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Eco-guilt and eco-shame in everyday life: an exploratory study of the experiences, triggers, and reactions

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Guilt and shame are often mentioned in the context of environmental problems. Exploring how such emotions affect individuals and their behavior is crucial to the effective promotion of more pro-environmental behavior and sustainable consumption. The aim of this article is to further the understanding of eco-guilt and eco-shame by studying these emotions among participants with differing levels of environmental concern (EC). Using a phenomenologically inspired approach, we conducted 18 in-depth interviews with Danish citizens. A clear connection between EC and the experienced emotions emerged, including how these emotions were triggered and how participants reacted to them. While individuals with high EC mainly experienced eco-guilt, individuals with low EC mainly experienced eco-shame and individuals with a medium level of EC experienced both emotions. Both eco-guilt and eco-shame can increase pro-environmental behaviors under certain conditions, but their effects are complex, and eco-shame in particular, risks leading to environmentally harmful behaviors. Therefore, harnessing these emotions to promote pro-environmental behavior introduces moral as well as practical considerations. The novelty of this study is that it questions the view that certain environmental emotions are inherently adaptive or maladaptive and underscores the importance of understanding the individual and social dynamics, which can affect how eco-guilt, eco-shame and their pro-environmental effects are experienced.

KEYWORDS

eco-guilt, eco-shame, moral emotions, pro-environmental behavior, climate emotions, environmental emotions

1 Introduction

Environmental issues such as air, water and soil pollution, climate change, natural resource depletion, and a reduction in biodiversity present formidable challenges for contemporary societies. These challenges raise key questions concerning how we humans can and should respond. Besides obvious technical and scientific elements, these questions have a moral component, for instance, regarding the responsibility of societies and other collectives, as well as the role of individual citizens, in limiting harm to the environment (Steg and Vlek, 2009). Multiple theoretical frameworks for predicting pro-environmental behavior also exist in the literature on individual responses to environmental problems (Kahneman and Tversky, 1979; Ajzen, 1985; Hines et al., 1986; Stern et al., 1999). However, where the individual's role and

activities are concerned, environmental issues can easily become imbued with emotion (Kleres and Wettergren, 2017), yet this emotion perspective has thus far received limited attention in the pro-environmental literature. It is well established in the fields of social psychology and the sociology of emotions that emotions are essential for understanding social experience and behavior (Barbalet, 1998; Tiedens and Leach, 2004; Bericat, 2015). Examining emotions within the context of environmental issues provides insights into the social situations in which emotions arise and how individuals feel and behave when confronted with these emotions, such as in their consumption habits. In addition to emotions such as anxiety (Lutz et al., 2023), denial (Norgaard, 2011), and hope (Ojala, 2012), guilt and shame are regarded as particularly important in shaping individuals' responses to environmental issues (Jacquet, 2017; Jensen, 2019). Indeed, in the words of the environmental philosopher Elisa Aaltola, "the very idea of anthropogenic climate change invites feelings of human failure," thus leading to guilt and shame (Aaltola, 2021). However, the emotions of guilt and shame and their relation to pro-environmental behavior have not been thoroughly investigated, particularly from a qualitative perspective, as we will show in Section 1.2 below.

1.1 Definitions of guilt and shame

The study draws on an understanding of guilt and shame as emotions that arise from the belief that one has failed to live up to some personal or societal standard, ideal, or norm. In the scientific literature, guilt and shame are classified as belonging to the same family of emotions. They are categorized as *negative self-conscious emotions* (Tracy et al., 2007; Lewis, 2008a) or *emotions of self-assessment* (Taylor, 1985), as they result from a negative self-evaluation with an emphasis on the self being flawed or doing something that is socially or morally wrong. Others use the term *social emotions*, since guilt and shame are fundamentally social in the sense that they are relational. Both require the capacity for social cognition and an orientation toward the thoughts and feelings of others and how these relate to the self (Hareli and Parkinson, 2008; de Hooge, 2012). Finally, guilt and shame are described as *moral emotions*. This reflects the fact that they play an important role in morality and moral decision-making because they are fundamental to mechanisms of self-censorship and self-regulation in accordance with norms and moral standards (Haidt, 2003). This link between emotions, morality, and social conformity is central to understanding guilt and shame.

While guilt and shame have many similarities and the boundaries between them are indistinct and complex (Sánchez, 2014), the psychological and philosophical literature often highlights four main differences. The first of these asks whether the emotion is the result of a perceived failure in terms of actions (guilt) or selfhood (shame) (e.g., Lewis, 1971; Tangney and Dearing, 2002; Bruhn, 2018). Helen Lewis introduced this influential distinction, stating, "The experience of shame is directly about the self, which is the focus of evaluation. In guilt, the self is not the central object of negative evaluation, but rather the thing done is the focus" (Lewis, 1971). Second, guilt is outwardly directed, while shame is self-directed. Guilt is rooted in a place of caregiving and the avoidance of acts that harm the external world (Baumeister et al., 1994). By contrast, shame is rooted in a self-focused social threat system; it focuses on the negative consequences for one's

social self (Lewis, 1971; Gilbert, 2003) and is therefore about a loss of standing in a social hierarchy (Taylor, 1985). A third distinction asks whether the emotion is evoked by internal or external evaluation (Taylor, 1985). In the case of guilt, a person evaluates and judges themselves, as exemplified by the voice of one's conscience when doing something that feels morally wrong. By contrast, shame is experienced as the critical gaze of others when behaving in ways that violate norms, standards, and ideals (Benedict, 1946; Williams, 1993; Maibom, 2010). The fourth and last difference is that guilt is connected with the belief that one has done something morally damaging, i.e., failing to live up to one's moral ideals, while shame is linked to the belief that one has done something socially damaging and somehow harmed one's social image.

1.2 Existing literature on eco-guilt and eco-shame

In the research literature on environmental behavior, guilt and shame have been given different labels. There are references to green (e.g., Kotchen, 2009), climate (e.g., Aaltola, 2021), and environmental (e.g., Fredericks, 2021) guilt and shame, in addition to eco-guilt and eco-shame (e.g., Mallett, 2012). Many studies recognize the potential of moral emotions to influence behavior (Haidt, 2008; Prinz and Nichols, 2010) and focus on whether it is possible to use eco-guilt and eco-shame as levers to promote pro-environmental conduct (e.g., Kollmuss and Agyeman, 2002; Mallett, 2012; Cowan and Kinley, 2014; Bissing-Olson et al., 2016; Wonneberger, 2018; Moore and Yang, 2020). The effectiveness and appropriateness of the emotions are often discussed, sometimes with a focus on the potential negative impact on psychological well-being (Doherty and Clayton, 2011) or on the moral value of the emotions (Jacquet, 2016; Aaltola, 2021). There are more studies of eco-guilt than eco-shame, presumably because many consider guilt to be adaptive and shame maladaptive (Lewis, 1971; Tangney and Dearing, 2002). However, research findings on the pro-environmental effects of eco-guilt and eco-shame are varied (Adams et al., 2020; Hurst and Sintov, 2022).

Eco-guilt and eco-shame have mainly been studied quantitatively—principally through surveys—although some studies have included experimentation (Harth et al., 2013; Mallett et al., 2013; Amatulli et al., 2019; Moore and Yang, 2020). Many surveys focus on the association between pro-environmental behavioral intentions and eco-guilt, eco-shame, or other emotions (Rees et al., 2014; Bissing-Olson et al., 2016; Amatulli et al., 2019). Some examine how these emotions in combination with other constructs, such as social norms and personal values, can influence behavior (Mallett et al., 2013; Onwezen et al., 2013; Cowan and Kinley, 2014). Few studies apply qualitative and/or mixed-methods empirical approaches in their examination of eco-guilt and eco-shame as emotional phenomena. Those that do rely on in-depth, semi-structured interviews (e.g., Gregory-Smith et al., 2013; Jayaratne et al., 2015; Nunkoo et al., 2021), focus group interviews (Rettie et al., 2014), or both (Bedford et al., 2011; Antonetti and Maklan, 2014; El Zoghbi and El Ansari, 2014). Most studies examine a specific behavioral domain (e.g., recycling, household shopping, or food waste) in-depth. The selected participants in the qualitative studies are often already strongly engaged in sustainability, for instance, by expressing pro-environmental values (e.g., Bedford et al., 2011), being climate

activists (Kleres and Wettergren, 2017), or identifying as sustainability-concerned consumers (Jayaratne et al., 2015).

We believe that there are two important gaps in the current research about eco-guilt and eco-shame. First, the predominant quantitative approach used to date could have missed some nuances and complexities in how these emotions function, emerge, and affect people under different conditions in their everyday lives. Second, since the few existing qualitative studies on this topic have focused on single behavioral domains (e.g., recycling), they risk overlooking valuable insights into how the emotions may be experienced, triggered, and reacted to by the same participants across domains. Furthermore, since the qualitative studies of eco-guilt and eco-shame have mainly included people already engaged in addressing sustainability issues, studying people with different levels of environmental concern (EC) will provide an understanding of how eco-guilt and eco-shame are experienced within the wider population. With these gaps in mind, the aim of this article is to provide an in-depth understanding of eco-guilt and eco-shame by studying the experiences of a variety of participants with self-reported low to high EC, independently of specific consumption domains. We use a qualitative phenomenologically-inspired approach with in-depth interviews focused on exploring whether and how the participants experience eco-guilt and eco-shame in their everyday lives. The knowledge gained will provide insights into the links between eco-guilt and eco-shame, social and moral structures, and the experiences of people living at a time when proper environmental conduct is often debated. It will also allow us to discuss whether, where, and how these emotions can be used strategically to promote pro-environmental behavior.

2 Methods

2.1 Participant sample and recruitment

The empirical data for this article were collected as part of a qualitative, explorative study of Danish citizens' experiences of morally and socially navigating consumer choices in the context of environmental problems. These experiences were expected to include eco-guilt and eco-shame. Eighteen participants were recruited through the online panel Norstat. They were compensated for their participation with a gift certificate of 300 DKK. The study used a purposive sampling strategy (Robinson, 2014) aimed at ensuring socio-democratic variation in gender, education, age, and place of residence within Denmark. It was vital to ensure participant variation in terms of environmental engagement. Therefore, the participants were screened and recruited based on their answers to a brief questionnaire that drew on questions extracted from environmental modules in the International Social Survey Programme (ISSP, 2010). Franzen and Vogl (2013) used a subset of these ISSP questions to construct an EC index (range: 0–100) that includes cognitive components targeting knowledge and opinions on environmental matters as well as conative components targeting intentions and behavior, including willingness to carry out certain actions (e.g., pay more) for the sake of the environment. As depicted in the table, we found notable differences in education level across the EC scores. Individuals with lower EC scores tended to have a lower level of

education and vice versa. This pattern is in line with Franzen and Vogl's finding that EC is positively associated with education, while others have conversely found that income and education are unrelated to environmental ("biospheric") values (Huddart-Kennedy et al., 2009; Sargisson et al., 2020). Participant recruitment in our study was designed to guarantee a variation in EC index scores. The participants were divided into three gradient EC groups. This generated a sample in which six participants had high EC scores (>70), six had medium EC scores (41–70) and six had low EC scores (≤40). The participants' characteristics are shown below in Table 1.

2.2 Interview guide

A semi-structured in-depth interview guide was developed using a phenomenology-inspired point of departure. The aim was to understand how and under what conditions eco-guilt and eco-shame might present themselves in the participants' lives and to limit any preconceived notions that we might bring to the investigation. The phenomenological approach has previously been used in other qualitative studies of guilt and shame (Karlsson and Sjöberg, 2009; Rukgaber, 2018; Zahavi, 2020) and has been employed in studies of sustainable consumption as evidenced in air travel reduction (Jacobson et al., 2020), green consumer choices and emotions (Ojala, 2022), and consumer guilt (Dedeoğlu and Kazançoğlu, 2010). Inspired by Bevan's (2014) approach to the phenomenological interview, our interview guide was structured using questions from three domains: contextualization, apprehension, and clarification. The aim was to approach the essence of eco-guilt and eco-shame from these three angles. This is illustrated in Figure 1.

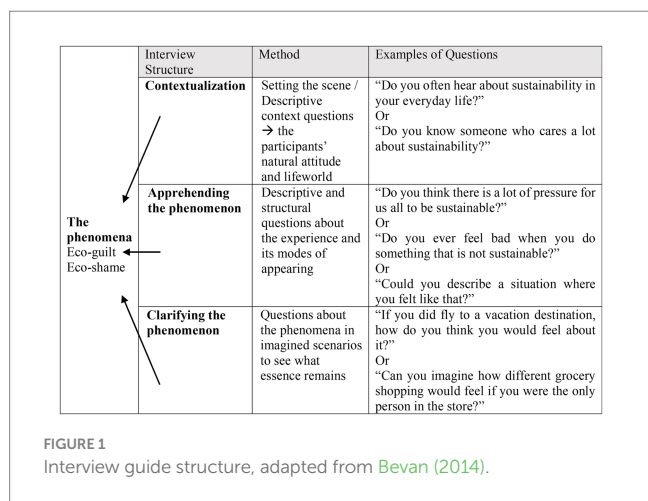
The interviews were conducted in Danish since this was the first language of all the participants and the interviewer. The interview guide (provided in Supplementary material) and the participants' quotes (presented in the Results section) were translated as precisely as possible from the original statements, both in terms of the wording and intended meaning. Several concerns and considerations arise in connection with interviews about eco-guilt and eco-shame. First, the emotions are often difficult to distinguish from one another, and participants were not expected to differentiate accurately between the two. Therefore, the interviewer used the expressions "feeling bad" or "bad conscience" instead of probing directly about "guilt" or "shame." If a participant used these words, however, the interviewer mirrored their language and understanding of the emotions. Second, the interview topic can be challenging when participants find it difficult and uncomfortable to reflect upon and speak about such emotions (Coppola and Pihkala, 2023). With this in mind, it was important for the interviewer to navigate, and sometimes avoid, blatant feelings and expressions of guilt or shame. In practice, this meant that the interviewer only asked direct questions about feeling bad at the end of the interviews, unless the participants had brought it up earlier.

2.3 Data analysis

The interviews lasted 40–75 min. All were recorded, transcribed verbatim, and anonymized. The analytical approach was inspired by Braun and Clarke's thematic analysis, which identifies, analyses, and

TABLE 1 Participant characteristics.

Pseudonym	Gender	Age	Place of residence (region within Denmark)	Educational level	EC score
Sandra	Female	34	Central Denmark Region	Low (gymnasium—upper secondary)	0.19
Birthe	Female	54	Central Denmark Region	Medium (Short-cycle tertiary)	0.22
Simon	Male	31	Capital Region	Low (gymnasium—upper secondary)	0.25
Rune	Male	46	Region of Southern Denmark	Medium (Short-cycle tertiary)	0.31
Carsten	Male	49	Region of Southern Denmark	Medium (Short-cycle tertiary)	0.36
Jonas	Male	25	Capital Region	Low (gymnasium—upper secondary)	0.39
Clara	Female	19	Region of Southern Denmark	Low (gymnasium—upper secondary)	0.44
Monique	Female	55	Capital Region	Low (vocational—upper secondary)	0.47
Daniel	Male	29	Central Denmark Region	Medium (Short-cycle tertiary)	0.56
Kathrine	Female	28	Central Denmark Region	Low (vocational—upper secondary)	0.60
Mathias	Male	40	Region of Southern Denmark	Low (vocational—upper secondary)	0.61
Ida	Female	31	Capital Region	Medium (Short-cycle tertiary)	0.67
Kirsten	Female	71	North Jutland Region	High (Bachelor's degree or higher)	0.78
Josephine	Female	26	Capital Region	High (Bachelor's degree or higher)	0.83
Knud	Male	65	Region of Southern Denmark	High (Bachelor's degree or higher)	0.83
Christina	Female	45	Central Denmark Region	High (Bachelor's degree or higher)	0.83
Lars	Male	47	Region of Southern Denmark	High (Bachelor's degree or higher)	0.92
Torben	Male	70	North Jutland Region	High (Bachelor's degree or higher)	0.97



describes patterns of meaning across qualitative data (Braun and Clarke, 2006). A shortlist of preset codes, such as eco-guilt and eco-shame, reflected the main topics of the interview guide, and new emergent codes were added as they became apparent (Taylor-Powell and Renner, 2003). Initially, all direct and indirect descriptions of guilt and shame were coded as “feeling bad.” These descriptions were then re-coded in accordance with the four theoretical distinctions set out above in Section 1.1, as summarized below in Table 2.

Text condensation (Malterud, 2012) was used to identify whether participants expressed guilt and shame according to one or several of the four theoretical definitions presented in Table 2. When identified, the expression was registered under the eco-guilt or eco-shame code, respectively. Identifying the emotions typically required context, such as including what led to or followed the participants’ emotional

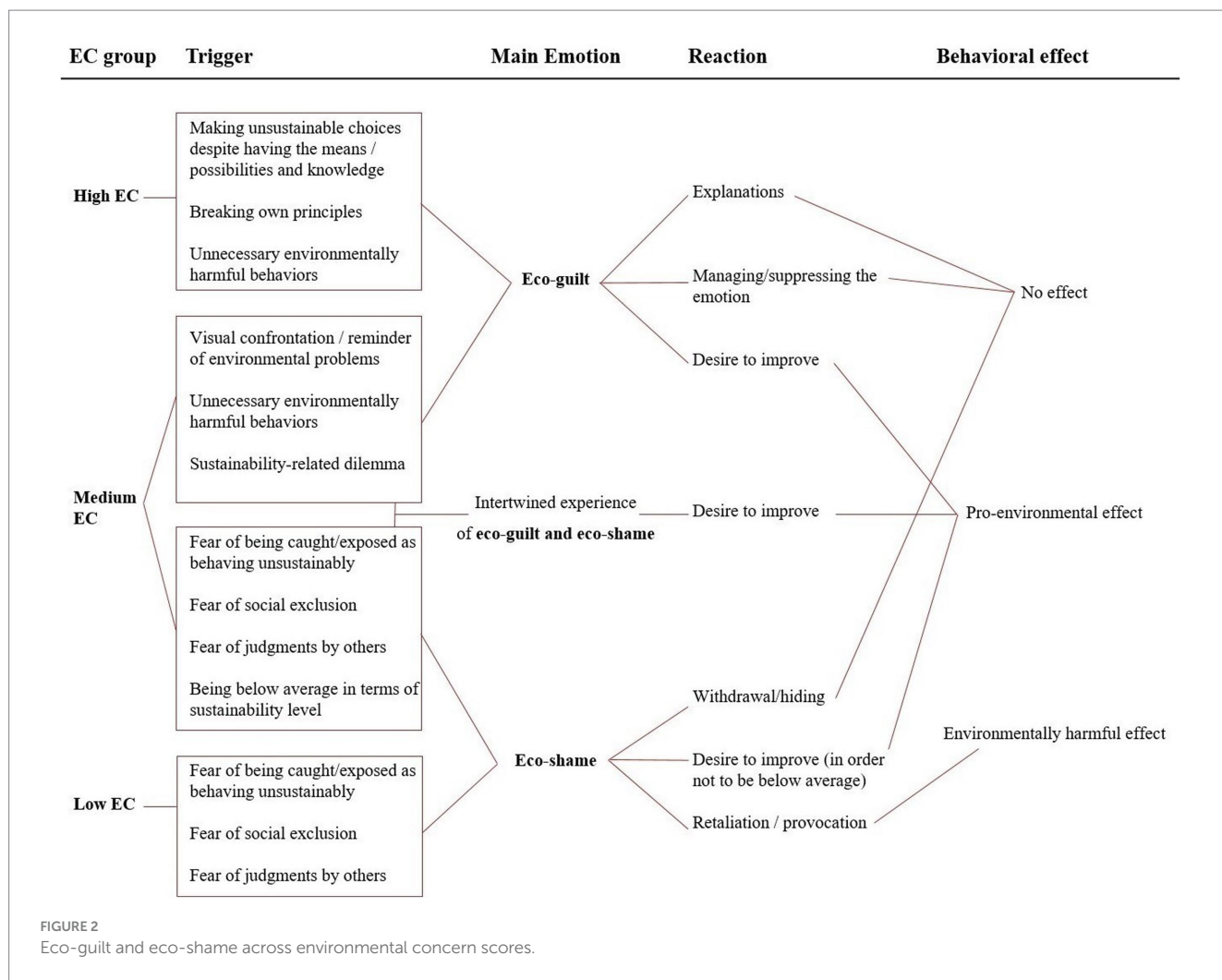
TABLE 2 Distinctions between guilt and shame.

Guilt	Shame
Evaluation focusing on action (“I did something bad”)	Evaluation focusing on self (“I am a bad person”)
Other directed (concern about the violation of others’ wellbeing)	Self-directed (concern about consequences impacting oneself)
Caused by one’s own internal evaluation	Caused by the perception of others’ external evaluation
Concern about moral damage	Concern about social damage

descriptions. Therefore, the analysis came to be structured according to three overall categories: the main emotional experience, the emotional triggers, and the subsequent reactions. In addition to eco-guilt and eco-shame, the participants’ reactions were assigned a pre-set code in line with our interest in the question of whether eco-guilt and eco-shame lead to pro-environmental reactions, as described in the introduction. By contrast, the codes for emotional triggers emerged during the coding process. While reading through all the text for each code and each coded interview in its totality, we unearthed interesting patterns across EC scores in terms of which emotion the participants experienced and how. The article therefore communicates the results across the three EC groups. The final codebook is attached as [Supplementary material](#).

3 Results

When comparing participants with high, low, and medium EC scores, we found substantial differences in experiences of eco-guilt and eco-shame, as well as the ways these emotions were triggered and



how the participants reacted to them. To provide an overview, the results are summarized in Figure 2. However, the figure cannot capture all the nuances and complexities of the results. For instance, it is important to note that high EC group participants do not exclusively experience eco-guilt and low EC group participants do not exclusively experience eco-shame. As the following sections will present in detail, these participants predominantly experienced one emotion over the other, though not exclusively.

3.1 High environmental concern score

3.1.1 Main emotional experiences

Participants with a high EC score (>70) mainly reported experiencing eco-guilt, with less eco-shame reported. Essentially, these participants described being less affected by how other people viewed their behavior in terms of sustainability. They also described themselves as having a high level of sustainable behavior in comparison with others, such as their parents, friends, family, and neighbors, which may be a reason why they seldom experienced eco-shame. These participants were more affected by their own sense of right and wrong. Most often, instances of eco-guilt occurred when they thought they had made unsustainable choices in their purchases of food items and other groceries, their use of

transport, and other shopping. Generally, the participants with high EC expressed an awareness of, and concern about, many different environmental problems, including CO₂ emissions and pollution, overuse of natural resources, the release of plastics and chemicals into the natural world, and reductions in biodiversity. This awareness influenced their experience of eco-guilt, where they expressed a strong sense of what they “ought” to do. For instance, when describing eco-guilt for watering plants in her garden, one participant stated:

“You know you should do something else, but you do not (...) In a way, it is the feeling of doing something wrong.” (Christina, 45).

Central to the experience of eco-guilt was the self-blame involved when acting in a way that is contrary to what the individual knows to be right. Several participants described this in connection with choosing conventional over organic vegetables:

“It annoys me that I take the cheap option, because it’s not what I want to do (...) I am the one who made a wrong choice. Sometimes I am stupid.” (Kirsten, 71).

Eco-guilt was described as an uncomfortable emotion because of this self-blame and self-criticism for behaving in ways that seem to go

against one's idea of right and wrong. However, in most cases, the duration of the emotional experience was quite brief, typically only lasting a matter of seconds. For instance, when asked about the duration of her experience, Kirsten answered:

“It is just in the moment, as I look at the product. (...) It is not something I lose any sleep over [laughing].” (Kirsten, 71).

In general, eco-guilt was most severe in the moment it was triggered, such as in the supermarket dilemma above, or when the participants reflected on, or were reminded of, their unsustainable behavior.

Eco-guilt seemed to be rooted in a sense of failing a moral obligation when behaving in ways that the participant believed to be environmentally harmful. Participants with high EC scores often described a moral self-obligation to be decent, moral people who live by their conscience and principles and have certain expectations of themselves. For example, when describing why she felt bad about buying conventional over organic vegetables, Kirsten said:

“It's about what I have agreed with myself to do. (...) That I fail in that way.” (Kirsten, 71).

This moral self-obligation was linked to a sense of obligation to animals, nature, or the planet itself. In general, participants with high EC reflected on their role in relation to environmental problems, and many had formulated their own principles of sustainable behavior. Examples of such principles included only buying meat that was about to expire (Josephine), not traveling by airplane (Torben, Josephine, Lars), and only buying meat from animals living in the wild (Kirsten).

3.1.2 Triggers

The participants highlighted several eco-guilt triggers. Two of these were prerequisites for the experience of eco-guilt, while two triggered eco-guilt more directly. Acknowledging that one has adequate information about sustainability was an important prerequisite of eco-guilt being triggered. As one participant described:

“Of course, I think it is a massive dilemma because I am well aware that I should not be taking the plane and flying all the way to Thailand just because I feel like it. It does not make any sense, climate-wise. But I do it anyway.” (Christina, 45).

Another prerequisite of eco-guilt was the sense of having the means and opportunity to choose the most sustainable options. One participant described how this related to his experience of eco-guilt:

“Whether it is embarrassing, or whether I feel bad about it, well, yes... Of course you feel a little bit guilty about being so wealthy here in Denmark and having so many opportunities and still we are polluting like crazy.” (Lars, 47).

While participants with lower EC reported feeling powerless about the environmental situation and unable to make sustainable choices, participants in the high EC group recognized that they had

the necessary means and opportunities as well as adequate information. They felt they had to act upon this, and their failure to do so triggered eco-guilt.

The high EC group described two main direct eco-guilt triggers. First, these participants breached their own principles as they actively reflected on a behavior and its environmental impact and formed a principle about avoiding the behavior, which they then broke. The subsequent eco-guilt arose not only from failing the environment, but also from failing in terms of what they had decided to do. Second, eco-guilt was triggered when participants did something they believed to be unnecessary and were aware that the environmental damage could have been avoided. For instance, the participant who experienced eco-guilt for watering her plants explained:

“I often think to myself: is it really necessary to use all this water just because you want some bloody flowers in your garden in summer?” (Christina, 45).

What is considered necessary relies on individual interpretation. Therefore, the idea of doing something unsustainable and unnecessary generally triggered eco-guilt, although the specific kinds of unnecessary and guilt-triggering behavior varied.

3.1.3 Reactions

Participants typically reacted to eco-guilt by offering an explanation for the behavior that made them feel bad. Most often, these explanations included structural circumstances and the behavior or needs of other people. Such a reaction focusing on structural circumstances, and specifically the lack of concrete information, is exemplified in the following response:

“It's a complete jungle. I mean... this talk about sustainability, it's all around us, but no one can (...) give us some concrete actions that we should take.” (Christina, 47).

As this quote suggests, even though participants with high EC generally considered themselves knowledgeable about environmental problems, several of them still expressed feeling overwhelmed by the complexity of environmental problems and mentioned this when discussing their feelings of eco-guilt. Others explained their eco-guilt-triggering behavior by referring to biological drives and necessities. For instance, Josephine stated that, since she needed to eat, she felt less eco-guilt about eating meat than other perceived unsustainable behaviors. Likewise, Lars explained his car use by referring to its practicality compared with public transportation. Explanations focusing on the role of other people included focusing on how others affected one's own unsustainable behaviors. For example, one participant experienced eco-guilt in relation to buying plastic toys:

“It's the same with those Kinder Eggs. Why the hell would they make such a thing with the plastic inside? (...) But damn it, the kids love it, and that's what is so annoying. So occasionally you have to give in to them. They are kids, after all.” (Knud, 65).

Knud explained his eco-guilt-triggering behavior by referencing the food producers and the needs of his children, whom he believed

should be allowed the (unsustainable) things they love. This can be seen as an attempt to negotiate the moral importance of environmental concerns by comparing it to the importance of being a good parent, and more generally, a good person. This illustrates the complexity we face as individuals when we feel torn between conflicting commitments and concerns.

In addition, participants in the high EC group reacted to eco-guilt by judging and managing the emotion. This often involved focusing on the positive rather than negative—something that was frequently mentioned in combination with comments about how useful an emotion is. For instance, one participant said that she no longer had a bad conscience because she did “not want to use a lot of energy thinking about things I cannot change” (Josephine, 26). Similarly, another participant stated:

“I do so many good things in my everyday life, so I do not want to go around having a bad conscience.” (Lars, 47).

Lars appears to be avoiding, or diminishing, his own eco-guilt by focusing on the positive actions he has already undertaken. This type of reaction was most apparent among the group of participants with high EC, probably because they had—or at least felt that they had—previously acted in sustainable ways.

Finally, in some cases, participants described how eco-guilt led to improvements in terms of engaging more sustainable behavior. In these cases, eco-guilt seemed to function preventively, or as a signal of bad behavior that indicated a need to change one’s ways. For instance, one participant reported that his motivation for limiting his purchases of plastic toys was that he knew it would make him feel bad (Knud, 65). Another described how eco-guilt was needed as a “push” toward more sustainable behavior (Christina, 47).

3.2 Low environmental concern score

3.2.1 Main emotional experiences

The group of participants with low EC scores (≤ 40) offered remarkably fewer accounts of eco-guilt than those in the other two groups. Overall, they gave fewer descriptions of sustainability as an important goal for which people should strive. Some stated that the sustainable behaviors of individual citizens had no effect, while others expressed skepticism about the concept of anthropogenic climate change. There were, however, several instances of eco-shame. Many of these participants seemed to have a strong sense of what others thought they “ought to” do in relation to sustainability. It seems that central to the experience of eco-shame was the perception that one had behaved in a way that went against “this societal sense of what you should be doing” because the participants knew that sustainable products and behaviors were “considered the correct choice” (Sandra, 34). In other words, the relevant norms were rooted not in the participants’ own personal beliefs, but in the pressure exerted by other people. One participant stated:

“Some people are trying to make us feel bad... Like we should do more. (...) There are these opinion makers who say, ‘this is the right thing to do’ and ‘this is the right way to think.’” (Carsten, 51).

The sense of failing to live up to this pressure was important to the eco-shame experience. Eco-shame was often experienced as a very personal critique. For instance, commenting on her feelings of eco-shame when her colleagues discussed sustainability, one participant asked herself:

“Are you then supposed to feel like a bad person if you do not care about [sustainability]?” (Sandra, 34).

Participants often described instances of eco-shame in the supermarket, mainly when they were buying non-organic goods, or buying meat or other products with low levels of animal welfare. Supermarkets seem to facilitate a feeling of eco-shame due to the large number of “sustainable” alternatives available, which are on display to other people as well. When asked if she ever wished she behaved more sustainably, Sandra replied:

“Mainly when I am grocery shopping, but that is probably more about how other people view it. I think there is such a pressure when you are walking around the supermarket and someone walks by with a lot of organic groceries or something, and they might look down on you for taking the wrong thing from the shelf.” (Sandra, 34).

Among this group of participants, some of whom directly stated that they did not care about the environment, the main motivation for being sustainable was the desire to avoid negative judgments from “others,” often described as groups of people like strangers in the supermarket or peers such as friends and colleagues. The participants also referred to specific individuals, and in some cases, they described someone whose authority they respected. Carsten described the latter and said that he would feel bad about himself and find it a particularly serious matter if someone like the Prime Minister of Denmark judged his lack of sustainable behaviors (Carsten, 51).

3.2.2 Triggers

The main eco-shame trigger in the low EC group was the fear of being exposed as an individual who does not care about sustainability. One participant explained: “It is about how other people see me” (Sandra, 34). When asked if she feared judgment by her family, she replied:

“No, no. Because I do not think they care about [being sustainable] either. It’s more strangers, or acquaintances, or colleagues and the like, where I do not know their opinion about it” (Sandra, 34).

This illustrates that whether or not eco-shame is triggered depends on the sustainability-related views and behaviors of the other person or people in question. When someone knows that the other person does not care about sustainability, there is no harm in being exposed as equally unsustainable, but when this is not the case, eco-shame can be triggered. Likewise, when asked if he ever wished he were more sustainable, another participant replied:

“That happens when I feel outnumbered. (...) When people kind of stand together and say: ‘This is what we have to do.’” (Rune, 46).

What seems to trigger eco-shame for Rune is the perception that everybody else is united in thinking that sustainability is something that requires action, resulting in him feeling like an outsider to the group. In general, the participants described fewer instances of eco-shame resulting from the imagined judgments of close family members, instead concentrating on the judgments of those with whom they had more insecure social relations, like friends, colleagues, and strangers.

3.2.3 Reactions

Among the participants with low EC, the main reaction to eco-shame in triggering situations was to withdraw or hide. These situations often involved conversations about sustainability, where the participants felt that they were less sustainable than others in the social setting. Going back to the situation with Sandra and her colleagues, she reported that she would “probably just listen” to those conversations and say “yes, I think about that kind of stuff” even though she did not (Sandra, 34). Another participant said:

“It is such a low blow to be like “Look at him! He is doing this and that. Now we should all be appalled by him”. (...) In those situations, you do not want to get involved because you know that you will be shamed yourself.” (Carsten, 51).

While these comments illustrate a similar reaction—trying to avoid situations where there is a risk of being eco-shamed—Carsten also expressed his own resistance in calling it a “low blow.” The same desire to resist eco-shaming and defend oneself was described by another participant who had flown to Berlin and felt the need to explain “why [he] had taken the plane instead of the bus” (Jonas, 25). Furthermore, some found it “provocative and annoying” when others merely mentioned something related to sustainability (Sandra, 34), while direct comments from others indicating that one’s behavior was not sustainable enough triggered the desire for retaliation:

“It depends on whether or not they are right. (...) If I do not really feel it is a problem, I would become spiteful and just do the opposite of what they think I should.” (Rune, 46).

When participants agreed to a certain extent with the critique, they were less likely to react with spite and provocation than when they disagreed with it and felt unfairly judged. Additionally, when eco-shame arose in conversations with others, it seemed that the reaction depended on how the other’s comments were voiced:

“If it ends up being shaming, and them saying ‘you are such a dinosaur’ (...) then you would just disregard those people and not want anything to do with them. (...) But if they can give you a proper and sound argument, I would be prepared to listen.” (Carsten, 51).

This remark illustrates a more general pattern that when the critique involved in the eco-shame experience is personal and somehow insinuates that the *person* is wrong, potentially to the extent that they are being perceived as morally inferior, the reaction is much more negative than when the critique focuses on behavior.

3.3 Medium environmental concern score

3.3.1 Main emotional experiences

The participants with medium EC scores (41–70) all agreed that sustainability was important, and that in a perfect world they would always behave in an environmentally friendly way. In reality, however, these participants were open about their struggle to make sustainable choices, most often due to limited finances, a lack of time or energy, or their desire for certain consumer goods overpowering their environmental intentions. This often led to experiences of both eco-guilt and eco-shame. These participants often described the emotions they experienced in the same terms used by the other EC groups, but some differences also emerged—as outlined in the following paragraphs.

In comparison with the high EC group, the main descriptive difference in this group’s reports of eco-guilt concerned the participants’ sense of moral obligation. Those in the medium EC group acknowledged that their eco-guilt was rooted in a failure to comply with what they considered a moral obligation, including obligations to the natural world and animals. However, unlike those in the high EC group, who spoke specifically about moral self-obligations and the importance of upholding their own moral principles, the medium EC group tended to refer to obligations to society. For instance, one participant explained:

“If we all think somebody else will do it, nothing will happen. That makes me feel bad. That we are supposed to solve this task collectively.” (Kathrine, 28).

Turning to eco-shame, participants in the medium EC group experienced this in the same way as described for the low EC group. That is, they felt that others were watching and judging them. However, there was an important difference here, as their reactions depended on whether or not the participant personally believed they had done something wrong. Describing a situation in which he felt eco-shame, one participant explained:

“When you are at the meat section and somebody walks by and takes the organic meat as you are standing there and you think maybe that would be more sustainable? Then you think okay, should I have taken that too and just paid a little extra? In that situation, I think to myself: what are other people thinking about me?” (Daniel, 29).

This quote indicates that Daniel is worrying about the thoughts and judgments of other people. This is partly because he is aware of the strong focus on sustainability and meat consumption. However, it is also because he fundamentally agrees that he should live sustainably—a view that was generally absent in the low EC group.

3.3.2 Triggers

In the group with medium EC scores, eco-guilt appeared to be triggered when participants were reminded of what they fundamentally believed was the environmentally right thing to do. For instance, they mentioned that visual confrontation with excessive plastic use triggered their eco-guilt because it reminded them of the negative effects of plastic pollution to which they had

contributed. In addition, being caught up in a sustainability-related dilemma that required them to reflect on a particular behavior or product and where they chose the least sustainable option triggered eco-guilt. The choice was often between a sustainable but more expensive or inconvenient option and a more affordable or easier but less sustainable option. Examples of this included choosing between organic or conventional products at the supermarket, or between taking the bus, train, car or airplane when travelling. One participant described the eco-guilt experience in relation to such a dilemma:

“Sometimes I think about what I can do and if it even makes a difference. Does it make sense that I pass up this avocado? (...). It has already been transported here, but at the same time, I know that is (...) only because they know there is a demand here because of people like me who are buying them. It makes me feel like a hypocrite.” (Daniel, 29).

This differs from the high EC group’s descriptions, where eco-guilt was triggered when participants broke their firm, and often formulated, principles. In the medium EC group, there is a sense of internal conflict and confusion over whether to forgo certain products for environmental purposes, and this creates a real dilemma.

Like those in the low EC group, the participants with medium EC scores had a fear of being exposed as indifferent to sustainability, and this was the main trigger of their eco-shame. However, there is an important difference here between the two groups. Often, when those in the medium EC group experienced eco-shame, the behaviors and situations involved also triggered eco-guilt: the eco-guilt and eco-shame therefore often occurred simultaneously. For instance, Clara described experiencing eco-guilt for driving her car instead of cycling, knowing that she “could have done something better” (Clara, 19). She also explained that driving her car could trigger eco-shame as well:

“It would be pretty awkward to meet people while getting out of the car after driving somewhere you could have walked to in ten minutes.” (Clara, 19).

Likewise, Daniel described finding grocery shopping a very uncomfortable activity because he worried about his conscience and blamed himself for making poor decisions (Daniel, 29). While this is clearly an indication of eco-guilt, the very same situation also triggered eco-shame in him. For instance, he admitted that seeing his friends in the supermarket would make him think: “Let us put something nicer at the top of the basket, so they cannot see what is underneath” (Daniel, 29).

3.3.3 Reactions

Like those in the high EC group, participants with medium EC scores reacted to eco-guilt by explaining their behavior. Often, after the participant had described something they felt bad about, they continued by describing structural circumstances or the unsustainable behavior of other people. A structural circumstance often mentioned by the medium EC group was their problematic financial situation. For instance, one participant said:

“I feel like I could do so much more, but then again, I am limited because of [my financial] means and where we stand right now. But yeah, I could do more. But then again, most people could probably do more, right? I wish there were more of those places where you bring your own food containers to the shop (...).” (Ida, 31).

Ida highlights two structural conditions that relate to her lack of sustainable behaviors, namely her financial situation and the shortage of sustainable food shops. In addition, Ida reflects on her own behavior compared to that of other people by adding that she suspects many others feel the same way as she does. Similarly, when another participant was asked whether she sometimes felt complicit in environmental problems, she stated:

“I do, but then at the same time, I would think that there are always others who are doing worse than me. Instead of being so negative to myself, I know that there are others who are even worse” (Katherine, 28).

The eco-guilt reaction of offering explanations was also observed among participants with a high EC score. However, the way in which Ida and Katherine did so—through a direct comparison with how others behaved equally or more unsustainably—was mainly observed in the medium EC group of participants.

The reactions to eco-shame from participants with medium EC can be organized into three types or patterns: a desire to withdraw, retaliate, or improve. As regards the last of these, the medium EC group explained that eco-guilt could lead to personal improvement in terms similar to those used in the high EC group. In relation to eco-shame, the reaction of improvement was mainly mentioned when the participants felt they were below average in terms of sustainable behavior in comparison with family, friends, or the average Dane. For instance, one participant stated:

“If I found out I was below average that would be something that would really make me think: okay, I need to do something about this.” (Clara, 19).

The eco-shame reaction of retaliation was found in its most direct form in the medium EC group. Among other things, this involved doing something even less sustainable out of spite, ridiculing others for being fanatical about sustainability, and highlighting another person’s behavioral inconsistencies. One participant described how her immediate reaction if somebody were to make her feel bad about her unsustainable behavior would be:

“Aggressive, ha-ha! (...) If I do not control myself, I become aggressive and then hit back, but I do not want to go there, really.” (Monique, 55).

When her friend “had a fit” about her buying non-environmentally friendly detergent, Monique reacted in the following way:

“My first thought was, ‘Wow, and you are driving a diesel car!’ That was the first thing that popped into my brain (...). I can easily list a number of things that you do, and say: ‘Why do you drive a diesel car?’, ‘Why do you buy new clothes and purses

so often?’, ‘Why do you buy perfume and lotion?’ (...)’ (Monique, 55).

There seems to be a general perception that if you critique and eco-shame others, your own behavior should be perfect. For many participants, the immediate reaction to feeling eco-shamed was to retaliate by focusing on the inconsistencies and flaws in the other person’s critique.

4 Discussion

The main aim of this paper was to provide an in-depth understanding of the experiences of eco-guilt and eco-shame. Eco-guilt is mainly rooted in a felt obligation toward oneself, society, or nature, and represents a personal commitment to living sustainably. In the context of growing public concern about the environment, this moral obligation has already been investigated in relation to its potential role in motivating pro-environmental behaviors (Stern, 2000; Bamberg and Möser, 2007; de Groot and Steg, 2009; van der Werff et al., 2013; Culiberg, 2014). Results from our study corroborate earlier research, where a connection was found between moral obligation and eco-guilt (Bamberg et al., 2007; Culiberg, 2014). The environmental moral obligation has been described as a moral norm that establishes expectations and guidelines or standards of behavior (Bamberg and Möser, 2007; Moore and Yang, 2020). Mallett (2012) suggests that eco-guilt can arise when people feel that they do not meet societal standards for environmental behavior. However, our findings suggest that eco-guilt was only triggered when participants were not only aware of, but also accepted and were willing to adhere to, these moral norms and societal standards. Where this was not the case—mainly among those with low EC scores—the participants did not feel guilty when they failed to behave sustainably.

We identified two prerequisites for experiencing eco-guilt: perceived necessary knowledge, and means and opportunities to behave more sustainably. These findings might be explained by the so-called low-cost hypothesis, suggesting that as the external cost of an action decreases, internal factors such as environmental concern, values, and personal norms become more influential (Diekmann and Preisendörfer, 2003; Steg and Vlek, 2009; Yürüyen Kılıç et al., 2022). This hypothesis might also explain why, in the absence of external barriers, individuals are more likely to blame themselves for their environmental transgressions, resulting in eco-guilt. Relatedly, eco-guilt resembles the concept of self-efficacy (Bandura, 1977), specifically environmental self-efficacy, which refers to an individual’s perceived ability to act in ways that mitigate environmental problems (Huang, 2016). Environmental self-efficacy has often been found to be a predictor of pro-environmental intentions and behavior (e.g., Huang, 2016; Jugert et al., 2016; Li et al., 2023; Stenberdt and Makransky, 2023). To date, research into the relationship between environmental self-efficacy and eco-guilt or eco-shame has been relatively limited (Wonneberger, 2018; Suresh and Walter, 2022). Our study shows that eco-guilt and self-efficacy are closely connected in relation to the everyday cognitions and actions of consumers, particularly those with high levels of environmental concern (high EC) and less so for consumers who are somewhat concerned about the environment (medium EC). Participants in these two groups with a sense of self-efficacy experienced eco-guilt when they failed to behave

sustainably. Our findings do not indicate a connection between eco-shame and self-efficacy, but self-efficacy did seem to influence reactions to eco-shame. In situations where participants experienced eco-shame but felt they did not have the means to behave more sustainably, their reactions were typically to withdraw or retaliate, apparently because they felt unfairly judged. This was mainly observed in participants with low EC scores.

Instances of eco-shame were not contingent on the participants’ own sense of obligation. They were triggered by their perceptions of what other people thought they ought to do. We identified more instances of eco-shame resulting from the perceived judgments of people at a greater social distance (such as friends, colleagues, and strangers) compared to close family members. This is in contrast to research suggesting that people are more influenced by those with whom they have close relationships (Abrahamse and Steg, 2013). However, the socializing effect of eco-shame differs from social influence in a broader sense. Essentially, shame arises when there is a threat to the social bond, which the emotion’s self-regulating function aims to secure. Therefore, insecure social bonds are characterized by more shame than secure social bonds, where the relationship feels safe (Lewis, 1971; Scheff, 2000). The fact that eco-shame was triggered more by what other people thought than by one’s own sense of obligation meant that even the small number of participants in the low EC group who had explicitly said that they did not care about being sustainable did still feel eco-shame. This is in line with expectations proposed by Aaltola (2021). In general, the low and medium EC groups reported many more instances of eco-shame than the high EC group. A likely reason for this is that participants with high EC scores felt they lived more sustainably and had higher environmental standards than others, resulting in them being less concerned about the judgments of others. This echoes research focusing on the emotion of pride in the environmental context (e.g., Harth et al., 2013; Mallett et al., 2013; Onwezen et al., 2013; Rees et al., 2014; Adams et al., 2020). In the psychology of moral emotions, pride is defined as the positive opposite of shame (Tangney and Fischer, 1995; Haidt, 2003; Lewis et al., 2008), which would explain why those who may have felt proud of their high level of sustainability and environmental standards did not simultaneously experience eco-shame. Another, perhaps complementary, explanation of why certain participants did not experience eco-shame can be found in studies of “moral licensing” that examine eco-guilt and eco-shame (e.g., Leviston and Uren, 2019; Adams et al., 2020; Moore and Yang, 2020; Hurst and Sintov, 2022). Moral licensing is a type of internal processing where an individual performs a behavior that they consider unethical or immoral, which they explain by saying that they have behaved in a morally justifiable way earlier or in other settings (Blanken et al., 2015). Participants with high EC scores—and some with medium EC scores—may believe that their environmentally good deeds compensate for and justify their more unsustainable behaviors, making them blind to their own environmental “mistakes” and thus less likely to experience eco-shame. Moral licensing may also help to explain how the high EC participants were able to lessen and suppress feelings of eco-guilt by consciously focusing on all of the positive environmental actions they undertook.

We found some cases where eco-guilt and eco-shame experiences were intertwined. This was mainly observed among the participants with medium EC scores, whose pro-environmental intentions and behaviors were motivated both by their own moral beliefs and by their

fear of being judged by others. These participants typically felt eco-guilt about a certain environmentally harmful act that then turned into eco-shame when another person, such as an acquaintance or friend, saw or commented on the behavior. In most of these cases, the participants reacted to their eco-shame pro-environmentally, as it reminded them of what they ultimately believed was the right thing to do. This pattern resembles Aaltola's (2021) "moral climate shame," which is conceptualized as the ability to tolerate an uncomfortable shame experience and use it constructively to reflect on one's choices and environmental ethics (Aaltola, 2021). We nuance Aaltola's suggestion by showing that, in practice, eco-shame will often be intertwined with an experience of eco-guilt, and that eco-shame is most likely to move the individual in a pro-environmental direction, at least among consumers with a medium level of EC.

The results show that both eco-guilt and eco-shame can be adaptive or maladaptive in promoting pro-environmental reactions. This goes against the dominant unidirectional view that only eco-guilt leads to pro-environmental behavior (e.g., Elgaaid, 2012; Harth et al., 2013; Adams et al., 2020), while eco-shame leads to the opposite (Mallett, 2012; Chu and Wan, 2020; Lamm et al., 2022). As these results show, eco-guilt led to pro-environmental behaviors when participants used the emotion as a reminder of what they should have done. However, in other situations, it did not prompt a change in behavior because the act of explaining one's unsustainable behaviors with reference to structural circumstances or the actions of other people seemed to weaken or suppress the emotion. Importantly, this reaction did not necessarily seem like a conscious strategy to alleviate eco-guilt, but is more likely an example of the complexity of the emotion, where internal self-assessments (Taylor, 1985) intersect with observations and perceptions about the external world. Here, we emphasize that our participants experienced eco-guilt while simultaneously finding the structural elements surrounding this emotion unfair or calling for structural changes out of genuine care for the environment. In terms of eco-shame, this emotion led to participants, especially those in the medium EC group, wanting to be more sustainable, or at least reflecting on their desired pro-environmental behaviors in order to avoid being below average in terms of sustainable conduct. However, eco-shame also led to maladaptive reactions such as withdrawal, provocation, and retaliation, especially when the participant felt unfairly judged by others. Our findings therefore seem to suggest that an individual's environmental engagement and current situation both play a decisive role in whether eco-guilt and eco-shame are adaptive or maladaptive emotions.

4.1 Limitations and areas for future research

The current exploratory study involved a relatively small sample, with 18 participants in total and six in each EC group. Individual descriptions and experiences, some of which were treated as deviations from the EC group, could have proven to be patterns to explore had the overall sample been larger. For instance, if there had been more participants in each EC group, it is likely that the high EC group would not only have included highly educated individuals. It is possible in that case that those with high EC scores but lower levels of education may have described aspects of eco-guilt and eco-shame experiences differently. Meanwhile, the fact that highly educated individuals had

high levels of EC followed the pattern of Franzen and Vogl's finding of an association between EC and educational level. Hook and Soma (2022) argue that with in-depth qualitative research, a smaller sample size can be justified when it provides a direction for future research. We recommend that future research further explores how the experiences of eco-guilt and eco-shame can be expressed differently by individuals with varying levels of engagement in sustainability and environmental matters. Such research should ideally include larger sample sizes so possible variations within EC groups can be gauged. Further, as Figure 2 illustrates, we suggest a range of themes and relationships between EC, emotional triggers, emotions (eco-guilt or eco-shame), reactions, and behavioral effects. These themes and relationships could be further explored by qualitative studies, but also tested quantitatively by establishing eco-guilt and eco-shame variables. For instance, the finding that those with high EC scores mainly experience eco-guilt, those with low EC scores mainly experience eco-shame, and those with medium EC scores often experience both emotions intertwined points to clear and testable hypotheses for quantitative research. Additionally, since environmental concern plays such a crucial role in this study when aiming to distinguish individuals based on their commitment to the environment, it is relevant to examine whether adjacent measures, such as environmental attitudes (Dunlap et al., 2000), environmental values (Stern et al., 1995), environmental engagement (Venhoeven et al., 2017), and environmental identity (Clayton and Opatow, 2003), operate similarly in the context of emotional and behavioral reactions.

It is a potential limitation of this study that some of the recruitment questions used to calculate the EC scores referred to a willingness to pay more for the sake of the environment (Franzen and Vogl, 2013). As many participants expressed that they had limited financial means, the EC scores may have been higher if the questions had exclusively prompted them about pro-environmental behavior, such as recycling, without reference to financial costs. The participants' focus on their resources and how they prioritized these in relation to buying more sustainable products also suggests that future studies would benefit from including economic data (such as participants' household income and expenditure). Furthermore, calculation of the EC score was based on relatively few (nine) questions. In addition, the EC scores and interview data represent the participants' subjective beliefs about themselves and their behavior, rather than their actual behavior. While this can be seen as a limitation, it is worth remembering that it is a common feature of this type of study, where actual behavior is not tracked. The discrepancy between an individual's good environmental intentions or self-perceived behavior and their actual behavior may even offer an interesting topic to explore further in relation to the experiences of eco-guilt and eco-shame.

Finally, the scope of this article has limited the focus and discussion. The dataset reported here may provide information about other emotions that were not explored in this article, such as pride, powerlessness, sadness, etc. In addition, the focus of this article was on *individual* experiences of eco-guilt and eco-shame, which means that the collective aspects of these emotions, such as how participants handle collective guilt, were not explored. Previous research suggests that collective guilt is important in understanding the phenomenon of pro-environmental behavior (Ferguson and Branscombe, 2010; Mallett et al., 2013). Hence, a fuller understanding of eco-guilt requires a focus on how this emotion may come across as a collective phenomenon and how collective eco-guilt and individual eco-guilt are related.

4.2 Implications for decision makers and stakeholders

Our findings have several practical implications. While both eco-guilt and eco-shame have the potential to promote pro-environmental reactions under certain conditions, they are complex emotions. For instance, we found that eco-guilt resulted in attempts to justify or explain perceived unsustainable behaviors, as well as a desire to behave more pro-environmentally. Furthermore, participants with medium levels of EC sometimes responded positively to eco-guilt and eco-shame, using both emotions as reminders of their moral and social commitment to be sustainable. However, sometimes the emotions resulted in explanations and emotional suppression (eco-guilt), or withdrawal, provocation, and retaliation (eco-shame). Meanwhile, those with low EC, who mainly experienced eco-shame, had exclusively negative reactions to the emotion. Therefore, our findings suggest that a “one size fits all” approach of using these emotions instrumentally risks generating the opposite reactions than those intended. As such, the design of communicative campaigns that target environmental behavior change should be sensitive to both the environmental setting and the behavioral context, as well as the level of pro-environmental concern among the consumers. This means that a multi-pronged approach is likely to be needed, where, on the one hand, environmentally concerned consumers are targeted in campaigns guiding them on how to implement more sustainable practices and, on the other hand, less-concerned consumers are provided with general information about environmental issues and sustainable choices are made more accessible, e.g., through choice editing for sustainability, where retailers remove the option to buy products with a poor environmental record. As we exclusively found negative eco-shame reactions among the group of less-concerned consumers, the use of eco-guilt or eco-shame tactics and appeals to self-efficacy may seriously backfire.

We found that the social aspect of eco-guilt and eco-shame plays a crucial role, where for example, eco-shame was triggered by the fear of social judgment. Those with high levels of EC were less susceptible to eco-shame, as they were less influenced by societal judgments, while those with medium and low levels of EC in particular experienced eco-shame in situations involving other people. In that sense, our findings are also relevant to the literature on social norms. In their extensive review, [Byerly et al. \(2018\)](#) found that targeting social norms is a popular intervention tool that can promote pro-environmental behavior. While many scholars agree that social norms encourage pro-environmental behavior ([Farrow et al., 2017](#); [Perry et al., 2021](#); [Saracevic and Schlegelmilch, 2021](#)), some stress that messages communicating these norms should be carefully considered, as they can lead to undesirable psychological or behavioral consequences ([Farrow et al., 2017](#)). We add to the understanding of this by highlighting that the use of shame tactics in messaging and interventions—irrespective of whether they are used by policy makers or marketeers—should be carefully considered in order to avoid undesirable reactions.

From a broader societal perspective, it should be critically discussed whether it is morally acceptable to induce eco-guilt and eco-shame intentionally in individuals as a way of reducing behaviors with a negative environmental effect, since our findings suggest that failing to adhere to one’s moral beliefs (eco-guilt) and the perception of failing in the eyes of others (eco-shame) can be a heavy emotional

burden for people at all levels of environmental concern. In line with this, some have argued that self-governance as a means through which to promote sustainable behavior should be challenged ([Paterson and Stripple, 2010](#); [Rutherford, 2017](#)). A potential risk of trying to induce eco-guilt and eco-shame is that the targeted individuals will then place too much focus on their own “bad” behaviors and how to alleviate these uncomfortable emotions, rather than collectively calling for change from those with more power in the value chains, e.g., retailers, regulators and other governing bodies, and politicians. In addition, eco-guilt reactions such as providing explanations for environmentally harmful behaviors may weaken perceptions of the urgency of environmental issues in general, thereby eroding individual and political engagement. Equally, eco-shame reactions like withdrawal, provocation, and retaliation may limit and further polarize the democratic debate about the environmental challenges and appropriate responses to them.

Data availability statement

To protect the privacy of the informants, the data for this study (anonymised interview transcripts) are not made publicly available. Arrangements for sharing the data can be made by contacting the authors directly.

Ethics statement

The studies involving humans were approved by University of Copenhagen Research Ethics Committee for Faculty of Science & Faculty of Health and Medical Sciences (CASE: 504-0305/22-5000). The studies were conducted in accordance with the local legislation and institutional requirements. Written informed consent for participation was not required from the participants or the participants’ legal guardians/next of kin because prior to participating in the interviews, the participants received a document explaining the research project and information about audio recording and the handling, sharing, and storing of personal data. The interviewer (the first author) read out the consent form to the participants and attained their verbal consent to participate.

Author contributions

RN: Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Project administration, Visualization, Writing – original draft. CG: Conceptualization, Supervision, Writing – review & editing. TL: Conceptualization, Supervision, Writing – review & editing.

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Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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Supplementary material

The Supplementary material for this article can be found online at: <https://www.frontiersin.org/articles/10.3389/frsus.2024.1357656/full#supplementary-material>

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