

To cite this article: Quan Nguyen Van and Anh Nguyen Ha Trang (2026). The Role of Green Identity Construction in Influencing Youth Pro-Environmental Behavioral Intentions toward Wildlife Protection. International Journal of Education, Business and Economics Research (IJEBER) 6 (3): 158-176

**THE ROLE OF GREEN IDENTITY CONSTRUCTION IN INFLUENCING YOUTH PRO-ENVIRONMENTAL BEHAVIORAL INTENTIONS TOWARD WILDLIFE PROTECTION**

**Quan Nguyen Van<sup>1</sup> and Anh Nguyen Ha Trang<sup>2</sup>**

<sup>1</sup>Academy of Policy and Development, Ministry of Finance  
Hoai Duc, Hanoi, Vietnam

<sup>2</sup>Wellspring International Bilingual School  
Long Bien, Hanoi, Vietnam

<https://doi.org/10.59822/IJEBER.2026.6310>

**ABSTRACT**

This study investigates the psychological mechanisms underlying youths' pro-environmental behavioral intention toward wildlife protection by extending the Theory of Planned Behavior with green identity construction and moral obligation. Drawing on insights from Norm Activation Theory, the study proposes that moral obligation serves as a key mediating mechanism through which identity-based values are translated into behavioral intentions. Data were collected from 317 young respondents using a structured questionnaire and analyzed Partial Least Squares Structural Equation Modeling. The results indicate that green identity construction has a significant positive effect on both moral obligation and pro-environmental behavioral intention. Moral obligation, in turn, strongly predicts behavioral intention and partially mediates the relationship between green identity and intention. Notably, the indirect effect of green identity via moral obligation is stronger than its direct effect, highlighting the central role of moral responsibility in driving environmentally responsible behavior. The findings contribute to the literature by demonstrating that identity alone is insufficient to explain pro-environmental intention unless it is internalized as a moral obligation. This study also provides practical implications for policymakers and educators by emphasizing the importance of fostering both environmental identity and ethical responsibility among youth to promote wildlife conservation. Overall, the research offers a more comprehensive understanding of how internal psychological factors shape pro-environmental decision-making in ethically sensitive contexts.

**KEYWORDS:** Green identity construction; moral obligation; pro-environmental behavioral intention; wildlife protection; youth environmental behavior.

## 1.0 INTRODUCTION

The issues of global warming and ecosystem degradation have become increasingly critical, posing significant challenges to environmental sustainability worldwide. Conventional environmental protection policies are no longer sufficient to effectively address these complex problems (Pörtner et al., 2022). One of the most urgent global priorities is reducing greenhouse gas emissions to mitigate climate change. Notably, nearly two-thirds of global emissions are linked to private consumption, highlighting the crucial role of individual actions. Consequently, promoting pro-environmental behavior, defined as behavior aimed at positively impacting the environment, has emerged as a key long-term strategy for achieving sustainability goals (Nielsen et al., 2021). Although governmental and organizational efforts play an essential role in environmental protection, their effectiveness largely depends on individuals' willingness to adopt sustainable practices. Everyday behaviors such as recycling, reducing energy consumption, and engaging in sustainable consumption not only contribute directly to environmental outcomes but also reinforce broader policy and institutional initiatives (Lange, 2023). Therefore, understanding the social and psychological drivers of pro-environmental behavior has become a central focus in environmental psychology and sustainability research. Among the theoretical frameworks explaining pro-environmental behavior, the social identity approach offers valuable insights into how group affiliations shape individual behavior. This approach posits that individuals derive part of their self-concept from their membership in social groups, and that group norms strongly influence behavior. When individuals identify with a group that values environmental responsibility, they are more likely to adopt behaviors consistent with those norms, including environmental protection. For instance, individuals with strong environmental identities or membership in environmentally oriented groups often feel intrinsically motivated to engage in sustainable behaviors (Lede et al., 2019).

A growing body of research has demonstrated the significant role of social identities in shaping pro-environmental behavior. Individuals typically hold multiple identities, such as national, community, or environmental identities, which may become salient depending on the context. Systematic reviews and meta-analyses consistently report positive associations between various forms of social identity and pro-environmental behavior, suggesting that leveraging identity is a promising pathway for promoting sustainable behavior (Masson & Fritsche, 2021). In addition, cultural factors play an important moderating role in shaping this relationship. Previous research has largely focused on differences between collectivist and individualist cultures, showing that collectivist contexts may strengthen the influence of social identity on pro-environmental behavior. However, the role of temporal cultural orientation, particularly long-term versus short-term orientation, remains underexplored. Given that pro-environmental behavior often involves long-term benefits, individuals in long-term-oriented cultures may be more inclined to engage in such behaviors compared to those with short-term orientations (Kjell, 2011). Building on these gaps, this study

focuses on the construction of green identity among youth and its influence on pro-environmental behavioral intentions toward wildlife protection. While previous research has examined environmental identity and general pro-environmental behavior, limited attention has been given to how green identity formation shapes behavioral intentions in the specific context of wildlife conservation. Considering that youth play a crucial role in future sustainability efforts, understanding the psychological mechanisms underlying their environmental behaviors is essential. Therefore, this study aims to examine the role of green identity construction in influencing youth pro-environmental behavioral intentions toward wildlife protection. By integrating the social identity approach with existing pro-environmental behavior research, this study seeks to contribute to both theoretical development and practical applications, offering insights for policymakers and environmental organizations in promoting sustainable behaviors among young individuals. The study is divided into 5 main parts including introduction, conceptual framework and hypothesis development, methodology, results and discussion, and implications and conclusion.

## **2.0 CONCEPTUAL FRAMEWORK AND HYPOTHESIS DEVELOPMENT**

### **2.1 Moral norm and the Theory of Planned Behavior**

The Theory of Planned Behavior (TPB) is widely recognized as an effective framework for predicting and explaining human behavior across various contexts. Empirical evidence from numerous studies and meta-analyses supports its strong explanatory power. For instance, Armitage & Conner (2001) found that the TPB explains an average of 27% of the variance in behavior and 39% in behavioral intention across 185 independent studies. Similarly, Kaiser et al. (2005) reported that the core constructs of the TPB predicted 76% of behavioral intention, with intention explaining 95% of the variance in conservation behavior. Earlier meta-analyses also indicate that the TPB and its predecessor, the Theory of Reasoned Action (TRA), explain approximately 40–50% of the variance in behavioral intentions and 19–38% in actual behavior (Sutton, 1998). Although the explained variance in behavior is relatively lower, these effect sizes are considered substantial within behavioral science research (Sutton, 1998). Beyond its predictive strength, the TPB is valued for its adaptability and simplicity, allowing it to be applied across a wide range of behaviors and extended with additional constructs relevant to specific contexts (Ajzen, 2012; Miller, 2017). One important extension of the TPB is the incorporation of moral norms, especially in the context of altruistic and pro-environmental behaviors such as wildlife protection. Moral norms are defined as personal feelings of moral obligation or responsibility to perform a certain behavior (Ajzen, 1991). Unlike subjective norms, which reflect perceived social pressure, moral norms represent an individual's internalized beliefs about whether a behavior is right or wrong, regardless of others' opinions (Schwartz, 1977). As such, moral norms capture a dimension of ethical self-regulation that is not fully addressed by the traditional TPB framework.

A growing body of research suggests that moral norms significantly enhance the predictive power of the TPB, particularly when examining behaviors with strong ethical or altruistic components. Studies have demonstrated that incorporating moral norms improves the explanation of behavioral intentions in environmental contexts (Conner et al., 2003; Corbett, 2005; Harland et al., 1999; Thøgersen, 2002). Supporting this view, Fishbein and Ajzen (2001) note that the inclusion of moral norms generally increases the proportion of explained variance in intentions. However, they also argue that moral norms are not considered a core component of the TPB, as their relevance may be

limited to specific types of behaviors (Fishbein & Ajzen, 2001). A review by Manstead (2000) further indicates that moral norms are particularly influential in behaviors that are altruistic, ethical, or socially sensitive. Accordingly, models that integrate morally oriented constructs have been shown to provide a more comprehensive understanding of pro-environmental behavior (Kaiser et al., 2005; Van Liere & Dunlap, 1978). Furthermore, research on stewardship identity suggests that individuals who perceive themselves as responsible for protecting natural systems are more likely to engage in environmentally beneficial behaviors (Lute & Gore, 2014; Landon et al., 2021). Social identity constructs have also been found to complement the TPB in predicting behavioral intentions in environmental contexts (Lu et al., 2022). Moral norms and identity-related constructs are particularly relevant in altruistic behaviors, where individuals must balance personal interests with broader environmental concerns (Conner et al., 2003). Applying these insights to youth, moral norms can play a crucial role in shaping pro-environmental behavioral intentions toward wildlife protection. As young individuals develop their environmental values and identities, their sense of moral responsibility may significantly influence their willingness to engage in conservation-related actions. Therefore, integrating moral norms into the TPB framework offers a more comprehensive approach to understanding the psychological mechanisms underlying youth engagement in wildlife protection.

## **2.2 Green identity construction**

Green identity construction refers to the process through which individuals develop and internalize an environmentally friendly self-concept, shaping how they perceive themselves in relation to environmental responsibility. This concept is closely related to self-identity, which has been defined as the salient part of an actor's self that relates to a specific behavior and reflects the extent to which individuals perceive themselves as fulfilling particular social roles (Yuriev et al., 2020). In the context of environmental behavior, green self-identity represents an individual's recognition of themselves as a typical environmentally responsible person and serves as a key motivator of pro-environmental actions. Within the Theory of Planned Behavior (TPB), self-identity has been increasingly recognized as an important extension that enhances the model's explanatory power. Ajzen (1991) emphasized that the TPB is open to the inclusion of additional predictors if they can account for a significant proportion of variance in behavioral intention beyond the core constructs. In this regard, self-identity and green self-identity have been identified as relevant factors influencing environmentally related behaviors.

Green identity plays a critical role in shaping individuals' cognitive and motivational processes underlying pro-environmental behavior. Individuals who strongly identify as environmentally responsible are more likely to develop favorable attitudes, perceive stronger social norms, and exhibit higher perceived behavioral control toward green behaviors. Empirical studies have demonstrated that green self-identity significantly influences green consumption behavior and strengthens individuals' intentions to engage in environmentally friendly actions (Neves & Oliveira, 2021). Moreover, green self-identity has been found to moderate the relationships between key TPB constructs, such that individuals with stronger green identities exhibit stronger associations between attitudes, social norms, perceived behavioral control, and behavioral intentions. In addition, prior research suggests that individuals who experience social exclusion may be more inclined to engage in pro-social and pro-environmental behaviors as a means of strengthening social connections and

gaining social acceptance (Debono et al., 2020). In such contexts, green identity construction can further enhance individuals' motivation to engage in environmentally responsible behaviors by reinforcing their desire to contribute positively to society. This highlights the role of green identity not only as a direct predictor of behavior but also as a mechanism that strengthens the influence of psychological and social factors on behavioral intentions. In the context of wildlife protection, green identity construction is particularly important, as it reflects the extent to which individuals perceive environmental protection, including the conservation of wildlife, as an integral part of their self-concept. Youths who develop a strong green identity are more likely to align their behaviors with environmental values, thereby increasing their intention to engage in wildlife protection activities.

### **2.3 Green identity construction and pro-environmental behavioral intention**

Green identity construction refers to the process through which individuals develop and internalize an environmentally friendly self-concept, reflecting their level of environmental concern and commitment to sustainable values. This concept is closely aligned with the social identity approach, which posits that individuals derive part of their self-concept from social group memberships and act in accordance with the norms and values associated with those identities. When individuals perceive themselves as environmentally responsible, they are more likely to adopt behaviors that are consistent with this identity. From a theoretical perspective, identity-based frameworks suggest that behavior is guided by the need for self-consistency. Individuals tend to act in ways that align with their self-identity to maintain cognitive and social coherence. In the context of environmental behavior, individuals with a strong green identity are more likely to engage in pro-environmental behavior as a way to reinforce and express their self-concept. This aligns with the argument that individuals who already demonstrate environmentally friendly behaviors in certain domains are likely to extend such behaviors to other contexts to maintain consistency (Liu et al. 2016).

Furthermore, within the TPB, identity-related constructs can enhance the explanatory power of behavioral intention by influencing key determinants such as attitude and motivation (Ajzen, 2012). Specifically, individuals with a strong green identity are more likely to develop favorable attitudes toward environmentally friendly behaviors, which in turn leads to stronger behavioral intentions. Environmental awareness, as an important component of green identity, has been consistently identified as a key driver of sustainable consumption behaviors, including the adoption of energy-efficient appliances (Neves et al., 2021). In addition, prior research highlights that individuals with higher levels of environmental concern are more inclined to adopt sustainable practices due to perceived co-benefits, such as improved comfort, better air quality, and long-term economic advantages. These co-benefits can further reinforce positive attitudes and motivate environmentally responsible decision-making. As a result, green self-identity not only directly influences behavioral intention but also indirectly shapes behavior through attitudinal mechanisms. Empirical evidence further supports the positive relationship between identity and pro-environmental behavior. Studies have shown that individuals with strong environmental or green identities are more likely to engage in behaviors such as recycling, sustainable consumption, and energy-saving practices (Hui et al., 2022). Moreover, individuals may adopt pro-environmental behaviors to strengthen social connections and align with group expectations, especially in contexts where environmental responsibility is socially valued (Debono et al., 2020). This suggests that green identity not only

operates at an individual level but is also reinforced through social and contextual influences. Applying these insights to the context of wildlife protection, green identity construction is expected to play a crucial role in shaping youths' pro-environmental behavioral intentions. As young individuals develop their environmental values and identities, they are more likely to engage in behaviors that reflect their commitment to environmental protection, including actions that support wildlife conservation. Based on the above arguments, the following hypothesis is proposed:

*H1: Green identity construction positively influences youths' pro-environmental behavioral intention toward wildlife protection.*

#### **2.4 The mediating role of moral obligation toward wildlife protection**

Building on this, moral obligation can also be linked to identity-based constructs such as green identity construction. Individuals who develop a strong environmental identity are more likely to internalize moral norms related to environmental protection, including wildlife conservation. This suggests that green identity may serve as an antecedent to moral obligation, reinforcing ethical considerations in decision-making processes, consistent with the Norm Activation Theory, which posits that personal norms arise from internalized values (Schwartz, 1977). As individuals increasingly define themselves through environmental values, these values become deeply embedded in their personal standards and self-concept, shaping how they evaluate environmental issues and their own responsibility in addressing them. In particular, the integration of environmental values into one's identity enhances sensitivity to ethical concerns and increases awareness of the consequences of harmful actions toward wildlife. As a result, individuals are more likely to perceive such harm as morally unacceptable and to experience a stronger sense of responsibility to act in environmentally responsible ways. Consequently, individuals with a stronger green identity are more likely to develop a corresponding sense of moral obligation toward wildlife protection. Based on the above arguments, the following hypothesis is proposed:

*H2: Green identity construction positively influences moral obligation toward wildlife protection.*

Moral obligation may also exert a direct influence on behavioral intention. Prior research has consistently demonstrated the significant role of moral obligation in shaping pro-environmental behavior. Individuals who experience a strong sense of moral obligation toward wildlife protection are more likely to resist environmentally harmful consumption practices and to actively support conservation initiatives (Verhagen et al., 2018). In contexts involving ethical trade-offs, moral considerations often function as a decisive determinant of intention, guiding individuals beyond purely utilitarian or self-interested reasoning. For example, in the case of bear bile consumption in Vietnam, moral beliefs have been found to conflict with personal benefits, thereby encouraging individuals to make more ethically grounded decisions (Cao et al., 2025). Furthermore, individuals with stronger moral objections tend to exhibit less favorable attitudes toward wildlife exploitation and lower behavioral intentions to engage in such practices, underscoring the critical role of moral norms in influencing pro-environmental intentions. In addition, moral obligation contributes to the consistency between individuals' values and their intended behaviors by reinforcing a sense of ethical commitment. When individuals perceive wildlife protection as a moral responsibility, they are more likely to form stable and enduring behavioral intentions that align with conservation objectives, even in the presence of external constraints or competing motivations. Taken together, these findings suggest that moral obligation operates as an internalized moral compass that directly

motivates pro-environmental behavioral intention, particularly in contexts characterized by ethical responsibility and altruistic decision-making. Based on the above arguments, the following hypothesis is proposed:

*H3: Moral obligation toward wildlife protection positively influences youths' pro-environmental behavioral intention.*

Given that green identity fosters the internalization of moral norms, it is important to examine how such moral obligation subsequently shapes behavioral intention. Furthermore, moral obligation is expected to play a mediating role between green identity and behavioral intention (Czyżewski et al., 2025). While green identity provides a self-concept that supports environmental values, moral obligation translates these values into a sense of ethical duty, thereby strengthening the likelihood of pro-environmental actions (Bruskotter et al., 2019). This mediating role reflects the process through which identity-based values are converted into behavioral motivations, transforming abstract beliefs into concrete intentions to act. In particular, individuals with a strong green identity are more likely to activate moral considerations when evaluating their actions, especially in contexts involving ethical and altruistic decisions such as wildlife protection. Through this process, they become more aware of the consequences of their behaviors and feel a greater sense of personal responsibility, which in turn reinforces their moral obligation. This internal moral pressure encourages consistency between one's values and actions, making individuals more likely to engage in behaviors that align with environmental protection goals. In this sense, moral obligation serves as a crucial psychological bridge between identity and intention, ensuring that environmental self-concepts are effectively translated into pro-environmental behavioral intentions. Therefore, moral obligation not only connects but also strengthens the pathway from green identity to behavioral intention, highlighting its central role in shaping environmentally responsible decision-making among youth. Based on the above arguments, the following hypothesis is proposed:

*H4: Moral obligation toward wildlife protection mediates the relationship between green identity construction and youths' pro-environmental behavioral intention.*

## **2.5 Demographics as control variables for pro-environmental behavioral intention**

A substantial body of research has identified various individual-level factors that influence pro-environmental behavior (PEB) and behavioral intention, including awareness, knowledge, attitudes, personality traits, and demographic characteristics (Hansen & Wiernik, 2018). These factors shape individuals' internal values and motivations toward environmental goals, thereby influencing their likelihood of engaging in pro-environmental actions. Among these, demographic characteristics such as age, gender, education, and income have been widely examined as important predictors of environmental attitudes and behaviors. Empirical findings suggest that gender differences exist in environmental engagement, with women generally demonstrating stronger environmental concern and greater participation in pro-environmental behavior than men. Education has been found to be positively associated with environmental knowledge and skills, which are essential for informed decision-making in environmental contexts. The relationship between age and pro-environmental behavior is more complex, with some studies reporting weak positive relationships, while others highlight non-linear effects influenced by cohort and contextual factors (Gifford & Nilsson, 2014).

In addition to demographic factors, individual motivations also play a critical role in shaping pro-environmental behavior. According to goal-framing theory, individuals' engagement in pro-

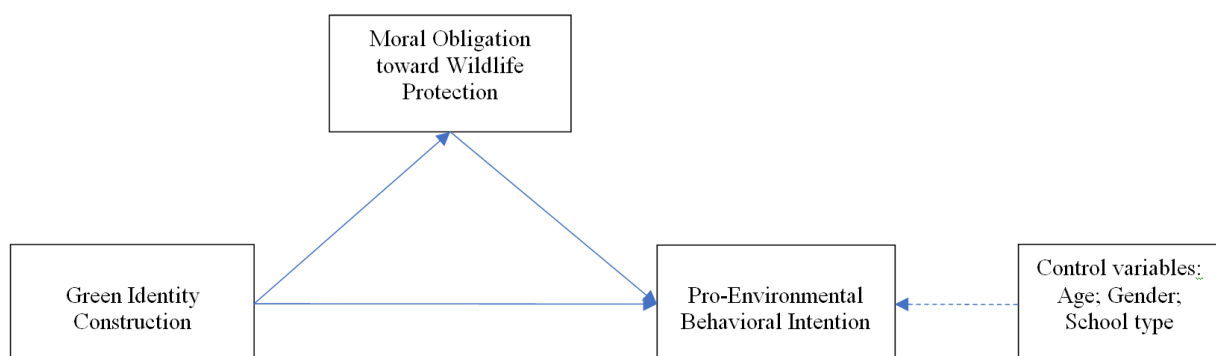
environmental activities can be driven by hedonic, gain, or normative motivations (Salman et al., 2025). Normative motivations, in particular, reflect individuals' beliefs that protecting the environment is the right thing to do, which can drive behaviors such as volunteering and donating to environmental causes. These normative drivers are closely related to pro-environmental behavioral intentions, although empirical findings on their relationship with subjective well-being remain mixed. Furthermore, environmental awareness and knowledge are considered essential enabling factors that support individuals in forming pro-environmental goals and intentions. For example, awareness of environmental issues has been shown to be strongly associated with personal norms and participation in environmentally responsible behavior (Ahmed et al., 2020), while environmental knowledge represents a foundational step in preparing individuals to respond effectively to environmental challenges. Despite the significant influence of these factors, they are not the primary focus of the present study. Instead, they may act as confounding variables that influence pro-environmental behavioral intention independently of the main theoretical constructs. Therefore, to ensure the robustness and internal validity of the research model, demographic variables are included as control variables. By controlling for these factors, this study aims to more accurately isolate the effects of green identity construction and moral obligation on youths' pro-environmental behavioral intention toward wildlife protection. Based on the above arguments, the following hypotheses are proposed:

*H5a: There is mean differences among age group toward youths' pro-environmental behavioral intention.*

*H5b: There is mean differences among gender group toward youths' pro-environmental behavioral intention.*

*H5c: There is mean differences among school type group toward youths' pro-environmental behavioral intention.*

Based on the above hypotheses, the authors proposes the following research model:



**Figure 1:** Research model  
*Source: Authors' analysis*

### 3.0 METHODOLOGY

#### 3.1 Measurement instrument and questionnaire design

The measurement instrument for this study was developed based on previously validated scales in the field of pro-environmental behavior and environmental psychology. The questionnaire consists of three key constructs: Green Identity Construction (GIC), Moral Obligation toward Wildlife

Protection (MOWP), and Pro-Environmental Behavioral Intention (PEBI). All measurement items were adapted and refined to ensure their suitability for the context of wildlife protection while maintaining their original theoretical meanings. Specifically, Green Identity Construction (GIC) was measured using three items adapted from prior studies on green self-identity (Neves & Oliveira, 2021; Hui & Khan, 2022). Moral Obligation toward Wildlife Protection (MOWP) was assessed using four items derived from research on moral responsibility and wildlife conservation (Bruskotter et al., 2019; Cao & Sakurai, 2025). Pro-Environmental Behavioral Intention (PEBI) was measured using five items adapted from established scales on pro-environmental behavioral intention (Salman & Khan, 2025; Ahmed et al., 2020).

All items were measured using a five-point Likert scale ranging from 1 (“strongly disagree”) to 5 (“strongly agree”), which is widely applied in behavioral research. Prior to the main data collection, a pilot test was conducted with a small group of respondents to ensure clarity, readability, and content validity. Minor revisions were made based on feedback to improve the quality of the questionnaire.

### **3.2 Sample population and data collection**

This study focuses on young individuals, given their critical role in shaping future environmental sustainability and wildlife protection efforts. The target population consists of youth with diverse demographic backgrounds, enabling a comprehensive understanding of pro-environmental behavioral intentions in relation to green identity construction. Data were collected using a structured questionnaire distributed through online platforms. A convenience sampling approach was employed to reach respondents efficiently, particularly students and young adults who are more accessible via digital channels. The final sample consisted of 317 valid responses after excluding incomplete or invalid questionnaires. The demographic profile of respondents includes gender, age, education level, school type, and monthly income. Gender was categorized into male and female. Age was divided into 4 groups: under 18, 18–22, 23–26, and 27–35, reflecting different stages of youth development. Education level included high school, college or university, and postgraduate levels, while school type was classified into public and private universities. Monthly income was grouped into four categories: less than 500 USD, 500–1000 USD, 1000–2000 USD, and above 2000 USD. These demographic variables were incorporated to provide a clearer profile of the sample and to support subsequent analyses examining differences in pro-environmental behavioral intention across groups. The selected sample is considered appropriate for investigating the role of green identity construction and its influence on youths’ pro-environmental behavioral intentions toward wildlife protection.

For data analysis, Partial Least Squares Structural Equation Modeling (PLS-SEM) using SmartPLS was employed to assess the reliability and validity of the measurement model and to test the proposed hypotheses. In addition, SPSS 27 was used to conduct supplementary analyses, including independent samples t-tests and one-way ANOVA, to examine differences in pro-environmental behavioral intention across demographic variables, particularly gender and age.

## 4.0 RESULTS AND DISCUSSION

### 4.1 Demographics of respondents

A total of 317 valid responses were collected and included in the analysis. The demographic characteristics of the respondents are presented in Table 1. In terms of gender, the sample consists of 148 males (46.7%) and 169 females (53.3%), indicating a relatively balanced distribution with a slight predominance of female respondents. This balance enhances the representativeness of the sample and reduces potential gender bias in subsequent analyses. Regarding age, the majority of participants fall within the 18–22 age group (49.8%), followed by those aged 23–26 (26.5%). Smaller proportions are observed in the 27–35 group (16.7%) and those under 18 (6.9%). This distribution indicates that the sample is largely composed of young adults, particularly individuals in early adulthood, which is consistent with the study's focus on youth. Such a concentration is appropriate, as this age group is more likely to be actively forming identities and values, including green identity and environmental awareness.

With respect to education level, most respondents are currently studying at or have completed college or university (68.8%), while 20.2% have postgraduate education and 11.0% have a high school level. This suggests that the sample is relatively well-educated, which may positively influence their awareness of environmental issues and their engagement in pro-environmental behaviors. In terms of school type, a majority of respondents are from public universities (69.7%), whereas 30.3% are from private universities, providing a reasonable variation in educational contexts. Regarding monthly income, the largest proportion of respondents falls within the 500–1000 USD range (34.4%), followed by those earning less than 500 USD (32.2%). Participants with incomes between 1000–2000 USD account for 22.4%, while only 11.0% report earning above 2000 USD. This income distribution reflects the financial characteristics typical of students and young individuals, many of whom may still be financially dependent or in the early stages of their careers.

**Table 1:** Demographics of respondents (n = 317)

<i>Demographics</i>		<i>Frequency</i>	<i>Percentage (%)</i>
Gender	Male	148	46.7
	Female	169	53.3
Age	< 18	22	6.9
	18–22	158	49.8
	23–26	84	26.5
	27–35	53	16.8
Educational Level	High school	35	11.0
	College / University	218	68.8
	Postgraduate	64	20.2
School type	Public university	221	69.7
	Private university	96	30.3
Monthly Income	< 500 USD	102	32.2

	500–1000 USD	109	34.4
	1000–2000 USD	71	22.4
	> 2000 USD	35	11.0
<b>Total</b>		<b>317</b>	<b>100</b>

Source: Authors' analysis

#### 4.2 Scale reliability and validity assessment

The reliability and convergent validity of the measurement scales were assessed using Cronbach's Alpha, rho\_A, Composite Reliability, and Average Variance Extracted (AVE). The results indicate that all main constructs, including Green Identity Construction (GIC), Moral Obligation toward Wildlife Protection (MOWP), and Pro-Environmental Behavioral Intention (PEBI), demonstrate satisfactory reliability. Specifically, Cronbach's Alpha values range from 0.831 to 0.906, exceeding the recommended threshold of 0.7, while Composite Reliability values range from 0.898 to 0.930, further confirming strong internal consistency. Additionally, rho\_A values are all above 0.8, providing further support for construct reliability.

**Table 2:** Construct reliability and convergent validity

	<b>Cronbach's Alpha</b>	<b>rho_A</b>	<b>Composite Reliability</b>	<b>Average Variance Extracted (AVE)</b>
GIC	0.831	0.835	0.898	0.747
MOWP	0.880	0.881	0.918	0.736
PEBI	0.906	0.911	0.930	0.728

Source: Data analysis by SmartPLS3

In terms of convergent validity, all AVE values are above the acceptable threshold of 0.5 (GIC = 0.747, MOWP = 0.736, PEBI = 0.728), indicating that the indicators adequately capture the variance of their respective constructs. Demographic variables such as age, gender, and school type report values of 1.000 across all measures, which is expected as they are single-item variables rather than latent constructs. Overall, these results confirm that the measurement model achieves satisfactory reliability and convergent validity, providing a solid basis for further analysis.

**Table 3:** Fornell-Larcker Criterion

	<b>Age</b>	<b>GIC</b>	<b>Gender</b>	<b>MOWP</b>	<b>PEBI</b>	<b>School type</b>
Age	1.000					
GIC	-0.044	0.864				
Gender	0.685	-0.062	1.000			
MOWP	0.023	0.609	0.076	0.858		
PEBI	0.097	0.568	0.112	0.755	0.853	
School type	0.791	-0.233	0.593	-0.302	-0.253	1.000

Source: Data analysis by SmartPLS3

Discriminant validity was first assessed using the Fornell–Larcker criterion, as presented in Table 3. According to this criterion, the square root of the Average Variance Extracted (AVE) of each construct should be greater than its correlations with other constructs. The results indicate that the diagonal values for Green Identity Construction (0.864), Moral Obligation toward Wildlife Protection (0.858), and Pro-Environmental Behavioral Intention (0.853) are all higher than their corresponding inter-construct correlations. This confirms that each construct shares more variance with its own indicators than with other constructs, thereby satisfying the Fornell–Larcker criterion and supporting discriminant validity.

**Table 4:** Heterotrait-Monotrait Ratio (HTMT)

	Age	GIC	Gender	MOWP	PEBI	School type
Age						
GIC	0.076					
Gender	0.685	0.090				
MOWP	0.031	0.710	0.080			
PEBI	0.102	0.650	0.117	0.840		
School type	0.791	0.256	0.593	0.323	0.268	

*Source: Data analysis by SmartPLS3*

In addition, discriminant validity was further evaluated using the Heterotrait–Monotrait ratio (HTMT), as shown in Table 4. All HTMT values are below the recommended threshold of 0.90, indicating that there are no serious issues related to discriminant validity. Although some relationships, such as between Moral Obligation and Pro-Environmental Behavioral Intention (0.840), exhibit relatively high values, they remain within acceptable limits. Overall, these results provide strong evidence that the constructs are empirically distinct and suitable for subsequent structural model analysis.

#### 4.2 Model assessment and discussion

The structural model was evaluated using path coefficients, t-statistics, and p-values, as presented in Table 5. The results indicate that the model demonstrates strong explanatory power, with an adjusted R<sup>2</sup> of 0.369 for Moral Obligation toward Wildlife Protection (MOWP) and 0.622 for Pro-Environmental Behavioral Intention (PEBI). This suggests that the model explains 36.9% of the variance in moral obligation and 62.2% of the variance in pro-environmental behavioral intention, indicating a substantial level of predictive accuracy. The relatively high explanatory power for PEBI highlights the important role of psychological constructs, particularly green identity and moral obligation, in shaping environmentally responsible intentions among youth.

**Table 5:** Structural equation modelling results estimates

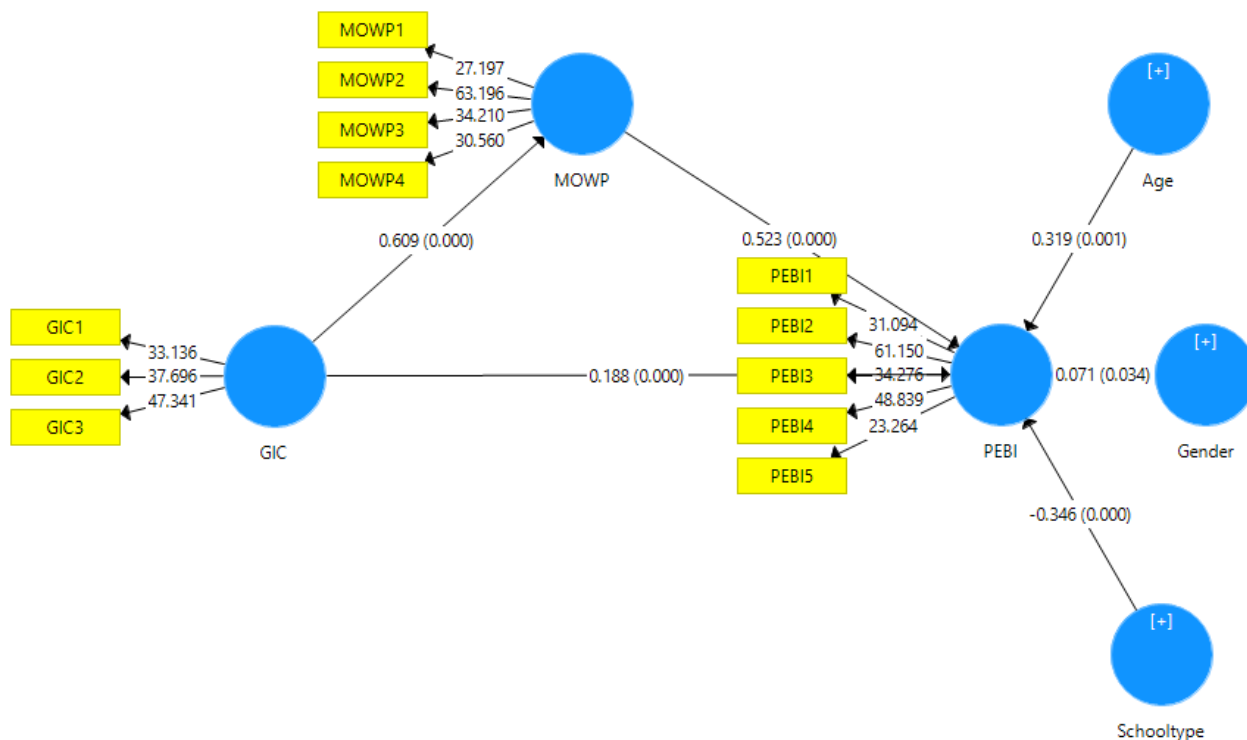
<i>Paths</i>	<i>Original Sample (O)</i>	<i>Sample Mean (M)</i>	<i>Standard Deviation (STDEV)</i>	<i>T Statistics ( O/STDEV )</i>	<i>P Values</i>
GIC -> PEBI	0.188	0.187	0.043	4.400	0.000
GIC -> MOWP	0.609	0.607	0.045	13.435	0.000
MOWP -> PEBI	0.523	0.526	0.069	7.587	0.000

GIC -> MOWP -> PEBI	0.319	0.319	0.048	6.586	0.000
Age -> PEBI	0.319	0.310	0.093	3.423	0.001
Gender -> PEBI	0.071	0.073	0.034	2.121	0.034
School type -> PEBI	-0.346	-0.344	0.065	5.294	0.000
Adjusted R <sup>2</sup> : MOWP = 0.369; PEBI = 0.622					

Source: Data analysis by SmartPLS3

The structural model results indicate that Green Identity Construction has a positive and statistically significant effect on Pro-Environmental Behavioral Intention ( $\beta = 0.188$ ,  $p < 0.001$ ), thereby supporting H1. This finding aligns with Neves and Oliveira (2021), who highlight the role of green self-identity in shaping energy-related behavioral change, as well as Hui & Khan (2022), who emphasize its importance in driving green consumption intentions. The present result further extends these findings to the context of wildlife protection, suggesting that when individuals internalize environmental values as part of their identity, they are more likely to translate these values into behavioral intentions. However, the relatively moderate magnitude of the effect also implies that identity alone may not be sufficient to fully explain behavioral intention, indicating the presence of additional psychological mechanisms that facilitate the translation of identity into action.

Green Identity Construction also demonstrates a strong and statistically significant positive influence on Moral Obligation toward Wildlife Protection ( $\beta = 0.609$ ,  $p < 0.001$ ), thereby supporting H2. This result aligns with Bruskotter et al. (2019), who argue that identity and underlying value systems are fundamental in shaping individuals' perceived moral responsibilities toward wildlife. The substantial magnitude of this relationship highlights that green identity plays a critical role in activating moral norms, particularly in contexts involving ethical considerations such as wildlife conservation. This finding suggests that identity-based processes are not only relevant for shaping attitudes but also serve as a key foundation for the development of internalized moral standards, reinforcing the argument that moral obligation is deeply rooted in individuals' value-based self-concept.



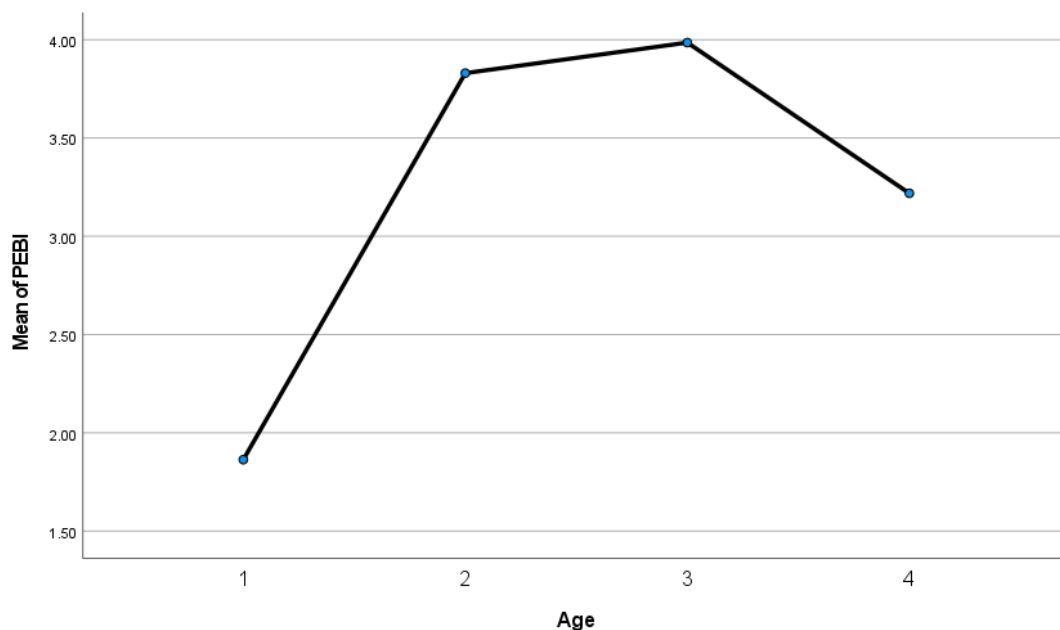
**Figure 2:** PLS bootstrapping model  
 Source: Data analysis by SmartPLS3

In addition, Moral Obligation toward Wildlife Protection exerts a strong and significant effect on Pro-Environmental Behavioral Intention ( $\beta = 0.523$ ,  $p < 0.001$ ), thus supporting H3. This finding is consistent with the study by Cao & Sakurai (2025), which demonstrates that moral beliefs play a decisive role in shaping attitudes and behavioral intentions, particularly in ethically sensitive contexts such as wildlife product consumption. The relatively large coefficient observed in this study further emphasizes the importance of moral obligation as a central determinant of behavioral intention. It suggests that when individuals perceive wildlife protection as a moral responsibility, they are more likely to form strong and consistent intentions to engage in pro-environmental actions, even in situations where such actions may involve personal costs or trade-offs.

The findings also provide empirical support for the mediating role of moral obligation as proposed in H3 ( $\beta = 0.319$ ,  $p < 0.001$ ). Specifically, Green Identity Construction influences Pro-Environmental Behavioral Intention both directly and indirectly through Moral Obligation toward Wildlife Protection. This indicates that moral obligation functions as a key psychological mechanism through which identity-based values are translated into behavioral intentions. This results aligns with Bruskotter et al. (2019), who emphasize the role of values and identity in shaping moral responsibility, and is further supported by Cao and Sakurai (2025), who highlight the influence of moral beliefs on behavioral intention. The mediation effect suggests that while green identity provides the foundation for environmental concern, moral obligation strengthens and operationalizes this concern by converting it into a sense of ethical duty that drives behavioral intention.

With regard to control variables, age shows a positive and statistically significant influence on Pro-Environmental Behavioral Intention ( $\beta = 0.319$ ,  $p = 0.001$ ), suggesting that older individuals tend to exhibit stronger environmental intentions. This may be explained by greater life experience, higher levels of awareness, or increased exposure to environmental issues over time. Gender also has a positive but relatively modest effect ( $\beta = 0.071$ ,  $p = 0.034$ ), indicating that although gender differences exist, they are not a dominant factor in explaining behavioral intention. In contrast, school type demonstrates a significant negative effect ( $\beta = -0.346$ ,  $p < 0.001$ ), suggesting that institutional context may influence environmental attitudes and behaviors among youth. These findings imply that while demographic characteristics contribute to explaining behavioral intention, their influence is secondary compared to the more substantial effects of psychological constructs such as identity and moral obligation.

An independent samples t-test was conducted to examine gender differences in pro-environmental behavioral intentions (PEBI). The results of Levene's test indicated that the assumption of homogeneity of variances was met ( $F = 2.933$ ,  $p = 0.088$ ). The t-test results revealed a statistically significant difference between male and female respondents ( $t = -2.001$ ,  $df = 315$ ,  $p = 0.046$ ). Specifically, female participants reported higher levels of PEBI than male participants (Mean Difference =  $-0.210$ ). However, the effect size was small (Cohen's  $d = -0.226$ ), indicating a limited practical significance.



**Figure 3:** Means plots of PEBI by age group

*Source: Data analysis by SPSS 27*

Moreover, a one-way ANOVA was conducted to examine differences in pro-environmental behavioral intentions (PEBI) across age groups. The results of Levene's test indicated that the assumption of homogeneity of variances was violated ( $p < 0.001$ ). Therefore, Welch's ANOVA was used as a robust alternative. The results revealed a statistically significant difference in PEBI among different age groups (Welch's  $F = 28.468$ ,  $p < 0.001$ ). This suggests that age plays a

significant role in influencing youths' pro-environmental behavioral intentions toward wildlife protection, in which respondents from 23 to 26 years old have the highest mean among age group.

## 5.0 IMPLICATIONS AND CONCLUSION

This study extends the Theory of Planned Behavior by incorporating green identity construction and moral obligation, thereby capturing the ethical and value-driven dimensions of pro-environmental behavior that are not fully addressed in the original framework. The findings confirm that identity-based constructs play a meaningful role in shaping behavioral intention, particularly in contexts involving environmental responsibility and wildlife protection. More importantly, the study demonstrates that moral obligation serves as a key psychological mechanism linking identity to intention, consistent with the logic of Norm Activation Theory. The stronger indirect effect compared to the direct effect highlights that environmental identity becomes behaviorally relevant primarily when it is internalized as a sense of moral responsibility. This provides a more nuanced understanding of how internal values are translated into pro-environmental intentions, especially among youth.

The results offer important insights for policymakers, educators, and environmental organizations seeking to promote wildlife protection and pro-environmental behavior among young people. A key implication is that fostering pro-environmental behavior requires more than increasing awareness or knowledge; it necessitates the development of a strong green identity. Educational institutions should therefore move beyond traditional information-based approaches and incorporate experiential and value-oriented learning methods. Activities such as environmental volunteering, conservation campaigns, and community-based projects can help young individuals internalize environmental values and see themselves as active agents of change. When environmental responsibility becomes part of one's self-concept, behavioral intentions are more likely to be consistent and enduring. At the same time, the findings emphasize the central role of moral obligation as a driver of behavioral intention. This suggests that communication strategies should explicitly appeal to ethical responsibility rather than relying solely on rational or benefit-based arguments. Campaigns that highlight the moral consequences of wildlife exploitation, the suffering of animals, or the long-term ecological impact of human actions may be more effective in motivating behavioral change. By framing wildlife protection as a moral duty rather than a personal choice, interventions can strengthen individuals' commitment to act in environmentally responsible ways. The strong mediating role of moral obligation also implies that identity-based interventions should be designed in ways that activate ethical reflection. Simply encouraging individuals to identify as "green" may not be sufficient unless this identity is linked to a clear sense of right and wrong. Programs should therefore integrate both identity-building and moral engagement, for example by encouraging critical thinking about environmental issues, ethical discussions, and reflection on personal responsibility.

Demographic differences observed in the study further suggest the need for more targeted approaches. The positive effect of age indicates that environmental intentions may strengthen with maturity, suggesting that younger individuals may require more foundational interventions focused on awareness and value formation. In contrast, older youth may benefit more from opportunities to translate their values into concrete actions. The significant influence of school type also highlights

the importance of institutional context, suggesting that differences in curriculum, exposure to environmental education, or organizational culture may shape environmental attitudes and intentions. This underscores the need for integrating sustainability and wildlife protection topics consistently across different educational settings. In the context of countries such as Vietnam, where wildlife conservation remains a pressing issue, these findings are particularly relevant. Efforts to reduce wildlife exploitation and illegal consumption should not only focus on enforcement and regulation but also on shaping long-term behavioral change through education and value formation. Targeting youth is especially important, as they represent a generation capable of redefining social norms and contributing to more sustainable environmental practices in the future.

This study is subject to several limitations. The use of convenience sampling may limit the generalizability of the findings, and the cross-sectional design restricts causal interpretation. In addition, the study focuses on behavioral intention rather than actual behavior, leaving room for future research to explore the intention–behavior gap through longitudinal or experimental approaches. Despite these limitations, the study provides important insights into the psychological mechanisms underlying pro-environmental behavioral intention toward wildlife protection. By highlighting the interplay between green identity and moral obligation, the findings demonstrate that environmental behavior is not only a matter of attitudes or control but also of identity and ethical responsibility. Strengthening these internal drivers may therefore be key to promoting more consistent and meaningful engagement in wildlife conservation among youth.

## REFERENCES

- Ahmed, M., Zehou, S., Raza, S. A., Qureshi, M. A., & Yousufi, S. Q. (2020). Impact of CSR and environmental triggers on employee green behavior: The mediating effect of employee well-being. *Corporate Social Responsibility and Environmental Management*, 27(5), 2225-2239.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational behavior and human decision processes*, 50(2), 179-211.
- Ajzen, I. (2001). Nature and operation of attitudes. *Annual review of psychology*, 52(1), 27-58.
- Ajzen, I. (2012). Martin Fishbein's legacy: The reasoned action approach. *The annals of the American academy of political and social science*, 640(1), 11-27.
- Armitage, C. J., & Conner, M. (2001). Efficacy of the theory of planned behaviour: A meta-analytic review. *British journal of social psychology*, 40(4), 471-499.
- Bruskotter, J. T., Vucetich, J. A., Dietsch, A., Slagle, K. M., Brooks, J. S., & Nelson, M. P. (2019).
- Cao, T. P. V., & Sakurai, R. (2025). Determinants of attitudes and purchase intentions toward bear bile: An analysis based on Wildlife Value Orientations and the extended Theory of Planned Behavior in Hanoi, Vietnam. *Environmental Challenges*, 101322.
- Czyżewski, B., Poczta-Wajda, A., Matuszczak, A., Smędzik-Ambroży, K., & Guth, M. (2025). Exploring intentions to convert into organic farming in small-scale agriculture: Social embeddedness in extended theory of planned behaviour framework. *Agricultural Systems*, 225, 104294.
- DeBono, A. E. (2011). *Why am I left out? Interpretations of exclusion affect anti-social and pro-social behaviors*. State University of New York at Albany.

- Debono, A., Corley, N., & Muraven, M. (2020). Why am I left out? Interpretations of exclusion affect antisocial and prosocial behaviors. *The American Journal of Psychology*, 133(1), 63-79.
- Gifford, R., & Nilsson, A. (2014). Personal and social factors that influence pro-environmental concern and behaviour: A review. *International journal of psychology*, 49(3), 141-157.
- Hansen, J. I. C., & Wiernik, B. M. (2018). Work preferences: Vocational interests and values. *The SAGE handbook of industrial, work & organizational psychology: Personnel psychology and employee performance*, 1, 408-448.
- Hui, Z., & Khan, A. N. (2022). Beyond pro-environmental consumerism: role of social exclusion and green self-identity in green product consumption intentions. *Environmental Science and Pollution Research*, 29(50), 76339-76351.
- Kaiser, F. G., Hübner, G., & Bogner, F. X. (2005). Contrasting the theory of planned behavior with the value-belief-norm model in explaining conservation behavior 1. *Journal of applied social psychology*, 35(10), 2150-2170.
- Kjell, O. N. (2011). Sustainable well-being: A potential synergy between sustainability and well-being research. *Review of General Psychology*, 15(3), 255-266.
- Landon, B. E., Onnela, J. P., Meneades, L., O'Malley, A. J., & Keating, N. L. (2021). Assessment of racial disparities in primary care physician specialty referrals. *JAMA network open*, 4(1), e2029238.
- Lange, F. (2023). Behavioral paradigms for studying pro-environmental behavior: A systematic review. *Behavior Research Methods*, 55(2), 600-622.
- Lede, E., Meleady, R., & Seger, C. R. (2019). Optimizing the influence of social norms interventions: Applying social identity insights to motivate residential water conservation. *Journal of Environmental Psychology*, 62, 105-114.
- Liu, C. H., Hong, C. Y., & Li, J. F. (2016). The effect of key factors on green consumption intention in the green hotel industry. *Global Journal of Business Research*, 10(2), 89-101.
- Masson, T., & Fritsche, I. (2021). We need climate change mitigation and climate change mitigation needs the 'We': A state-of-the-art review of social identity effects motivating climate change action. *Current opinion in behavioral sciences*, 42, 89-96.
- Miller, T., Howe, P., & Sonenberg, L. (2017). Explainable AI: Beware of inmates running the asylum or: How I learnt to stop worrying and love the social and behavioural sciences. *arXiv preprint arXiv:1712.00547*.
- Neves, J., & Oliveira, T. (2021). Understanding energy-efficient heating appliance behavior change: The moderating impact of the green self-identity. *Energy*, 225, 120169.
- Nielsen, K. S., Clayton, S., Stern, P. C., Dietz, T., Capstick, S., & Whitmarsh, L. (2021). How psychology can help limit climate change. *American Psychologist*, 76(1), 130.
- Pörtner, H. O., Roberts, D. C., Adams, H., Adler, C., Aldunce, P., Ali, E., ... & Birkmann, J. (2022). *Climate change 2022: Impacts, adaptation and vulnerability*.
- Salman, F., & Khan, M. S. (2025). Influence of pro-environmental behavior (PEB) on environmental sustainability: empirical evidence from health supplements industry. *Environment, Development and Sustainability*, 1-25.
- Schwartz, S. H. (1977). Normative influences on altruism. In *Advances in experimental social psychology* (Vol. 10, pp. 221-279). Academic Press.

- Verhagen, M., Lodder, G. M., & Baumeister, R. F. (2018). Unmet belongingness needs but not high belongingness needs alone predict adverse well-being: A response surface modeling approach. *Journal of personality*, 86(3), 498-507.
- Yuriev, A., Dahmen, M., Paillé, P., Boiral, O., & Guillaumie, L. (2020). Pro-environmental behaviors through the lens of the theory of planned behavior: A scoping review. *Resources, Conservation and Recycling*, 155, 104660.
- Zeelenberg, M., Van Dijk, W. W., Manstead, A. S., & vanr de Pligt, J. (2000). On bad decisions and disconfirmed expectancies: The psychology of regret and disappointment. *Cognition & Emotion*, 14(4), 521-541.