–2019, 2021
Malaysia		2017
mall		2014
market		2013–2022
midscale		2015
mistreatment		2022
mobile		2015–2016
mobility	Tourism mobility	2013–2014
motivation		2013–2022
MTES	Memorable Tourism Experience Scale	2014
OBSE	Organisation-Based Self-Esteem	2021
OCB	Organisational Citizenship Behaviour	2013, 2015–2016, 2019, 2021–2022
OCBE	Organisational Citizenship Behaviour for the Environment	2018
Oktoberfest		2014
online		2013–2022
organisation		2014–2022
OTA	Online Travel Agents	2013
outbound		2014–2016
outsource		2014–2015
overtourism		2020
pandemic		2020–2022
park		2014, 2017
participation		2013, 2017
perception		2013–2022
performance	work performance	2013–2022
placelessness		2014
plan		2014
platform		2020–2022
potential		2013–2022
price		2019
proactivity		2015
PsyCap	Psychological Capital	2017, 2019
PUF	Park User Fees	2013
QOL	Quality of Life	2016
quality		2014–2022
QWL	Quality of Work Life	2015
rating	hotel rating	2018–2020
recovery		2014, 2022
relationship		2013–2022
resort		2015
restaurant		2013, 2016–2022

Keywords	Explanation	Year(s)
revisit		2015–2022
risk		2013–2014, 2017–2022
robot		2020–2022
rural		2014–2015, 2017–2018
safety		2013
satisfaction		2013–2022
service		2013–2022
smartphone		2016
SNSs	Social Network Sites	2016
spa		2014
strategy		2013–2022
stress		2015, 2021
sustainability		2013–2022
Taiwan		2013–2018
talent		2019
TM	Talent Management	2019
TripAdvisor		2017–2018, 2020–2021
trust		2013, 2017–2019
twitter		2018
UGC	User-Generated Content	2018
upscale		2014–2015
value		2013–2022
VR	Virtual Reality	2020, 2022
website		2013–2021
wellbeing		2021–2022
wellness		2013–2014, 2020–2021
willingness		2016, 2019–2020
winery		2016
workplace		2013, 2016, 2019–2022
WTP	Willing to Pay	2017
Research intentions		
analysis		2013–2022
development		2013–2022
enhancement		2015–2022
evaluation		2017–2020, 2022
examination		2013–2022
exploration		2013–2022
investigation		2013–2022
survey		2013–2022
test		2013–2022
Related concepts		
aesthetic	Aesthetic approach	2013
BCTM	Business Cycle of Tourism Market	2015
CAT	Cognitive Appraisal Theory	2013
CBBE	Consumer-Based Brand Equity	2021
CEBs	Customer Engagement Behaviours	2013
competency	Competency models	2018
CRM	Customer Relationship Management	2014–2019
CSF	Critical Success Factors	2014
CSR	Corporate Social Responsibility	2013–2022
CWB	Counterproductive Work Behaviours	2013
DBE	Destination Brand Experience	2014
DMBE	Destination Management And Business Effectiveness	2014
DMOs	Destination Management Organisations	2019–2020
DSR	Destination Social Responsibility	2020
efficacy	Self-efficacy	2021–2022
EMS	Environmental Management System	2015
ERB	Environmentally Responsible Behaviour	2015
eWOM	Electronic Word of Mouth	2013, 2016–2022
FBMCs	Facebook Marketing Campaigns	2018
GHRM	Green Human Resource Management	2022
Guanxi		2015
HBPS	Hotel Brand Portfolio Strategy	2015
holistic	Holistic approach	2021
HPWPs	High-Performance Work Practices	2018
HRM	Hotels Response Management	2022

Keywords	Explanation	Year(s)
LMX	Leader-Member Exchange	2013, 2016–2017
MDV	Multidimensional Value	2013
p2p	Peer-To-Peer Accommodation	2018–2022
PCSP	Proactive Customer Service Performance	2016, 2020
PPGIS	Public Participation Geographic Information System	2013
PPT	Pro-Poor Tourism	2013
prosocial	Prosocial behaviour	2020
proximity	Proximity tourism	2017
RSTD	Residents Support For Tourism Development	2018
SCSAs	Self-Contained And Serviced Apartments	2015
SDGs	Sustainable Development Goals	2022
STTA	Strata Titled Tourism Accommodation	2014
TCB	Tourist Citizenship Behaviours	2014
TCE	Transaction Cost Economics	2015
TFL	Transformational Leadership Styles	2013
TPB	Theory of Planned Behaviour	2018–2019
transformative	Transformative tourism	2021–2022
TSL	Transactional Leadership Styles	2013
VSB	Variety-Seeking Behaviour	2015
WOM	Word of Mouth	2018–2019, 2021
WWOOF	World Wide Opportunities on Organic Farms	2014
Research participants		
Asian		2015
attendee	event/convention attendee	2013, 2017
Australian		2014
chef		2017
Chinese		2014–2021
consumer		2013–2022
customer		2013–2022
employee	hospitality employees	2013–2022
entrepreneur		2015–2016, 2018, 2020–2022
frontline	frontline employee	2013, 2016, 2018–2022
GenY		2013
geotraveller		2013
guest		2013–2015, 2017–2022
guide		2013
host		2014, 2017, 2019–2022
hotelier		2013–2015
incivility	incivility customer	2019–2022
manager		2013–2022
marketer		2014–2022
operator		2013, 2016
policymaker		2022
provider		2017, 2020
stakeholder		2013–2022
supervisor		2016
tourist		2013–2022
traveller		2013–2022
visitor		2013–2021
voluntourist		2014
Research methods		
Bayesian	Bayesian approach	2018
CFA	Confirmatory Factor Analysis	2013, 2016–2017, 2020
conjoint	Conjoint analysis	2016
content	content analysis	2019, 2021
CTR	Click Through Rate	2015
fsQCA	Fuzzy-set Qualitative Comparative Analysis	2018, 2021
interview		2013–2022
IPA	Importance Performance Analysis	2016
LESI	Lodging Executives Sentiment Index	2013
logit	Logit model	2013
model		2013–2022
netnography		2018
PLS-SEM	Partial Least Squares Structural Equation Modelling	2013, 2018–2022
quantitative		2014–2016, 2018–2022
questionnaire		2013–2018

Keywords	Explanation	Year(s)
regression	Regression analysis	2013, 2015–2021
RETS	Resident Empowerment through Tourism Scale	2014
RevPAR	Revenue Per Available Room	2014, 2018
sample		2014–2021
SEM	Structural Equation Modelling	2016
systematic	Systematic analysis	2018
VEP	Volunteer-Employed Photography	2014
ZMET	Zaltman Metaphor Elicitation Technique	2013