

Face consciousness, personal norms, and environmentally responsible behavior of Chinese tourists: Evidence from a lake tourism site

Abstract: This study explores the role of face consciousness in tourists' environmentally responsible behavior (ERB). It expands the norm activation theory, integrates the concept of face consciousness and examines how personal norms (PN) on environmentally responsible behavior is moderated by face consciousness. Data was collected from 415 mainland Chinese tourists in West Lake, China. Structural equation modeling was employed to test the proposed theoretical framework. The results show that ascribed responsibility positively influences personal norms, while awareness of consequences plays a decisive role in activating personal norms. Furthermore, the results demonstrate that the fear of losing face moderates the relationship between personal norms and environmentally responsible behavior. The study also investigates the moderating role of age difference between personal norms and environmentally responsible behavior. The effect of personal norms on environmentally responsible behavior is stronger in younger tourists. Our findings make important theoretical contributions to the literature of ERB in tourism and offer practical implications for tourism managers to encourage responsible behavior among tourists.

Key Words: norm activation theory; face consciousness; personal norms; environmentally responsible behavior; Chinese tourists; age difference

1. Introduction

The ongoing rise of tourists and their environmental impacts on tourism destinations have attracted increasing interest from scholars and practitioners (Han et al., 2020; Xu et al., 2020). Mainland China has become one of the largest tourism markets in the world. As a consequence, Chinese tourists' environmentally responsible behavior has attracted strong interest in the past decade (Wang & Zhang, 2020). Face consciousness is an important concept to understand Chinese travelers' behavior (Gao et al., 2017; Kwek & Lee, 2015). Face is known as *Mianzi* in Chinese (Hwang, 1987; [Chen et al., 2021](#)). Chinese people aspire to project an image of decency or social responsibility. The desire to gain face may be equally relevant in environmental protection initiatives as it has been in the brand marketing literature (Wan & Poon, 2014). When people engage in environmentally responsible behaviors (ERB) for a collective purpose, their peers may be induced to adopt these ERB(s) (Hwang, 2012). Face is the core spiritual creed in regulating social behavior in Chinese culture (Ho, 1976; Lin, 1939). To avoid losing face or even to gain face, Chinese people tend to behave in a socially responsible way (Hwang, 2012). The concept of face gain and face loss have been well documented in the luxury branding literature. Our study builds on prior research and tests face as a potential moderator in Chinese travelers' ERB. Ho (1976) notes that Chinese social interactions are inevitably influenced by even the slight chance of gaining face or losing face. In keeping with the social order, face acts as a subtle behavioral norm that Chinese people consciously or unconsciously follow in their interpersonal interactions (Qi, 2011). It plays a key role in ethical judgment and moral practice (Hwang, 1987, 2012).

Given the deleterious impacts resulting from over-tourism in the pre COVID-19 context, Chinese travelers (and others) have called for research on informing and educating Chinese travelers to assume responsibility and behave in environmentally friendly ways (Yang et al., 2021). Environmentally responsible behavior (ERB) is broadly defined as those activities that intentionally seek to minimize negative impacts and maximize positive impacts of travelers' actions on the ecological environment (Chiu et al., 2014). Scholars have found that norm activation theory (NAT) can effectively explain and predict environmentally responsible behavior (Han, 2014; Onwezen et al., 2013). NAT was initially created by Schwartz to study the relationship between moral decision-making and individual altruistic behavior such as ERB and cultural responsible behaviors (Schwartz 1977). Despite NAT's great usefulness, there is an increasing awareness that its explanatory capability must be improved by including certain neglected factors that, from a culture perspective, shape ERB in individual lives (Harland et al.,

2007; Zhang et al., 2016). The personal norm (PN) concept is central to NAT for encouraging ERB (Lalot et al., 2019; Schwartz, 1977). Personal norms refer to an individual's self-expectations for specific actions (Schwartz, 1977). Undoubtedly, personal moral norms are closely related to culture (Hsu & Huang, 2016). Culture forms individuals' moral self-expectations (Wang & Zhang, 2020), yet very little research has examined the role of cultural factors in the relationship between PN and ERB (Tolkach et al., 2017). This study aims to provide a better understanding of the role of face consciousness and the relationship between personal norms and Chinese travelers' ERB. Specifically, the objectives are as follows: 1) to validate NAT by integrating face consciousness into the proposed theoretical framework to understand Chinese tourists' ERB, and 2) to explore the moderating effect of face consciousness between PN and ERB.

Literature lacks a solid theoretical explanation for scholars to proceed in investigating Chinese environmental responsible decision-making process from the perspective of cultural psychology (Wang & Zhang, 2020; Zhang et al., 2019). While there has been a number of studies on the role of face in tourism, our study contributes to literature through an analysis of the role of face in activating personal norms into ERB using structural equation modelling (SEM) to test the associations between the constructs under investigation. Drawing from Norm Activation Theory and Face theory, we argue Chinese travelers' environmentally responsible behavior may be improved from face consciousness. Our study provides deeper knowledge on how to enhance Chinese tourists' moral obligation to improve ecological problems. We consolidate the explanations that face plays an important role in Chinese tourists' green decision-making process. This study would benefit scholars and practitioners from diverse backgrounds interested in environmental protection issues.

2. Literature review and hypothesized relationships

2.1 Tourist environmentally responsible behavior

Tourist environmentally responsible behavior refers to the activities of tourists aims to prevent or at least minimize the adverse impacts to the destination environment (Cheng & Wu, 2015). Due to the difficulty of measuring actual ERB, the majority of present research has used self-reporting to measure tourist environmentally responsible behavior (Ramkissoon et al., 2012). ERB has been measured differently because of different theoretical backgrounds and various research contexts. Based on the locus of control, Smith Sebasto and D'costa (1995) categorized ERB as six measuring constructs, including

civil action, education action, physical action, financial action, legal action and persuasive action. In tourism academy, general environmentally responsible behavior (GERB) and specific environmentally responsible behavior (SERB) have been extensively studied (Cheng & Wu, 2015; Lee et al., 2015; Ramkissoon et al., 2013). GERB refers to tourist's ERB displayed in daily life (Lee et al., 2015). SERB indicates tourist' ERB conducted at the destination (Ramkissoon et al., 2013). Based on the constructs proposed by Smith-Sebasto and D'Costa (1995), Cheng and Wu (2015) developed the 8-item Likert scale to measure general behavior and specific behavior. General behavior includes solving environmental problem, reading environmental books, reports and advertinments, discussing with others about environmental protection issues and convincing companions to adopt green behaviors. Specific behavior includes recycling, legal behavior, green activities and educational actions.

Tourist environmentally responsible behavior depends on environmental decision making triggered by personal cognitive, affective and normative determinants (Han et al., 2020; Lee et al., 2021). The task of improving ERB is "nudging" the essential determinants in particular directions (Steg & Vlek, 2009). Indeed, numerous studies demonstrated that cognitive variables (attitude, environmental knowledge, environmental awareness), affective factors (place attachment, anticipated feelings, guilty) and normative determinants (moral obligation, social norm) are vital triggers of tourist ERB (Zhang & Huang, 2019). Structural Equation Modelling, a robust quantitative technique, was then adopted to examine the potential relationships between tourists' inherent factors and their environmental responsible behavior (Nunkoo & Ramkissoon, 2012).

Although these studies are insightful in better understanding tourist ERB, some scholars argue that causal analysis of ERB has a blind spot on culture factors which also significantly shape individual's ERB (Wang et al., 2018; Zhang et al., 2019). Individuals don't make green decisions in a cultural vacuum. Instead, an individual's decision-making process of ERB is constructed and embedded in cultural thought patterns (Wang & Zhang, 2020). Recently, several researchers used qualitative research methods (e.g. auto-ethnography, in-depth interview) to demonstrate that face exerts a key role in shaping Chinese tourists' responses to environmentally responsible change processes. For example, Zhang et al. (2019) demonstrated that Chinese outbound tourists behave environmentally responsible for fear of losing face. However, the potential relationship between face and ERB has not been examined by using advanced statistical techniques. It is thus timely to conduct the study on how face influences tourist ERB.

2.2 Norm activation theory

Personal norms (PN) are the central construct in NAT, with two activation factors of awareness of consequences (AC) and ascribed responsibility (AR) (Onwezen et al., 2013; Schwartz, 1977). Ascribed responsibility refers to actors' assumption of responsibility for the consequences of their actions (Schwartz, 1977; Steg & De Groot, 2010). Personal norms are defined as self-expectation of environmentally responsible behavior (Harland et al., 2007) while awareness of consequences indicates that one's potential actions may have negative effects for others (Han, 2014; Schwartz, 1977). When the conditions of ascribed responsibility and awareness of consequences are met, individuals are more likely to experience a feeling of moral obligation to display environmentally responsible behavior.

Norm activation theory begins with one's awareness of consequence. This awareness can directly activate a personal norm that determines whether the individual should perform a certain action that may harm others (AC→PN→ERB) (De Groot & Steg, 2009; Gao et al., 2016; Zhang et al. 2013). Some scholars have indicated that the more people are aware of the negative consequence of not acting environmentally responsibly, the more they will tend to activate moral obligation and engage in environmentally responsible behavior (Blamey, 1998). For instance, Gao et al. (2016) indicate that Chinese tourists' awareness of negative consequences (AC) positively affected ascribed responsibility and personal norms, and ascribed responsibility was also positively related to personal norms. Researchers also argue that awareness of negative consequences can influence personal norms via ascribed responsibility. They believe that the individual must be aware of the consequence of his or her activity before they are able to act in an environmentally responsible way. In turn, the feeling of responsibility increases the personal norms to engage in environmentally responsible behavior (AC→AR→PN→ERB) (De Groot & Steg, 2009; Stern et al., 1999). For example, Stern et al. (1999) employed the NAT model (AC→AR→PN→ERB) as the basis of their value-belief-norm theory.

H1: Tourists' awareness of consequences positively influences their ascribed responsibility.

H2: Tourists' ascribed responsibility positively influences their personal norms.

H3: Tourists' awareness of consequences positively influences their personal norms.

H4: Tourists' personal norms positively influence their environmentally responsible behavior.

2.3 Face

In response to the call of indigenous green tourism knowledge in tackling environmental problems, and to de-link research work from Western epistemologies, the concept of “face” is specifically introduced to study the influence on Chinese tourist environmentally responsible behavior. Face is defined as the projection of a person’s self-image that he or she can claim from others in the social network (Kwek & Lee, 2015). Qi (2011, p.280) indicates that face is ‘the social anchoring of self in the gaze of others’. In Chinese collectivistic culture, face occupies a highly conspicuous place in everyday thinking and daily activities (Ho, 1976). For example, face can be lost, gained, given or taken in everyday activities such as greetings, invitations and shopping (Li & Su, 2007). More uniquely, face stands not only for Chinese people’s personal prestige but also for the prestige of their immediate family, other relatives, neighbors and colleagues (Wang et al., 2018). Thus, Chinese people are more likely to have strong face consciousness.

Gaining and losing face are distinguished as two significant changes in the status of Chinese face (Kwek & Lee, 2015; Zhang et al., 2011). An individual can gain face when his or her behavior surpasses social expectations. Gaining face can make people experience pride. Correspondingly, face can be lost when an individual’s conduct fails to meet the minimum acceptable social standards. In response, an individual may feel embarrassed and ashamed. These self-conscious emotions, such as shame from losing face and pride from gaining face, are centrally involved in Chinese moral obligation and their pro-social behavior. Hwang (2012) found that Chinese individuals who have strong face consciousness are more likely to behave in moral, and socially and universally approved ways in social interactions.

Face can urge Chinese individuals to act in an environmentally responsible manner. Wang et al. (2018) found that Chinese rural bed-and-breakfast hosts use urban tourists’ awareness of face to regulate their environmentally responsible behavior during host-guest interactions. Gaining face through public praise from their rural hosts for their environmentally responsible behavior can motivate tourists and their companions to behave better. In contrast, tourists may experience a sense of losing face when they receive gentle hints from their hosts about their environmentally unfriendly behavior. Gaining and losing face have become internalized forces of self-restriction (Wang et al., 2018). *In other words, when a Chinese individual fails to behave in accordance with his or her personal norms, one feels a loss of face and experiences shame even in the absence of an audience (Wang et al., 2018; Zhang et al., 2019).* Accordingly, that individual will self-regulate his or her behavior to maintain or save face. When a Chinese individual behaves properly in relation to a moral obligation, he or she is more likely to behave

in an environmentally responsible manner, which may result in gaining face and experiencing pride for his or her growth in personal accomplishment.

2.4 The moderating role of face

2.4.1 Desire to gain face

Gaining face has had a prevailing influence in many Asian countries including China. In the present study, the desire to gain face (DGF) is introduced as a moderating factor between personal norms (PN) and environmentally responsible behavior (ERB). A moderating factor is referred to as “one which systematically modifies either the form and/or strength of the relationship between a predictor and a criterion variable” (Han, 2014). Desire to gain face (DGF) is referred to as a personal motive to pursue social approval or a positive evaluation (Zhang et al., 2011). People who desire to gain face are sensitive to others’ evaluations and are likely to translate others’ positive views into their behavioral norms to shape and project a favorable and responsible image that will be positively perceived by others (Wang et al., 2018). People visiting tourist attractions tend to form collective meanings (e.g. protect the site’s resources). Being tidy and green in compliance with public morality can help Chinese individuals engage in environmentally responsible behaviors while presenting a good social image (Hwang, 2012; Wang et al., 2018). Chinese individuals who have a strong need for social approval or recognition are more likely to activate personal norms to act in environmentally responsible ways (e.g. Hwang, 2012). Wang et al. (2018) found that Chinese urban tourists from Shanghai have a strong desire to gain face when they interact with rural B&B hosts. They were more likely to abide by a green lifestyle and behave in a green way during the trip.

Chinese people with a high level of desire to gain face intend to strengthen self-improvement and are more likely to adopt responsible behavior to maintain face (Wan & Poon, 2014). An extant review of the literature shows the desire to gain face can be considered as a relevant factor activating moral obligation and turning it into environmentally responsible behavior (Hwang, 2012). Accordingly, it is proposed that the more the Chinese individuals desire to gain face, the more likely they will be to activate personal norms and engage in environmentally responsible behavior.

2.4.2. Fear of losing face

Fear of losing face (FLF) is also introduced as a moderating factor, it is defined as individuals' concern about social disapproval or negative evaluation (Zhang et al., 2011). Such social evaluation can dominate Chinese individuals in the field of public scrutiny. People who fear losing face are sensitive to how their behavior is perceived by others and how others may evaluate them (Ndubisi & Moi, 2005). People with a high level of fear of losing face tend to be more conservative and cautious, seldom veering from their moral obligations (Wan & Poon, 2014; Zhang et al., 2011). Unfriendly environmental behavior, such as spitting or littering in the public areas and shared workspaces in China, and feeding birds in parks, will breed negative evaluations and result in losing face (Hwang, 2003). Thus, people with a high level of fear to lose face will avoid the embarrassment or shame of negative evaluations and will especially strive to meet the moral obligation of environmentally responsible behavior. Zhang et al. (2019) indicate that Chinese tourists who worry about losing face are inclined to adopt moral behaviors when travelling abroad. Hwang (2012) found that Chinese college students who fear losing face like to exhibit environmentally friendly behaviors in front of their acquaintances to avoid the embarrassment of losing face. People with a high level of fear of losing face worry more about the embarrassment and shame caused by losing face (Zhang et al., 2019). As such, people also tend to engage in altruistic behaviors in environmental settings to protect their social image (Miron-Spektor et al., 2015).

Based on previous work on norm activation theory and the concept of face, we propose a single integrative model with the following hypotheses.

H5: Desire to gain face moderates the effect of personal norms on environmentally responsible behavior.

H6: Fear of losing face moderates the effect of personal norms on environmentally responsible behavior.

2.5 The moderating role of age

Many scholars have viewed age as one of the focal variables in investigating environmental motives and behaviors (Hines et al., 1987; Wiernik et al., 2016). Previous research have demonstrated that people of different ages hold different ecological attitudes and conduct different sustainable activities (Dunlap & Liere, 1978; Wiernik et al., 2013). For example, Dunlap and Van Liere (1978) indicated that younger individuals are more open to adopt new ecological ideas and experience. They are more willing

to perform environmental behavior. Hines et al. (1987) meta-analytically examined the relationship between age and environmental behavior. They found age is a negative moderator in predicting environmental behavior, indicating that older individuals make fewer change to environmental sustainability (Hines et al., 1987). Wiernik et al.(2013) used meta-analytic techniques to examine the relationship between age and environmental psychological variables in the context of organizations, such as environmental concern, environmental attitude, environmental value and environmental knowledge. They demonstrated that age is a moderator variable to predict the differentiated environmental activity (Wiernik et al., 2013; Wiernik et al., 2016). Given that age difference has been demonstrated as a moderator variable to explain the differentiated environmentally responsible behavior in organizations and community, it may reasonably be expected that age difference may moderate the relationship between personal norms and environmentally responsible behavior of tourists.

H7: Age difference moderates the effect of personal norms on environmentally responsible behavior.

<insert Figure 1 here>

3 . Methods

3.1 Measures and questionnaire development

The survey questionnaire contained three parts (i.e., introductory letter, queries for participants' demographic characteristics, and questions for variables). To measure the variables, previously validated items were adapted to the context of the study (Cheng & Wu, 2015; Han et al., 2016; Zhang et al., 2011). Specifically, awareness of consequences (AC), ascribed responsibility (AR) and personal norms (PN) was adapted from Han et al. (2016). Face including the fear of losing face and the desire to gain face was employed from Zhang et al. (2011). Environmentally responsible behavior including general behavior and specific behavior was adapted from Cheng and Wu (2015). Due to the sample profile being Chinese tourists, the scale was translated from English to Chinese by a bilingual speaker of both languages after consulting with a tourism professor. The Chinese questionnaire was then back translated to English by three independent translators blinded to the original scale. The result matched well with the original version. A pretest was conducted in June 2017 at Westlake in Hangzhou. In total, 97 valid questionnaires

were collected. The questionnaire was evaluated by two tourism scholars to ensure its content validity. The original version was slightly modified based on their comments and pretested for its readability and reliability. All the measurement items are displayed in the Appendix.

Multiple items with a 7-point Likert-type scale were utilized for all measures. Specifically, face was measured using 8 items (four items for “desire to gain face” and four items for “fear of losing face”). Environmentally responsible behavior was evaluated with 8 items (four items for “specific behavior” and four items for “general behavior”). Awareness of consequences was evaluated with 4 items, Ascribed responsibility with 3 items and personal norms with 4 items. To examine the structural equation modeling (SEM) of the measurement scales, our collected data were analyzed in the SPSS (Statistical Package for the Social Science) version 23.0, and AMOS (Analysis of Moment Structures) version 23.0 for Windows.

3.2 Study sites and sample

West Lake is a world-famous tourism destination that is well known to tourists and the public in Hangzhou, China. In 2011, it was inscribed by UNESCO as a World Heritage Site for its exceptional cultural landscape and since free access was granted to visitors. [Due to the free pricing strategy, it attracts various tourists, especially the university students in Yangtze River Delta \(Wu et al., 2014; Zhou et al., 2020\).](#) In 2019, it received more than 28.5 million tourists from all over the world. [Natural resources, historical culture and entertainment activities are the core competitiveness of West Lake \(Wu et al., 2014\).](#) Tourist environmentally responsible behavior refers to actions that reflect protection for the natural resources and cultural heritage of destinations (Cheng & Wu, 2015). Thus, in this study, we selectively chose [The Broken Bridge \(natural resources\), Yue Fei Temple \(historical culture\), the Curved Yard \(natural resources\), Lotus pool \(natural resources and historical culture\), and the Colored Port View Fish Garden \(entertainment activities\) \(UNESCO, 2011\).](#) These sites are famous and considered as the must-see attractions for Chinese tourists. Some environmental problems caused by tourists are obvious in these sites. For example, in the [Colored Port View Fish Garden it is easy to discover tourists discard trashes into the fishbond. It is also easy to find the tourists’ irresponsible behavioral outcomes, such as trampled grass, broken branches and fast food boxes.](#)

Questionnaires were distributed at these scenic spots in West Lake. A systematic sampling method (sampling one out of every 10 Chinese tourists) was adopted to collect the data from September to

October 2017. Tourists' participation in the survey was anonymous and voluntary. In order to ensure that the target population was Chinese tourists, the research assistants offered the interpretation service to respondents. Every respondent who needed assistance was informed about the measurement items before he or she completed the survey. Each survey took approximately 12 minutes to complete. In total, four hundred and ninety-five copies were administered, with 17 incomplete questionnaires and 63 refusals. Thus, four hundred and fifteen useable copies were obtained for the data analysis, with a response rate of 70.7%.

4 . Results

4.1 Sample profile

Of the 415 valid respondents, there were more female respondents (53.7%) than male respondents (46.3%). The distribution of marital status was as follows: unmarried (50.1%), married with child or children (39.0%), married without children (9.2%) and other (1.6%). The largest single age group was 21-30 (54.7%), followed by 31-40 (22.8%) and 41-50 (11.4%). In terms of educational level, the majority had completed university (51.8%), followed by junior college (16.4%). In general, most of the respondents were either students (29.8%) or workers (21.7%) with an annual income below 20,000 CNY (34.2%) (US\$1 = CNY¥6.54). Regarding tourists' places of origin, most were from East China (72.8%), which includes Zhejiang Province, Shanghai, Anhui Province, Jiangsu Province, Shandong Province, Fujian Province and Jiangxi Province. About 38.1% visited West Lake one to two times and 30.9% three to five times (see Table 1). [Comparing the sample demographics with recent research, representative sample was obtained. For example, in this research about 29.8% are students. This sample demographics aligns with Zhou et al. \(2020, P6\). "Regarding occupational distribution, students \(30.3%\) accounted for the highest proportion in West Lake" .](#)

<insert Table 1 here>

4.2 Confirmatory factor analysis

Variables did not indicate problematic univariate skew or problematic univariate kurtosis (i.e., $|\text{Skewness index}| < 3.00$; $|\text{Kurtosis index}| < 10.00$) (Kline, 2011). Thus, univariate normality was achieved (see Table 2). The Mardia coefficient was also used to assess the multivariate normality of variables

measured to describe the distribution property of all the data, as suggested by Bollen (1989). The main criterion for multivariate normality is the index of Mardia coefficient, which needs to be less than $p(p+2)$; “p” stands for the number of the observed variables. The results showed that the Mardia = 21.573 was less than 783(27x29) by using AMOS software, indicating that the model passed the test of multivariate normality. This study employed Harman’s single factor analysis to further check the possibility of a common method variance (CMV), known as common method bias (Podsakoff et al., 2003). All variables were assessed through a principal components factor analysis with varimax rotation. The output showed that the value of CMV was 42.8% lower than the threshold level of 50% (Mattila & Enz, 2002), showing that common method bias may not be a problem with this dataset.

Confirmatory factor analysis (CFA) was undertaken to test the measurement quality. CFA was carried out with the maximum likelihood estimation approach using AMOS software; results showed an acceptable model fit ($\chi^2= 696.5$, $df= 303$, $\chi^2/df= 2.30$, $p<0.001$, $RMSEA = 0.056$, $CFI = 0.97$, $IFI = 0.97$, $NFI = 0.94$). Cronbach’ s α of all sub-dimensions (between 0.809 and 0.885) reached 0.7, meeting the requirement of internal consistency (Hair et al., 1998) (see Tables 2). Next, convergent validity was tested (see Table 2); the standardized loadings (between 0.63 and 0.91) were all significant ($p<0.001$) and fell within the suggested threshold value of 0.50 and 0.95 (Bagozzi & Yi, 1988; Cheng et al., 2013). They are also satisfied the threshold value of 0.63 (Tabachnick & Fidell, 2007). Composite reliability (CR) was calculated to assess the reliability of the constructs (see Table 2). All values were between 0.810 and 0.886, higher than the minimum threshold of 0.70 (Hair et al., 1998). The results indicated good reliability of the constructs (Jöreskog & Sörbom, 1996).

The results show that average variance extracted (AVE) values ranged from 0.52 to 0.66, exceeding the minimum standard of 0.50 (Fornell & Larcker, 1981). The convergent validity of the measures was

thus supported. In addition, the square root of each construct's AVE was larger than the correlations with other latent variables (see Table 3). Accordingly, evidence of discriminant validity was firmly established (Fornell & Larcker, 1981). Moreover, the results of collinearity diagnostics identified that that all coefficients of Variance Inflation Factor (VIF) ranged from 1.176 to 1.690 are less than five, indicating acceptable level of the multicollinearity between all constructs (Ringle et al., 2015).

<insert Table 2 here>

<insert Table 3 here>

4.3 Testing the hypothesized structural equation modeling

Structural equation modeling (SEM) was employed to assess the adequacy of the proposed model and the hypothesized relationships. The results showed a good model fit ($\chi^2 = 778.2$ $df = 315$, $\chi^2/df = 2.47$, $p < 0.001$, $RMSEA = 0.060$, $CFI = 0.96$, $GFI = 0.88$, $IFI = 0.96$, $NFI = 0.94$). The hypothesized relationships of the proposed theoretical framework were tested. The results of the SEM are shown in Figure 2.

<insert Figure 2 here>

The SEM results showed that awareness of consequences (AC) ($\beta = 0.65$, $p < 0.01$) and ascribed responsibility (AR) ($\beta = 0.16$, $p < 0.05$) significantly and positively affect personal norms (PN), respectively; awareness of consequences (AC) ($\beta = 0.39$, $p < 0.01$) significantly and positively influences

ascribed responsibility (AR). Results also showed that personal norms (PN) ($\beta = 0.28, p < 0.01$) was a significant predictor of Environmentally Responsible Behavior (ERB). Hypotheses 1, 2, 3 and 4 were supported (See Table 4.)

<insert Table 4 here>

4.4 Moderating effect of desire to gain face (DGF) (Low score of DGF and High score of DGF)

The construct of Desire to Gain Face was adopted as a moderator of one path (PN \rightarrow ERB) in the structural model. All participants were split into two subgroups: low score group of DGF (with a total number of 221) and high score group of DGF (with a total number of 194). A multiple group analysis within Amos was used to assess the moderator variable effects of Desire to Gain Face on the structural model (Byrne, 1998) by comparing the two subsamples. The examination of the moderating effect was conducted in a three-step approach suggested by Li (2006) and Kim (2008). The first step was to test the difference between the χ^2 values of the unconstrained structural model and the constrained structural model. The results showed that the χ^2 value for the unconstrained and the constrained models were 697.61 (df = 292) and 700.26 (df = 296), respectively. The difference between the two χ^2 values was 2.665 with 4 degrees of freedom, which was not statistically significant at the level of $\alpha = 0.05$ ($\chi^2(df = 4) = 8.76$ at $\alpha = 0.05$), indicating that the Desire to Gain Face had no moderating effect on the structural model.

4.5 Moderating effect of fear of losing face (FLF) (Low score of FLF and High score of FLF)

The construct of Fear of losing face was adopted as a moderator of one path (PN \rightarrow ERB) in the structural model. All participants were split into two subgroups: low score group of FLF (with a total number of 207) and high score group of FLF (with a total number of 208). A multiple group analysis within Amos was used to assess the moderator variable effects of Fear of losing face (FLF) on the structural model by comparing the two subsamples. The first step was to test the difference between the χ^2 values of the unconstrained structural model and the constrained structural model. The results showed that the χ^2 value for the unconstrained and the constrained models were 708.43 (df = 292) and 719.17 (df = 296), respectively. The difference between the two χ^2 values was 10.74 with 4 degrees of freedom, which was statistically significant at the level of $\alpha = 0.01$ ($p = 0.003^{**} < 0.01$; $\chi^2(df = 4) = 8.761$ at $\alpha = 0.05$), indicating that the construct of Fear of losing face had a moderating effect on the structural model.

The second step was to test the difference in the individual path. The chi-square difference was performed again to test for moderating effects on the targeted paths (PN → ERB). The testing results revealed that the influence of Fear of losing face on the causal relationship between personal norms (PN) and Environmentally responsible behavior (ERB) was significantly different between the low age group and the high age group, with $\Delta\chi^2(1) = 3.98$, $p < 0.05$. As a result, hypothesis 6: Fear of losing face moderates the effect of personal norms on environmentally responsible behavior was supported. The third step was to compare the path coefficient between the two groups. The independent t-value was employed to compare two path coefficients within the Amos program. Table 5 indicates that the effect of personal norms on environmentally responsible behavior was stronger in the high FLF group ($\beta = 0.28$, $t = 3.09$, $p < 0.01$) than the effect in the low FLF group ($\beta = 0.21$, $t = 2.35$, $p < 0.05$).

4.6 Moderating effect of age (Low age and High age)

Age variable was adopted as a moderator of four paths in the structural model. All participants were split into two subgroups: low age group (with a total number of 258) and high age group (with a total number of 157). A multiple group analysis within Amos was used to assess the moderator variable effects of age variable on the structural model (Byrne, 2001) by comparing the two subsamples. The first step was to test the difference between the χ^2 values of the unconstrained structural model and the constrained structural model. The results showed that the χ^2 value for the unconstrained and the constrained models were 729.70 (df = 292) and 745.92 (df = 296), respectively. The difference between the two χ^2 values was 16.65 with 4 degrees of freedom, which was statistically significant at the level of $\alpha = 0.01$ ($p = 0.003^{**} < 0.01$; $\chi^2(df = 4) = 8.761$ at $\alpha = 0.05$), indicating that the age variable had a moderating effect on the structural model.

The second step was to test the difference in the individual paths. The chi-square difference was performed again to test for moderating effects on the targeted paths (PN → ERB). The testing results revealed that the influence of age on the causal relationship between personal norms (PN) and environmentally responsible behavior (ERB) was significantly different between the low age group and the high age group, with $\Delta 2(1) = 4.21$, $p < 0.05$. As a result, hypothesis 7 was supported: Age moderates the effect of personal norms on environmentally responsible behavior. The third step was to compare the path coefficient between the two groups. The independent t-value was employed to compare two path coefficients within the Amos program. Table 5 indicates that the effect of personal norms on environmentally responsible behavior was stronger in the low age group ($\beta = 0.26$, $t = 2.49$, $p < 0.05$) than

the effect in the high age group ($\beta = 0.22$, $t = 2.32$, $p < 0.05$), and the effect of perception of value was stronger in the member group ($\beta = 0.56$, $t = 5.63$, $p < 0.001$). The results of the three moderating effects are shown in Figure 3 and Table 5.

<insert Figure 3 here>

<insert Table 5 here>

5. Discussion and conclusion

This research clearly examines the intricate theoretical relationships between vital factors (i.e. awareness of consequences, ascribed responsibility, personal norms) and Chinese tourists' environmentally responsible behavior, originally establishes the variable of face and age difference within the framework of norm activation theory, and further identifies the role of fear of losing face in promoting Chinese travellers' environmentally responsible behavior. The findings indicate that the effect of personal norms on environmentally responsible behavior does exist but has a moderating influence by the fear of losing face and age difference. Our study develops and examines a conceptual model that explicates the psychological process of activating the moral obligation of Chinese tourists' environmentally responsible behavior by considering the undeniable role of fear of losing face. Results also demonstrated that younger travellers, who are mainly generation Y (Fyall et al., 2017), are more likely to experience a feeling of moral obligation to behave greenly.

5.1 Theoretical implications

The findings enrich our understanding of NAT in several ways, especially shedding light on the neglected role of fear of losing face in the context of Chinese culture (Kwek & Lee, 2015; Wang et al.,

2018) and contributing the influence of age difference to the pool of studies on sustainable tourism (Fyall et al., 2017; Wiernik et al., 2016).

First, ascribed responsibility ($\beta_{AR \rightarrow PN} = 0.16, p < 0.05, \text{Mean}_{AR} = 5.31$) positively influences personal norms ($\text{Mean}_{PN} = 6.14$), while awareness of consequences ($\beta_{AC \rightarrow PN} = 0.65, p < 0.01, \text{Mean}_{AC} = 6.26$) plays a decisive role in activating personal norms. Personal norms positively influence tourists' environmentally responsible behavior. These findings support NAM and are in line with previous research in Fig. 2 (Gao et al., 2016; Han et al., 2015). However, they are not consistent with the conclusion that ascribed responsibility is the most important driver of tourists' environmental moral obligation (Han et al., 2015). Our results reveal that when comparing ascribed responsibility and awareness of consequences as the direct driving force of personal norms, awareness of consequences assumes greater importance in the norm activation of Chinese tourists. These findings validate the view of Zhang et al. (2016) that awareness of consequences is a more important factor for Chinese norm activation than ascription of responsibility. It is possible that the promotion of green tourism by Chinese local governments may bring about a positive change in Chinese tourists' awareness of consequences of environmental protection (Liu et al., 2020). As an example, Hangzhou government offers tourists environmental education and encourages destination marketing stakeholders develop green consumption markets.

Second, consistent with previous research, this article reveals that age difference is a moderating variable between environmental psychological factors and environmentally responsible behavior (Hines et al., 1987; Wiernik et al., 2016). Previous studies investigated the influence of age difference on environmentally responsible behavior in work or community settings (Dunlap & Liere, 1978; Wiernik et al., 2013). Few research has examined the moderating role of travellers' age difference between personal

norms and environmentally responsible behavior in a tourism setting. The results reveal that younger tourists are more likely to experience a feeling of moral obligation to make the environmentally responsible choice. It enriches the understanding of the difference between Chinese younger and older travellers on exhibiting environmentally responsible behavior in the tourism setting.

Furthermore, results demonstrate that fear of losing face, which had a strong moderating impact, was an important determining force in Chinese tourists' environmentally responsible behavior. More specifically, it can be theorized that the Chinese tourists experience stronger feelings of environmental moral obligation to engage in responsible behavior when they have a high level of fear of losing face. Although the current literature has shown the awareness of losing face is closely related to Chinese tourists' environmental behavior (Wang et al., 2018; Zhang et al., 2019), research studying the effect of fear of losing face between personal norms and environmentally responsible behavior is still in an infancy stage (Huang et al., 2019; Wang & Zhang, 2020). This article adds to previous studies to show that the process of Chinese tourists' personal norms and environmentally responsible behavior is bound to Chinese cultural factors (Chen et al., 2021; Grahamrowe et al., 2019). This research presents a deep insight into how personal norms and environmentally responsible behavior are moderated by fear of losing face from the perspective of Chinese cultural psychology. The concept of fear of losing face is similar to the ideas of Foucault (1978) that the Chinese travellers may internalize the effects of "prisoner's" constant surveillance, a psychological process of the fear of losing face which creates the intrinsic power to normalize green behavior (Bahja et al., 2021; Wang et al., 2018). The results demonstrate that personal norms are connected to culturally specified rules that represent the learned expectation to behave greenly (Leoniak & Cwalina, 2019).

Finally, this research expands the existing literature of the Norm Activation Model (NAM) (Schwartz, 1977) by investigating the moderating factors of face consciousness and age difference between personal norms and environmentally responsible behavior. Previous studies tested the role of anticipated guilt and pride between personal norms and environmentally responsible behavior (Bahja et al., 2021; Onwezen et al., 2013), but has rarely examined the function of face consciousness within NAM. This study addresses the research gap by discussing fear of losing face and desire to gain face of Chinese tourists. The article responds to the call for more studies on cultural psychology factors (Wang & Zhang, 2020; Zhang et al., 2019) and to the particular role of face consciousness within NAM. These findings contribute to the theoretical evidence of extended NAM that fear of losing face, as the projection of self-image (Lalot et al., 2019; Nielsen, 2017), motivated Chinese tourists rationalize environmentally responsible behavior.

5.2 Practical implications

Personal norms (PN) were found to play a prominent role in stimulating Chinese tourists' environmentally responsible behavior ($\beta_{PN \rightarrow ERB} = 0.28, p < 0.01$). Thus, engendering travellers' personal norms of eco-friendly practice can be an effective tool to encourage their responsible behavior (Grahamrowe et al., 2019; Zhang et al., 2013). DMOs should educate tourists not just to make eco-friendly choices in the destination, but also to practice green activities in their daily lives (Wang et al., 2018). Further, the findings reveal that the increased level of problem awareness can greatly boost tourists' sense of moral obligation. Thus, efforts should be made to remind travellers that irresponsible activities (such as littering, killing wild animals) can cause environmental pollution and ecological deterioration. The results also indicated ascribed responsibility is essential in activating Chinese tourists' personal norms. Thus, various eco-friendly communication channels (e.g., radio, SMS, interpretive services)

should be used to inform tourists to be responsible for environmental problems caused by their often neglected activities and consumption (Cheng & Wu, 2015; Ramkissoon et al., 2013). DMOs should share an important message to tourists via SMS to increase the awareness of environmental issues and encourage them to take environmentally responsible behavior, such as reducing plastic and paper waste, preserving the natural habitats of wild animals. DMOs should join with the local educational nonprofit to make some make some pro-environmental Public Service Advertising (PSA) to urge tourists to take responsibility for green consumption and low carbon travel. Such efforts will help tourists instil a sense of responsibility towards environmental protection (Wang & Zhang, 2020).

Second, the findings deepen the understanding how age affects Chinese tourists' environmentally responsible behavior. The influence of age difference may offer important clues about how DMOs can design effective interventions for different age groups to be more environmentally responsible when making a choice. The results suggest that compared to older tourists, youngers (Gen Y) are more receptive to interventions that awaken the moral self-consciousness. Given this, interventions for youngers should be focused on digital environmental protection and eco-technology markets, rather than established traditional destination rules. Such approaches would satisfy the Gen Y tourists who receive good education and pursue digital empathy, and who appear to be less sensitive to traditional regulations (Fyall et al., 2017; Leask et al., 2014).

More importantly, the results imply that fear of losing face form the underlying mechanism through which personal norms guide environmentally responsible behaviour. There is a need for more efforts to emphasize the function of fear of losing face in improving Chinese tourists' environmentally responsible behavior. Therefore, destination workers who deal with Chinese travellers need to understand the significance of Chinese face culture (Huang et al., 2019; Tam & Chan, 2017). Environmental education

regarding to tourists' face loss would allow destination workers when dealing with Chinese tourists irresponsible activities. DMOs need to convey a clear message to Chinese visitors that environmentally unfriendly behavior will not only lead to a loss of individual's face but that it will also bring shame upon their companions and their country (Wang et al., 2018). Such efforts of face threatening acts may directly influence Chinese tourists' face consciousness and eventually help them to take the responsibility of behaving greenly (Chen et al., 2021; Zhang et al., 2019).

6. Limitations and future research directions

There are some limitations to this study. First, this study targets only tourists in Lake tourism, China. The largest age representation is among people aged 21-30. Future studies are needed to explore other places with diverse ethnic groups and age distribution. Second, the proposed NAT-Face model successfully predicted Chinese tourists' environmentally responsible behavior. However, awareness of consequences, instead of ascribed responsibility, plays the decisive role in activating Chinese tourists' environmental personal norms. Therefore, future studies need to test the applicability of norm activation theory in other Chinese tourism contexts. Third, this study revealed the moderating role of fear of losing face between personal norms and environmentally responsible behavior. To strengthen cross-cultural validity extension, comparisons in different national cultures is needed in future studies. In addition, efforts to include other cultural values should also be made in future research designs. Fourth, the questionnaire is measured by self-reported ERB rather than actually observed behavior. Self-reported ERB may be related to a social desirability bias, which can be reflected in the relatively high mean values of ERB items. Future studies could focus on adopting more sophisticated measure of tourist ERB.

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Table 1. Demographic profile of the respondents. (N=415)

Variable	N	%
Gender		
Male	192	46.3%
Female	223	53.7%
Age		
≤20	20	4.8%
21-30	227	54.7%
31-40	95	22.8%
41-50	47	11.4%
≥51	26	6.3%
Education level		
Junior high school or below	31	7.5%
Senior high school	59	14.2%
College	68	16.4%
University	215	51.8%
Graduate school	42	10.1%
Marital status		
Married without child	38	9.2%
Married with child or children	162	39.0%
Unmarried	208	50.1%
Others	7	1.6%
Annual income (CNY ¥^a)		
≤20000	142	34.2%
20001-50000	95	22.9%
50001-80000	71	17.1%
80001-120000	37	8.9%
120001-300000	48	11.6%
≥300001	22	5.3%
Variable	N	%

Past experience

One to two times	158	38.1%
Three times to five times	128	30.8%
Six times to ten times	74	17.8%
More than eleven times	55	13.3%

Occupation

Government official	26	6.3%
Teacher	18	4.3%
Doctor	24	5.8%
Businessman	35	8.4%
Student	124	29.9%
Freelancer	24	5.8%
Retired	51	12.3%
Soldier	18	4.3%
Worker	90	21.7%
Others	5	1.2%

Residence

Eastern China	302	72.8%
Northern China	19	4.6%
Northwestern China	14	3.4%
Southern China	25	6.0%
Central China	15	3.6%
Northeastern China	17	4.1%
Southwestern China	20	4.8%
Hong Kong, Macao and Taiwan	3	0.7%

Note:^aUS \$ 1 = CNY ¥ 6.54 (31 Jan 2018)

Table 2. Measurement items and descriptive statistics (N=415)

Constructs and items	Mean(SD)	Skewness	Kurtosis	CR	Standardized loading	Cronbach's α SMC
Desire to gain face (DGF)				0.81		0.81
Dgf1	4.66 (1.61)	-0.45	-0.36		0.66***	0.44
Dgf2	4.75(1.58)	-0.43	-0.29		0.70***	0.49
Dgf3	3.84(1.60)	-0.07	-0.54		0.77***	0.59
Dgf4	4.55(1.54)	-0.36	-0.20		0.75***	0.56
Fear of losing face (FLF)				0.81		0.81
Flf1	3.83(1.54)	0.09	-0.36		0.71***	0.50
Flf2	3.85(1.59)	-0.07	-0.63		0.72***	0.52
Flf3	3.67(1.57)	0.08	-0.60		0.83***	0.69
Flf4	3.98(1.60)	-0.12	-0.61		0.63***	0.40
Awareness of consequences (AC)				0.87		0.87
Ac1	6.22(1.15)	-1.71	3.11		0.81***	0.66
Ac2	6.25(1.10)	-1.75	3.30		0.83***	0.69
Ac3	6.28(1.07)	-1.79	3.66		0.86***	0.74
Ac4	6.27(1.18)	-2.14	5.23		0.70***	0.49
Ascribed responsibility (AR)				0.84		0.84
Ar1	5.31(1.63)	-0.82	-0.03		0.83***	0.69
Ar2	5.40(1.54)	-0.95	0.33		0.79***	0.62
Ar3	5.22(1.75)	-0.86	-0.12		0.78***	0.61
Personal norm (PN)				0.83		0.83
Pn1	6.01(1.22)	-1.61	3.25		0.65***	0.42
Pn2	6.15(1.13)	-1.60	2.84		0.83***	0.69
Pn3	6.29(1.01)	-1.96	5.10		0.75***	0.56
Pn4	6.11(1.12)	-1.53	2.74		0.73***	0.53
General behavior (GB)				0.87		0.86
Gb1	4.78(1.40)	-0.07	-0.44		0.74***	0.55
Gb2	4.75(1.54)	-0.27	-0.55		0.86***	0.74
Gb3	4.50(1.61)	-0.11	-0.79		0.91***	0.83
Gb4	5.16(1.46)	-0.44	-0.41		0.64***	0.41
Specific behavior (SB)				0.89		0.89
Sb1	4.99(1.54)	-0.41	-0.54		0.74***	0.55
Sb2	4.16(1.74)	0.09	-0.93		0.90***	0.81
Sb3	4.24(1.76)	0.05	-0.90		0.88***	0.77
Sb4	5.03(1.54)	-0.42	-0.46		0.72***	0.52

Notes: All standardized loadings are significant at the 0.001 level; SD: Standard deviations.

CR = Composite reliability = $(\sum \lambda)^2 / [(\sum \lambda)^2 + \sum \theta]$.

Table 3. Measurement model results and correlations of scales

Constructs	Mean	SD	AVE	1	2	3	4	5	6	7
1. DGF	4.45	1.29	0.52	0.72 ^a						
2. FLF	3.83	1.27	0.52	0.63	0.72 ^a					
3. AC	6.26	0.79	0.64	0.07	-0.05	0.80 ^a				
4. AR	5.31	1.70	0.64	0.14	0.15	0.39	0.80 ^a			
5. PN	6.14	0.68	0.55	0.03	-0.04	0.72	0.40	0.74 ^a		
6. GB	4.80	1.39	0.63	0.28	0.18	0.21	0.40	0.35	0.79 ^a	
7. SB	4.61	1.79	0.66	0.21	0.15	0.06	0.34	0.19	0.77	0.81 ^a

Notes: ^a Represents the square root of AVE

DGF = Desire to gain face; FLF = Fear of losing face; AC = Awareness of consequences; AR = Ascribed responsibility; PN = Personal norm; GB = General behavior; SB = Specific behavior;

AVE = Average variance extracted = $(\sum \lambda^2) / [\sum \lambda^2 + \sum \theta]$.

Table 4. Standardized structural estimates (H1-H4)

Hypothesis	Path	Standardized estimates	T-value	Results of hypothesis testing
H1	AC → AR	0.39	6.80**	Supported
H2	AR → PN	0.16	3.16*	Supported
H3	AC → PN	0.65	9.71**	Supported
H4	PN → ERB	0.28	6.04**	Supported

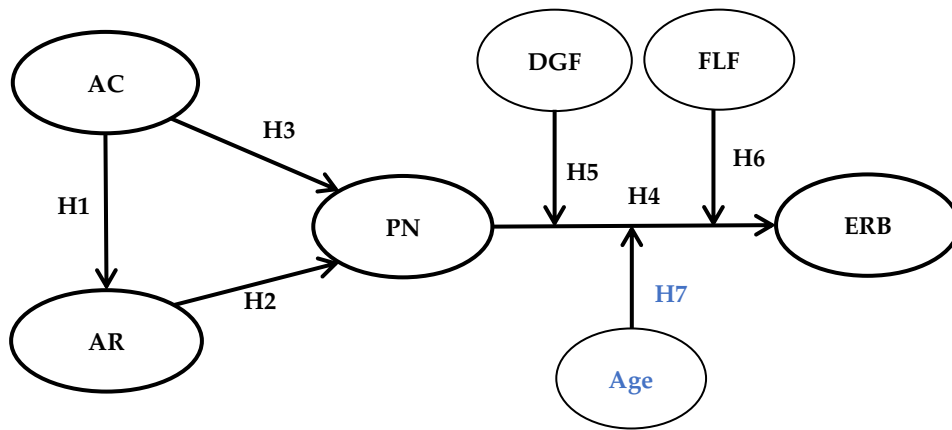
Notes: AC = Awareness of consequences; AR = Ascribed responsibility; PN = Personal norm

*p<0.05; **p<0.01

Table 5. Comparison Results of path coefficients and T-Value (H5-H7)

Hypothesized moderated path	Low score group		High score group		Comparison (Low, High)
	Path coefficient	T-value	Path coefficient	T-value	
H5: PN → ERB	—	—	—	—	Low DGF= High DGF
H6: PN → ERB	0.21	2.35*	0.28	3.09**	Low FLF < High FLF
H7: PN → ERB	0.26	2.49*	0.22	2.32*	Low age > High age

Notes: DGF = Desire to gain face; FLF = Fear of losing face; PN = Personal norm; ERB = Environmentally responsible behavior. *p<0.05; **p<0.01.



AC = Awareness of consequences; GF = Desire to gain face; AR = Ascribed responsibility
 FLF = Fear of losing face; DGF=Desire to gain face;
 PN = Personal norm; ERB = Environmentally responsible behavior

Figure 1. The conceptual model of NAT-Face

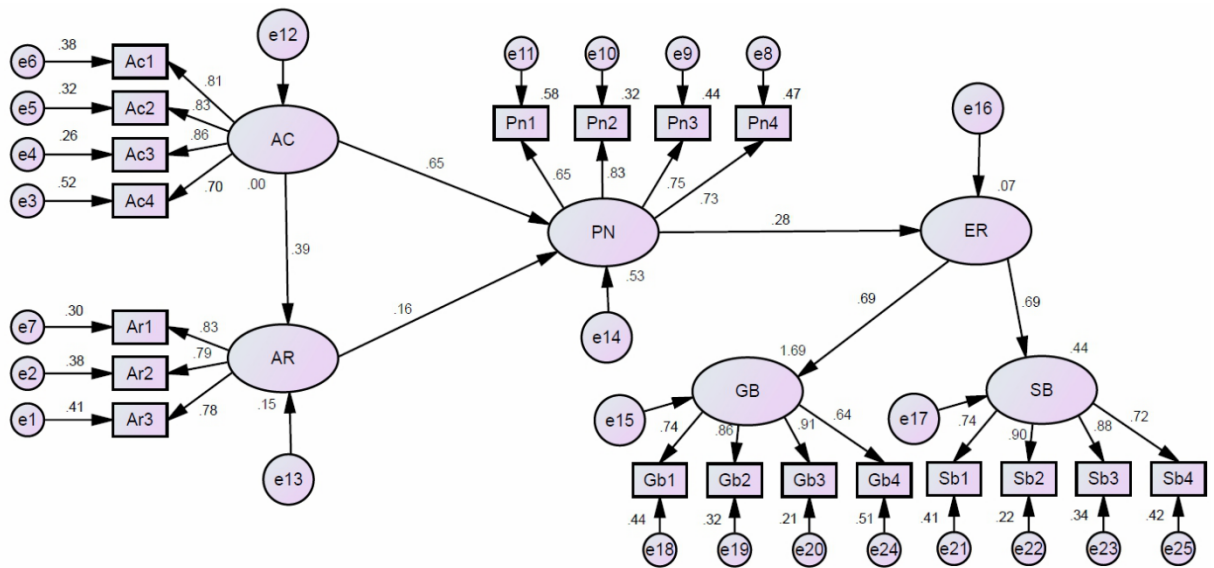
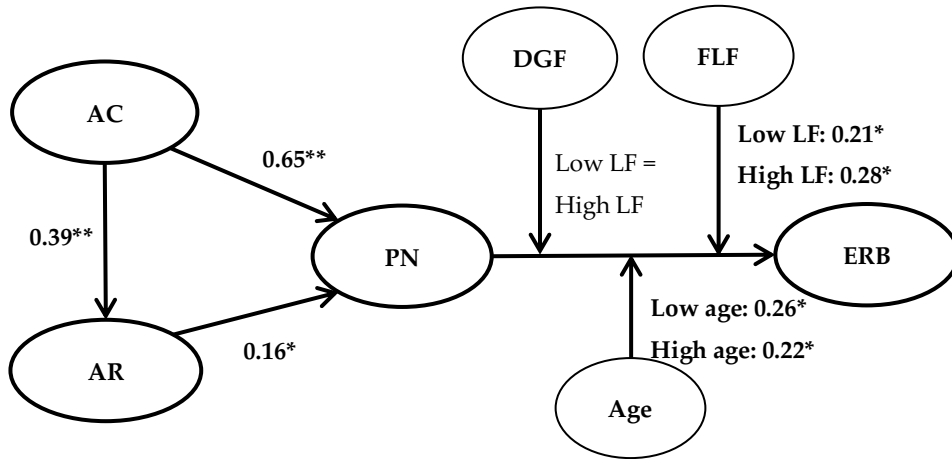


Figure 2. Results of structural equation modeling (H1-H4)



AC = Awareness of consequences; GF = Desire to gain face; AR = Ascribed responsibility
 FLF = Fear of losing face; DGF=Desire to gain face;
 PN = Personal norm; ERB = Environmentally responsible behavior

Figure 3. Results of the moderating effects with the hypotheses (H5-H7)

Appendix: Questionnaire

Constructs/Items	Strongly Disagree			Strongly Agree			
	1	2	3	4	5	6	7
Face							
Desire to gain face (DGF)							
I hope that I can talk about things that most others do not know	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I hope that I can possess things that most others thirst for	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I hope to let people know that I have association with some big names	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I hope that I have a better life than most others in others' view	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fear of losing face (FLF)							
I always avoid talking about my weakness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I try to avoid letting others think that I am ignorant, even if I really am	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I do my best to hide my weakness before others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If I work in an organization of bad reputation, I will try not to tell others about that	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Norm activation theory (NAT)							
Awareness of consequences (AC)							
Environmentally irresponsible behavior can cause ecological degradation and exhaustion of natural resources	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Environmentally irresponsible behavior may cause greater environmental impacts on the local community in West Lake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Environmentally irresponsible behavior can cause environmental deterioration in West Lake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Environmentally responsible behavior helps to reduce waste and minimize environmental deterioration.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ascribed responsibility (AR)							
I believe that every traveler is partly responsible for environmental problems caused by the travel industry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I feel that every tourist is jointly responsible for the environmental deterioration caused by tourist environmentally irresponsible behavior	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Every tourist must take responsibility for environmental problems caused by the trip.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Personal norm (PN)

- I feel that it is important to reduce the harm to the lake and wider environment
- I feel it is important that lake travelers behave eco-friendly when travelling
- I feel an obligation to reduce the negative impact on the host community during the trip
- Regardless of what other people do, because of my own values/principles I feel that I should behave in an environmentally responsible way while travelling on West Lake

Environmentally responsible behavior (ERB)

General behavior (GB)

- I try to solve the environmental problems in West Lake
- I read the reports, advertising, and books related to the environment of West Lake
- I discuss with others the environmental protection of West Lake
- I try to convince my companions to adopt positive behavior in the natural environment of West Lake

Specific behavior (SB)

- I pick up trash and protect branches when I see them in West Lake scenic areas
 - When I see others' inadequate environmental behavior in West Lake, I will report it to the authorities
 - According to the law, I will deter any behavior damaging the environment of West Lake
 - I participate in environmental activities to protect West Lake
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