

## **A COMPREHENSIVE REVIEW OF FACTORS INFLUENCING PRO-ENVIRONMENTAL BEHAVIOR**

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### **ABSTRACT**

There are various aspects that affect people's participation in activities that promote environmental sustainability. Based on well-established theoretical frameworks, such as the Value-Belief-Norm theory and the Theory of Planned Behavior, this study critically examines the complex roles of social norms, psychological attachment to location, environmental knowledge, attitudes, values, and other perceived impediments. The effectiveness of environmental education initiatives aimed at closing the "attitude-behavior gap," wherein expressed environmental concern frequently does not transfer into consistent action, is highlighted. This review offers a comprehensive and in-depth understanding of the main drivers and inhibitors of Pro B by integrating insights from a wide range of studies. It also offers extensive implications for researchers, educators, and policymakers who aim to promote a more sustainable and environmentally conscious global society.

**Keywords:** Environmental Concern, Pro-Environmental Behavior, Attitude, Social Norms, Environmental Sustainability

### **1. INTRODUCTION**

Climate change, biodiversity loss, resource depletion, and pollution require a drastic adjustment in human behavior. Pro-environmental behavior (PEB) includes several conscious activities to reduce environmental damage. These actions include recycling, energy conservation, sustainable diets, carbon footprint reduction, and advocating for strong environmental policies and systemic sustainable consumption ([1]). It is not just an academic exercise to comprehend the underlying psychological, social, and contextual factors that drive, facilitate, or impede PEB; it is an essential precondition for creating successful interventions, significant policies, and, eventually, a global culture of sustainability and environmental stewardship.

Researchers from a variety of fields have been working for decades to understand the intricate interactions between factors that explain why some people regularly participate in PEB, frequently without much outside encouragement, while others, even when they have a strong awareness of environmental issues or express genuine concern for the environment, do not always follow through on their intentions. Known as the "attitude-behavior gap," this widespread phenomenon poses a serious problem for environmental psychology ([2]).

This disparity highlights the urgent need for a thorough comprehension that acknowledges the complex and dynamic network of individual, societal, and structural factors that together determine environmental behavior, moving beyond crude, linear assumptions about human decision-making. Achieving significant and long-lasting environmental change requires closing this gap.

An organized, comprehensive summary of the leading theoretical stances and solid empirical data that shed light on the intricate factors influencing PEB is what this review seeks to do. Core psychological concepts, including the development and impact of environmental information, attitudes, and core values, will be covered. The widespread influence of social and environmental elements, including community influence, societal norms, and the availability of supportive infrastructure, will also be carefully examined. Importantly, this journal will also discuss the important and frequently interconnected obstacles that prevent the broad adoption of ecologically conscious behavior, providing explanations for why even well-meaning people could find it difficult to take action. In the crucial field of environmental psychology and education, this magazine aims to give a fundamental and nuanced understanding of future research endeavors and practical applications by compiling and critically integrating insights from the provided literature.

### **PRO-ENVIRONMENTAL BEHAVIOR, ENVIRONMENTAL SUSTAINABILITY, AND HOW THEY INTERACT?**

Through harm reduction and the resolution of global issues like climate change, environmental sustainability seeks to ensure that humans and nature coexist and protect Earth's life-supporting systems for future generations. The term "pro-environmental behavior" (PEB) refers to the deliberate steps people take to reduce their impact on the environment, such as recycling and supporting green policies. The active way by which sustainability is accomplished through cumulative impact, promoting policy change, and cultivating a culture of responsibility is PEB. These two ideas are highly reciprocal and interconnected. On the other hand, the pursuit of sustainability makes sustainable choices simpler and more prevalent by establishing supportive policies and incentives, building enabling infrastructure, and raising awareness and educating people. A societal commitment to sustainability is essential for fostering and sustaining such habits, while PEB essentially serves as the practical engine for achieving environmental sustainability goals.

## **2. METHODOLOGY**

In order to consolidate the body of research on pro-environmental behavior (PEB), this review study uses a thorough literature review methodology. In order to locate, evaluate, and incorporate important theoretical frameworks and empirical data, the process entailed methodically consulting 11 carefully chosen academic references. Following a thorough analysis of well-known models like the Theory of Planned Behavior and the Value-Belief-Norm theory, a thematic analysis of the different elements influencing PEB—such as environmental knowledge, attitudes, values, place attachment, social norms, and acknowledged barriers—was conducted. The results of these various studies were then combined to give a comprehensive understanding of drivers and inhibitors. This led to a discussion of practical methods for promoting PEB and the formulation of a research agenda for the future that was based on knowledge gaps and areas that needed more investigation.

## **3. DISCUSSION**

### **3.1 Factors Influencing Pro-Environmental Behavior**

A plethora of empirical research reveals a multitude of particular personal, societal, and contextual elements that profoundly impact an individual's propensity to engage in PEB, in addition to these broad theoretical frameworks. Comprehending these distinct elements is essential for creating focused and successful interventions.

### **3.2. Environmental Knowledge and Awareness**

Pro-Environmental Behavior (PEB) and environmental knowledge have a complicated, indirect relationship rather than a straightforward linear one. Although understanding environmental challenges requires information, [3] contends that knowledge alone does not equate to action. He promotes "action competence," a concept in which environmental education fosters critical thinking, practical skills, and the drive to take action in addition to knowledge.

This intricate relationship is empirically supported by Liu, Teng, and Han [4], who show that behavioral intentions and environmental views moderate the knowledge-action relationship. Understanding of environmental concerns is first shaped by knowledge, which in turn shapes attitudes (such as a strong belief in the threat posed by climate change) and intentions for certain PEBs (such as cutting back on meat consumption). Extensive knowledge by itself might not always result in behavioral change if positive attitudes and strong intentions are not developed, which would contribute to the ongoing "attitude-behavior gap." In the end, knowledge serves as a potent enabler, assisting people in relating their values and beliefs to practical actions and enhancing their own standards for doing pro-environmental action.

### **3.3. Environmental Attitudes and Behavioral Intentions**

According to ([5]). Theory of Planned Behavior, pro-environmental behavior (PEB) is greatly influenced by behavioral intentions and environmental views. One's willingness to act is directly impacted by pro-environmental activities and positive opinions on environmental concerns. This was supported by [6], who discovered that among Indonesian university students, favorable environmental attitudes were a major predictor of PEB. Students are more likely to develop strong intentions to act morally when they believe that environmental preservation is personally relevant and consistent with their values. The mediating function of environmental attitudes and intentions is further highlighted by [4]. They discovered that in order for environmental information to properly translate into PEB, it must first cultivate favorable environmental attitudes. A continuous "attitude-behavior gap" develops in the absence of this vital psychological link between factual comprehension and positive assessment and deliberate decision-making, diminishing the connection between knowledge and action.

### **3.4. Values and Beliefs**

The core values and beliefs of individuals have a significant impact on their pro-environmental behavior (PEB), as noted by [7]. The way that environmental attitudes and behaviors are predicted by value orientations—egoistic (self-interest), altruistic (welfare of others), and particularly biospheric (intrinsic value of nature)—is emphasized. Increased PEBs are a result of those who prioritize biospheric values because they continuously exhibit greater environmental concern and a deeper moral commitment to nature. The causal chain for PEB is based on these fundamental values, especially biospheric ones, according to [8] Value-Belief-Norm (VBN) hypothesis. According to this paradigm, which also takes into account one's entire environmental worldview (such as the New Environmental Paradigm), strongly held values influence views and create personal standards that motivate pro-environmental behavior.

### **3.5. Other Psychological Factors: Place Attachment**

1. Particular psychological bonds that people have with specific physical locations can also be extremely important and potent in inspiring PEB, in addition to generic values and beliefs. In particular, [9] explores this area in depth, thoroughly examining the

complex relationships between several types of pro-environmental action and civic and natural place attachment. Place attachment, as used here, describes the complex emotional and mental connection a person forms with a certain geographic region. There are two main types of place attachment that they carefully differentiate between:

- **Natural place attachment:** A strong emotional, spiritual, or experiential connection people develop with the natural world, such as a park or hiking trail they love, is referred to as natural place attachment. This deep connection frequently results in a strong desire to protect these surroundings because people view threats to them as losses to themselves. By encouraging behaviors like volunteering for conservation, taking part in cleanup projects, and deliberately reducing one's ecological imprint to protect the integrity of these natural areas, this attachment fosters a sense of stewardship and accountability.
- **Civic place attachment:** The emotional connection people have to the social, cultural, and built aspects of their city, neighborhood, or community is known as civic place attachment. Through pride in a city's history or commitment to the welfare of the community, it embodies a sense of identification, belonging, and shared responsibility for one's local location. Pro-environmental actions are positively correlated with civic and natural place attachment. Strong civic ties, for example, can encourage support for neighborhood green projects, recycling, or sustainable urban development. This demonstrates how cultivating a strong sense of connection to both the natural and man-made environments may be an effective strategy for promoting a variety of pro-environmental behaviors, turning general environmental worries into concrete local acts motivated by concern for one's immediate surroundings.

### 3.6. Social Factors and Norms

Societal elements that significantly influence pro-environmental behavior (PEB) include peer pressure, societal norms, and group action.[7] point out that individual environmental activities are significantly influenced by both descriptive norms—what other people usually do—and injunctive norms—what other people approve or disapprove of. ([6]), For example, noted the significant influence of social norms in Indonesian universities. Because people are more likely to follow perceived social norms, campuses that actively support sustainability through energy-saving initiatives, recycling, and active environmental student organizations are likely to see higher levels of PEB among their student body. Furthermore, effective pro-environmental efforts depend on social cohesion and collective efficacy—the idea that a group can accomplish a goal.

### 3.7. Barriers to Pro-Environmental Behavior: Mind the Gap

Even though there has been a noticeable rise in environmental awareness and generally positive attitudes, a sizable and enduring "attitude-behavior gap" still poses a serious problem. This disparity shows that people's declared environmental concerns or intentions may not always result in tangible, regular pro-environmental behavior. In their thorough analysis of the nuances of this disparity ([3]), not only pinpoint the reasons behind people's actions toward the environment, but also—and perhaps more importantly—the obstacles that frequently stand in the way of pro-environmental conduct. These barriers are divided into a number of important categories by them. People are more likely to take part in group projects like legislative reforms, community cleanups, or climate strikes when they think their

combined efforts may result in meaningful change. This helps the movement overcome individual obstacles([11]).

- **INDIVIDUAL BARRIERS:**

1. **Lack of knowledge/information:** Knowledge is necessary, but limited or unavailable information about what to do or the precise effects of actions might be a barrier. People might not be aware of the best energy-efficient commuting routes, where to compost, or how to recycle correctly.
2. **External Locus of Control:** People may think that governments or businesses are largely responsible for finding solutions to environmental issues, or that their efforts will not have a significant impact. This helplessness can cause people to do nothing.
3. **Personal Cost:** Pro-environmental actions, such as purchasing organic food, installing solar panels, or using public transportation, can occasionally be seen as time-consuming, expensive, or inconvenient.
4. **Habit:** Many actions that hurt the environment (such as driving and excessive consumption) are hard to change because they are deeply rooted habits.
5. **Values/Beliefs:** Conflicting values (such as putting economic expansion ahead of environmental protection) can serve as obstacles even while biospheric values support PEB.
6. **Psychological distance:** Environmental issues can seem far away in time (occurring far away) or space (impacts occurring in the future), which makes it hard for people to feel compelled to take action.

- **EXTERNAL/CONTEXTUAL BARRIERS:**

1. **Lack of infrastructure:** PEB may be directly hampered by the lack of essential infrastructure, such as recycling facilities, public transit, or renewable energy sources.
2. **Economic factors:** PEB may be unaffordable for many due to the high costs of environmentally friendly goods and services or the absence of financial incentives for sustainable decisions.
3. **Policy and regulatory failures:** Individual efforts may be hampered by insufficient environmental rules, a lack of enforcement, or policies that unintentionally promote unsustainable practices.
4. **Social norms and cultural values:** As was previously mentioned, it may be more difficult for people to embrace pro-environmental behavior if it is not accepted or respected in society.

According to ([3]), these obstacles frequently combine to form intricate obstacles to widespread PEB. Addressing these multi-layered obstacles through a combination of systemic and individual-level interventions is necessary to close the attitude-behavior gap.

#### **4. ENCOURAGING PRO-ENVIRONMENTAL BEHAVIOR: STRATEGIES AND RESEARCH AGENDA**

Environmental psychology places a lot of emphasis on finding practical ways to promote PEB because environmental issues are so urgent. To promote pro-environmental behavior,



and ([2]) offer an integrative review and research agenda, classifying treatments into various approaches:

#### 4.1. Informational Strategies

1. The goal of these tactics is to raise awareness and understanding of environmental issues and solutions. Even if studies ([4-5]). indicate that knowledge is not enough on its own, it is nevertheless an essential starting point. Informational tactics consist of:
2. **Providing specific, actionable information:** Giving precise directions on how to recycle, save energy, or cut waste can sometimes be more helpful than spreading broad environmental ideas.
3. **Highlighting consequences:** Stressing the advantages of PEB for individuals and society as a whole, as well as the drawbacks of unsustainable behavior (knowledge of consequences via VBN theory).
4. **Feedback mechanisms:** Giving people feedback on how they are doing in terms of the environment (such as power bills that display how much energy they use in comparison to their neighbors) might encourage behavior change.

#### 4.2. Motivational Strategies

1. These strategies seek to affect perceived behavioral control, attitudes, and values.
2. **Financial incentives and disincentives:** The perceived cost-benefit of PEB can be changed by subsidies for environmentally friendly goods (like electric cars) or levies on actions that harm the environment (like the carbon tax).
3. **Non-financial incentives:** Social benefits, public acclaim, or recognition for participating in PEB can be beneficial.
4. **Moral appeals:** Intrinsic motivation can be promoted by appealing to people's moral obligations and ideals, which are personal norms according to VBN theory. This entails presenting environmental preservation as a moral requirement.
5. **Promoting a sense of collective efficacy:** Feelings of powerlessness can be alleviated by promoting the idea that group efforts can have an impact.

#### 4.3. Structural Strategies

1. To make PEB simpler and more convenient, these interventions concentrate on altering the social and physical surroundings.
2. **Improving infrastructure:** Realistic obstacles are eliminated by funding renewable energy grids, easily accessible recycling facilities, and public transit.
3. **Policy and regulation:** Behavior can be greatly influenced by enacting stronger environmental laws, product standards, and sustainable urban planning.
4. **Technological innovation:** More accessible options are made possible by the development and promotion of eco-friendly technologies (such as sustainable materials and energy-efficient appliances).
5. **Default options:** Adoption rates can be greatly increased by making the environmentally friendly choice the default (e.g., double-sided printing, opting into green energy tariffs).

#### **4.4. The Role of Environmental Education**

- By promoting values, attitudes, and action competence in addition to knowledge distribution, environmental education is essential in promoting PEB. In their comprehensive assessment of environmental education outcomes for conservation, [10] demonstrated how successful environmental education is at influencing different PEB outcomes. Their analysis most likely highlights the significance of educational initiatives that are:
  - Interactive and experiential: Introducing students to actual environmental problems and solutions.
  - Place-based: Fostering place connection by relating environmental ideas to students' local surroundings([9])..
  - Action-oriented: Giving people the abilities and self-assurance to act effectively (action competence, as ([5]). discusses).
  - Values-driven: Promoting thoughtful consideration of one's values and how they relate to environmental sustainability (according to VBN theory).
  - Fostering critical thinking: Giving people the ability to examine various options and assess intricate environmental issues.

#### **5. CONCLUSION**

Adopting pro-environmental behavior is not only a smart concept for individuals, but it is also vital for the world and our civilization. From our core values and beliefs to the daily cues and societal norms we encounter, this review has guided us through the many facets of what motivates us to act sustainably. We've seen the power of our intentions and attitudes, and how establishing a connection with the places we care about may genuinely motivate us to preserve them. The "attitude-behavior gap"—that annoying discrepancy where we care about the environment but don't always take action—can't be ignored, though. These common obstacles, such as cost, convenience, or even just ingrained behaviors, are real.

We need a clever, multifaceted strategy to promote greater environmentally friendly behavior. This entails not only educating people but also figuring out how to genuinely inspire them and ensuring that our environments and institutions make sustainable decisions simple and appealing. Environmental education also plays a significant role in this puzzle. It may be tremendously effective when done properly—when it's practical, relates to our local communities, and fosters critical thinking and self-assurance. By genuinely understanding these processes, we're actively creating a society where everyone lives in harmony with the environment rather than merely wishing for a more sustainable future.

#### **RECOMMENDATION FOR FURTHER STUDIES**

We still have a lot to learn about the most effective ways to promote environmentally friendly behavior. More research that examines the interplay of these various influences, from our personal beliefs to the structures in place around us, is desperately needed. To observe how people's habits evolve (or remain the same!) over time, it would also be very beneficial to track their actions over a longer time span. In order to fully understand what works best in diverse real-world scenarios, we need also be thoroughly testing alternative techniques and interventions. This is because what motivates people in one culture or demographic may not be the same in another. Lastly, comprehending the "rebound effect," which occurs when our

attempts to be more efficient paradoxically result in higher consumption, is a crucial subject for further research and can negate environmental benefits?

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