

TOURISTS' ENVIRONMENTALLY RESPONSIBLE BEHAVIOR : A SYSTEMATIC LITERATURE REVIEW

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Abstract:

Tourism is one of the main subjects of environmentally responsible behavior (ERB). This study presents a systematic analysis of 80 research papers on tourists' environmentally responsible behavior (TERB) in the Scopus database from 2014 to 2023. The findings indicate that scholars from diverse disciplines are actively engaged in TERB research, with a particular emphasis on nature-based scenic destinations. Notably, Chinese scholars demonstrate considerable attention towards this subject matter. Keyword co-occurrence analysis reveals that researchers primarily concentrate on environmentally responsible behavior, destination social responsibility, and place attachment. Quantitative methods dominate as the primary research approach, with unidimensional analyses being most prevalent. In terms of theoretical frameworks conducted by scholars, Theory of Planned Behavior (TPB) and Stimulus-Organism-Response theory (S-O-R) emerge as the two most frequently utilized theories. Internal factors are identified as the primary determinants influencing TERB outcomes. Finally, the future research direction of this study is prospected.

Keywords: tourists' environmentally responsible behavior; systematic review; antecedent; dimension

Introduction

The rapid growth of tourism has provided opportunities for economic and social development in many countries, but it has also damaged the environment and natural resources of tourist destinations (Aziz & Niazi, 2023; Han et al., 2023). The subjects of environmental responsibility behavior in the context of tourism can be tourists (Aziz & Niazi, 2023), residents (Wang, Y., et al., 2023), entrepreneurs (Tuan, 2018) or tourism employees (Ye et al., 2022). According to the survey, most of the environmental problems in tourist destinations are caused by the ignorant behaviors of tourists, such as littering, trampling, feeding animals, picking flowers, etc. (Han et al., 2023), and have become a serious environmental crisis faced by tourist destinations in developing countries (Fenitra et al., 2022). Tourists are one of the main bodies of tourist attractions, and also the main stakeholders of sustainable development and environmental management of

tourist sites. Studies have shown that tourists' environmentally responsible behavior (TERB) plays an important role in improving the environmental quality of tourist destinations, promoting the protection of natural resources in tourist destinations, enhancing the protection of historical and cultural monuments in tourist destinations, and realizing the sustainability of tourist destinations (Sangkhaduang et al., 2023; Patwary, 2023). Therefore, TERB has become a hot topic discussed by tourism destination managers and tourism researchers (Xu et al.,2022; Sthapit et al.,2023; Aziz et al.,2023).

Based on the analysis of relevant literatures on TERB, this paper expounds the research overview of TERB, clarifies the research methods and theoretical progress of TERB, summarizes the measurement and antecedents of TERB, and puts forward the possible research directions in the future. It is hoped to provide theoretical reference and guidance for the future research of interested scholars. At the same time, it provides the knowledge base for governments and managers to formulate appropriate policies.

The definition of TERB

In 1971, Borden and Schettino first introduced the concept of "environmentally responsible behavior"(ERB), which refers to the actions taken by individuals or groups to solve environmental problems. Sivek and Hungerford(1990) extend this definition, arguing that environmentally responsible behaviour (ERB) should be a series of actions taken by individuals or groups to reduce the use of natural resources in order to promote the sustainable use of natural resources. The concept of tourist' environmentally responsible behavior (TERB) comes from the concept of environmental responsible behavior (ERB) in environmental psychology, which refers to a series of behaviors that tourists take the initiative to implement in tourism activities in order to reduce the negative impact on the environment, promote the sustainable use of resources, and do not disturb the ecosystem and biosphere (Lee et al., 2013). TERB is also considered to be an act by tourists that contributes to the protection of the environment and the well-being of the destination during their trip. It requires visitors to have a strong sense of responsibility for the local natural and human environment (Li et al.,2023) in order to prevent or at least minimize adverse impacts on the destination environment, thereby benefiting the environment (Wu et al.,2022).Similar concepts in other disciplines or fields include tourist pro-environment behavior, tourist environment-friendly behavior, tourist environmental protection behavior, tourist eco-friendly behavior, tourist eco-civilization behavior and tourist sustainable behavior (Wang, G., 2023).

Method

A systematic review is a scholarly synthesis of evidence on a well-defined topic using a critical approach (Saini & Shlonsky, 2012). A "systematic review", also known as a "research synthesis", aims to provide a comprehensive and unbiased synthesis of many relevant studies in one document (Aromataris & Pearson, 2014). Systematic reviews are thus more precise than narrative reviews (Mays et al., 2005). In recent years, systematic reviews have also been commonly used to analyse

tourism literature, such as tourism innovation (Gomezelj, 2016), rural tourism (Rosalina et al., 2021), and memorable experience tourism (Hosseini et al., 2023).

In the keyword search in Scopus("environmentally responsible behaviour" and "tourism" in the field of titles) for the period 2014-2023, a total of 80 peer-reviewed articles were found. Using these 80 peer-reviewed articles as the data source, this study systematically analysed TERB in publication term, journal, first author's region, keywords, research context, research methodology, research theories, and related research content (dimensions and measurements, antecedents).

Three analytical methods were used in this review. Qualitative analysis was used to identify the main points of the study. The year of publication, the journal of publication, the region of the first author, the research context, the research method, and the research theory were analyzed with frequency analysis. Keyword co-occurrence analysis was performed by software of VOSview.

Results

Published papers.

Published papers by year.

Figure.1 shows the number of published papers about TERB in the last ten years (2014-2023). From Figure.1, during 2014-2023, the number of publicly published high-level papers in this field shows a growing trend on the whole, and in particular, the number of published papers in 2022 and 2023 accounted for 40% in the past decade, indicating that people's interest in this research field continues to increase.

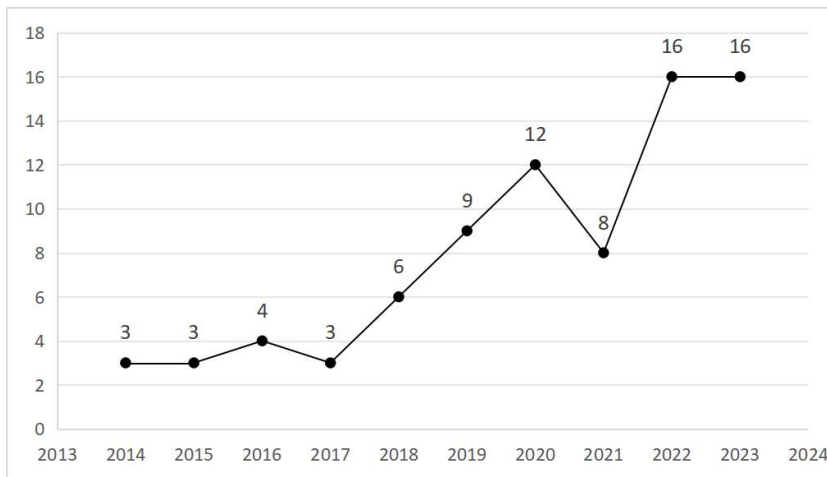


Figure.1 Number of published papers about TERB (data from Scopus)

Published papers by journal.

Table.1 presents the published papers on TERB by journal for the period from 2014-2023. 45 papers were published in tourism journals and 35 in non-tourism journals. The highest number of

publications in tourism journals is in the Journal of Sustainable Tourism, followed by Tourism Management Perspectives and Journal of Hospitality and Tourism Management.

Table 1. Number of published papers on TERB by journal

Publication	Journal	N	Percent
Tourism journal	Journal of Sustainable Tourism	9	11.25%
	Tourism Management Perspectives	4	5.00%
	Journal of Hospitality and Tourism Management	4	5.00%
	Journal of Travel Research	3	3.75%
	Journal of Destination Marketing & Management	3	3.75%
	Tourism Management	2	2.50%
	Journal of Travel & Tourism Marketing	2	2.50%
	Journal of Outdoor Recreation and Tourism	2	2.50%
	Asia Pacific Journal of Tourism Research	2	2.50%
	Worldwide Hospitality and Tourism Themes	1	1.25%
	Visitor Studies	1	1.25%
	Tourism Recreation Research	1	1.25%
	Tourism in Marine Environments	1	1.25%
	Tourism Geographies	1	1.25%
	Tourism and Hospitality Management	1	1.25%
	Leisure Sciences	1	1.25%
	Journal of Tourism and Cultural Change	1	1.25%
	Journal of Outdoor Recreation and Tourism	1	1.25%
	Journal of Ecotourism	1	1.25%
	International Journal of Tourism Research	1	1.25%
International Journal of Geoheritage and Parks	1	1.25%	

	In Sport Tourism and Sustainable Destinations	1	1.25%
	Current Issues in Tourism	1	1.25%
No-tourism journal	Sustainability	12	15.00%
	Forests	2	2.50%
	Frontiers in Psychology	2	2.50%
	Journal of Cleaner Production	2	2.50%
	Behavioral Sciences	1	1.25%
	Sage Open	1	1.25%
	Plos One	1	1.25%
	International Journal of Sustainable Development and Planning	1	1.25%
	Social Responsibility Journal	1	1.25%
	Environmental Science and Pollution Research	1	1.25%
	Frontiers in Environmental Science	1	1.25%
	Marine Policy	1	1.25%
	Earth and Environmental Science	1	1.25%
	Land	1	1.25%
	Business Strategy & Development	1	1.25%
	Journal of Business Research	1	1.25%
	Global Ecology and Conservation	1	1.25%
	Management Science Letters	1	1.25%
	Journal of Environmental Management	1	1.25%
	Environmental Technology and Management	1	1.25%
	Science of the Total Environment	1	1.25%

The first author of the published papers by region

Figure.2 illustrates the regions of the first authors who studied TERB. As to the figure below, researchers from 18 countries and regions in the world have participated in TERB research as first authors, and the region with the largest number of participants in this field is China, with 39 participants, accounting for 48.75%. The second is South Korea, with 8 participants, accounting for 10.00%.

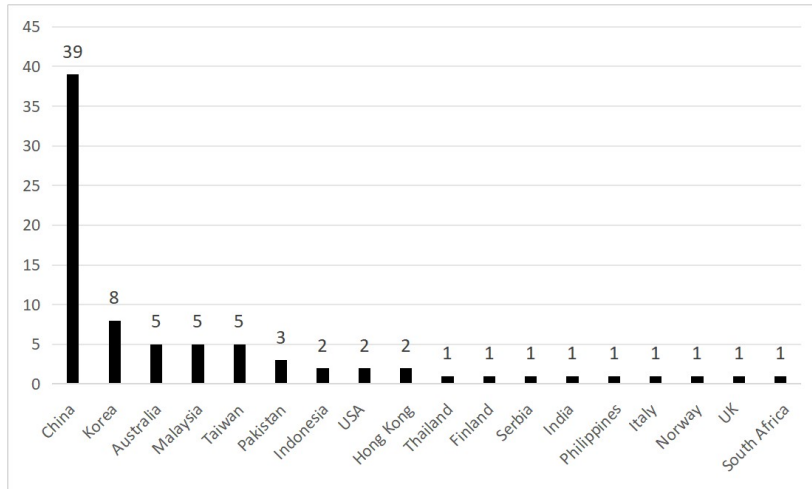


Figure.2 The first author of the published papers by region

Published papers for each author.

Table.2 shows authors who have published more than 3 papers in the field of TERB. The most published authors are Han Heesup from Korea and Morrison Alastair M. from UK.

Table 2. Published papers over 3 for author in TERB.

Rank	Author	Documents
1	Han Heesup	4
2	Morrison Alastair M.	4
3	Sial Muhammad Safdar	3
4	Ahmad Naveed	3
5	Chang Wang	3
6	Jinhe Zhang	3
7	Lujun Su	3

Trends in keywords

The present study conducts co-occurrence analysis to examine the usage trend of TERB-related keywords basing on VOSviewer software (Figure.3). The findings reveal that environmentally responsible behavior, destination social responsibility and place attachment are frequently conducted by scholars between 2014 and 2023. Table.3 lists the keywords were used more than 5 times in the selected literature.

Table 3. The keywords used more than 5 times in TERB.

Rank	Keyword	Occurrences	Total linkstrength
1	environmentally responsible behavior	50	227
2	place attachment	12	61
3	destination social responsibility	12	53
4	tourists' environmentally responsible behavior	8	35
5	China	5	27
6	environmental attitude	5	25
7	nature-based tourism	5	25

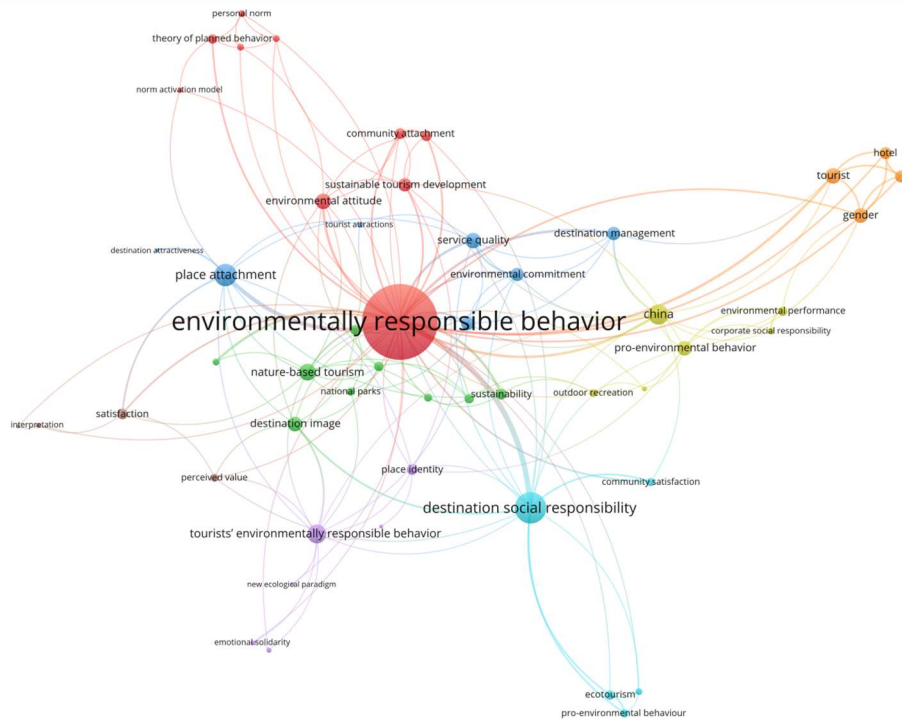


Figure 3. Co-occurrence analysis on the trend of keywords in TERB

Research context

The study context of TERB is illustrated in Figure.3, encompassing National Nature Reserves and National Parks, nationwide or regional areas, coastal and island destinations, cultural destinations, as well as other categories such as sports events, music festivals, community-based destinations, and theme parks. Notably, over one-third of these studies focused on National Nature Reserves and National Parks.

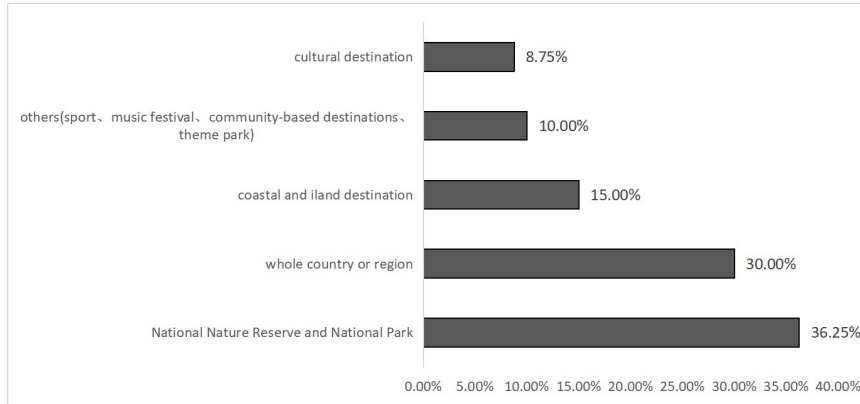


Figure.4 Research context on TERB

Research methodology

Figure.5 provides the methodology used in the TERB study. According to following figure, the research mainly relied on quantitative methods (N = 69), accounting for 86.25%. Quantitative research uses surveys to collect data, and then uses relevant software to analyze the data. The research mainly relies on SPSS, AMOS and SmartPLS, and a few use Mplus. The second is qualitative research (N = 15), accounting for 8.75%. Interviews and open questionnaires were used to complete the qualitative work. The application of mixed method is still limited (N = 4), accounting for only 5.00%.

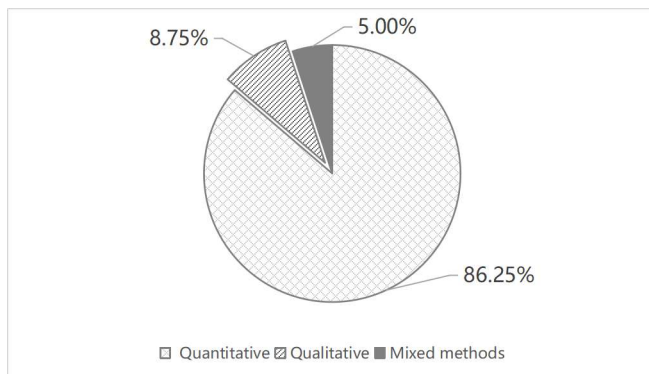


Figure.5 Research methodology on TERB

The theory of TERB

Nearly half of the papers in the research review linked TERB with other theories (Table.4). Commonly used theories are Theory of planned behavior (TPB), Stimulus-organism response theory(S-O-R), The norm activation model (NAM), Cognitive-affective-conative image model and social exchange theory (SET), among which TPB and S-O-R are most commonly used. According to the theoretical classification, the theory mainly involves the fields of psychology, sociology, and consumer behavior.

Table 4. Theories used in TERB.

Theory	N	Examples
Theory of planned behavior (TPB)	10	Sangkhaduang et al.(2023);Patwary (2023);Zhang, Y. et al. (2022);Liu,P.et al.(2022);Saleem et al.(2021);Liu et al.(2019);Wang et al.(2019a); Wang et al.(2019b); Wang et al.(2018);Han & Hyun (2017)
Stimulus-organism-response theory(S-O-R)	8	Qiu et al.(2023);Wei & Zhang(2023);Aziz & Niazi (2023b);Cheng & Chen(2022);Jiang et al.(2022);He et al. (2022); Su et al.(2020);Su & Swanson (2017)
The norm activation model (NAM)	6	Zhang, Y. et al.(2022);Confente & Scarpi (2021);Zhao et al. (2020);Kiatkawsin et al.(2020); Wang et al.(2018);Han & Hyun (2017)
Cognitive-affective-conative model	4	Aziz & Niazi (2023a);Aziz et al.(2023);Liu,J. et al.(2022);Zhang, Q. et al.(2022)
Social exchange theory (SET)	4	Aziz & Niazi (2023b);Tu & Ma (2022);Liu,J. et al.(2022);Li et al. (2021)
The value-attitude -behavior (VAB) theory	2	Wang,G. et al.(2023);Liu et al.(2021)
Self-regulated attitude theory	1	Li et al.(2023);
Reasonable person model	1	Qiu et al.(2022)
Value-action gap and Behavioral reasoning theory	1	Gupta et al.(2022)
Situational cognition theory	1	Cao et al.(2021)

Nudge and value belief norm theories	1	Lee et al.(2021)
Self-congruity theory	1	Li et al.(2020)
The broken windows theory	1	Liu et al.(2019)
Sonsumption values theory	1	Abdullah et al.(2019)
Directed acyclic graph (DAG) theory	1	Han & Oh (2021)
Knowledge-belief-norm	1	Fenitra et al.(2022)

Theory of planned behavior (TPB) used in TERB.

The theory of planned behavior is based on the theory of rational behavior. In 1991, Ajzen introduced the "perceived behavior control" variable and proposed a theory of planned behavior to compensate for the limitations of rational behavior theory. Based on attitudes, subjective norms, and perceived behavioral control, it is possible to predict the intention to perform a certain behavior with high precision, he said. However, an individual's behavioral intention can directly predict his actual behavior (Ajzen, 1980). As the successor of rational behavior theory, planned behavior theory is an important theoretical basis for explaining environmentally responsible behaviors, such as tourists' environmentally responsible behaviors (Panwanitdumrong & Chen, 2021). Research shows that TPB has been applied to understand TPEB in different contexts, such as snorkeling tourism, national forest trails, national park, destination brand engagement and museums, etc. ; moreover, relevant literature also confirmed the positive effects of attitude, norm, and behavior control on TERB (Sangkhaduang et al., 2023; Zhang, Y. et al., 2022; Wang et al., 2019a; Saleem et al., 2021; Han & Hyun, 2017).

Stimulus-organism-response theory (S-O-R) used in TERB.

In 1974, Mehrabian and Russell proposed the stimulus-organic-response (S-O-R) analysis framework, which aims to analyze the behavioral responses and processes of people when stimulated by external environmental factors. The theory holds that external environmental factors (stimuli) can affect a person's internal state (organism), which in turn leads to a person's approach and avoidance behavior (response). The effectiveness of S-O-R has been verified in environmental psychology, consumer behavior, tourism, and other disciplines (Su & Swanson, 2017; Kim et al.,2020). For example, Sangkhaduang et al.(2023) built a comprehensive model of the relationship between tourist source credibility and TERB based on S-O-R theory, taking tourist destination image (cognition and emotion) and place attachment as mediating variable. The results showed

that destination source credibility enhances the cognitive and emotional image, place attachment and TERB.

The norm activation model (NAM) used in TERB.

In 1973, Schwartz proposed the normative activation theory (NAM), which includes three elements: awareness of consequences (AC), ascription of responsibility (AR) and personal norms (PN) (Schwartz, 1977). AC is an individual's awareness of a negative consequence of engaging in (or not engaging in) an action; AR refers to the individual's sense of responsibility for negative consequences; PN refers to the self-expectation of an individual to carry out a specific behavior in a specific situation. NAM was initially used to explain altruistic or pro-social behaviour and was subsequently considered a useful theoretical underpinning for understanding TERB, i.e., "when an individual becomes aware of an adverse consequence to others or the environment (consequence awareness) and ascription responsibility for that consequence to him or herself (attribution of responsibility), the corresponding personal norms are activated and subsequently the pro-social/pro-environmental behaviour" (Gao et al., 2017; Zhang, Y. et al., 2022; Confente & Scarpi, 2021). In the NAM model, the relationship between AC, AR, PN and TERB has been confirmed in the relevant literature. For example, Confente and Scarpi (2021) apply the normative activation theory to tourists' environmentally responsible behavior and prove that responsibility ascription plays a mediating role between the awareness of consequences and TERB. Environmental sensitivity and place attachment play a regulating role between AC, AR and TERB. In heritage tourism, Zhao et al. (2020) confirmed that AC positively affects AR, and both AC and AR have significant positive effects on PN. PN further affects tourist behavior, and personal norms are the most powerful anthems to explain tourists' environmental responsibility behavior.

Cognitive-affective-conative model(CAC) used in TERB.

Cognitive-affective-conative theory suggests that the interaction of cognitive, affective, and conative is an important factor in the formation of certain attitudes and behaviours (Lim & Kim, 2020). This model also has strong explanatory power in tourism environment research, for example, some scholars' studies have considered Gartner's (2012) Cognitive-Affective-Creative DI model to explain TERB. In the context of coastal tourism destinations, affective DI generates emotional attachment to the destination and influences TERB(Aziz et al., 2023); perceived value plays a mediating role between emotional image and TERB, while destination social responsibility plays a moderating role between perceived image and TERB. Therefore, cultivating TERB is the key to maintaining the competitiveness of coastal tourism destinations (Liu, J. et al., 2022).

Social exchange theory (SET) used in TERB.

Homans(1985) pointed out that social exchange theory (SET) is a sociological theory that clarifies the social structure of human behavior and its relationships. The theory states that individuals exchange goods and interact with reciprocity in anticipation of a positive outcome. This theory lays an important theoretical foundation for understanding the influence of destination activities

on tourist behavior. Therefore, SET is a widely used theory in tourism literature (Aziz & Niazi, 2023a). Research has shown (Aziz & Niazi, 2023a) that when visitors are exposed to positive social-emotional interactions at their destination, they behave environmentally responsibly. Therefore, SET theoretically explains the relationship between tourists' positive contact with the residents, emotional solidarity with residents and TERB. Using social exchange theory, Tu and Ma (2022) verified a moderated mediation model, in which gratitude plays a mediating role between positive contact and TERB, while friendliness plays a moderating role between positive contact and TERB.

The antecedence of TERB

Table.5 summarizes the antecedents of TERB. Liu,J. et al. (2022) believed that tourists' environmentally responsible behavior factors can be divided into internal factors (subjective norms, perceived value and satisfaction) and external factors (environmental quality, policies and destination characteristics).The literature review shows that environmental attitude, perceived value, subjective norms, tourism experience, satisfaction, place attachment, environmental knowledge, social responsibility, tourism quality, environmental concern, emotion and perceived behavioral control are the main factors affecting TERB. It can be seen that researchers mostly study the antecedence of TERB from internal factors. And tourism quality is the main external factor affecting TERB.

Table 5. The antecedence of TERB

Antecedence	Examples
environmental attitude	Kil et al.,2014;Lee & Jan 2015;Wang et al.,2018; Wang et al., 2019b; Abdullah et al.,2019;Liu et al.,2019;Kiatkawsin et al.,2020;Go et al.,2022; Sultan et al.,2020;Saleem et al.,2021;Liu et al.,2021;King-Chan et al., 2021;Weng et al.,2022;Sangkhaduang et al.,2023
perceived value	Chiu et al.,2014a;Chiu et al.,2014b;Handriana & Ambara,2016;He et al.,2018;Abdullah et al.,2019;Han,& Oh, 2021;Lee et al.,2021;King-Chan et al.,2021;Xu et al.,2022;Liu,J. et al.,2022;Aziz et al.,2023;Aziz & Niazi,2023a; Aziz & Niazi,2023b
subjective norm	du Preez & Heath, 2018;Wang et al.,2018; Wang et al.,2019b;Liu et al.,2019; Kiatkawsin et al.,2020; Zhao et al.,2020;Wang & Zhang,2020;Go et al.,2022;Saleem et al.,2021;Zhang,Y. et al.,2022;Wang, G. et al.,2023
tourism experience	Lee et al.,2015;Lee & Jan, 2015;Han et al.,2016;Xu et al.,2018;Lee et al.,2021;Cheng, & Chen, 2022;Weng et al.,2022;Zhang,Y. et al., 2022;Sthapit et al.,2023;Wei & Zhang,2023;

satisfaction	Chiu et al.,2014b;Handriana & Ambara,2016;Pan & Liu,2018;He et al.,2018;Cheung et al.,2020;Yin et al.,2021;Wei & Zhang,2023;Kim et al.,2023;Wang,Y. et al.,2023
place attachment	du Preez & Heath, 2018;Alonso-Vazquez et al.,2019;Chow et al.,2019 ; Confente & Scarpi, 2021;Cheng et al.,2021;Xu et al.,2022;Sthapit et al.,2023;Kim et al.,2023;Li et al.,2023
environmental knowledge	Cheng & Wu,2015;Abdullah et al.,2019;Cheung et al.,2020;Gao et al.,2021;King-Chan et al.,2021;Go et al.,2022;Sangkhaduang et al.,2023
social responsibility	Su & Swanson, 2017;Tuan, 2018;Lee et al.,2021;Liu,J. et al.,2022;Aziz & Niazi,2023a;Luo et al.,2020;Song & Kang, 2023
tourism quality	Handriana & Ambara,2016;He et al.,2018;Liu et al.,2019;Cheng et al.,2021;Yin et al.,2021
environmental concern	Go et al.,2022;Sultan et al.,2020;liu et al.,2021;Sangkhaduang et al.,2023;Wang, G. et al.,2023
emotion	Su & Swanson, 2017;Zhao et al.,2020;He et al.,2022;Aziz & Niazi, 2023b
perceived behavioral control	Wang et al.,2018; Wang et al.,2019b;Liu et al.,2019;Saleem et al.,2021
recreation	Lee et al.,2015;Lee & Jan 2015;Han,& Oh, 2021
involvement	Chiu et al.,2014b;Xu et al.,2018;Zhang, Y. et al.,2022
tourists' self-efficacy/self-construal	Liyao & Qian, 2021;Liu et al.,2021;Wang,C. et al.,2023
motivation	Kil et al.,2014;Cheung et al.,2020
environmental sensitivity	Cheng & Wu,2015 ; Confente & Scarpi, 2021
destination identification	Su & Swanson, 2017;du Preez & Heath, 2018
awareness of tourism's negative consequences	Confente & Scarpi, 2021;Luo et al..2020

awe/natural
empathy Jiang et al.,2022;Wang,C. et al.,2023

The dimension and measurement of TERB

Through literature review, it is found that scholars usually divide TERB into multidimensional and one-dimensional forms (Table.6). In terms of dimensions, two-dimension, tri-dimension, and seven-dimension are commonly used. Compared with multi-dimensional, scholars prefer to analyze TERB in unidimensional mode. In terms of measurement items, there are no fixed items, and researchers mostly set items according to the actual empirical situation, with as few as 4 items and as many as 24 items. 5-point Likert-type scale and 7-point Likert-type scale is commonly used as measurement methods(Sangkhaduang, et al.,2023;Cheng & Chen, 2022).

Table 6. The dimension and measurement of TERB

Dimensionality	Dimension division	Items	Examples
unidimensional	-	4、 5、 6、 8、 10	Li et al.,2023;
			Lee et al.,2021;
			Saleem, et al., 2021;
			Zhao et al.,2020;
two-dimension	On-site behaviour、 Off-site behaviour	8	Liu et al.,2019;
			Aziz & Niazi, 2023;
multi - dime nsion	General ERB、 Site-specific ERB compliance ERB、 active ERB	7	Tu & Ma, 2022;
			Su & Swanson, 2017;
			Abdullah,et al., 2019;
tri-dimension	environmentally friendly behaviours、 environmental	12	King-Chan et al.,2021 Cheng et al.,2021 Zhang et al.,2019. Li et al., 2021 Zhang, Y. et al.,2022

	concern-based Behaviours、 environmentally sustainable behaviours		
	General ERB、 Site-specific ERB、 Activity Specific ERB	23	Han & Oh, 2021
seven-dimension	Civil action、 Financial action、 Physical action、 Persuasive action、 Sustainable behavior、 Pro environmental behavior、 Environmentally friendly behavior	24	Lee & Jan, 2015 ; Cheng & Wu,2015 ; Lee et al.,2015 ; Lee & Jan, 2019

Discussion

This study conducted a systematic literature review of journal articles on TERB published between 2014 and 2023. The analysis shows a gradual increase in the number of articles since 2014, illustrating the growing interest in the subject in academia. In terms of published journals, 80 peer-reviewed articles, 45 published in tourism journals and 35 published in non-tourism journals, indicate that research in this field has attracted the attention of scholars from different disciplines. The article covers a wide range of geographical locations, Chinese scholars are highly involved, and the most common research environment is the nature-based scenic area. The co-occurrence analysis of keywords reveals that researchers primarily focused on environmentally responsible behavior, destination social responsibility, and place attachment. Most of the selected analysis papers used quantitative methods and mainly relied on SPSS, AMOS and Smart PLS. Qualitative research has not been widely used in this field. Quantitative methods are less combined with qualitative methods. Due to the complexity of TERB, researchers lack consensus on the dimensions and scales of TERB, but unidimensional analysis is still the most commonly used by researchers. More than half of the articles adopted relevant theoretical basis, and the most commonly used were Theory of planned behavior (TPB) and Stimulus-organism response theory (S-O-R). Based on this, the researchers explored the antecedents of TERB and found that the main factors affecting TERB were internal factors, such as environmental attitude, perceived value, subjective norms, tourism experience, satisfaction, place attachment, etc. Tourism quality is the main external factor affecting TERB. Overall, this study contributes to a better understanding of TERB research progress and related research content.

Conclusions

In this paper, a systematic approach is adopted to comprehensively demonstrate the research overview of TERB, which is conducive to promoting the development of TERB related research. However, there are still some limitations in this study. First of all, the scope of this review is limited to relevant research papers in the Scopus database, and the literature is only searched within the field of the title, and the conference papers are not included. Secondly, this study focuses on the ERB of tourists, and does not consider the ERB of tourism enterprises, tourism employees and destination residents, which affects the applicability of the study to a certain extent. Thirdly, TERB is a multidisciplinary issue, and this study does not compare the research paradigms of different disciplines. Finally, in the analysis of TERB dimension and measurement, there is no summary and induction of each measurement item. The analysis of internal and external factors of TERB is not detailed enough. Future research should therefore expand TERB research by covering multiple searches and using high-level academic conference papers. Secondly, multi-subject and interdisciplinary comparative studies need to be supplemented and improved by subsequent studies. In addition, TERB measurements and antecedents also require more systematic analysis and interpretation.

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