

## 14. Antecedents of Pro-Environmental Behavioral Intention towards Eco-tourism of Chinese Domestic Tourists: Integration of Theory of Planned Behavior and Theory of Interpersonal Behavior

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### EXTENDED ABSTRACT

In tourism activities, tourists' pro-environmental behavioral intention (PEBI) is an antecedent of human interaction with the environment. This study identifies the factors of pro-environmental behavioral intention among Chinese domestic tourists in eco-tourism. A comprehensive pro-environmental behavioral intention model was constructed using the integrated TPB, TIB, and control variables. Analysis results indicate that (1) perceived eco-tourism usefulness, publicity and education, policies and regulations, infrastructure, and perceived behavioral control have significant positive effects on PEBI and (2) all three controls do not significantly affect the results.

### LITERATURE REVIEW

Perceived eco-tourism usefulness refers to the extent tourists believe that participating in eco-tourism will increase their pro-environmental behavior by learning experiences or activities in eco-tourism destinations. Manoj et al. (2020) indicate that visitors' environmental engagement may also significantly impact the development of environmental learning behaviors.

**H1a** *Perceived eco-tourism usefulness positively affects their PEBI.*

It is necessary to reinforce their altruistic values, ecological values and environmental beliefs so that users know that pro-environmental behavior can make them become better people (Xie et al., 2020).

**H1b** *Biosphere value positively affects their PEBI.*

Tourists can be given knowledge and information about decreasing waste at tourism destinations to improve their capability to decrease waste (Wang et al., 2021).

**H1c** *Environmental knowledge positively affects their PEBI.*

Environmental education, known as environmental moral education, positively correlates with pro-environmental behavior.

**H2a** *Publicity and education positively affect their PEBI.*

Regulatory policies can turn the behavior of regional residents into PEBs by imposing substantial administrative penalties on individuals or companies that have polluted the environment (Hong & Park, 2018).

**H2b** *Policies and regulations positively affect their PEBI.*

The more the subjective norm's pressure, the greater the intention of consumers to shop with reusable bags (Wang & Li, 2022).

**H3a** *Subjective norm positively affects their PEBI.*

TPB factors associated with behavior-specific self-identity will have greater predictive strength than TPB alone (Lee & Jan, 2018).

**H3b** *Eco-tourism self-identity positively affects their PEBI.*

Although the level of tourism risk does not always correlate negatively with tourists' intention, the safety requirements of tourists can affect tourist behavioral intention, and the increase in tourists' perception of destination risk hurts their behavioral intention (Zhang et al., 2020).

**H4a** *Risk negatively affects their PEBI.*

Public environmental facilities are an essential component of tourism destinations as a hygiene factor in environmental behavior (Wang et al., 2020).

**H4b** *Infrastructure positively affects their PEBI.*

Perceived behavioral control is the most significant factor influencing intentional behavior in the pro-environmental workplace of employees in Malaysian public organizations (Razak & Sabri, 2019).

**H5** *Perceived behavioral control positively affects their PEBI.*

Many studies suggest that habits should be a significant explanatory structure for a sustainable lifestyle (Verplanken & Roy, 2016).

**H6** *Habit positively affects their PEBI.*

## RESEARCH METHOD

To measure Chinese domestic tourists' PEBI, measurement scales and items were developed based on previous literature that applied TPB and TIB in pro-environmental and eco-tourism contexts. Chinese domestic tourists can be seen as the target population to make the sample more comprehensive and representative. The survey was conducted from January 2022 to February 2022. By applying simple random sampling techniques, the online survey was conducted. After data cleaning, the useable sample size of 559 with an 89% response rate was sufficient for data analysis. PLS-SEM was used to test the measurement model and structural model.

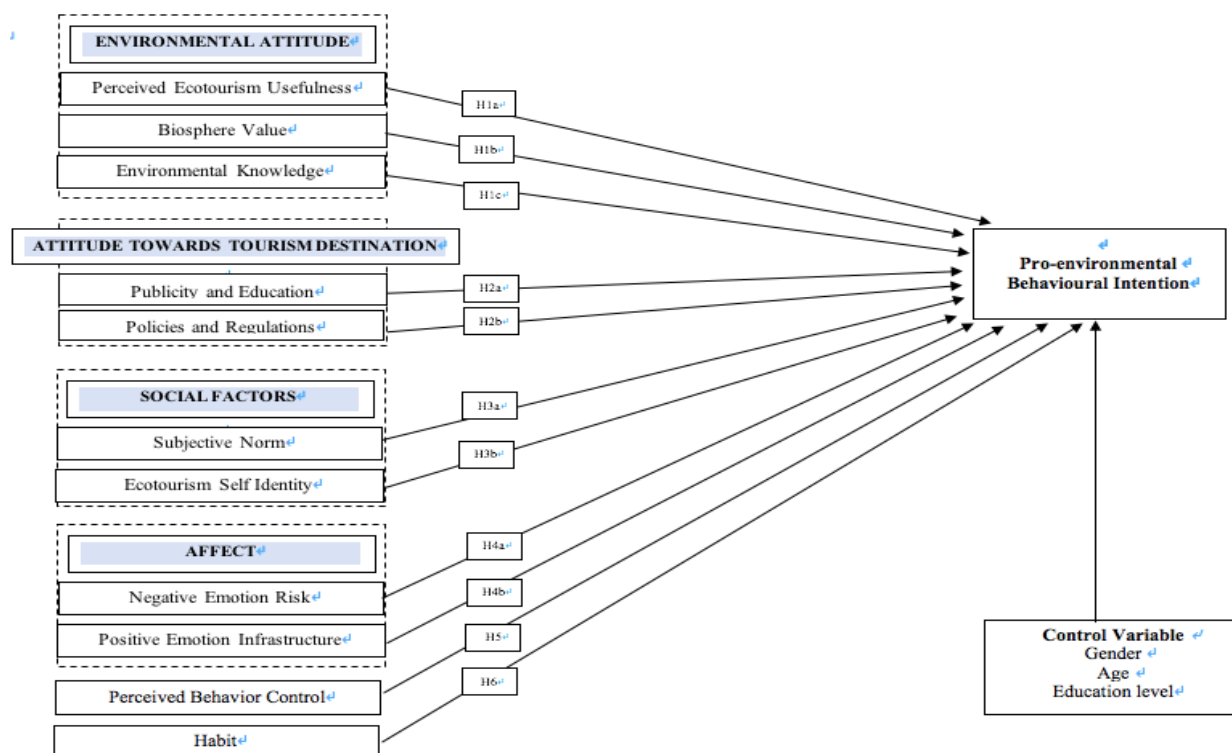


Figure 1: The Proposed Conceptual Model

## RESULTS

### Measurement Model Assessment

The results indicated that all the constructs had Cronbach's Alpha ranging from 0.737 to 0.931, and composite reliability ranged from 0.848 to 0.949, which exceeded the recommended threshold. The AVE were all higher than 0.50 to support convergent validity, except pro-environmental behavioral intention with the value of AVE of 0.421. Therefore, the outer loading value of SN5 less than 0.50 was deleted, and PEBI5, PEBI7, PEBI9, PEBI10 were removed to meet the recommended AVE thresholds. All HTMT values were less than the stricter criterion of <0.85.

### Structural Model Assessment

The research results confirmed that perceived ecotourism usefulness has a positive and significant influence on PEBI (H1a,  $\beta = 0.104$ ,  $p < 0.01$ ). Biosphere value has no significant influence on PEBI (H1b,  $\beta = -0.001$ ,  $p > 0.05$ ). Environmental knowledge has no significant influence on PEBI (H1c,  $\beta = 0.006$ ,  $p > 0.05$ ). Publicity and education have a positive and significant influence on PEBI (H2a,  $\beta = 0.203$ ,  $p < 0.001$ ). Policies and regulations have a positive and significant influence on PEBI (H2b,  $\beta = 0.142$ ,  $p < 0.01$ ). Subjective norm has no significant influence on PEBI (H3a,  $\beta = -0.008$ ,  $p > 0.05$ ). Ecotourism self-identity has no significant influence on PEBI (H3b,  $\beta = 0.018$ ,  $p > 0.05$ ). Risk has no significant influence on PEBI (H4a,  $\beta = -0.083$ ,  $p > 0.05$ ). Infrastructure has a positive and significant influence on PEBI (H4b,  $\beta = 0.213$ ,  $p < 0.001$ ). Perceived behavioral control has a positive and significant influence on PEBI (H5,  $\beta = 0.378$ ,  $p < 0.001$ ). Habit has no significant influence on PEBI (H6,  $\beta = 0.010$ ,  $p > 0.05$ ). Thus, hypotheses H1a, H2a, H2b, H4b, and H5 were accepted. In addition, the results indicated that gender ( $\beta = 0.000$ ,  $p > 0.05$ ), age ( $\beta = -0.038$ ,  $p > 0.05$ ), and education level ( $\beta = -0.036$ ,  $p > 0.05$ ) were found to be insignificant.

## DISCUSSIONS

This study was designed to identify Chinese domestic tourists' pro-environmental behavioral intentions. The results showed that the TPB and TIB theory, and thus perceived eco-tourism usefulness, publicity and education, policies and regulations, infrastructure, and perceived behavioral control have strong predictive power for PEBI. In general, this model of the TPB and TIB theory explained 60% of the variance in PEBI ( $R^2 = 0.603$ ). Notably, the insignificance of gender, age and education level did not worsen the primary model results. It assesses PEBI as a multidimensional construction to capture a large variety of eco-tourism activities in China and improve the performance behavior of Chinese domestic tourists and the sustainable development ability of tourism destinations.

Furthermore, the more attention tourism boards and the ministry, tourism managers, and government give to sustainable tourism development, the more likely it is that Chinese domestic tourists will increase their intention to engage in pro-environmental behavior during tourism. Due to time, budget and resource constraints, only a quantitative survey was used to collect data. However, future studies could consider using qualitative or mixed research methods to gain deeper insight into the investigated issues and participants' attitudes. The case study for this research is limited to one popular eco-tourism destination, Yulong snow mountain in Yunnan, an ecological resources-based tourist attraction that may not generalize to all other tourism destinations. This investigation may be expanded to include other cases, such as farm, coastal and adventure tourist destinations, to compare and examine the difference in their PEBI.

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