

A reflection on non-epistemic values in environmental psychology research

Viktoria Cologna

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Viktoria Cologna is a postdoctoral researcher at the University of Zurich and ETH Zurich. At the time of writing, she was a postdoctoral fellow at Harvard University, funded by the Swiss National Science Foundation (P500PS_202935). She is an environmental social scientist interested in the determinants of individual and collective action on climate change, public perceptions of science, and the role of science in society and policy-making.

Environmental psychology has provided important intellectual and policy-relevant contributions to understanding the psychological processes that foster and hamper action on climate change. Research has shed light on the correlates and determinants of climate change belief (Hornsey et al., 2016), engagement in pro-environmental behavior (Bamberg & Möser, 2007; Bergquist et al., 2023; Morren & Grinstein, 2016), climate policy support (Bergquist et al., 2022; Bumann, 2021), and collective action on climate change (Rees & Bamberg, 2014; van Zomeren et al., 2010). However, critics have challenged current conceptual, theoretical, and methodological approaches in environmental psychology, including the choice of investigated behaviors and sample populations. For example, researchers have called for a stronger focus on high-impact behaviors (Nielsen, Cologna, et al., 2021), as well as on high-socioeconomic-status people beyond their role as consumers (Nielsen, Nicholas, et al., 2021) and large socio-ecological transformations (Wullenkord & Hamann, 2021). Scholars have also argued for the need to move beyond traditional, theory-based, and decontextualized ap-

proaches (Clayton et al., 2016); increase interdisciplinary collaborations (Clayton et al., 2016; Nielsen et al., 2020); and foster cultural diversity and cross-border collaborations (Tam & Milfont, 2020). To address these critiques, scholars have advocated for a *critical* environmental psychology (Kühn & Bobeth, 2022; Räthzel & Uzzell, 2019). What connects these critiques is that they voice disagreement about the goals of environmental psychology research and how to achieve them – disagreements resulting partly from different underlying value commitments.

A value is “something that is desirable or worthy of pursuit” (Elliott, 2017, p. 11). These may be ‘epistemic’ values such as precision and accuracy, which promote the acquisition of true beliefs, or ‘non-epistemic’ values such as moral or political norms, which do not directly bear on the attainment of knowledge. Philosophers of science have long acknowledged that science cannot be value-free and that non-epistemic values can play a positive and legitimate role in the scientific process (Douglas, 2000; Elliott, 2017; Elliott & McKaughan, 2014; Longino, 1990). In this commentary, I want to raise awareness of the presence of non-epistemic values in environmental psychology, their societal impacts, and how a greater inclusion of non-dominant views can increase the field’s impact and objectivity.

Non-epistemic values may enter the scientific process at several stages: when defining the goals of a study, formulating research questions, appraising hypotheses, and communicating results (Pulkkinen et al., 2022). In environmental psy-

chology, non-epistemic values can influence the choice of research questions, methods, interventions, behaviors, the evaluation of evidence, and the selection of the study population. Whether these non-epistemic value judgements are intentional or not, they can play a legitimate role as long as they represent major social and ethical priorities (Elliott, 2017), such as climate change mitigation.

It is important for the environmental psychology community to be aware of and self-reflective about how non-epistemic values influence environmental psychology research, public understanding of human behavior in the face of climate change, and policy recommendations. Non-epistemic value judgements can inform the object of study, such as a focus on high-income people (vs. low-income people or representative samples), consumer behaviors (vs. civic actions), high-impact (vs. low-impact) behaviors, and nudging (vs. market-based) interventions, which can have important societal consequences. For example, it has been argued that research on interventions that target individual behaviors could have the adverse effect of limiting system-level change (Chater & Loewenstein, 2023). Not only is the scientific process influenced by values, it also influences values by reifying and normalizing them (Pruss, 2023). For example, the predominant focus on low-impact behavior could strengthen the public's overestimation of the relevance of low-impact behavior for climate change mitigation (Cologna et al., 2022; Wynes et al., 2020). As a research community, environmental psychologists are implicated in the reproduction and persistence of competing models of social change and transformation that feed into the policy and media discourse (Shove, 2010). Given the lack of cultural diversity of its authors (Tam & Milfont, 2020), much environmental psychology research has arguably been influenced by non-epistemic values of dominant groups in the Global North whose visions on sustainability transitions are in turn influenced

by the capitalist socio-technical systems they live in. This bias has the potential to hamper research on socio-ecological transformations that challenge the status quo.

As a scientific discipline devoted to studying the individual as unit of analysis, environmental psychology also shapes our understanding of human beings in the face of climate change. Environmental psychology has been criticized for its individual reductionism, which conceptualizes individuals as monads that act independently of their social environment (Rätzzel & Uzzell, 2019). While authors have challenged individual reductionism and encouraged the field to study the interplay between individual characteristics and larger social, physical, and systemic factors (Nielsen et al., 2024), much of environmental psychology research follows an individualistic perspective where behavior results from the interplay of intrapersonal characteristics such as attitudes (Shove, 2010; Wille & Lange, 2022). This individual reductionism neglects the influence of power relations, economic structures, and dominant ideologies and is inherently a value-laden and not an epistemic stance. Whether intentionally or not, such framings can feed into public perceptions that individuals are largely to blame for the climate crisis and obscure the fact that social practices, governments, and powerful actors with vested interests perpetuate unsustainable economic institutions and ways of life (Shove, 2010).

As the environmental psychology community grows, new journals are founded, and the policy-relevance of the field increases, it is important for environmental psychologists to be *transparent* about how values might influence their research and *aware* of their potential societal impact. Given the field's lack of diversity, it is important to incorporate a plurality of values in the scientific process (Cologna, 2021) by increasing interdisciplinary and cross-country collaborations beyond WEIRD countries. For example, incorporating

values held by historically marginalized groups and those strongly affected by the climate crisis will benefit the legitimacy and objectivity of the knowledge generated by the field (Longino, 2019). To conclude, deliberating, discussing, and challenging the role of non-epistemic values in environmental psychology (whether in research collaborations, special issues, the peer-review process, or at conferences) provides an opportunity for the field to develop in ways that are conducive to providing scientific insights that can aid the large-scale socio-ecological transformation needed to mitigate climate change.

Kontakt

Viktoria Cologna
 v.cologna@ikmz.uzh.ch
 University of Zurich
 Department of Communication and Media
 Research
 Andreasstrasse 15, 8050, Zurich

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