Experiencing Nature, Inspiring Change: A Qualitative Study of Pro-Environmental Motivation

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Abstract

Effort to promote sustainability often depend on individuals adopting and maintaining pro-environmental behaviors during everyday activities. However, motivation does not always translate into consistent action, and cultural background may shape how people interpret experiences and responsibility. To examine these processes in a concrete context, this qualitative study interviewed 20 Dutch adults (aged 26-80) who had taken a nature-based trip within the previous six months. Purposive and snowball sampling were used to recruit participants able to reflect in detail on their trip, since this context makes motivation, barriers, and cultural meanings easier to describe. Using Thematic Analysis (TA), semi-structured interviews were analysed. Participants generally described pro-environmental motivation as grounded in personal standards and self-definition, with nature experiences more often reinforcing existing motives than creating entirely new ones. At the same time, sustaining action was frequently constrained by everyday feasibility, especially when sustainable options demanded extra time, money, or effort. Cultural background, discussed mainly in terms of national context and upbringing, shaped what the nature experience meant (e.g. leisure vs. livelihood) and what responses felt realistic afterward. Overall, the study's contribution is showing that traveling in nature more often reinforces motivation than generates it, while consistent behavior depends on reducing practical friction and recognising that cultural frames shape how motivation is put into practice. In practice, the findings suggest that support should focus on making sustainable choices easier in daily life and adapting interventions to the cultural meanings people attach to nature experiences.

Keywords: pro-environmental behavior, thematic analysis, environmental self-identity, nature-based travel

Experiencing Nature, Inspiring Change: A Qualitative Study of Pro-Environmental Motivation

Environmental challenges such as climate change and environmental deterioration have made sustainability an increasingly urgent concern. Addressing these problems involves policy and technological change, but also how people act in their everyday lives. Given that daily choices can support sustainability efforts, researchers have paid growing attention to pro-environmental behavior (Steg & Vlek, 2008). While large-scale measures remain fundamental, in practice long-term progress also depend on the will power people hold to act in environmentally responsible ways. This is central because even though many know about environmental problems, a persistent gap between what people know and what they actually do remains (Kollmuss & Agyeman, 2002). Understanding the psychological mechanisms that motivate (or fail to motivate) people to participate in pro-environmental behavior is an important challenge. One way to approach this is to see how emotionally engaging nature experiences shift pro-environmental motivation, by either strengthening it or by highlighting reasons it does not translate into action. Thus, this research tries to investigate whether recent nature-based experiences influence people's motivation to act sustainably.

Pro-environmental behavior

Steg & Vlek (2008) define pro-environmental behavior (PEB) as actions that seek to minimise the harm to the environment as much as possible or contribute to its protection. Such behaviors can occur in both the private sphere, such as recycling or reducing meat consumption, and in the public sphere, with actions like participating in climate change strikes. Over the years, several frameworks have tried to explain why people behaves in such ways. One of the most authoritative examples is the Theory of Planned Behavior (TPB) proposed by Ajzen (1991). It introduces the idea that sustainable actions stem from intentions shaped by attitudes, perceived social norms, and perceived behavioral control. TPB is useful

for predicting PEB, but unfortunately it offers limited insights into the motivational processes behind these choices. The Value-Belief-Norm (VBN) theory introduced by Stern et al. (1999) extends this by linking personal values and moral obligations to environmental concern, making clear that sustainability involves moral consideration. Instead, Self-Determination Theory (SDT) (Ryan & Deci, 2000) supports the relevance of intrinsic motivation: acting in ways that feel personally meaningful and aligned with one's sense of self.

Although these theories hold great value, they tend to pay less attention to how emotions and culture shape people's motivation to act. Addressing this gap, the present research looks at whether and how experiences in nature can enhance emotional engagement and motivation toward PEB across different cultural contexts.

Nature-based experiences as a potential driver of PEB

Many studies indicate that spending time in nature can evoke emotions such as awe, joy, calmness, and gratitude, which in turn may strengthen a person's emotional bond with the natural world and enhance motivation to protect it (McMahan & Estes, 2015). Evidence also shows that nature exposure contributes to better well-being, empathy, and prosocial tendencies (Capaldi et al., 2015). Whitburn et al. (2019) also found that individuals with higher levels of connection with nature tend to report more environmental concerns and more frequent sustainable behavior.

In our study, motivation refers to the reasons people describe for engaging in PEB, while the barriers refer to what they define as getting in the way of starting or maintaining those behaviors constantly every day.

Cultural background as a moderator

Beyond individual emotions, the way people interpret their experiences in nature may also depend on the cultural context. In the present study, cultural background refers to the sociocultural factors participants linked to how they experience and interpret nature, such as

upbringing (rural vs. urban; environmentally supportive vs. unsupportive), national context (country of birth), community and peers influences, and identity-related meanings. This matters because people can understand the same nature experience in different ways (for example, fun and leisure versus survival and livelihood), which can shape what responsibility looks like and what actions feel realistic afterward.

Culture shapes the values and norms through which individuals relate to nature. Research in environmental psychology shows that cultural values influence both environmental concern and the likelihood of engaging in PEB (Tam & Chan, 2017). For instance, individuals from collectivistic societies often report stronger feelings of social responsibility and interdependence with the environment, whereas those from more individualistic countries may view sustainable behavior as a personal choice rather than a shared duty (Milfont & Schultz, 2015). These differences suggest that cultural background may shape how emotional processes translate nature experiences into long-term PEB, highlighting its potential moderating role in this relationship.

The background people bring from their culture and upbringing may influence the expression of emotions in response to nature experiences. Mesquita et al. (2015) found that in cultures where emotional inhibition is valued, individuals may downplay emotions such as awe or gratitude, which could reduce their effect on motivation. As a consequence, the same nature experience might produce stronger pro-environmental intentions in some cultures and weaker intentions in others, depending on how emotions are expressed and valued. This perspective highlights the importance of considering both universal psychological processes and the sociocultural conditions that shape them.

The “null effect” problem

Despite the common assumption that contact with nature promotes sustainability, not all experiences lead to increased pro-environmental motivation or behavior. People can have

powerful experiences and still never change. For instance, brief encounters like a short walk in a park may improve mood, but it rarely results in acting more sustainably in daily life. This is important because it suggests that the question is not whether contact with nature can inspire PEB, but when it does and through which mechanisms. Emotional responses can vary widely across individuals and cultures, so the same experience might inspire one person but not affect another. Contextual elements, such as overcrowded tourist sites, can further diminish the impact of intense or immersive experiences (Bolognesi et al., 2023).

These limitations highlight the value of qualitative inquiry. The same nature experience can feel powerful for one person and neutral for another. Qualitative research can show what drives that difference and how motivation develops.

Research gap

Existing studies have often emphasized the positive effects of nature contact on environmental attitudes and behaviors, yet relatively little attention has been paid to when and why these effects fail to occur (e.g. Mackay & Schmitt, 2019). Many reviews assume that time in nature directly increases pro-environmental motivation, but findings are inconsistent. While emotions such as awe and joy can enhance concern for the environment, these feelings do not automatically translate into lasting behavioral change (Sheeran & Webb, 2016).

The role of cultural background has also been largely neglected. Culture, among many things, also shapes the ways people perceive and emotionally respond to nature, influencing which experiences feel meaningful and motivating. For instance, in Scandinavian countries, nature experiences are often framed around outdoor recreation and collective well-being (the philosophy of friluftsliv; Gelter, 2000), whereas in Japan, they emphasize quiet contemplation and mindfulness while engaging in all five senses (the practice of shinrin-yoku; Vermeesch et al., 2024). These variations indicate that cultural background can shape how people

emotionally respond to nature, which in turn affects whether these experiences foster pro-environmental motivation (Milfont & Schultz, 2015).

For these reasons, there is a limited understanding of the psychological and cultural mechanisms that determine why certain nature experiences inspire sustainable motivation and behavior while others do not. This study addresses this gap by exploring how individuals personally interpret and respond to nature-based experiences, and how their personal cultural context shapes these processes.

Aim and research question

This study focuses on how participants describe drivers and barriers to PEB after nature-based travel. Specifically, it investigates how participants describe the internal and external influences that shape their willingness to adopt sustainable habits. The research also examines how cultural background influences these motivations and perceived barriers.

Through in-depth interviews and interpretative analysis, the following section aims to understand:

1) What motivates individuals to adopt pro-environmental behaviors after experiencing nature (e.g., moral obligation, concern for future generations, social influence, personal well-being).
2) What barriers prevent or discourage behavioral change (e.g., practical constraints, financial costs, lack of social support, competing priorities).
3) How cultural background moderates these processes by shaping the meanings, emotions, and reflections associated with nature-based experiences.

Together, these insights contribute to explaining why some individuals feel inspired to act more sustainably after nature contact, while others do not, offering a deeper understanding of the interplay between personal motivation, contextual barriers, and cultural interpretation.

To explore the psychological and emotional processes underlying pro-environmental motivation, this study adopts a Thematic Analysis (TA) approach. We decided to use this method because it makes it easier to find shared meanings across interviews while treating the researcher's interpretations as useful input for the analysis. This makes it possible to capture how participants make sense of their nature experiences and to present shared themes and meaningful differences that survey measures may overlook.

The following exploratory research question is addressed: "How do individuals explain their motivations and barriers to adopting PEBs following nature-based travel, and how does cultural background influence these processes?".

Methods

To address the study aims, a qualitative design was used to explore motivations, barriers to change, and cultural influences after nature-based travel. The following subsections provide an overview of the study's main methodological elements.

Participants

A total of twenty Dutch adults were recruited via purposive sampling, with snowball sampling used to expand the pool. Eligibility, checked during recruitment, required being at least 18 years old, holding Dutch nationality, and having taken part in a nature-based trip in the last six months (this included both day trips and overnight stays, and both domestic and international travel). Participants were recruited via the researchers' personal networks, and there was no compensation. The sample's age ranged from 26 to 80. All interviews were conducted in person and each participant signed informed consent beforehand. No participants were excluded. On the basis of a checklist developed by the EC-BSS at the University of Groningen, the study was exempt from full ethical review.

Instruments

A semi-structured interview has been used to collect data. Following the previously stated study aims, the researchers developed 7 open-ended questions that delved into motivation, barriers, and cultural background.

Interview guide

Topic A: Background and Travel experience

1) Can you tell me about a recent trip you took in a natural setting (hiking, camping, visiting a park, etc.)?
   - Where did you go?
   - How long was the trip?
   - Who did you travel with?

2) Since that trip, have you noticed any changes in your behaviors that you feel are more environmentally friendly?
   - If yes: Can you describe what specific actions you've taken? How often do you do them?
   - If no: What do you think has prevented any change?

Topic B: Motivation to change

3) What do you think encouraged or inspired you to make more environment friendly choices? *(Prompts: personal values, concern for future generations, social influence, personal desires to reduce climate change).*

4) Do you see yourself continuing these environment friendly behaviors? What makes you feel that way?

Topic C: Barriers to change

5) Have there been moments when it felt difficult for you to act more sustainably? *(Prompts: lack of time, higher cost of sustainable options, social pressure, lack of knowledge).*

6) How do you usually respond when those challenges come up (if at all)? *(Prompts: finding alternatives, prioritizing, seeking information, changing routines).*

Topic D: Cultural differences

7) Do you think your cultural background influenced how you experienced or interpreted your trip in nature? If so, how?

Procedure

Data collection took place between late October and early November 2025. Participants were informed about the study and provided written consent before the interview.

On average, interviews lasted around 50 minutes. Using the question guide, one researcher conducted the interview while the other took notes. Audio was not recorded, but verbatim quotations were captured in the notes and slightly edited for readability. Most interviews were conducted in English, but for less-fluent participants, questions were translated into Dutch during the session by a native Dutch-speaking researcher, who then translated the written responses back into English for analysis. Considering that the translating process could have influenced interpretation, researchers tried to limit this through a careful collaboration throughout the entire operation. After each session, notes were compiled into a shared document for analysis and participants were de-identified using codes from #1 to #20, to allow for clear referencing without stating any demographics. Participants could skip any question at any time.

Data collection stopped at 20 interviews because the analysis indicated thematic saturation. As interviewing progressed, new interviews no longer added substantial new insights (Guest et al., 2005).

Design

A qualitative design with Thematic Analysis (TA) has been used to examine motivations, barriers to change, and cultural influences after nature-based travel. TA was used to look for recurring patterns across interviews, with the understanding that the researchers actively shaped the coding and theme development. With this approach, subjectivity is treated as a resource rather than a problem, and interpretations are supported with direct quotations. This design suits the exploratory aim and the semi-structured, open-ended interviews collected.

Data Analysis

The dataset was first read repeatedly to become familiar with the content. Next, initial codes were created by marking segments of text that related to the study aims (motivations,

barriers, and cultural background). Codes were compared across interviews and refined as the dataset was revisited. The labels were then grouped into subthemes based on conceptual similarity and organised under the three broader themes.

The procedures above outline how the dataset was collected and prepared. The following *Results* section presents the themes that arose from the interviews.

Results

After analysis, three overarching themes, aligned with the study's research questions, were individuated: 1) motivation to change, referring to factors participants described as encouraging pro-environmental behaviors after their trip; 2) barriers to change, capturing factors that made sustainable action difficult to start or maintain; and 3) cultural moderation, describing how participants framed their background as shaping how they experienced nature and what felt feasible afterward. Each theme is divided into subthemes, and the tables provide short quotes as examples.

Table 1

Overview of Subthemes and Associated Quotes: Motivation to Change

Subthemes	Questions and verbatim quotes
	3) What do you think encouraged or inspired you to make more environment friendly choices? *4) Do you see yourself continuing these environment friendly behaviors? What makes you feel that way?*
Values-based moral obligation	For me, it is really a moral value; it is morally good, it feels good; these are personal values; I hate buying, I hate consumerism; I do not want to participate in this (consumerism society); I really want to look at what I really need; it is fun and nice to live sustainably; it fits my own values; being in nature makes me think more about my impact.
Earth/climate/animal concerns	I am genuinely concerned about climate changes; it suddenly dawned on me how polluted the earth is; it is important that we learn again to cooperate with the earth; of course, also for the earth; I want to help the earth; to protect nature; mainly to prevent animal suffering; I do that to exhaust the earth a little less; to preserve nature as much as possible; my love for all

	living beings and organisms around us; nature comes first for me.
Identity	I feel responsibility not to be hypocritical; my motto is: start with yourself; I felt one with nature; I have always thought that way and acted accordingly; it has become a habit; I try to stay close to myself; nature is really a place to come home to, and that makes me want to treat it consciously.
Social influence/ upbringing/role models	As a child, I loved maps of countries and the atlas; I usually find that others respond with respect or even join in when they see me doing it; this is also how I was raised; Dalai Lama is my shining example; supporting people in the area; I also do it to inspire other people; also, social influence; mainly socially: I was raised with love for animals and nature, […] so it was spoon-fed to me from childhood; I hope I can keep sharing my knowledge and passion so it creates a ripple effect and helps others make more conscious choices too.
Beauty of nature	I really hated seeing paper and other rubbish laying around in the forest; there is limited beauty in nature; it is such a sad idea that we as humans leave so many traces behind; genuinely looking at nature; the beauty of nature; my deep love for the beauty and hidden values of nature; especially seeing tracks, rivers that are lower during dry periods, and small ecosystems like mosses, mushrooms and streams make me feel responsible and live more consciously.
Health	Health is also a factor; I just want to live healthily; I have become very aware of the importance of food in relation to health; also, my health.
Concern about future generations/future	It is mainly like leaving something behind for others; it is not fair for the next generation; also, because I want to have children one day, I think more often that we really have to take action; also worries about the future.
External incentives	We could do insulation very easily financially, because we got all kinds of subsidies etc., so it really came from that. But if we had not had that, I might not have done it so quickly.

Table 2

Overview of Subthemes and Associated Quotes: Barriers to Change

Subtheme	Questions and verbatim quotes
	5) Have there been moments when it felt difficult for you to act more sustainably? *6) How do you usually respond when those challenges come up (if at all)?*

Financial costs	Money also plays an important role; when you want a piece of meat that is very expensive; the higher prices of organic foods; costs are a big point for me; costs of food make it hard; organic is quite a lot more expensive;
Practical constraints	It is also about what is on offer; it does take more time, money and effort; the availability in the world; sustainable options are not always available; I cannot pick up everything in the world; I find it quite time-consuming; when there are no sustainable options
Competing priorities/convenience	The biggest challenge is that I cannot do something about everything; I also like to eat some meat; it has to fit your way of life and weekly busyness; I also take the car more often than necessary, out of convenience;
Compromises	Am I going to buy it again or am I going to skip it this time?; I cannot clean up the whole world, only my own little bit; sometimes you just do not have a choice; not possible to do everything […] it is important that I at least stay aware;
Lack of social support/social pressure/culture	Pressure from others; I also sometimes experience confusion about what is actually good for me. There are quite a lot of contradictory advice; you are never completely sure about what is really better or healthier; that was a sign of poverty. So that is exactly what you did not want back then; it is sometimes difficult to stay true to your values in a world where people still serve meat, talk about faraway ski or sun vacations on the schoolyard or at work or in cafes; when I see that many people around me do not show sustainable behavior.
Travel desires	When I talk about flying. Sometimes I find that difficult; the fact that I really like to travel far; I find it hard to say I do not want to fly anymore; when it comes to travel.
Structural constraints	In healthcare, we throw away so much, and I cannot change that because of strict regulations; sometimes I have to order things because I live quite remotely; marketing keeps trying to tempt you.
Conflicting/Lack of information	I sometimes find it difficult to understand what is actually more harmful; back then, […] sustainable eating: the concept did not even really exist yet; we simply did not have that knowledge.

Table 3

Overview of Subthemes and Associated Quotes: Cultural moderation

Subthemes	Question and verbatim quotes
	7) Do you think your cultural background influenced how you experienced or interpreted your trip in nature? If so, how?

Country of birth	Precisely because I am Western, I saw the consequences of my behavior here in the West; my background is that I am a simple man from Groningen; that contrast with the Western lifestyle; it is just what you are used to; Dutch people are not very used to nature; I think it was a huge reset compared to life in the Netherlands; if you grow up there, it feels natural and not as special; in the Netherlands you have all high-level prosperity where the mess is all cleaned up; in the Netherlands we also learn that keeping animals in farms is normal, or even funny and cosy.
Environmentally supportive Vs. unsupportive upbringing	It started for me, quite early as a child; I had been introduced to vegetable gardening by my grandfather; this is actually how I was raised; I always grew up in nature; I was raised with love for animals and nature, we lived on a farm, so it was spoon-fed to me from childhood; as a child I was also always busy with animals; from a young age I have already been camping and I learned a lot about nature; my upbringing plays a big role.
Fun Vs. survival lens	We do not have to worry about nature because we have our homes and can come up with solutions to deal with the consequences; I think you experience nature differently than when you go there as a tourist or when you actually live there. For them, nature is mainly important for food and the negative dangers you have. For Westerns, it is more for recreation; Western lifestyle, in which comfort and abundance are much more central; the village from my youth was small, but with dozens of little shops and businesses. You needed each other and could not do without it; we use nature more as a cultural experience, as if we have some kind of right to consume it; it is such a different way of living: a different relationship between people and nature; they are completely used to that nature.
Rural Vs. urban upbringing	Poor people used to have their own vegetable garden and wore secondhand clothes, a sign of poverty; my background was formed in the 70s, when many village communities still existed; if you grew up in nature and are much more dependent on what nature gives, you have a different awareness of nature; since I did not grow up with many nature experiences, I think that is why being in nature impacts me so much; we both grew up in the countryside, always surrounded by nature; a city child is much more detached from nature.
Identity	The way I see things comes from the past; I have been nature-minded my whole life; sometimes it is also in your character. Whether you are sensitive or not; that I love nature it is just how I am.
Community & peers	Also the people around you, determines how you later look at nature, and also how you experience it; as a child I went camping in nature with my parents and I think in the trips I made as an adult, I used those childhood experiences as a kind of guide; people that influences me.

In the next sections, we move from describing the data to interpreting what these patterns mean. We relate the results to prior work, consider alternative explanations, note strengths and limitations of the study, and discuss practical and research implications.

Discussion

This study explored how people make sense of what motivates or hinders pro-environmental behavior after traveling in nature, and how cultural background shapes those processes. In general, the findings suggest that spending time in nature rarely creates motivation from nothing. More often, it seems to intensify or clarify motivations that are already present, while actual behavioral change still depends heavily on what feels realistic in everyday life. Cultural background then shapes which meanings are most available (e.g., leisure vs livelihood), which skills and habits people bring with them, and what kinds of responses feel natural or appropriate in the first place.

Motivational pathways after nature contact

Motivation was the strongest when it was tied to what people stand for and how they see themselves. A clear pattern in the interviews is that the *values-based obligations* and *identity* did not act as separate processes. The former set the standard for what feels right, and the latter makes acting on that standard feel self-consistent rather than optional. This helps explain why nature experiences rarely looked like the start of motivation from scratch. More often, they seemed to bring existing standards into focus and make them feel more immediate in the moment. In that sense, nature travel worked more like a reminder or amplifier than a single turning point. The practical implication is that for highly motivated people, the issue may be less about needing more persuasion and more about having the right conditions that make it easier to act on existing standards (Festinger, 1957; van der Werff et al., 2013).

Concern for the earth, climate, and animals was another major driver. The main point here is that the "reason to act" was often framed as preventing harm to nature and non-human

life, not as pursuing personal benefits. That kind of concern can support action even when the consequences are perceived as distant, because it is grounded in what feels morally important rather than what feels convenient. It is also telling that explicit “climate change” language appeared less often than broader talk about nature degradation or animals. This points to everyday interpretations, rather than weak climate concern: after time in nature, responsibility may be expressed through what feels visible and emotionally concrete rather than through abstract meanings. In other words, participants linked sustainability to protecting living systems they could picture, which can still motivate choices in areas like consumption and diet (Schultz, 2001; de Groot & Steg, 2007).

External incentives, although mentioned by only one participant, add an important contrast because they point to a different mechanism. Across the dataset, many participants wanted to do more, yet costs repeatedly stopped them. The incentive example shows what happens when the situation changes: behavior can shift because financial support lowers the barrier to the sustainable option. In that case, the change was not about suddenly caring more. The shift was about the step becoming doable. For these reasons, the point here is about incentives being able to remove a practical block that keeps motivated people stuck. This is especially relevant when the main obstacles are upfront costs, where supportive policies can help people act on intentions they already have (Gillingham & Palmer, 2014; Sun & Sankar, 2022).

Constraints in sustaining change

Costs came up as a simple limit on consistency: even when motivation was there, behavior often depended on what felt affordable. So, the important pattern is not the rejection of sustainability itself, but its selective implementation. When prices are too high, priorities switch. This helps explain why behavior can look inconsistent without meaning that concern is weak. The issue is that motivation must fit a budget, so actions depend on the situation. The

practical implication is that if sustainable options stay priced as “extra”, every change in behavior is likely to remain partial even among people with positive attitudes (Ajzen, 1991; Vermeir & Verbeke, 2006; Aschemann-Witzel & Zielke, 2015).

Practical constraints point to a different process. The issue was not only about whether people wanted to act, but about what happens under real-time pressure. When sustainable choices require extra planning, time, travel, or mental effort, everyday automatic routines tend to win, especially during stressful moments. That matters because it reframes the intention-behavior gap as a default problem. People can hold steady intentions but still act unevenly when the greener option is harder. This helps explain why some nature-based experiences may strengthen motivation without big changes. A trip can change how someone feels, but it does not automatically change time or daily routines (Ajzen, 1991; Verplanken & Wood, 2006).

Beyond money and time, the interviews also showed that some barriers are *social* and *interpretative*. Being sustainable was sometimes described as socially awkward or effortful in contexts where high-impact habits (like eating meat or frequent flying) are treated as normal. Going against the norm could create tension or make people stand out. In parallel, uncertainty and mixed advice made some choices feel hard to judge, which can push people toward familiar defaults rather than deliberate “green” decisions. The “poverty” example adds an important layer: some sustainable practices carry social meanings that are not automatically positive. This depends on people’s background and what those practices used to signal. Taken together, this suggests that barriers are not only about resources. In fact, they can also be about belonging and meaning, which helps explain why people can feel motivated yet still struggle to act consistently in everyday settings (Ajzen, 1991; Cialdini et al., 1991).

Cultural lenses on nature and action

Cultural background clearly shaped how participants made sense of nature and what felt doable after. The *country of birth* pattern points to hidden assumptions people carry each day. These include ideas about comfort and how visible harm is. In that frame, nature can feel especially striking when it is less present in everyday surroundings, whereas growing up around it can make it feel less remarkable. It also shapes what feels normal or hard to question, such as culturally established views of livestock farming. The main takeaway is that nature is not experienced as a neutral "thing". It is filtered through learned meanings and routines, which model what people notice and what kinds of actions feel sensible (or not). Even within one national context, nature can be experienced and interpreted differently (Schwartz, 2008; White, 1967).

The *fun versus survival lens* shows cultural moderation in a very direct way because it changes the definition of nature in the first place. When nature is framed through leisure, it becomes a place for restoration and beautiful experiences; when it is framed through livelihood, it is tied to food, safety, work, and risks that have to be managed. These differences matter because they shift which emotions are likely to be experienced and what responsibilities feel pressing. The same panorama can feel like something to admire for a tourist, but like everyday reality for someone who depends on it, which naturally leads to different "next steps" afterward. So, the focus here is not that nature contact has one predictable psychological effect. Its impact depends on the meaning frame people bring. In turn, that frame shapes both interpretation and action (Scoones, 1998; Lindenberg & Steg, 2007).

Environmentally supportive versus unsupportive upbringing shows how the personal background someone holds can shape not only motivation, but also the ability to act on it. Early experiences like camping, spending time outdoors, gardening, or learning to reduce

one's footprint seemed to give some participants a head start. This is not only because they encouraged positive attitudes, but because they built familiarity and skills. That is important since feeling concerned is often not enough. People also need to know what to do and feel confident about it. This helps explain why similar events did not affect everyone equally. Some participants returned home with routines that made PEB easier, while others may have felt motivated but lacked what was needed to make it a daily habit (Chawla, 1998; Rosa et al., 2018; Evans et al., 2018).

Conclusions

This study examined how people make sense of what motivates or hinders pro-environmental behavior after nature-based travel, and how cultural background shapes these processes. Overall, participants rarely described nature contact as a single event that suddenly created motivation. In most cases, it was described as reinforcing motivations that had already been developing over time due to previous experiences. At the same time, traveling in nature could occasionally function as a clearer trigger: six participants reported distinct changes in behavior and attitudes that they linked directly to their trip.

Regarding the first research question, pro-environmental motivation mainly came from personal standards and self-definition. Participants often framed PEB as both the "right thing to do" and as consistent with who they are. In other words, motivation appeared the strongest when environmental action was tied to identity and moral responsibility. Although external incentives were mentioned only one time, we still consider them very important. They show that making the green option easier can shift behavior (e.g., through financial support), even without stronger motivation.

The topic of the second research question helps explain why motivation did not always translate into action. Barriers were common. Only two participants reported no meaningful barriers, while most described some form of everyday friction that shaped what they could

sustain. Constraints did not usually remove motivation. Rather, they shaped how far it could be implemented and how consistent it could become. This supports a central conclusion of the study: sustained pro-environmental action depends not only on values, but also on whether sustainable options are affordable, accessible, and easy to maintain within daily routines. In addition, some barriers were social (for example, social pressure in everyday settings or uncertainty about what option is actually "better"), which made it more difficult to act consistently. In practice, reducing cost and effort, improving access, and making sustainable options easier to maintain would likely help motivated people act more consistently.

Addressing the third research question, interviewees' personal background came up often in what they said. Only two participants downplayed its role, suggesting that it mattered for most. Cultural background influenced what the trip meant, and which responses felt realistic afterward. As a result, similar nature experiences could be interpreted differently and could lead to different post-trip responses, depending on the meanings and skills participants brought with them.

Taken together, the study's main contribution is a combined account of three linked layers shaping post-trip pro-environmental behavior: relatively stable motivations rooted in values and identity, everyday constraints that shape whether intentions become action, and cultural lenses that shape meaning and what feels feasible after nature contact. These conclusions are context-specific to this sample and to an interpretative qualitative approach.

Limitations and future directions

Several limitations should be noted. The sample consisted of Dutch adults recruited through purposive and snowball sampling. This may limit transferability and may favor people already interested in nature or sustainability in general. Methodologically, interviews were semi-structured and not audio recorded. And although we took detailed notes and wrote down exact quotes, note-taking is a tool that can reduce nuance compared to full transcripts.

Hence, this might have affected the exact wording. Likewise, some interviews involved in-session translation, which can also lead to small shifts in wording or meaning.

Future research should extend these findings by directly comparing different cultural and national contexts. We also suggest the implementation of a longitudinal study design. This can help examine if motivation persists over time. Further work could also focus on what is the most effective intervention to reduce friction (e.g., cost reductions and improved access), so that people who already feel motivated are better able to act consistently.

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Appendix: AI Use Summary

- AI system: ChatGPT (https://chatgpt.com).
- Final prompts used: “Can you paraphrase this sentence and give me 10 alternatives?”; “Can you tell me if the tone of this sentence is academically good enough (if not, can you highlight which part and give 8 alternatives?”; “Can you summarise this by cutting e.g. 100 words, and give me 5 different outputs?”.
- Use case: I have only used these prompts to modify something I did already write, never to generate text from scratch.
- Modifications: every time I asked prompts like the ones just presented, I have always asked for multiple alternatives because I never copy-paste something directly. When needed, what I usually did is to get an insight into the possibilities I have (from the alternatives presented) and then mix them up with my text and the parts I like the most. To be clear, it is as if I were making a collage of pieces of sentences, with the old parts and the new ones presented by the AI model.