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## A DETERMINATION OF ECOTOURISM INTENTIONS TOWARDS THE SUSTAINABLE ENVIRONMENT FOR THE FUTURE OF TOURISM.

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### ABSTRACT:

Environmental conservation is one of the very important phenomena in recent times, that is works to conserve the natural environment and deliver to the economy. In recent years, researchers show interest in behavioral intentions for the sustainable development of natural areas. In this study, we find literature published during the years 2009 to 2018 on the very rising topic of ecotourism intention. For that Scopus database is selected to find out the number of studies published on ecotourism intention. The PRISMA statement templet is used to explain the overall process of selection and rejections of Article for the review of Ecotourism intentions. The final 52 articles with a minimum of 10 citations for the review are selected to analyze the literature to find the gap and direction of ecotourism. Year base, journal base, subject base, and a minimum of 10 citations are done in the methodology part. Finally, the classification of data is done as per results from the quality assessment process. behavioral intentions and environmental sustainability are discussed widely by the researchers and theoretical preferences are the theory of planned behavior is used in maximum studies. The findings of the study showed that ecotourism intentions are strongly affected by the education, conservation of natural resources that are converted into behaviour.

### INTRODUCTION

Environmental conservation is one of the very important phenomena in recent times, that is works to conserve the natural environment and deliver to the economy. Its also turning into a significant topic for the tourism industry and ecological conservation is recognized as sustainable development of the regions (Allen et al., 1993). Environmental issues are very depressive and serious over the few years, natural

resources are damaging very rapidly in the high tourism areas. Although tourism brings a large number of economic benefits the resource consumption is gradually greater and greater with the period (EPA, 2017). Environmental degradation is a very common indicator for every economy around the globe and developed states are focused to retain environmental sustainability through ecotourism. Ecotourism is gradually conservation of resources for future generations and delivering the economic benefits in the economy (Karst, 2017). For the implementation of ecotourism, that is important to enhance the intention and behavior for ecotourism among the tourists and visitors of natural areas. Responsible environmental behavior intention, according to Cottrell & Graefe, (1997), is a reflection of individual attention to the environment, commitment and ecological knowledge. That is building the image of the destination and the importance of natural resources. Natural areas protection is becoming more challenging with the coming years, due to climate change in large economies that also affects the global environment (Pecl et al., 2017). Although climate change is an inherently global issue, the impacts will not be felt equally across the planet. Impacts are likely to differ in both magnitude and rate of change in different continents, countries, and regions. Some nations will likely experience more adverse effects than others (Lejeusne et al., 2010). Climate change is a broader perspective of natural environment degradation with more complex reason, but the tourist destinations are a comparatively less complex and complicated context (Qureshi et al., 2019). Ecotourism intention that converts into behavior is an important element for the awareness of conservation of natural resources. According to De Vries, Dijkstra, & Kuhlman, (1988) constitutes an example by assuming that behavior can best be predicted by the behavioral intention, which is determined by the individual's attitude and the perceived subjective norms from other people. Attitude is determined by the expectation of various consequences, beliefs about the behavior.

In this study, we will find literature published during the years 2009 to 2018 on the very rising topic of ecotourism intention. For that Scopus database is selected to find out the number of studies published on ecotourism intention. For that, it is made important to make a good number to find out the results. Protection of natural resources is largely depending on the tourists, due to a massive number of tourists are on the tourists destinations and that is not possible to observe and monitor tourists in the destinations every time for that it is very important to create awareness and sense of responsibility among the tourists toward the conservation of natural resources. Improper development of infrastructures such as extensive paving and sand and beach mining, unplanned construction of resorts, hotels, roads, airports, power plants, reservoirs, and waste disposal systems brought about as a result of tourist visits has led to congestion within areas that are fragile and sensitive like natural habitats for wildlife, wetlands, coral reefs, lakes, forests, minerals, oceans, fertile soils, and riverbed basins (Khan et al., 2020). An increase in tourists and too much pressure on water resources, food, and energy have caused these losses which are very heavy and irreparable. According to estimates, the average water consumption per passenger or tourist (as measured by the amount of water used for watering gardens and hotel lawns, golfing fields and swimming pool is ten times more than the amount that is necessary for the survival of the organization (Yavari et al., 2017). To minimize and recover the damages done by the tourists that are very important to make the intention of tourists to behave in the natural environment in a collective way of resource protection.

The current study will extract the literature published in Scopus database journals on the topic of ecotourism intention. The systematic review aims to know the ecotourism

intention that f the converts into behaviour on the later stages is how much helpful in environmental sustainability. the study will also be focusing on the direction of literature in the last 10 years. Which area is largely discussed by the researchers and recommendations of the literature for the conservation of the natural resources? For that purpose, the study will arrange a comprehensive systematic literature review with the help of PRISMA 2009, to make a more detailed and transparent process for the literature selection. Quality assessment, detail inclusion, and exclusion procedures are also be done for making the more pure and clear information. For that purpose, excel sheets will be used for the checking of the process and remove the repetition of data in the review. The keywords used for the data searching will be “Ecotourism Intention” and all the relevant literature will be import on the excel sheets after that the quality assessment done. The study will explain the classification of the literature and overview of the areas which are discussed in deep by the past researchers. Classification is developed according to the researchers working on the literature in the year 2009 to 2018. Excel sheet will use for the classification of the data and study to analyze the direction given by the literature. Classification of data will help us to find out the future direction goodness for the researchers to work for the development of the body of knowledge. The study will also discuss the theoretical development of the ecotourism intention in the published literature in the year 2009 to 2018. Theoretical development is discussing the theories used by the literature in the field of ecotourism intention and recommendations of theoretical development in the literature. In the last stage, the study will conclude the overall discussion that starts from the methodology part and classification of the literature. The recommendations will be formed after the detailed analysis of the literature and the comprehensive process done for the selection of literature.

## **METHODOLOGY**

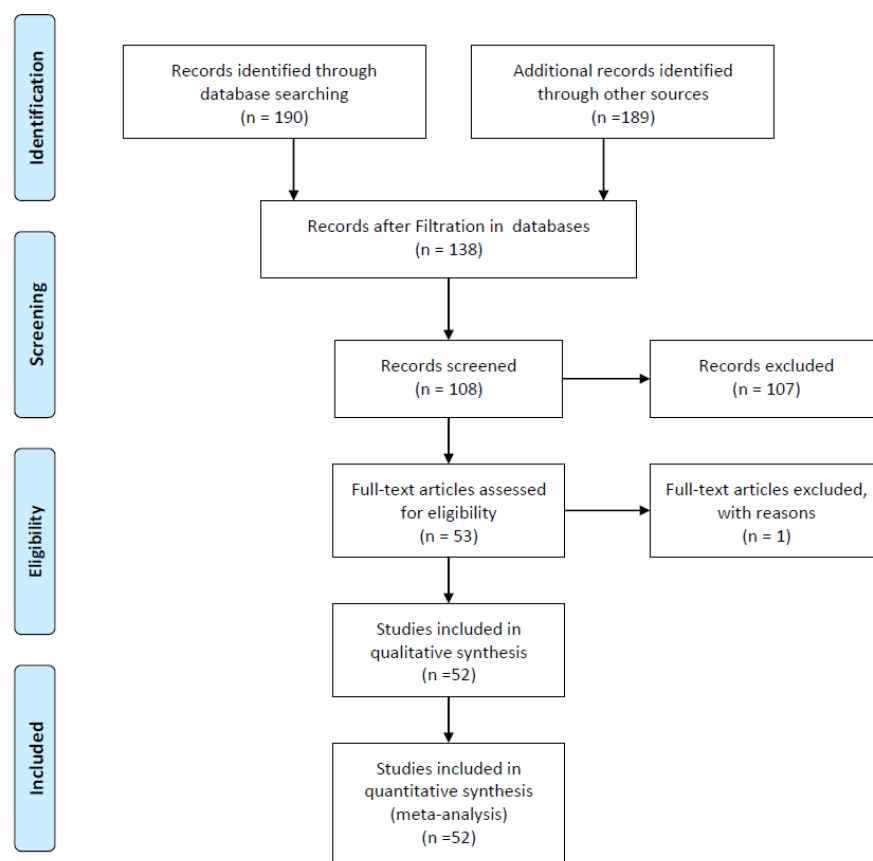
The most recent attention of environmental sustainability paid more value towards ecotourism has attracted researchers to explore implications of the ecotourism in different dimensions. The study analysis the past literature to a systematic literature review (SLR) (REYES, 2015). The PRISMA statement templet is used to explain the overall process of selection and rejections of Article for the review of Ecotourism. The PRISMA statement helps the researcher to improve the reporting of the review paper. The review is limited to published literature.

## **LITERATURE RESEARCH**

The Scopus database is used to find the literature with the keyword used in Ecotourism. The keywords search in the database are “ecotourism intention” and the total number of articles is shown by database 190, but when the research is limited to the year 2009 to 2018 the number is decreased to 138. The process is needed to filter more for the quality of the review, the language and subject are selected for assessment and numbers are reached to 107. English language published literature is selected for the review. The PRISMA diagram 2009 figure one shows that the subjects of Social Sciences, business administration, and Environmental Sciences are the subject’s areas to include the literature articles for the review. The 107 Articles are including after the subject’s selection and in the eligibility section of the PRISMA diagram. The data is imported to excel sheets for further assessment of the literature. The excel sheets are extended into more sheets to find out the highest citations Articles and analyzing the year wise publications. after the selection of a minimum of 10 times cited paper only 53. Articles remain on the eligibility criteria. One more study is also excluded after the detail studies of the article’s due irrelevancy with the subject. The final 52 articles for the review are selected to analyze the literature to find the gap and direction of ecotourism.



PRISMA 2009 Flow Diagram

**Figure1:** PRISMA framework***Quality Assessment***

The review papers are based only on articles and review papers and conference papers are excluded from the study. For maintaining the quality of the review, every kind of duplication is checked very thoroughly on the excel sheets. The other important problem was the citation checking during the study and during the process minimum, citation 10 times is checked very strictly. Abstracts and conclusions of the articles are checked deeply for the analysis and purification of the articles to make sure at the possible level.

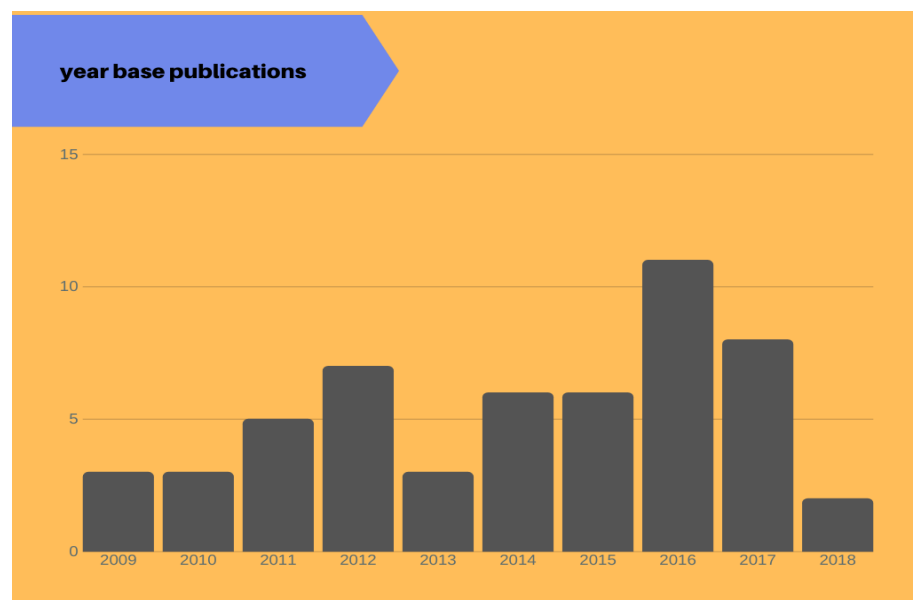
***Eligibility and Inclusion Criteria***

The checking and eligibility criteria of research articles are moved through highly critical and accurately observed ways to enhance the best possible articles for the process. For the language selection, only English language articles are included for the review and other language articles are ignored from the database. The research article from the database is selected from three major subjects, Business administration, social sciences, and environmental sciences. But also make sure the papers from all journals of the database must be considered for more better and quality results. The open-access articles are considered for the review.

***Studies Included in Qualitative Synthesis***

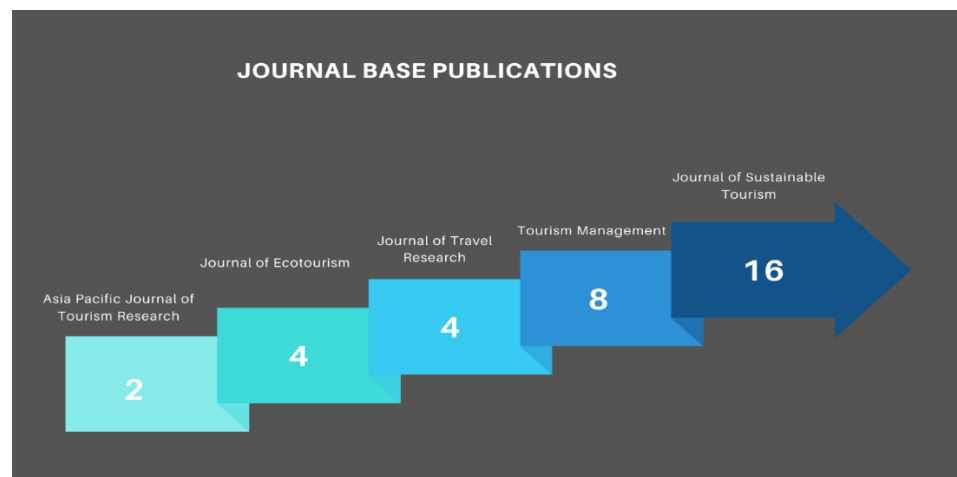
The final 52 studies are used for the final process and find the direction and research done by the researcher in the year 2009 to 2018. The year base analysis is done to find out the annual publications and most cited papers are also explained through the graph. the subject wise research is also explained in the graph to show the number of papers is include and exclude for the review. The journal base and most cited papers are also discussed.

The year-wise publications according to the most cited papers are shown in the diagram. The year 2009 is the initial year selected for the review and 3 papers are on the eligibility criteria with more than 10 citations. The year 2010 is also contributing only 3 studies with more than 10 citations and the year 2011,2012,2013 and 2015 are 5,7,3,4, and 4 selecting only papers that have more than 10 times cited by the others. Year base selection is shown us the actual numbers of papers selected from which year. The year 2016 is the highest number contributing to 11 studies having more than 10 citations. From the year 2017 study selected 8 papers for the review and the year 2018 is the lowest number with 2. The highest number of articles are selected from the year 2016 with 11 articles each but the lowest number is 2 from the year 2018. The figure two is shoing the details of year base publication.



**Figure 2:** distribution of literature year base publication

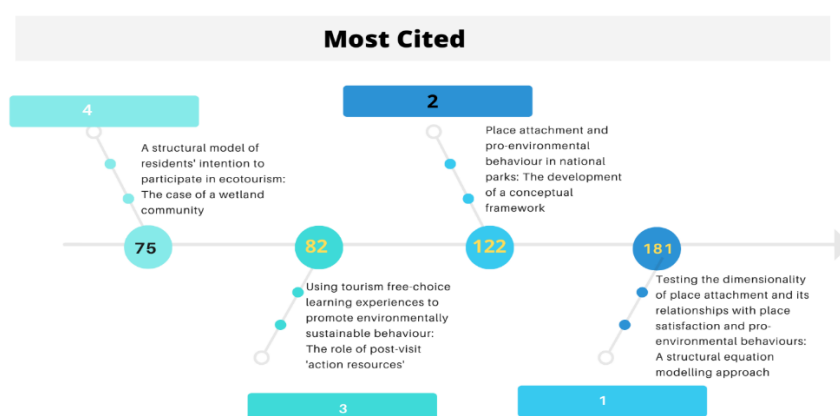
The journal base selection of articles is completed and the number of journals in the Scopus database selected for the review. The journal of tourism is contributing to the maximum number of articles in the articles with 16 studies, figure three is showing the detail distribution of journal base publications. The selection criteria were set for every journal that was equally the same and more than 10 cited papers is selected for the review due to find the research gap and allocate the future research direction in ecotourism intention. The second journal with a high number of articles in tourism management with 8 articles fulfills the criteria for the review. The figure is showing the maximum number of papers with minimum citation 10 is showing. Asia pacific journal of tourism research has contributed two articles.



**Figure 3:** distribution of literature on journal base publication

### *Most Cited Papers*

The review on ecotourism selection criteria is formed based on most numbers of time cited a paper and earlier we discussed that the minimum criteria are an Article is cited by 10 times. The process of selecting the paper which is the highest time cited is Testing the dimensionality of place attachment and its relationships with place satisfaction and pro-environmental behaviors: A structural equation modeling approach. The article is cited 181 times and shown in the graph also. The second study is cited by 122 times, Place attachment and pro-environmental behavior in national parks: The development of a conceptual framework is second highest cited paper included in the study with 122 times by the other researchers. The third most cited study is, using tourism free-choice learning experiences to promote environmentally sustainable behavior: The role of post-visit 'action resources'. The other selected articles are also cited most of the time and shown in the graph. the selection process of the articles done on the excel sheets and minimum cited papers is 10 times and the maximum in the study is 181 times. Figure four is showing the literature distribution on highly cited studies.



**Figure 4:** distribution of literature on highly cited articles.

### *Classification*

The literature selected from the past research is processed on Microsoft excel sheet and analyzes every study very deeply and classification is arranged according to the nature of the literature. During the classification of literature, repetition and

duplication are avoid very seriously due to the nature of research. The literature is classified according to the variables used in past research and categorized all the variables are further distributed into the three main sections in which the author, variables and core findings are discussed in details below.

### ***Behavioral Intentions***

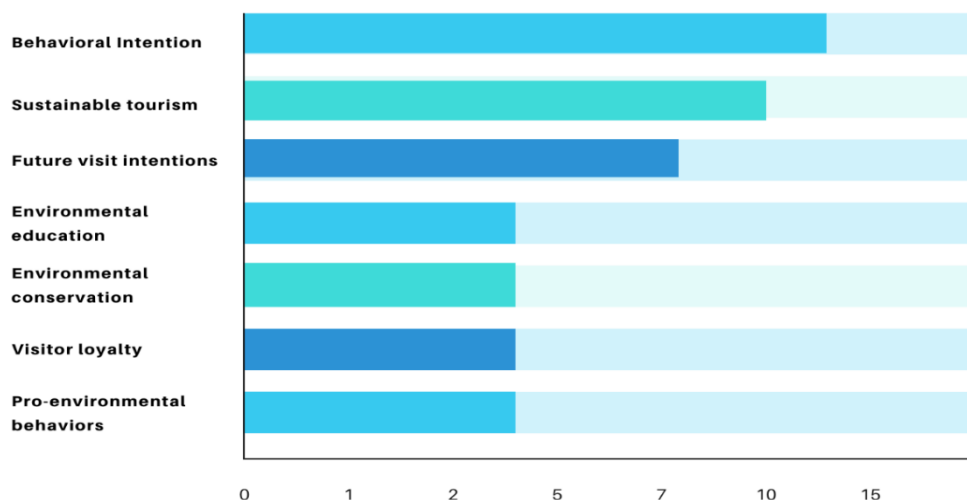
Behavioral intention is a person's stated intention to perform a behavior. the intention to perform a behavior is a direct determinant of actual behavior (Moore et al., 2015). In recent years, researchers show interest in behavioral intentions for the sustainable development of natural areas. In the current study highest literature is focusing on behavioral intentions. A total of 12 studies talks about the behavioral intentions out of the 52 in the systematic review. For the development of behavioral intention in nature base areas, we need to find out the overall research direction in the literature. For the ecotourism intentions and development, it is important to study the factors that affect behavior towards sustainability. According to Sardianou et al., (2016) behavioral intentions regarding sustainable tourism practices, data gathered from Greece for the study. Recommendations of the study are for achieving the sustainable tourism that is important to create behavioral intentions in the tourists visiting the tourist's destinations. For the creation of environmental awareness and ecotourism related activities the author of the Customer responses to environmentally certified hotels: the moderating effect of environmental consciousness on the formation of behavioral intentions, presents the idea of the environmental certification that is very much helpful to create the behavioral intentions of sustainable tourism in the customers (Martínez García de Leaniz et al., 2018). The authors also found that the higher the environmental consciousness of consumers, the greater their intention to stay, to spread positive word-of-mouth and pay a premium for environmentally conserve the atmosphere. But the Kim, Airey, & Szivas, (2011) suggested that multidimensional aspects of attitudes and behavioral intentions toward local environmental issues are important to adopt the interpretation that can help to manage the negative impacts of tourism such as onsite environmental damage, changes to the wildlife behavior, pollution and vandalism caused by visitors, through providing visitors with information about alternative sites, routes, or activities. The interpretive strategy based on the peripheral route to persuasion involves modifying overt behavioral change at least in the short term. For the enhancement in the ecotourism behavior to use the strategies of attitude that protect the natural environment and conservation of natural resources in the context of sustainable tourism. A research study in literature recommended that factors such as perceptions, attitudes, and participation towards protected areas are highly correlated and can affect stakeholders' intent to engage in conservation (Imran et al., 2014) but on the other hand, it is also argued that ecotourism can develop and can provide direct effect to the local stakeholders and consequently help develop positive attitudes toward the environment and conservation (Arnberger, Eder, Allex, 2012). Behavioral intentions are also related with the place satisfaction and attachment, low and high pro-environmental behavioral intentions come through this process (Ramkissoon et al., 2013). Researchers are eventually looking to apply the principle of behavior analysis to protect the natural areas and decrease the behavioral intention that is detrimental to the natural environment. For that, green involvement also presented by the researcher to eliminate the environmental issues in recent times. There is a need to improve eco-friendly services and visitor perceptions, intentions, and involvement with natural areas. The author also recommended that "green" involvement in festival settings. Given the growing interest in environmental issues, it explores relationships between eco-friendly services, and visitor perceptions, intentions, or choices, using the theory of involvement, and involvement–value relationship studies (Wong et al., 2015).

Table 1 is showing the literature related to behavioral intentions overall direction in recent years.

### ***Sustainable Tourism***

Sustainable development can be defined as; ‘sustaining the existence of all living creatures together in harmony and without any threat to each other’ (Ekinci, 2014). Researchers are focusing on the concept of tourism and sustainable tourism for many decades, clear progress is not clear yet. Ecotourism is an example of the gap between tourism and sustainable tourism (Kerstetter et al., 2004), he also defines ecotourism as the visited placed should adopt the sustainability contribution in all dimensions. Walker & Moscardo, (2014) believes that the continuous focus on providing opportunities to tourists about learning, understanding and developing positive behavior towards the tourist's destination can achieve sustainability. Ecotourism principles are suggesting positive contribution in the sustainability but there are very few evidence to meet the full concept of sustainability in tourism by ecotourism (Coghlan & Kim, 2012). Table one is showing the classification of literature.

**Table1:** Classification table of literature



Literature in the current study also contributed to the Cittaslow (slow city) philosophy in terms of sustainable tourism development (STD). According to Ekinci, (2014) in recent ages a number of organizations working to protect the cultural, historical and natural tourist destinations from further dangers. The author suggested in after results the Cittaslow model can be adopted at a large level to protect the more areas and promotion of sustainable tourism. One of the literature authors contributed to the festival model for sustainable tourism and recommended that festival performances can create more ecotourism intentions and sustainable tourism. The study observes 353 tourists for data collection and finds the impacts of the festival on sustainable tourism (Song et al., 2015). The study also suggested that future festivals are effecting sustainable tourism positively. Most of the literature related to sustainable tourism is related to the protection of the natural resources and solutions related to adopting the models. One of the studies also suggested that compassion can be a greater variable for the outcomes of the sustainable and aspirational forms of sustainable tourism. The final results of the literature are concluded that compassion is neglected by the literature related to tourism but the researcher suggested that compassion is a motivator towards sustainable tourism (Song et al., 2015). Sustainable tourism classification is based on the 8 studies that are the second number on the most cited in



the current study, most of the literature is contributing towards the sustainable techniques in tourism. Literature is also distinguishing between sustainable tourism and ecotourism principles.

### ***Future and Revisit Visit Intentions***

Ecotourism intention related to a future visit and revisit intention is discussed in the literature with the perceived value of the tourist destination. According to the study Place attachment as a mediator of the relationship between nature-based recreation benefits and future visit intentions finds that the place attachment is fully mediate the relationship between place and future visit intention (Kil et al., 2012). For the place attachment, related findings are benefit desire and attained benefits are an important predictor for the behavioral intention and place attachment. Accordingly, tourists destinations must create opportunities for the visitor's future visits in terms of physical and natural resources activities that attract them for the visit. Thapa & Lee, (2017) conducted the research on visitor experience and future visit intention, concluded that visitors' satisfaction and perceived value is related to the experience offered by the visiting place. For the research 336 tourists' reaction is collected from different destination and the structural equation model is used for the data results. For the future visit, intention wildlife is considered as the most significant experience for the visitors. Tourists with more ecotourism experiences and a greater understanding of an area's natural heritage will attribute more importance to the natural environment and are more likely to have stronger revisit intentions for ecotourism (Thapa & Lee, 2017).

For the revisit of the tourists, it is important to educate the tourists about destination sustainability. Literature in the current study finds that environmental concerns and ecotourism experience mediate the relationship between motivation and revisit intention (Huang & Liu, 2017). In the mediation mechanism discovery, the finding suggests that tourists' ecotourism intentions affect their motivations through their perceptions of both the environment and sustainable development and through their interpretations of different ecological experiences (Dortyol et al., 2014). Lee, Lee, & Lee, (2014) also work earlier on the revisit intention of the visitors, results of the study found that people visit to learn about natural places. The study also suggested that people are traveling for relaxation and looking for a gap from routine affairs. For that, it is important to create opportunities for the tourists to get relax in the tourist destinations and they are able to revisit the destination. From the future visit and revisit intention part of the literature researchers finding are very much related to conserving the environment and experience towards ecotourism. Mostly literature suggested that ecotourism places are more likely to revisit and future visit for the tourists.

### **ENVIRONMENTAL CONSERVATION AND EDUCATION**

One of the very prime concepts in foundation ecotourism is environmental conservation and environmental education for ecotourism intention. Very few researchers focus the environmental education and conservation in the literature. Peake, Innes, & Dyer, (2009) explain that environmental education and conservational is largely dependent on individual mechanism leads to intention and behavior. In his study individual and interpreter role measure for the conveying of the message of conservation. A 1500 visitors' data are collected that received the conservation message in ecotourism setting. The results of the study suggested that a positive message creates the "locus of responsibility among the visitors in the conservation of natural resources and generates the satisfaction level. Another study explores the resident's intentions in ecotourism conservation. The author explores the

participant intention towards ecotourism management and proposed a structural relationship between environmental knowledge, attitude towards ecotourism, participant intention, and scenery of the tourist's landscape.

Results indicate that the resident's involvement in the ecotourism positively affects the relationship, increase the environmental knowledge and environmental planning that promotes residents' affinity for local attractions (Zhang & Lei, 2012). Park & Boo, (2010) contributed a study title an assessment of convention tourism's potential contribution to environmentally sustainable growth and results are solid waste, air pollution, water pollution, and energy waste is most problematic for the environment. For the recovery and conservation, respondents are agreed for the recycling of resources and processes (Faiza et al., 2015). results were also concluding towards the approaches that create environmental importance and behavioral development for the sustainability of the environment. Environmental conservation and education are very basic principles of ecotourism. Past literature has direction and contribution towards the phenomena but still, comprehensive and dedicated efforts are missing in the literature.

### **PRO-ENVIRONMENTAL BEHAVIORS**

In the classification of data, very limited records are found about pro-environment behavior and environmental belief. According to Han & Hyun, (2017), in the recent tourism industry understanding of pro-environmental behavior is vital for the sustainability perspective. The research was conducted in the museum context and findings of the research are supporting the hypothesis proposed by the authors. Research creates more viable literature in the context of the museum and very much contributing for the support of professionals belong to museums to make better strategies for encouraging pro-environmental decisions and behaviors through efficient management of visitors' motivation of sacrifice, interconnected feeling with nature, and cognitive and affective processes of pro-environmental decision-making. Another study also discussed the pro-environmental behavior in the adventure guides. The results of the study are supporting the proposed hypothesis and guide are helpful in creating environmental awareness among the tourists (Serenari et al., 2012). Most of the literature is recommended that environmental behavior is created through the belief of conservation. Although very limited literature is available on the area that is a very important element of ecotourism intention.

### **THEORETICAL DEVELOPMENT OF ECOTOURISM INTENTION**

Ecotourism Intention related to many theories used in the literature from a different perspective. value-belief-norm theory and merging it with Vroom's expectancy theory are used by the Kiatkawsin & Han, (2017) to find the intention to behave by the young travelers for the pro-environmental. The findings of the study show the results, expectancy theory strongly influences pro-environmental personal norms, which are influences the pro-environmental intentions. Value base norm theory and expectancy theories are more robust and significant in the pro-environmental intention. To examine the ecotourism behavior, ecotourism behavioral intention and ecotourism behave, nature tourists, a study is conducted by T. H. Lee & Jan. The author integrated the model using the theory of planned behavior, the technology acceptance model, value-belief-norm theory, and social identity theory to provide an integrated ecotourism behavioral model for four important Taiwanese nature-based tourism destinations. study's findings, encouraging tourists' perceived ecotourism usefulness and biosphere value will enhance their environmental attitude, ecotourism behavioral intention, and ecotourism behavior (T. H. Lee & Jan, 2018). Literature is supporting the theoretical background for ecotourism behavioral intention. Song,

Xing, & Chathoth, (2015b) apply the theory of social exchange, and the theory of reasoned action in festival tourism as well as their consequences to local community management. Findings of the theoretical models are future tourism impact studies in general and festival impact should be underpinned by integrative theories, including the theory of reasoned action and social exchange theory. Green events, value perceptions, and the role of consumer involvement in festival design and performance are also contributed to the events and festival settings. Given the growing interest in environmental issues, it explores relationships between eco-friendly services, and visitor perceptions, intentions, or choices, using the theory of involvement, and involvement–value relationship studies. The findings of the study are theoretical and managerial implications. There is a strong linkage between green involvement and perceived value. To obtain a maximum comparative advantage, however, marketing efforts must focus on promoting green initiatives.

**Table 2:** Theoretical development of ecotourism intention table

<b>05</b>	<b>theory of planned behavior</b>
<b>03</b>	<b>expectancy theory</b>
<b>03</b>	<b>theory of reasoned action</b>
<b>02</b>	<b>theory of involvement</b>
<b>01</b>	<b>functional theory</b>

To achieve sustainable tourism and reducing the carbon emissions from tourist destinations is a great challenge as the number of tourists are increasing rapidly over the years. A study conducted to use bicycles on tourists' destinations for bicycling touring. Extended the theory of planned behavior (TPB), using personal norm and past behavior as predictors and the attractiveness of unsustainable alternatives as a moderator. The results of the study are proving that the theory of planned behavior is superior for behavior intention provoking in tourists. The theory of planned behavior is also used in another study for the pro-environment and reducing the environmental impacts. Results suggest that the theoretical antecedents of the theory of planned behavior can predict intentions to perform pro-environmental behavior among non-western guides (Lejeusne et al., 2010). S. Lee et al., (2014) use functional theory to identify ecotourists' motivations in relation to their intention to revisit restored ecological parks. Results reveal that functional theory in the perspective of

ecotourism is legitimate, suggesting that ecotourists' intentions to revisit restored environmental parks are affected by a variety of motivating functions. Table two is showing the theoretical development of literature in ecotourism intention. The theoretical background in the current study is very much based on the theory of planned behavior. Four studies contributed a body of knowledge for ecotourism intention with the theory of planned behavior. Theory of reasoned action and technology acceptance models are also having progress towards behavioral intentions.

## CONCLUSION

The literature is demonstrated that environmental sustainability is achieved through ecotourism intentions that converted into behavior. Past researches are mainly focused on behavioral intentions, that are talking about personal norms during the traveling. Personal norms showed the strongest association with behavioral intentions and further mediated the link between injunctive social norms and behavioral intentions (Doran & Larsen, 2016). With the personal norms and behavioral intentions generation process there is a very important element is about the interpretation of multidimensional aspects of environmental protection. To control the environmental issues in the local community, behavioral intentions and attitudes can be controlled through interpretations (Kim et al., 2011). For the ecotourism intentions from visitor's willingness to manage the environmental and conservation issues. Results showed that most visitors' positive environmental attitudes and support for management policies related to specific responsible environmental behavior. Literature also explains the entrepreneurial behavioral intention to support sustainable tourism. In particular, results suggest that younger entrepreneurs are probably more informed about the potential of sustainability for the regions and are more likely to favor sustainable tourism practices (Sardianou et al., 2016). Ecotourism intention among the visitors is leading to behavior that is helpful for the sustainability of natural resources. Environmental sustainability is a broader concept while ecotourism is following the concepts of sustainability. Behavioral intentions are demonstrating loyalty with the tourist's destinations, analyzing loyalty as an important focus for nature-based tourism research. Analyzing recent loyalty and related behavioral intentions research is positively developing behavioral intentions that are promising satisfaction of the visitors (Moore et al., 2015). Environmental loyalty and satisfaction are needs education for the conservation of natural resources. Ecotourism intention and behavior can be achieved through environmental education. Environmental education and interpretation have largely focused on individual mechanisms (e.g. cognitive processes) leading to intention and behavioral change. Less has been said about the role of the situation and communication processes between tour guides and tourists in ecotourism experiences (Peake et al., 2009). Literature is focusing on the behavioral intentions for the ecotourism. Ecotourism related theories are used with the theory of planned behavior dominating in literature for achieving sustainability in visitors' behavioral intentions. Literature also evidence of the theory of reason action, technology acceptance model, the theory of involvement and expectancy theory. Future researches to find behavioral intentions can explore the results while using these theories about ecotourism intentions.

## REFERENCES

- len, L. R., Hafer, H. R., Long, P. T., & Perdue, R. R. (1993). Rural residents' attitudes toward recreation and tourism development. *Journal of Travel Research*, 31(4), 27–33. <https://doi.org/10.1177/004728759303100405>
- Arnberger, A., Eder, R., Alex, B., Sterl, P., & Burns, R. C. (2012). Relationships between national-park affinity and attitudes towards protected area

- management of visitors to the Gesaeuse National Park, Austria. *Forest Policy and Economics*, 19, 48–55. <https://doi.org/10.1016/j.forpol.2011.06.013>
- Coghlan, A., & Kim, A. K. (2012). Interpretive layering in nature-based tourism: A simple approach for complex attractions. *Journal of Ecotourism*, 11(3), 173–187. <https://doi.org/10.1080/14724049.2012.712135>
- Cottrell, S. P., & Graefe, A. R. (1997). Testing a conceptual framework of responsible environmental behavior. *Journal of Environmental Education*, 29(1), 17–27. <https://doi.org/10.1080/00958969709599103>
- De Vries, H., Dijkstra, M., & Kuhlman, P. (1988). Self-efficacy: The third factor besides attitude and subjective norm as a predictor of behavioural intentions. *Health Education Research*, 3(3), 273–282. <https://doi.org/10.1093/her/3.3.273>
- Doran, R., & Larsen, S. (2016). The Relative Importance of Social and Personal Norms in Explaining Intentions to Choose Eco-Friendly Travel Options. *International Journal of Tourism Research*, 18(2), 159–166. <https://doi.org/10.1002/jtr.2042>
- Dortyol, I. T., Varinli, I., & Kitapci, O. (2014). How do international tourists perceive hotel quality?: An exploratory study of service quality in Antalya tourism region. *International Journal of Contemporary Hospitality Management*, 26(3), 470–495. <https://doi.org/10.1108/IJCHM-11-2012-0211>
- Ekinci, M. B. (2014). The Cittaslow philosophy in the context of sustainable tourism development; the case of Turkey. *Tourism Management*, 41, 178–189. <https://doi.org/10.1016/j.tourman.2013.08.013>
- EPA. (2017). *International Climate Impacts*. Environmental Protection Agency of United States.
- Faiza, S., Shyamala, B. N., Oghbaei, M., & Prakash, J. (2015). Formulation of nutritious premixes based on natural ingredients and evaluating their efficacy for value addition. *International Food Research Journal*, 22(2), 546–555. <https://doi.org/10.1007/s11356-014-3584-2>
- Han, H., & Hyun, S. S. (2017). Fostering customers' pro-environmental behavior at a museum. *Journal of Sustainable Tourism*, 25(9), 1240–1256. <https://doi.org/10.1080/09669582.2016.1259318>
- Huang, Y. C., & Liu, C. H. S. (2017). Moderating and mediating roles of environmental concern and ecotourism experience for revisit intention. *International Journal of Contemporary Hospitality Management*, 29(7), 1854–1872. <https://doi.org/10.1108/IJCHM-12-2015-0677>
- Imran, S., Alam, K., & Beaumont, N. (2014). Environmental orientations and environmental behaviour: Perceptions of protected area tourism stakeholders. *Tourism Management*, 40, 290–299. <https://doi.org/10.1016/j.tourman.2013.07.003>
- Karst, H. (2017). “This is a holy place of Ama Jomo”: buen vivir, indigenous voices and ecotourism development in a protected area of Bhutan. *Journal of Sustainable Tourism*, 25(6), 746–762. <https://doi.org/10.1080/09669582.2016.1236802>
- Kerstetter, D. L., Hou, J. S., & Lin, C. H. (2004). Profiling Taiwanese ecotourists using a behavioral approach. *Tourism Management*, 25(4), 491–498. [https://doi.org/10.1016/S0261-5177\(03\)00119-5](https://doi.org/10.1016/S0261-5177(03)00119-5)
- Khan, N., Mustapha, I., & Qureshi, M. I. (2020). Review paper on sustainable manufacturing in ASEAN countries. In *Systematic Literature Review and Meta-Analysis Journal* (Vol 1, Number 1).
- Kiatkawsin, K., & Han, H. (2017). Young travelers' intention to behave pro-environmentally: Merging the value-belief-norm theory and the expectancy

- theory. *Tourism Management*, 59, 76–88. <https://doi.org/10.1016/j.tourman.2016.06.018>
- Kil, N., Holland, S. M., Stein, T. V., & Ko, Y. J. (2012). Place attachment as a mediator of the relationship between nature-based recreation benefits and future visit intentions. *Journal of Sustainable Tourism*, 20(4), 603–626. <https://doi.org/10.1080/09669582.2011.610508>
- Kim, A. K. J., Airey, D., & Szivas, E. (2011). The Multiple Assessment of Interpretation Effectiveness: Promoting Visitors' Environmental Attitudes and Behavior. *Journal of Travel Research*, 50(3), 321–334. <https://doi.org/10.1177/0047287510362786>
- Lee, S., Lee, S., & Lee, G. (2014). Ecotourists' Motivation and Revisit Intention: A Case Study of Restored Ecological Parks in South Korea. *Asia Pacific Journal of Tourism Research*, 19(11), 1327–1344. <https://doi.org/10.1080/10941665.2013.852117>
- Lee, T. H., & Jan, F. H. (2018). Ecotourism Behavior of Nature-Based Tourists: An Integrative Framework. *Journal of Travel Research*, 57(6), 792–810. <https://doi.org/10.1177/0047287517717350>
- Lejeusne, C., Chevaldonné, P., Pergent-Martini, C., Boudouresque, C. F., & Pérez, T. (2010). Climate change effects on a miniature ocean: the highly diverse, highly impacted Mediterranean Sea. In *Trends in Ecology and Evolution* (Vol 25, Number 4, bl 250–260). <https://doi.org/10.1016/j.tree.2009.10.009>
- Martínez García de Leaniz, P., Herrero Crespo, Á., & Gómez López, R. (2018). Customer responses to environmentally certified hotels: the moderating effect of environmental consciousness on the formation of behavioral intentions. *Journal of Sustainable Tourism*, 26(7), 1160–1177. <https://doi.org/10.1080/09669582.2017.1349775>
- Moore, S. A., Rodger, K., & Taplin, R. (2015). Moving beyond visitor satisfaction to loyalty in nature-based tourism: a review and research agenda. *Current Issues in Tourism*, 18(7), 667–683. <https://doi.org/10.1080/13683500.2013.790346>
- Park, E., & Boo, S. (2010). An assessment of convention tourism's potential contribution to environmentally sustainable growth. *Journal of Sustainable Tourism*, 18(1), 95–113. <https://doi.org/10.1080/09669580903147936>
- Peake, S., Innes, P., & Dyer, P. (2009). Ecotourism and conservation: Factors influencing effective conservation messages. *Journal of Sustainable Tourism*, 17(1), 107–127. <https://doi.org/10.1080/09669580802276000>
- Pecl, G. T., Araújo, M. B., Bell, J. D., Blanchard, J., Bonebrake, T. C., Chen, I. C., Clark, T. D., Colwell, R. K., Danielsen, F., Evengård, B., Falconi, L., Ferrier, S., Frusher, S., Garcia, R. A., Griffis, R. B., Hobday, A. J., Janion-Scheepers, C., Jarzyna, M. A., Jennings, S., ... Williams, S. E. (2017). Biodiversity redistribution under climate change: Impacts on ecosystems and human well-being. In *Science* (Vol 355, Number 6332). American Association for the Advancement of Science. <https://doi.org/10.1126/science.aai9214>
- Qureshi, M. I., Yusoff, R. M., Hishan, S. S., Alam, A. F., Zaman, K., & Rasli, A. M. (2019). Natural disasters and Malaysian economic growth: policy reforms for disasters management. *Environmental science and pollution research international*, 26(15), 15496–15509. <https://doi.org/10.1007/s11356-019-04866-z>
- Ramkissoon, H., Graham Smith, L. D., & Weiler, B. (2013). Testing the dimensionality of place attachment and its relationships with place satisfaction and pro-environmental behaviours: A structural equation modelling approach. *Tourism Management*, 36, 552–566. <https://doi.org/10.1016/j.tourman.2012.09.003>

- Sardianou, E., Kostakis, I., Mitoula, R., Gkaragkani, V., Lalioti, E., & Theodoropoulou, E. (2016). Understanding the entrepreneurs' behavioural intentions towards sustainable tourism: a case study from Greece. *Environment, Development and Sustainability*, 18(3), 857–879. <https://doi.org/10.1007/s10668-015-9681-7>
- Serenari, C., Leung, Y. F., Attarian, A., & Franck, C. (2012). Understanding environmentally significant behavior among whitewater rafting and trekking guides in the Garhwal Himalaya, India. *Journal of Sustainable Tourism*, 20(5), 757–772. <https://doi.org/10.1080/09669582.2011.638383>
- Song, Z., Xing, L., & Chathoth, P. K. (2015). The effects of festival impacts on support intentions based on residents' ratings of festival performance and satisfaction: a new integrative approach. *Journal of Sustainable Tourism*, 23(2), 316–337. <https://doi.org/10.1080/09669582.2014.957209>
- Thapa, B., & Lee, J. (2017). Visitor experience in Kafue National Park, Zambia. *Journal of Ecotourism*, 16(2), 112–130. <https://doi.org/10.1080/14724049.2016.1245737>
- Walker, K., & Moscardo, G. (2014). Encouraging sustainability beyond the tourist experience: Ecotourism, interpretation and values. *Journal of Sustainable Tourism*, 22(8), 1175–1196. <https://doi.org/10.1080/09669582.2014.918134>
- Wong, I. K. A., Wan, Y. K. P., & Qi, S. (2015). Green events, value perceptions, and the role of consumer involvement in festival design and performance. *Journal of Sustainable Tourism*, 23(2), 294–315. <https://doi.org/10.1080/09669582.2014.953542>
- Yavari, K., Gholamali, M., & Yazdian, F. (2017). Decreasing of Deuterium Concentration of Water: A Possible Tool in Diabetes Therapy. *Electronic Journal of Biology*, 13(4), 314–319.
- Zhang, H., & Lei, S. L. (2012). A structural model of residents' intention to participate in ecotourism: The case of a wetland community. *Tourism Management*, 33(4), 916–925. <https://doi.org/10.1016/j.tourman.2011.09.01>