

Understanding the Residents' Attitudes Toward Tourism Development and Environmental Responsibility in Community-Based Tourism Villages

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ABSTRACT

Sustainable tourism development continues to expand due to its economic value, yet it also raises environmental concerns. Encouraging environmentally responsible behavior (ERB) among residents of tourism villages remains an important issue. This study examines the factors influencing residents' intentions to engage in ERB by integrating Norm Activation Theory (NAT) and the Theory of Planned Behavior (TPB). Data were collected from 165 residents across three tourism villages in the Special Region of Yogyakarta, Indonesia, using purposive sampling, and analyzed with Partial Least Squares–Structural Equation Modeling (PLS-SEM). The findings show that personal norms significantly affect attitudes ($\beta = 0.768$, $t = 12.753$, $p < 0.001$), while social norms also contribute positively ($\beta = 0.171$, $t = 2.944$, $p = 0.003$). Attitudes significantly influence intention ($\beta = 0.520$, $t = 4.962$, $p < 0.001$), and perceived behavioral control has a direct positive effect on intention ($\beta = 0.385$, $t = 3.418$, $p = 0.001$). In addition, attitudes mediate the effects of personal norms ($\beta = 0.399$, $p < 0.001$) and social norms ($\beta = 0.089$, $p = 0.006$) on intention. These results indicate that residents' moral values and perceived ability shape their willingness to support environmentally responsible tourism practices.

Keywords: Attitude; Environmentally Responsible Behavior; Norm Activation Theory; Perceived Behavioral Control; Sustainable Tourism

INTRODUCTION

Sustainable tourism development has become a central theme in the tourism sector. (Runtunuwu & Husen, 2023) demonstrate that eco-tourism in a tourist destination not only affects the income of micro, small, and medium-sized enterprises (MSMEs), but also reflects increasing attention to sustainability aspects and environmental values in tourism destination development. While its economic benefits are widely recognized, tourism is also expected to take responsibility for maintaining environmental sustainability. Nevertheless, tourism activities often generate negative environmental impacts. Therefore, environmental protection must be viewed as a shared responsibility among all tourism stakeholders, including tourists, local communities, businesses, government, and other related actors.

Several studies have explored environmentally responsible behavior (ERB) (Fauzi et al., 2024; Fenitra et al., 2022; Han, 2021; Su et al., 2020). However, most of these studies focus on the demand side, particularly tourists' behavior and attitudes toward environmental responsibility. Research examining the supply side, which includes residents, business operators, and government agencies, remains relatively limited. Understanding ERB from the perspective of local communities living in tourism destinations is crucial for mitigating environmental degradation and ensuring the long-term sustainability of tourism development.

An environmentally friendly tourism destination must begin with the behaviors of the local community living within it. One of the most fundamental forms of environmental protection lies in proper waste disposal practices. Many leading tourism destinations continue to struggle with severe waste management issues. The problem of waste remains complex and unresolved, particularly concerning plastic waste such as bottles, plastic bags, and food containers, which negatively affects not only the aesthetic and visual appeal of destinations but also the health of local flora and fauna (Hilman et al., 2023; Kanal Muria, 2023; Wicaksono, 2024). Effective management and sustainable practices in tourism areas also require active community participation, as residents play a central role in planning, managing, and maintaining the environmental quality of their villages (Maryunani, 2023). Moreover, the attitudes and awareness of residents toward sustainability further shape the adoption of environmentally responsible practices in local tourism development (Kee et al., 2023).

This study adopts a supply-side perspective to examine the role of individuals who are part of local communities residing in tourism destinations. While previous research has largely concentrated on tourists' ERB, this study offers a new perspective by focusing on residents' environmental practices. Beyond its empirical relevance, the study also aims to make a theoretical contribution to the discourse on sustainable tourism. It draws upon several theoretical frameworks, namely, the Norm Activation Theory (NAT), the Theory of Planned Behavior (TPB), the Value-Belief-Norm Theory, the Stakeholder Theory, and the concept of social responsibility to develop a comprehensive model encompassing both antecedents (drivers) and consequences (impacts) of ERB.

Previous studies have highlighted the crucial role of several factors that shape behavioral norms, such as personal norms and social norms (Kang & Moscardo, 2006; Lestawi & Bunga, 2020), which are central constructs within the NAT. The NAT emphasizes the importance of awareness of consequences and the ascription of responsibility in shaping personal norms (Han et al., 2018; Stern et al., 1995). In general, NAT focuses on personal moral obligations, moral considerations, and the sense of awareness and responsibility that drive pro-social behavior. While NAT underscores the influence of personal norms in guiding specific behaviors, it tends to overlook other external factors

that also shape individual actions. To address this limitation, the TPB provides a complementary perspective. TPB posits that an individual's behavior is determined by behavioral intention, which in turn is influenced by attitude, subjective norms, and perceived behavioral control. Thus, it can be inferred that the NAT serves as an antecedent framework, while the TPB represents the consequential stage that explains how internalized moral norms translate into behavioral intentions and actions.

This study aims to develop and empirically test a comprehensive model that explains the antecedents and consequences of residents' attitudes within the context of responsible and sustainable tourism development. The novelty of this research lies in providing insights into the crucial role of local communities in actively participating, taking responsibility, and engaging in the preservation and management of the natural environment and resources surrounding them, particularly those that serve as tourism attractions (Timothy, 2002; U.S. Environmental Protection Agency [EPA], 2021; Weaver, 2011). Moreover, despite numerous studies exploring pro-environmental attitudes and behaviors, existing research tends to examine the antecedents and consequences of such attitudes sporadically. There remains a notable research gap, as few studies have integrated and analyzed the relative importance of these factors from the supply-side perspective, namely, residents living in tourism destinations.

This research was conducted in three community-based tourism (CBT) villages located in the Special Region of Yogyakarta (DIY), Indonesia: (1) Nglanggeran Tourism Village (Gunungkidul Regency), (2) Kreet Tourism Village (Bantul Regency), and (3) Kelor Tourism Village (Sleman Regency). These three case study sites represent different stages of tourism village development—advanced (Nglanggeran), moderately developed (Kreet), and developing (Kelor). The selection of these sites was also based on the distinct characteristics of each destination: nature-based tourism (Nglanggeran), handicraft-based tourism (Kreet), and heritage-based tourism (Kelor).

LITERATURE REVIEW

The Role of ERB in Sustainable Tourism Development

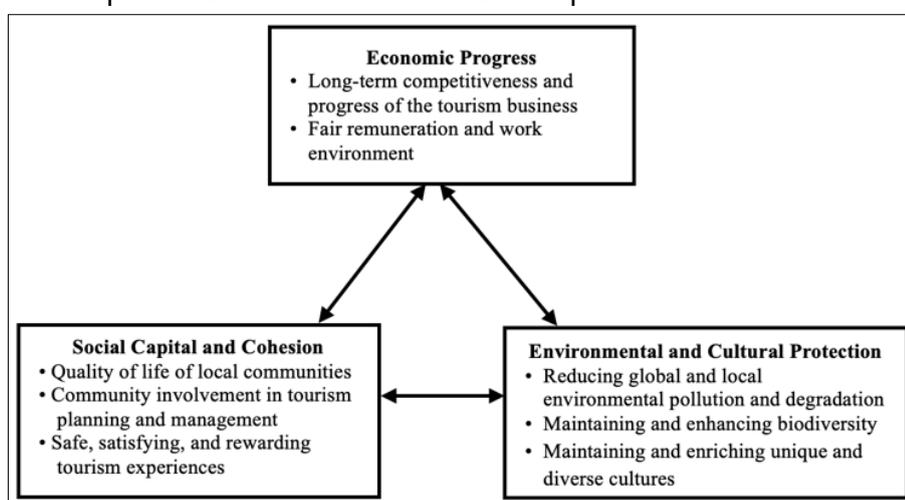
ERB reflects an individual's ecological commitment, awareness, and knowledge. The term has also been referred to as eco-friendly behavior (Gautam, 2020) or pro-environmental behavior (Gohary et al., 2022; Zhang et al., 2018). In the tourism context, environmentally responsible tourists are conceptualized as individuals who engage in a range of actions that promote the sustainable use of resources while minimizing or preventing adverse environmental impacts at destinations (Zhang et al., 2021). Moreover, tourists who exhibit ERB are shaped by distinct psychological processes and driven by various influencing factors (Luo et al., 2020).

Internal psychological factors include subjective norms, perceived values, and satisfaction (Chiu et al., 2014), while external determinants encompass environmental quality, policy frameworks, and destination characteristics (Bruyere et al., 2011). In essence, ERB represents any individual or collective action intended to mitigate environmental problems (Sivek & Hungerford, 1990). Similarly, Axelrod and Lehman (1993) define such behavior as actions that contribute to the preservation and conservation of the natural environment. Within the tourism domain, ERB includes practices such as conserving natural resources, managing waste properly, reducing pollution, and taking preventive measures to minimize environmental degradation at tourism sites (Lee et al., 2013; Panwanitdumrong & Chen, 2021).

ERB has emerged as a key concept within the broader framework of sustainable tourism adoption. The development of sustainable tourism is grounded in three fundamental principles: environmental protection, social responsibility, and economic vitality (Ecotrans). These principles emphasize that tourism should not only generate economic benefits but also safeguard ecological systems and contribute positively to local communities.

In a more comprehensive sense, sustainable tourism development is characterized by its commitment to maintaining ecological balance, ensuring community well-being, and supporting long-term economic resilience. The overarching goal is to create a tourism system that harmonizes environmental preservation, social inclusivity, and economic sustainability, ensuring that present needs are met without compromising the ability of future generations to enjoy and benefit from tourism resources. A schematic representation of these characteristics and objectives is illustrated in Figure 1.

Figure 1. Principles of Sustainable Tourism Development



Source: [United Nations \(2020\)](#)

Figure 1 presents sustainable tourism as a holistic framework built upon three mutually reinforcing dimensions. Economic progress is positioned as the foundation, highlighting the importance of long-term competitiveness within the tourism industry, the creation of high-quality and inclusive business opportunities, fair remuneration, and decent working conditions for all workers. Beyond economic outcomes, tourism is also framed as a social force that strengthens social capital and cohesion by improving the quality of life of local communities, fostering their active involvement in tourism planning and management, and ensuring that travel experiences are safe, satisfying, and meaningful for visitors. At the same time, the figure underscores the critical role of environmental and cultural protection, emphasizing the need to reduce environmental pollution and degradation, conserve biodiversity, and preserve as well as promote the uniqueness and diversity of local cultures. Together, these three dimensions illustrate how sustainable tourism balances economic viability, social well-being, and environmental and cultural stewardship.

Advancing a Theory-Driven Conceptual Framework and Hypothesis Development on ERB and Sustainable Tourism Development

Environmental social responsibility within the development of sustainable tourism destinations necessitates the active engagement of local communities. Residents of tourism destinations are expected to serve as environmental stewards who play a central role in preserving and managing their surroundings. In this context, environmental stewardship encompasses a range of community-driven actions, including

environmental protection, proper waste management, environmental education for visitors, and participation in the planning and monitoring of tourism-related activities.

According to the [EPA \(2021\)](#), environmental stewardship refers to “the responsible use and protection of the natural environment through conservation and sustainable practices.” Local communities often occupy a frontline position in conserving natural resources for several reasons. First, they coexist directly with the natural environments that constitute the core of tourism attractions. Second, their economic livelihood frequently depends on tourism, making environmental sustainability an immediate concern. Third, they possess local wisdom and traditional ecological knowledge that guide effective and context-sensitive resource management ([Bamberg et al., 2007](#); [Timothy, 2002](#); [Weaver, 2011](#)).

To identify how residents’ attitudes and intentions toward environmentally friendly behavior are formed, this study employs two theoretical foundations: the NAT, which is rooted in pro-social behavioral intentions, and the TPB, which is grounded in self-interest motivation and widely adopted in environmental psychology research ([Bamberg et al., 2007](#); [Dong et al., 2023](#); [Yazdanpanah & Forouzani, 2015](#)).

Within the framework of the NAT, two types of norms are recognized as influencing individual behavior: personal norms and social norms. Personal norms refer to an individual’s moral obligation to perform or refrain from a specific behavior ([Jansson & Dorrepaal, 2015](#)). In social contexts, social norms often play a crucial role in shaping personal norms. [Perugini and Bagozzi \(2001\)](#) suggest that social norms act as a significant source for activating personal values and interests toward certain actions.

As antecedents of attitudes, personal norms, being self-expectations, shape one’s evaluative orientation, including the degree of favorability or support toward a specific attitudinal object. For instance, an individual who holds a personal moral belief that people should protect the environment is more likely to develop a positive attitude toward ERB.

Furthermore, personal norms can directly influence behavioral intention, as individuals feel a moral duty to act consistently with their internalized values and beliefs ([Kim et al., 2021](#); [Meng & Choi, 2016](#); [Shanmugavel & Rajendran, 2022](#); [Teng et al., 2015](#)). Several scholars, including [Ponnareddy et al. \(2020\)](#), [Shi et al. \(2017\)](#), and [Zhang & Stewart \(2017\)](#), argue that personal norms serve as the strongest direct predictor of individuals’ intentions to engage in ERB.

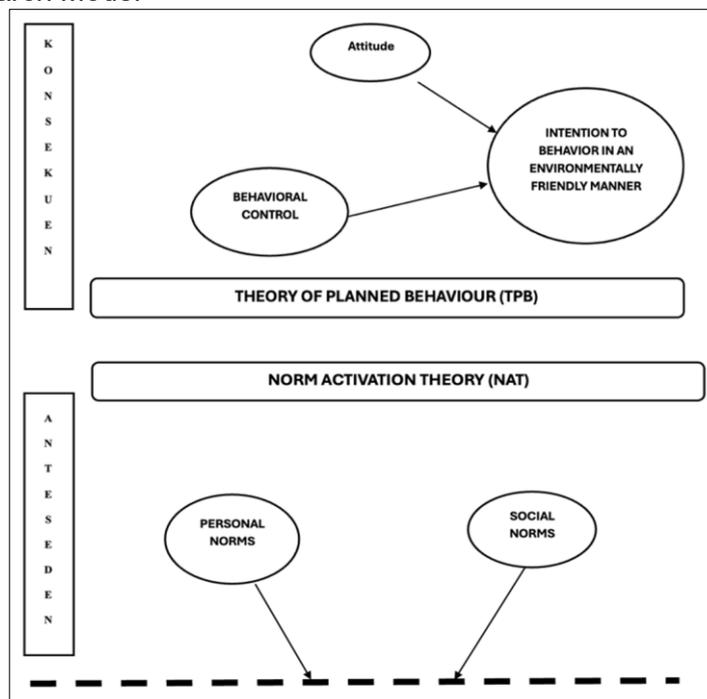
According to the TPB proposed by [Ajzen \(1985\)](#), an individual’s behavior is guided by their behavioral intentions, which are shaped by three core determinants: attitude toward the behavior, subjective norms, and perceived behavioral control ([Chiu & Cho, 2022](#); [Perugini & Conner, 2000](#)). Attitude represents an individual’s overall evaluation, favorable or unfavorable, of performing a particular behavior, while subjective norms capture the perceived social pressure to engage or not engage in that behavior. Perceived behavioral control reflects the individual’s assessment of how easy or difficult it would be to perform the behavior in question ([Chiu & Cho, 2022](#)).

In the context of ERB, perceived behavioral control refers to the degree to which individuals believe they possess the capability and resources to act in an environmentally responsible manner. As emphasized ([Saleem et al., 2021](#)), a person’s likelihood of performing a specific behavior depends on their perceived ability to do so. The often-observed gap between attitudes and behavioral intentions can occur when individuals lack sufficient means or opportunities to act consistently with their pro-environmental

beliefs. Consequently, perceived behavioral control is found to have a positive and significant influence on individuals' intentions to behave responsibly toward the environment (Saleem et al., 2021). The conceptual framework of this study is presented in the following research model.

Research Modeling: Integration of NAT and TPB

Figure 2. Research Model



The advantage of integrating these two theoretical frameworks in Figure 2 lies in their ability to simultaneously account for pro-social motivational factors (social norms) and self-interest motivations (personal norms) (Bijani et al., 2022; Rezaei, 2019), thereby offering a more holistic theoretical understanding of pro-environmental behavior (Han et al., 2019; Han & Hyun, 2017; Park & Ha, 2014). Moreover, the concurrent application of both theories provides distinct benefits, such as enhancing explanatory power (Bamberg et al., 2007; Han & Hyun, 2017; Savari et al., 2022), enriching empirical depth (He & Zhan, 2018; Onwezen et al., 2013; Zhang et al., 2018), and facilitating a deeper exploration of the intentions of tourism stakeholders, particularly local communities, toward pro-environmental behavior (Han, 2014; Park & Ha, 2014). By integrating the NAT and the TPB, this study conceptualizes dynamic interrelationships among key constructs, namely personal norms, social norms, attitudes, perceived behavioral control, and the intention to engage in ERB. Based on these theoretical arguments, a conceptual framework and hypothesis development are proposed.

Direct Relationships

- H1: Social norms have a positive effect on attitude.
- H2: Personal norms have a positive effect on attitude.
- H3: Attitude has a positive effect on intention.
- H4: Perceived behavioral control has a positive effect on intention.

Indirect Relationships

- H5: Personal norms influence intention indirectly through attitude.
- H6: Social norms influence intention indirectly through attitude.

RESEARCH METHOD

The present study employed a quantitative research design. The population consisted of residents from three tourism villages in the Special Region of Yogyakarta, Indonesia: Nglanggeran (Gunungkidul Regency), Krebet (Bantul Regency), and Kelor (Sleman Regency). Data were collected from May to August 2025. A non-random purposive sampling technique was applied because only residents who were actively involved in tourism-related activities and had direct experience with tourism development were considered capable of providing relevant information. A total of 165 valid responses were obtained.

The sample size was deemed adequate for Partial Least Squares Structural Equation Modeling (PLS-SEM). Following the 10-times rule (Hair et al., 2019), the minimum required sample should be ten times the maximum number of structural paths directed at a latent construct. Since the most complex construct in the model received three paths, the minimum required sample was 30 respondents; therefore, 165 exceeded this requirement.

Measurement instruments were adapted from established scales. Personal norms and social norms were measured using four items each adapted from Chin et al. (2018). Attitude toward ERB was measured using three items adapted from prior TPB-based studies, while intention was measured using three items from validated tourism sustainability research. All items were assessed using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

Data were analyzed using SmartPLS 4.0. The measurement model (outer model) was evaluated through indicator loadings, composite reliability, Cronbach's alpha, and average variance extracted (AVE) to ensure reliability and convergent validity. Discriminant validity was assessed using the Fornell–Larcker criterion and the heterotrait–monotrait ratio of correlation (HTMT) ratio. The structural model (inner model) was examined using path coefficients, t-values obtained through bootstrapping (5,000 subsamples), R² values, and mediation analysis to test the proposed hypotheses.

RESULTS

Respondents' Profile

Table 1. Respondents' Profile

| Data Demographic | Frequency (n=165) | Percentage (%) |
|----------------------------------|-------------------|----------------|
| Gender | | |
| Male | 78 | 47 |
| Female | 87 | 53 |
| Age | | |
| 17-24 Years | 56 | 33.9 |
| 25-35 Years | 69 | 41.8 |
| 36-45 Years | 24 | 14.5 |
| 46-55 Years | 14 | 8.5 |
| >55 Years | 2 | 1.2 |
| Educational Background | | |
| Senior High School | 60 | 36.4 |
| Diploma (D3-D4) | 21 | 12.7 |
| Bachelor's Degree (S1) | 79 | 47.9 |
| Master's/Doctoral Degree (S2-S3) | 60 | 36.4 |
| Occupation | | |
| Village/Local Government Officer | 13 | 7.9 |

| | | |
|---------------------|----|------|
| Housewife | 7 | 4.2 |
| Private Employee | 53 | 32.1 |
| University Student | 41 | 24.8 |
| High School Student | 10 | 6.1 |
| Farmer | 4 | 2.4 |
| Civil Servant | 15 | 9.1 |
| Professional | 4 | 2.4 |
| Military/Police | 4 | 2.4 |
| Entrepreneur | 14 | 8.5 |
| Residence | | |
| Bantul Regency | 21 | 12.7 |
| Gunungkidul Regency | 36 | 21.8 |
| Kulon Progo Regency | 26 | 15.8 |
| Sleman Regency | 37 | 22.4 |
| Yogyakarta City | 45 | 27.3 |

Table 1 provides an overview of the demographic characteristics of the 165 respondents. In terms of gender, female participants slightly outnumber males, with 87 respondents (53%) compared to 78 males (47%). Regarding age distribution, most respondents fall within the 25–35-year-old group (41.8%), followed by those aged 17–24 years (33.9%). The 36–45 age group accounts for 14.5% of respondents, while only a small portion are aged 46–55 years (8.5%) and above 55 years (1.2%). These figures suggest that most respondents belong to the young-to-middle productive age category.

In terms of educational attainment, respondents with a bachelor’s degree represent the largest proportion, totaling 79 individuals (47.9%). Those with a high school or postgraduate (master’s–doctoral) education share an equal percentage of 36.4% each, while 21 respondents (12.7%) hold a diploma (D3–D4). This pattern indicates that the majority of respondents possess relatively high levels of formal education.

In terms of occupation, most respondents were employed in the private sector (53 respondents, 32.1%), followed by students (41 respondents, 24.8%). Other notable occupational groups included civil servants (9.1%) and entrepreneurs (8.5%). The remaining respondents represented a range of professions such as village or sub-district officials (7.9%), pupils (6.1%), homemakers (4.2%), farmers (2.4%), professionals (2.4%), and members of the Indonesian National Armed Forces or Police (2.4%). This distribution highlights the occupational diversity among respondents, with a predominant representation from the private sector and academic communities.

In terms of residential distribution, the largest proportion of respondents resided in Yogyakarta City (45 respondents, 27.3%), followed by Sleman Regency (37 respondents, 22.4%) and Gunungkidul Regency (36 respondents, 21.8%). Smaller shares came from Kulon Progo Regency (26 respondents, 15.8%) and Bantul Regency (21 respondents, 12.7%). This pattern suggests that participants were well distributed across the DIY, with a concentration in urban and peri-urban areas. Overall, the demographic composition of respondents reflects a broad and balanced representation of the study area’s population.

Measurement Model**Table 2.** Descriptive Statistics, Validity, and Reliability Result

| Item | | Loading Factor | Mean | SD | Cronbach's Alpha | CR | AVE |
|--------------------------|---|----------------|-------|-------|------------------|-------|-------|
| Perceived Control | | | | | | | |
| 1 | Participation in donating to activities for the preservation of natural and cultural environments in my area. | 0.696 | 0.680 | 0.088 | 0.828 | 0.874 | 0.538 |
| 2 | The decision to separate my waste or not is entirely within my control. | 0.711 | 0.699 | 0.079 | | | |
| 3 | I am confident that, should I choose to do so, I am capable of contributing donations to environmental and cultural preservation programs in my village. | 0.749 | 0.744 | 0.050 | | | |
| 4 | I am confident that, should I choose to do so, I am able to attend public meetings concerning the management of natural and cultural resources in my village in the future. | 0.762 | 0.756 | 0.046 | | | |
| 5 | I am confident that, should I choose to do so, I can separate and processing waste in the future. | 0.684 | 0.672 | 0.078 | | | |
| 6 | I possess the necessary resources, time, and opportunities to engage in environmental preservation activities in the future. | 0.793 | 0.786 | 0.046 | | | |
| Personal Norms | | | | | | | |
| 1 | A moral obligation to protect the environment. | 0.788 | 0.782 | 0.046 | 0.898 | 0.917 | 0.552 |

| Item | | Loading Factor | Mean | SD | Cronbach's Alpha | CR | AVE |
|---------------------|---|----------------|-------|-------|------------------|-------|-------|
| 2 | Environmental issues cannot simply be ignored. | 0.734 | 0.723 | 0.075 | | | |
| 3 | It is important for society to protect the environment. | 0.676 | 0.667 | 0.073 | | | |
| 4 | I have a strong personal obligation to use energy wisely. | 0.741 | 0.733 | 0.060 | | | |
| 5 | I am morally obliged to safeguard the environment. | 0.783 | 0.772 | 0.055 | | | |
| 6 | I feel that I must take action to help future generations. | 0.746 | 0.734 | 0.064 | | | |
| 7 | Because of my own values and principles, I feel a moral responsibility to behave in an environmentally friendly manner. | 0.756 | 0.744 | 0.066 | | | |
| 8 | I must do whatever I can to conserve natural resources. | 0.728 | 0.718 | 0.064 | | | |
| 9 | I feel a strong personal obligation to recycle most of my household recyclable materials. | 0.730 | 0.727 | 0.048 | | | |
| Social Norms | | | | | | | |
| 1 | The people I know use environmentally friendly products. | 0.795 | 0.787 | 0.049 | 0.885 | 0.910 | 0.591 |
| 2 | The people I know are very concerned about environmental issues. | 0.745 | 0.741 | 0.051 | | | |
| 3 | The people I know recycle items that can be recycled. | 0.778 | 0.776 | 0.041 | | | |
| 4 | The people I know do not litter. | 0.695 | 0.687 | 0.070 | | | |
| 5 | The people I know always conserve water. | 0.784 | 0.777 | 0.048 | | | |
| 6 | People whose opinions I value encourage me to separate and process waste. | 0.791 | 0.781 | 0.055 | | | |

| | Item | Loading Factor | Mean | SD | Cronbach's Alpha | CR | AVE |
|-----------------------------|---|----------------|-------|-------|------------------|-------|-------|
| 7 | People who are important to me expect me to contribute or donate to community activities in my village. | 0.790 | 0.784 | 0.048 | | | |
| Intention Toward ERB | | | | | | | |
| 1 | I will donate to environmental and cultural preservation activities in my community. | 0.799 | 0.791 | 0.050 | 0.860 | 0.893 | 0.545 |
| 2 | I will not throw waste into rivers. | 0.728 | 0.713 | 0.071 | | | |
| 3 | I will report any environmental pollution or damage to the authorities. | 0.691 | 0.686 | 0.059 | | | |
| 4 | I will dispose of litter properly. | 0.714 | 0.702 | 0.067 | | | |
| 5 | I will participate in local environmental preservation activities. | 0.748 | 0.741 | 0.052 | | | |
| 6 | I will encourage others to protect the environment and preserve culture. | 0.696 | 0.684 | 0.081 | | | |
| 7 | I will separate organic and inorganic waste. | 0.785 | 0.777 | 0.052 | | | |
| Attitude Toward ERB | | | | | | | |
| 1 | I support the prohibition of disposing of waste and human waste in rivers. | 0.787 | 0.782 | 0.052 | 0.838 | 0.885 | 0.607 |
| 2 | I support tree-planting activities in my village or place of residence. | 0.819 | 0.811 | 0.047 | | | |
| 3 | I support activities that involve separating and/or processing organic waste. | 0.729 | 0.714 | 0.080 | | | |
| 4 | For me, participating in activities that involve separating and/or processing | 0.795 | 0.786 | 0.051 | | | |

| | Item | Loading Factor | Mean | SD | Cronbach's Alpha | CR | AVE |
|---|---|----------------|-------|-------|------------------|----|-----|
| | inorganic waste is enjoyable. | | | | | | |
| 5 | I support donation activities for environmental protection initiatives. | 0.762 | 0.752 | 0.057 | | | |

The results of the measurement model analysis presented in Table 2, obtained through the SmartPLS application, indicate that all constructs in this study satisfy the criteria for convergent validity and reliability. The factor loadings for all indicators exceeded the recommended threshold of 0.5, demonstrating that each item effectively represents its corresponding latent construct.

Regarding reliability, the findings also reveal a high level of internal consistency across all constructs. Cronbach's Alpha values ranged between 0.828 and 0.898, while Composite Reliability (CR) values were similarly robust, falling between 0.874 and 0.917. Both indicators surpass the acceptable benchmark of 0.7, confirming that the measurement items within each construct consistently capture the underlying concept. Overall, these results affirm that the measurement instrument employed in this study demonstrates sound psychometric properties, both valid and reliable, thus providing a solid foundation for subsequent structural model analysis.

Table 3. Discriminant Validity (Cross Loading)

| Indicator | Control | Behavioral Intentions | Personal Norms | Social Norms | Attitude |
|-----------|---------|-----------------------|----------------|--------------|----------|
| KN1 | 0.696 | 0.567 | 0.616 | 0.621 | 0.589 |
| KN2 | 0.711 | 0.558 | 0.589 | 0.568 | 0.592 |
| KN3 | 0.749 | 0.655 | 0.717 | 0.573 | 0.688 |
| KN4 | 0.762 | 0.676 | 0.698 | 0.635 | 0.670 |
| KN5 | 0.684 | 0.553 | 0.591 | 0.528 | 0.633 |
| KN6 | 0.793 | 0.671 | 0.703 | 0.690 | 0.680 |
| NP1 | 0.678 | 0.696 | 0.788 | 0.609 | 0.714 |
| NP2 | 0.644 | 0.695 | 0.734 | 0.643 | 0.703 |
| NP3 | 0.589 | 0.654 | 0.676 | 0.555 | 0.615 |
| NP4 | 0.653 | 0.618 | 0.741 | 0.599 | 0.685 |
| NP5 | 0.716 | 0.704 | 0.783 | 0.612 | 0.708 |
| NP6 | 0.677 | 0.673 | 0.746 | 0.603 | 0.658 |
| NP7 | 0.714 | 0.658 | 0.756 | 0.594 | 0.693 |
| NP8 | 0.656 | 0.624 | 0.728 | 0.629 | 0.658 |
| NP9 | 0.638 | 0.561 | 0.730 | 0.627 | 0.628 |
| NS1 | 0.586 | 0.649 | 0.612 | 0.795 | 0.580 |
| NS2 | 0.512 | 0.568 | 0.526 | 0.745 | 0.485 |
| NS3 | 0.615 | 0.572 | 0.559 | 0.778 | 0.578 |
| NS4 | 0.610 | 0.643 | 0.631 | 0.695 | 0.597 |
| NS5 | 0.702 | 0.691 | 0.682 | 0.784 | 0.686 |
| NS6 | 0.697 | 0.741 | 0.690 | 0.791 | 0.687 |
| NS7 | 0.666 | 0.674 | 0.665 | 0.790 | 0.643 |
| NT1 | 0.646 | 0.799 | 0.653 | 0.687 | 0.670 |
| NT2 | 0.619 | 0.728 | 0.684 | 0.627 | 0.636 |
| NT3 | 0.527 | 0.691 | 0.554 | 0.546 | 0.559 |
| NT4 | 0.548 | 0.714 | 0.607 | 0.589 | 0.584 |

| | | | | | |
|-----|-------|-------|-------|-------|-------|
| NT5 | 0.695 | 0.748 | 0.687 | 0.658 | 0.648 |
| NT6 | 0.593 | 0.696 | 0.634 | 0.565 | 0.609 |
| NT7 | 0.693 | 0.785 | 0.717 | 0.699 | 0.708 |
| SK1 | 0.661 | 0.634 | 0.725 | 0.595 | 0.787 |
| SK2 | 0.711 | 0.708 | 0.752 | 0.676 | 0.819 |
| SK3 | 0.665 | 0.623 | 0.670 | 0.567 | 0.729 |
| SK4 | 0.723 | 0.668 | 0.721 | 0.625 | 0.795 |
| SK5 | 0.655 | 0.702 | 0.665 | 0.644 | 0.762 |

Based on the results presented in Table 3, which summarizes the discriminant validity test using cross-loading analysis, it can be inferred that each indicator exhibits the highest loading on its intended construct compared to all other constructs. This finding demonstrates that the indicators are able to clearly distinguish one construct from another.

For instance, indicator SK1 recorded the highest loading value of 0.787 on the Attitude construct, which is notably higher than its loadings on other constructs such as Control (0.661), Personal Norms (0.725), Social Norms (0.595), and Intention (0.634). A similar pattern was observed for the remaining indicators, where the primary construct consistently displayed higher loadings than any cross-loadings on other constructs.

These results confirm that the indicators used in this study exhibit strong discriminant validity, as each construct is represented by distinct items that do not substantially overlap with others. Consequently, the measurement model successfully meets the requirements for discriminant validity.

Thus, it can be concluded that the measurement model in this study demonstrated good discriminant validity. Each indicator was able to measure the intended construct specifically, without significant overlap with other constructs. These results confirm that the instrument used was appropriately constructed and can be used further in structural analysis using the PLS-SEM model.

Hypothesis Testing

Table 4. Hypothesis Testing

| Hypothesis | | Original Sample (O) | t-statistics | p-value | Conclusion |
|-----------------|--|---------------------|--------------|---------|------------|
| Direct Effect | | | | | |
| H1 | Personal norms have a positive effect on attitudes toward ERB. | 0.768 | 12.753 | 0.000 | Accepted |
| H2 | Social norms have a positive effect on attitudes toward ERB. | 0.171 | 2.944 | 0.003 | Accepted |
| H3 | Attitudes toward ERB influence the intention to behave in an environmentally responsible manner. | 0.520 | 4.962 | 0.000 | Accepted |
| H4 | Perceived control influences the intention to behave in an environmentally responsible manner. | 0.385 | 3.418 | 0.001 | Accepted |
| Indirect Effect | | | | | |
| H5 | Personal norms → Attitude → Intention | 0.399 | 4.323 | 0.000 | Accepted |

| | | | | | |
|----|-------------------------------------|-------|-------|-------|----------|
| H6 | Social norms → Attitude → Intention | 0.089 | 2.775 | 0.006 | Accepted |
|----|-------------------------------------|-------|-------|-------|----------|

Table 4 presents the results of the hypothesis testing, including the path coefficients (original sample), t-statistics, and p-values for both direct and indirect effects. The findings demonstrate a consistent pattern in explaining ERB, with attitudes playing a central role in linking normative factors to behavioral intention.

Regarding the direct effects, personal norms show a strong and statistically significant positive influence on attitudes toward ERB ($\beta = 0.768$, $t = 12.753$, $p = 0.000$). Given the high coefficient and t-value well above the critical threshold of 1.96, H1 is accepted. This indicates that individuals' internal moral obligations substantially shape favorable attitudes toward ERB. In comparison, social norms also exert a positive and significant effect on attitudes ($\beta = 0.171$, $t = 2.944$, $p = 0.003$), leading to the acceptance of H2. Although significant, the smaller coefficient suggests that external social pressures contribute to attitude formation to a lesser extent than personal moral standards.

Attitudes toward ERB, in turn, significantly influence the intention to behave in an environmentally responsible manner ($\beta = 0.520$, $t = 4.962$, $p = 0.000$). Therefore, H3 is accepted. The magnitude of this coefficient indicates that more favorable attitudes are associated with stronger behavioral intentions. Additionally, perceived behavioral control has a positive and significant impact on intention ($\beta = 0.385$, $t = 3.418$, $p = 0.001$), supporting H4. This finding implies that individuals who perceive greater control over performing environmentally responsible actions are more likely to intend to engage in such behavior.

The indirect effects further confirm the mediating role of attitudes. Personal norms significantly influence intention through attitudes ($\beta = 0.399$, $t = 4.323$, $p = 0.000$), supporting H5. This result demonstrates that attitudes act as a key mechanism through which internal moral values are translated into behavioral intentions. Similarly, social norms have a significant indirect effect on intention via attitudes ($\beta = 0.089$, $t = 2.775$, $p = 0.006$), leading to the acceptance of H6. Although the indirect effect of social norms is weaker, it remains statistically meaningful.

Overall, all proposed hypotheses (H1–H6) are supported. The results confirm that attitudes function as a pivotal mediating construct that connects both personal and social norms to intentions to engage in ERB, while perceived behavioral control directly strengthens such intentions.

Table 5. R-Square Test

| | R Square | R Square Adjusted |
|--------------------|----------|-------------------|
| Attitude | 0.834 | 0.832 |
| Behavior Intention | 0.769 | 0.766 |

Table 5 presents the results of the coefficient of determination (R^2) and adjusted R^2 analyses for the two dependent variables: Attitude toward ERB and Intention toward ERB. The R^2 value reflects the proportion of variance in the dependent variable that can be explained by the independent variables included in the model.

For the Attitude toward ERB construct, the R^2 value of 0.834 suggests that 83.4% of the variance in attitude can be explained by the independent variables, personal norms, and social norms. The adjusted R^2 value of 0.832, which accounts for the number of predictors and sample size, also remains high, indicating that the model demonstrates strong predictive power in explaining attitudes toward ERB.

Similarly, for the Intention toward ERB construct, the R^2 value of 0.769 implies that 76.9% of the variance in intention is explained by attitude and perceived behavioral control. The adjusted R^2 value of 0.766 shows only a minimal reduction after adjustment, confirming the robustness and validity of the model in predicting individuals' intentions to engage in environmentally responsible actions.

Figure 3. Structure Model

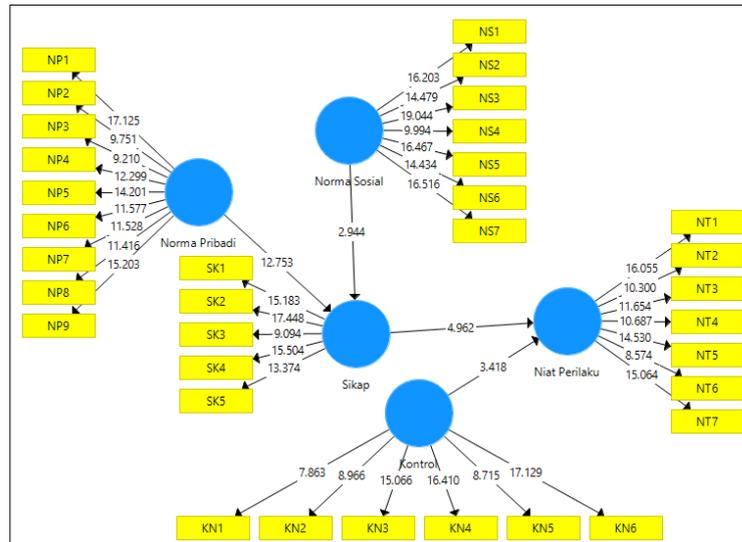


Figure 3 presents the results of the structural model analysis using PLS-SEM. The outer model evaluation shows that all indicators loaded significantly on their respective constructs, with t-values exceeding the critical threshold of 1.96, indicating adequate indicator reliability. In the structural model, Personal Norms had a significant positive effect on Attitude ($t = 12.753$), suggesting that stronger internal moral obligations enhanced residents' positive attitudes toward ERB. Social Norms also significantly influenced Attitude ($t = 2.944$), although the effect was weaker compared to Personal Norms. Furthermore, Attitude significantly affected Behavioral Intention ($t = 4.962$), indicating that favorable attitudes increased residents' intention to act responsibly. Perceived Behavioral Control demonstrated a significant positive influence on Behavioral Intention ($t = 3.418$), implying that higher confidence in one's ability to perform pro-environmental actions strengthened intention. Overall, the findings confirmed that personal and social normative factors shaped behavioral intention both directly and indirectly through Attitude, highlighting the central mediating role of Attitude in the proposed model. The results of this study highlight the crucial role of social norms and personal norms as antecedents influencing community attitudes and behavioural control, which in turn affect the intention to behave in an environmentally responsible manner. The core implication of these findings is the optimization of the community's role as environmental stewards. The analysis of the six proposed hypotheses indicates that all are supported by empirical data.

DISCUSSION

H1: Personal Norms → Attitude Toward ERB

The findings indicate that personal norms exert a significant positive influence on attitudes toward ERB. This suggests that residents' internalized moral obligations and sense of personal responsibility play a central role in shaping their evaluation of environmental protection efforts. In tourism villages, environmental responsibility appears to be grounded not merely in external expectations but in deeply held personal values. This result is consistent with NAT (Schwartz, 1977), which posits that behavior is driven by activated moral norms. Previous studies have similarly shown that personal norms are strong predictors of environmental attitudes and intentions (Ponnapureddy et al., 2020; Shi et al., 2017; Zhang & Stewart, 2017). The present findings reinforce the view that moral commitment serves as a key psychological foundation for pro-environmental attitudes in CBT settings.

H2: Social Norms → Attitude Toward ERB

Social norms were also found to positively influence attitudes toward ERB, although their effect was weaker than that of personal norms. This indicates that perceived expectations from the community contribute to shaping residents' environmental evaluations. The result aligns with the TPB (Ajzen, 1991), which highlights the importance of normative pressures in shaping attitudes and intentions. In tourism villages, environmental practices are often embedded in collective routines and shared expectations. Thus, social norms function as reinforcing mechanisms that encourage individuals to adopt favorable attitudes toward environmental protection. This finding is in line with prior research demonstrating the role of normative influence in promoting sustainable behavior (Han et al., 2019; Rezaei, 2019).

H3: Attitude → Intention to Engage in ERB

The analysis confirms that attitudes toward ERB significantly predict intention to behave in an environmentally responsible manner. Residents who evaluate environmental protection positively are more likely to express strong behavioral intentions. This result is consistent with the central proposition of TPB, which positions attitude as a primary determinant of intention (Ajzen, 1991). In the context of tourism villages, a favorable perception of environmental stewardship appears to translate directly into commitment to action. Similar relationships have been documented in sustainability research, where positive environmental attitudes strengthen behavioral intention (Bijani et al., 2022; Han et al., 2019).

H4: Perceived Behavioral Control → Intention to Engage in ERB

Perceived behavioral control was found to significantly influence intention. This suggests that residents' confidence in their ability to carry out environmentally responsible practices strengthens their willingness to act. In line with TPB, perceived control reflects individuals' assessment of their capacity and available resources (Ajzen, 1991). When residents perceive that they have sufficient support, facilities, and knowledge to engage in pro-environmental practices, their intention becomes stronger. This finding underscores the importance of enabling conditions in fostering sustainable behavior.

H5: Personal Norms → Attitude → Intention

The mediation analysis reveals that personal norms influence intention indirectly through attitudes. In other words, moral obligation shapes behavioral intention by first shaping evaluative judgments about environmental responsibility. This pattern supports the integration of NAT and TPB. Moral norms do not operate in isolation; rather, they influence behavior through cognitive processes that form attitudes. The findings suggest

that strengthening residents' moral awareness is likely to enhance intention, particularly when such awareness translates into positive environmental evaluations.

H6: Social Norms → Attitude → Intention

Similarly, social norms were found to affect intention indirectly through attitudes. Community expectations contribute to intention formation by fostering favorable environmental attitudes. This indicates that collective environmental values become internalized and influence behavioral decision-making through attitudinal pathways. As noted by [Perugini and Bagozzi \(2001\)](#), personal and social norms often reinforce one another within social contexts. In tourism villages, shared environmental responsibility appears to function as a collective norm that supports sustainable behavioral intentions.

CONCLUSION

This study aimed to examine the determinants of residents' intentions to engage in ERB in tourism villages by integrating NAT and the TPB, with particular emphasis on the mediating role of attitude. The findings of this study confirm that residents' intentions to engage in ERB are shaped by the combined influence of moral convictions, social expectations, evaluative judgments, and perceived capability. Personal norms emerge as the most influential determinant of attitude toward ERB, indicating that internalized moral responsibility plays a central role in forming favorable environmental evaluations. Social norms also contribute positively to attitude formation, although their influence is comparatively weaker. These results suggest that while community expectations matter, residents' internal moral standards constitute the primary foundation of pro-environmental attitudes in tourism villages.

Attitude functions as a pivotal mechanism within the model. Favorable evaluations of environmental responsibility significantly increase residents' intentions to act accordingly, and attitudes mediate the effects of both personal and social norms on intention. This pattern indicates that normative beliefs translate into behavioral intention through evaluative processes rather than through direct normative pressure alone. In addition, perceived behavioral control directly strengthens intention, demonstrating that residents' confidence in their ability to perform environmentally responsible actions is essential for converting positive attitudes into planned behavior.

From a practical standpoint, the results imply that strategies aimed at promoting sustainable tourism should address both internal and external drivers of behavior. Programs that cultivate moral awareness and environmental responsibility at the individual level are likely to have a substantial impact. At the same time, reinforcing supportive community norms can further consolidate positive attitudes. Efforts to enhance perceived behavioral control, such as providing accessible facilities, clear guidelines, and institutional support, are equally important, as intention is strengthened when individuals perceive environmental action to be feasible.

The study contributes theoretically by integrating NAT and the TPB in a community-based tourism context, demonstrating how normative factors and perceived control operate through attitudinal processes to shape intention. Future research may extend this model by examining additional contextual or structural variables that influence the translation of intention into actual environmentally responsible behavior.

LIMITATION

Despite its valuable contributions, this study is not without limitations. First, the sample was confined to three tourist villages in the DIY, which may limit the generalizability of the results to other regions with different cultural or policy contexts. Second, the cross-

sectional nature of the study captures data from a single time frame, making it difficult to observe evolving patterns or long-term behavioral changes. Third, while the quantitative approach provided valuable insights, it could be complemented by qualitative methods such as interviews or field observations to better capture the lived experiences and contextual realities of sustainable tourism communities. Fourth, future research should include larger and more diverse samples to enhance the robustness and external validity of the findings. Moreover, researchers should explore the influence of destination type and data depth (He & Zhan, 2018; Onwezen et al., 2013; Zhang et al., 2018) as additional determinants shaping individuals' intentions toward ERB (Han, 2014; Park & Ha, 2014).

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DECLARATION OF CONFLICTING INTERESTS

The author declares that there is no conflict of interest.

REFERENCES

- Ajzen, I. (1985). From Intentions to Actions: A Theory of Planned Behavior. In *Action Control* (pp. 11–39). Springer Berlin Heidelberg. https://doi.org/10.1007/978-3-642-69746-3_2
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
- Axelrod, L. J., & Lehman, D. R. (1993). Responding to environmental concern: What factors guide individual action? *Journal of Environmental Psychology*, 13(2), 149–159.
- Bamberg, S., Hunecke, M., & Blöbaum, A. (2007). Social context, personal norms, and the use of public transportation: Two field studies. *Journal of Environmental Psychology*, 27(3), 190–203. <https://doi.org/10.1016/J.JENVP.2007.04.001>
- Bijani, M., Mohammadi-Mehr, S., & Shiri, N. (2022). Towards rural women's pro-environmental behaviors: Application of protection motivation theory. *Global Ecology and Conservation*, 39, e02303. <https://doi.org/10.1016/J.GECCO.2022.E02303>
- Bruyere, B. L., Beh, A. W., & Foster, G. (2011). Perceptions of wildlife parks by youth who live near them: A study in Samburu, Kenya. *Children, Youth and Environments*, 21(2), 168-183. <https://doi.org/10.1353/cye.2011.0022>
- Chin, J., Jiang, B. C., Mufidah, I., Persada, S. F., & Noer, B. A. (2018). The investigation of consumers' behavior intention in using green skincare products: A pro-environmental behavior model approach. *Sustainability*, 10(11), 3922. <https://doi.org/10.3390/su10113922>
- Chiu, W., & Cho, H. (2022). The model of goal-directed behavior in tourism and hospitality: A meta-analytic structural equation modeling approach. *Journal of Travel Research*, 61(3), 637-655. <https://doi.org/10.1177/0047287521991242>
- Chiu, Y. T. H., Lee, W. I., & Chen, T. H. (2014). Environmentally responsible behavior in ecotourism: Antecedents and implications. *Tourism Management*, 40, 321–329. <https://doi.org/10.1016/J.TOURMAN.2013.06.013>
- Dong, Z., Wu, Z., & Hou, Y. (2023). Protect the environment for impressing others? Understanding whether, why, and when relational mobility shapes individual pro-environmental behaviors. *Journal of Cleaner Production*, 427, 139215. <https://doi.org/10.1016/J.JCLEPRO.2023.139215>

- Fauzi, M. A., Hanafiah, M. H., & Kunjuraman, V. (2024). Tourists' intention to visit green hotels: building on the theory of planned behavior and the value-belief-norm theory. *Journal of Tourism Futures*, 10(2), 255–276. <https://doi.org/10.1108/JTF-01-2022-0008>
- Fenitra, R. M., Premananto, G. C., Sedera, R. M. H., Abbas, A., & Laila, N. (2022). Environmentally responsible behavior and knowledge-belief-norm in the tourism context: The moderating role of types of destinations. *International Journal of Geoheritage and Parks*, 10(2), 273-288. <https://doi.org/10.1016/j.ijgeop.2022.05.001>
- Gautam, V. (2020). Examining environmental friendly behaviors of tourists towards sustainable development. *Journal of Environmental Management*, 276, 111292. <https://doi.org/10.1016/j.jenvman.2020.111292>
- Gohary, A., Shah, A., Hosseini, S. R., Chan, E. Y., & Madani, F. (2022). God salience and tourists' pro-environmental behavior. *Annals of Tourism Research*, 93. <https://doi.org/10.1016/j.annals.2021.103318>
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2–24. <https://doi.org/10.1108/EBR-11-2018-0203>
- Han, H. (2014). The norm activation model and theory-broadening: Individuals' decision-making on environmentally-responsible convention attendance. *Journal of Environmental Psychology*, 40, 462–471. <https://doi.org/10.1016/J.JENVP.2014.10.006>
- Han, H. (2021). Consumer behavior and environmental sustainability in tourism and hospitality: a review of theories, concepts, and latest research. *Journal of Sustainable Tourism*, 29(7), 1–22.
- Han, H., & Hyun, S. S. (2017). Drivers of customer decision to visit an environmentally responsible museum: merging the theory of planned behavior and norm activation theory. *Journal of Travel and Tourism Marketing*, 34(9), 1155–1168. <https://doi.org/10.1080/10548408.2017.1304317>
- Han, H., Hwang, J., Lee, M. J., & Kim, J. (2019). Word-of-mouth, buying, and sacrifice intentions for eco-cruises: Exploring the function of norm activation and value-attitude-behavior. *Tourism Management*, 70, 430–443. <https://doi.org/10.1016/J.TOURMAN.2018.09.006>
- Han, H., Yu, J., Kim, H. C., & Kim, W. (2018). Impact of social/personal norms and willingness to sacrifice on young vacationers' pro-environmental intentions for waste reduction and recycling. *Journal of Sustainable Tourism*, 26(12), 2117–2133. <https://doi.org/10.1080/09669582.2018.1538229>
- He, X., & Zhan, W. (2018). How to activate moral norm to adopt electric vehicles in China? An empirical study based on extended norm activation theory. *Journal of Cleaner Production*, 172, 3546–3556. <https://doi.org/10.1016/J.JCLEPRO.2017.05.088>
- Hilman, Z., Awfa, D., Fitria, L., Suryawan, I. W. K., & Prayogo, W. (2023). Problematika sampah di sektor perjalanan dan pariwisata: Kajian literatur. *Jurnal Teknologi Lingkungan Lahan Basah*, 11(3), 896-903. <https://doi.org/10.26418/jtlb.v11i3.72509>
- Jansson, J., & Dorrepaal, E. (2015). Personal norms for dealing with climate change: Results from a survey using moral foundations theory. *Sustainable Development*, 23(6), 381–395. <https://doi.org/10.1002/sd.1598>
- Kanal Muria. (2023, October 5). *Permasalahan sampah di tempat wisata menjadi perhatian serius*. Kanal Muria. <https://kanalmuria.com/permasalahan-sampah-di-tempat-wisata-menjadi-perhatian-serius/>

- Kang, M., & Moscardo, G. (2006). Exploring cross-cultural differences in attitudes towards responsible tourist behaviour: A comparison of Korean, British and Australian tourists. *Asia Pacific Journal of Tourism Research*, 11(4), 303-320. <https://doi.org/10.1080/10941660600931143>
- Kee, D. M. H., Lee, J. W. K. H., Azlan, I. Y. A., Subramaniam, J. A., Koay, J. C. W., Putri, A. M., ..., & Shrivastava, K. (2023). Sustainability in the food and beverage industry: A comparative study of Malaysia, India, and Indonesia. *International Journal of Tourism and Hospitality in Asia Pasific*, 6(3). <https://doi.org/10.32535/ijthap.v6i3.2591>
- Kim, J. S., Lee, T. J., & Kim, N. J. (2021). What motivates people to visit an unknown tourist destination? Applying an extended model of goal-directed behavior. *International Journal of Tourism Research*, 23(1), 13–25. <https://doi.org/10.1002/jtr.2388>
- Lee, T. H., Jan, F. H., & Yang, C. C. (2013). Conceptualizing and measuring environmentally responsible behaviors from the perspective of community-based tourists. *Tourism Management*, 36, 454–468. <https://doi.org/10.1016/J.TOURMAN.2012.09.012>
- Lestawi, I. N., & Bunga, D. (2020). The role of customary law in the forest preservation in Bali. *Journal of Landscape Ecology*, 13(1), 25-41. <https://doi.org/10.2478/jlecol-2020-0002>
- Luo, W., Tang, P., Jiang, L., & Su, M. M. (2020). Influencing mechanism of tourist social responsibility awareness on environmentally responsible behavior. *Journal of Cleaner Production*, 271, 122565. <https://doi.org/10.1016/J.JCLEPRO.2020.122565>
- Maryunani, M. (2023). Increasing community participation in village development through BUMDesa management in East Java. *Journal of the Community Development in Asia*, 6(2), 223–236. <https://doi.org/10.32535/jcda.v6i2.2278>
- Meng, B., & Choi, K. (2016). The role of authenticity in forming slow tourists' intentions: Developing an extended model of goal-directed behavior. *Tourism Management*, 57, 397–410. <https://doi.org/10.1016/J.TOURMAN.2016.07.003>
- Onwezen, M. C., Antonides, G., & Bartels, J. (2013). The Norm Activation Model: An exploration of the functions of anticipated pride and guilt in pro-environmental behavior. *Journal of Economic Psychology*, 39, 141–153. <https://doi.org/10.1016/J.JOEP.2013.07.005>
- Panwanitdumrong, K., & Chen, C. L. (2021). Investigating factors influencing tourists' environmentally responsible behavior with extended theory of planned behavior for coastal tourism in Thailand. *Marine Pollution Bulletin*, 169, 112507. <https://doi.org/10.1016/J.MARPOLBUL.2021.112507>
- Park, J., & Ha, S. (2014). Understanding consumer recycling behavior: Combining the theory of planned behavior and the norm activation model. *Family and Consumer Sciences Research Journal*, 42(3), 278-291. <https://doi.org/10.1111/fcsr.12061>
- Perugini, M., & Bagozzi, R. P. (2001). The role of desires and anticipated emotions in goal-directed behaviours: Broadening and deepening the theory of planned behaviour. *British Journal of Social Psychology*, 40(1), 79-98. <https://doi.org/10.1348/0144666011164704>
- Perugini, M., & Conner, M. (2000). Predicting and understanding behavioral volitions: The interplay between goals and behaviors. *European Journal of Social Psychology*, 30(5), 705-731. [https://doi.org/10.1002/1099-0992\(200009/10\)30:5%3C705::AID-EJSP18%3E3.0.CO;2-%23](https://doi.org/10.1002/1099-0992(200009/10)30:5%3C705::AID-EJSP18%3E3.0.CO;2-%23)
- Ponnappureddy, S., Priskin, J., Vinzenz, F., Wirth, W., & Ohnmacht, T. (2020). The mediating role of perceived benefits on intentions to book a sustainable hotel: A multi-group comparison of the Swiss, German and USA travel markets. *Journal of Sustainable Tourism*, 28(9), 1290-1309. <https://doi.org/10.1080/09669582.2020.1734604>

- Rezaei, S. (2019). *Quantitative Tourism Research in Asia: Current Status and Future Directions*. Springer Singapore.
- Runtunuwu, P. C. H., & Husen, Z. (2023). Does attractiveness and value of eco-tourism relate to income of micro, small, and medium businesses in tourism object? Study in North Maluku. *International Journal of Applied Business and International Management*, 8(1), 62–73. <https://doi.org/10.32535/ijabim.v8i1.1963>
- Saleem, M. A., Li, J., & Afzal, H. (2021). Protect for affinity? The role of destination brand engagement in forming environmentally responsible tourist behaviours. *Journal of Sustainable Tourism*, 29(8), 1344-1364. <https://doi.org/10.1080/09669582.2020.1835932>
- Savari, M., Mombeni, A. S., & Izadi, H. (2022). Socio-psychological determinants of Iranian rural households' adoption of water consumption curtailment behaviors. *Scientific Reports*, 12(1), 13077. <https://doi.org/10.1038/s41598-022-17560-x>
- Schwartz, S. H. (1977). Normative influences on altruism. In *Advances in Experimental Social Psychology* (Vol. 10, pp. 221-279). Academic Press.
- Sekaran, U., & Bougie, R. (2016). *Research Methods for Business: A Skill Building Approach*. John Wiley & Sons.
- Shanmugavel, N., & Rajendran, R. (2022). Adoption of rainwater harvesting: A dual-factor approach by integrating theory of planned behaviour and norm activation model. *Water Resources Management*, 36(8), 2827-2845. <https://doi.org/10.1007/s11269-022-03179-0>
- Shi, J., Wang, L., Yao, Y., Zhan, C., Su, N., & Zhao, X. (2017). Systemic therapy for youth at clinical high risk for psychosis: A pilot study. *Frontiers in Psychiatry*, 8, 211. <https://doi.org/10.3389/fpsy.2017.00211>
- Sivek, D. J., & Hungerford, H. (1990). Predictors of responsible behavior in members of three Wisconsin conservation organizations. *The Journal of Environmental Education*, 21(2), 35-40. <https://doi.org/10.1080/00958964.1990.9941929>
- Stern, P. C., Dietz, T., & Guagnano, G. A. (1995). The new ecological paradigm in social-psychological context. *Environment and Behavior*, 27(6), 723-743. <https://doi.org/10.1177/0013916595276001>
- Su, L., Hsu, M. K., & Boostrom Jr, R. E. (2020). From recreation to responsibility: Increasing environmentally responsible behavior in tourism. *Journal of Business Research*, 109, 557-573. <https://doi.org/10.1016/j.jbusres.2018.12.055>
- Teng, Y. M., Wu, K. S., & Liu, H. H. (2015). Integrating altruism and the theory of planned behavior to predict patronage intention of a green hotel. *Journal of Hospitality & Tourism Research*, 39(3), 299-315. <https://doi.org/10.1177/1096348012471383>
- Timothy, D.J. (2002) Tourism and Community Development Issues. In R. Sharpley and D. Telfer (Eds.), *Tourism and Development: Concepts and Issues* (pp. 149–164). Channel View Publications.
- U.S. Environmental Protection Agency (EPA). (2021). *Environmental Stewardship*. Environmental Stewardship.
- United Nations. (2020). *High-Level Political Forum 2020*. High-Level Political Forum on Sustainable Development. <https://hlpf.un.org/2020>
- Weaver, D. (2011). Celestial ecotourism: New horizons in nature-based tourism. *Journal of Ecotourism*, 10(1), 38-45. <https://doi.org/10.1080/14724040903576116>
- Wicaksono, P. (2024, August 12). *Kememparekraf Soroti Darurat Sampah di Yogyakarta, Berdampak Buruk terhadap Pariwisata*. Tempo.co. https://www.tempo.co/ekonomi/kememparekraf-soroti-darurat-sampah-di-yogyakarta-berdampak-buruk-terhadap-pariwisata-26355#google_vignette
- Yazdanpanah, M., & Forouzani, M. (2015). Application of the Theory of Planned Behaviour to predict Iranian students' intention to purchase organic food. *Journal of Cleaner Production*, 107, 342-352. <https://doi.org/10.1016/J.JCLEPRO.2015.02.071>

Zhang, H., Zhang, X., & Bai, B. (2021). Tourism employee pro-environmental behavior: An integrated multi-level model. *Journal of Hospitality and Tourism Management*, 47, 443-452. <https://doi.org/10.1016/J.JHTM.2021.04.014>

Zhang, L., & Stewart, W. (2017). Sustainable tourism development of landscape heritage in a rural community: A case study of Azheke village at China Hani Rice Terraces. *Built Heritage*, 1(4), 37-51. <https://doi.org/10.1186/BF03545656>

Zhang, X., Liu, J., & Zhao, K. (2018). Antecedents of citizens' environmental complaint intention in China: An empirical study based on norm activation model. *Resources, Conservation and Recycling*, 134, 121-128. <https://doi.org/10.1016/J.RESCONREC.2018.03.003>

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