

Prakṛtīreva śaraṇam - "Nature is the only refuge": The role of Environmental Psychology in Saving the Planet

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Abstract: Over the last few decades, humans have plundered nature's resources much faster than they can be replenished. Our tendency to take nature for granted is beginning to create havoc across the world. The current state of affairs is tragic, given India's ancient belief systems that approached nature as a divine entity. This article explores the potential of Environmental psychology in tackling the ecological issues facing us today. Environmental psychology is an interdisciplinary, application-oriented field that focuses on the interplay between individuals and their surroundings. It is directed at enhancing our relationship with the natural environment and making the built spaces that we occupy more humane. Climate change is a pressing concern for environmental psychologists worldwide. Environmental psychology can play a key role in enhancing our comprehension of the actions that contribute to climate change, particularly through the development of behavioural models. It can also enable more informed decisions on how communication methods can be used with the public and offer valuable insights into how people react to various policy measures. A key area for future research is understanding how Indian psychology with its emphasis on the interconnectedness of individuals and environments, indigenous wisdom and spiritual traditions, can be employed to promote sustainability. In some countries, policymakers are regularly seeking guidance from behavioural scientists to develop improved conceptual frameworks and effective implementation strategies to protect the environment. It is becoming increasingly critical to develop such collaborations in India as well. Of course, the foundation for this will come from an augmentation of the full-time courses offered in Indian universities and the creation of employment opportunities for those who pursue environmental psychology.

Keywords: environmental psychology, Indian psychology, climate change, sustainability, pro-environmental behaviour

Poet and scholar Gary Snyder famously said, "Nature is not a place to visit, it is home." Human beings are an extension of the natural world. According to the Yogic theory of Panchmahabhoota, the fundamental structures of all living entities- trees, plants, animals, and humans are made of five elements: Agni (fire), Jal (water), Prithvi (earth), Aakash (ether), and Vayu (air). All the elements present in the Universe are also present in us, and we are indeed one with nature. Greek physician and philosopher Hippocrates ardently believed in nature's ability to heal. The focus on nature as a form of medicine declined in the 20th century, due to the ascent of modern medicine, which based itself on vaccines and antibiotics. However, later, the work of several scholars, such as biologist E.O. Wilson (1984) and Roger Ulrich (1984) began to turn things around. Wilson stated that humans are deeply connected to other living beings. Ulrich's research in hospitals

showed that patients who had natural views from their windows used less pain medication, had fewer post-operative complications, and were discharged sooner than those who did not have such views. Several studies demonstrated the health benefits of spending time in nature to include reduced stress, improvements in immune function, more effective pain control, and lower blood pressure (e.g., Frumkin et al, 2017). Yet those of us residing in cities and towns lose our connection with mother nature. Concrete buildings, steel cars, modern gadgets, and machines overwhelm our senses. Over the last few decades, humans have plundered nature's resources much faster than they can be replenished. Our tendency to take nature and her generosity for granted is beginning to create havoc across the world.

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The Environmental Crisis

According to the World Meteorological Organization, extreme weather events in 2024 have caused the highest number of climate-related displacements in recent times. In the past year, about 800,000 people were displaced, and another 1,700 lost their lives. Economic losses from hurricanes and other natural disasters soared globally. The damage caused by hurricanes Helene and Milton pushed the total economic loss from natural disasters in the U.S. to \$217.8 billion. Poorer countries are more severely affected by cyclones, droughts, wildfires, and other disasters due to weaker infrastructure and limited resources for disaster preparedness. India is among the countries struggling to cope with frequent natural disasters affecting different parts of the country. In 2024, Kerala experienced the highest number of fatalities due to extreme weather events, with Madhya Pradesh and Assam following closely behind (Awasthi, 2024).

Air pollution is one of India's most pressing environmental challenges. The 2024 World Air Quality Report states that India is the fifth most polluted nation globally, with 74 out of the 100 most polluted cities situated here. Delhi, India's capital has the worst air quality in the world for several days in a given year. The primary contributors to air pollution include vehicle emissions, construction activities, crop burning, industrial waste, and fossil fuel combustion. India's heavy reliance on coal, oil, and gas results in it being a significant contributor to global pollution, releasing over 2 billion metric tons of carbon dioxide into the atmosphere annually. Air pollution has created high levels of respiratory ailments in the country. Poor air quality worsens conditions such as asthma and COPD and heightens the risks of pneumonia and lung cancer. Levels of water pollution in the country are alarmingly high. Three years ago, the Central Pollution Control Board announced that more than half of India's rivers were polluted. This pollution poses health risks through waterborne diseases and negatively affects freshwater biodiversity and agricultural productivity. The plastic crisis in India ranks among the worst globally, with the country generating over 9 million tons of plastic waste each year. Some factors responsible for high levels of plastic waste include India's massive population, rapid

urban expansion, low waste collection rates, inefficient waste management systems, and harmful practices such as open burning. Presently, only about 5% of collected waste is recycled, 18% is composted, and the majority is incinerated (Igini, 2024). The common practice of incinerating waste releases harmful pollutants, including dioxins, into the atmosphere, adding to the already soaring levels of air pollution.

The current state of affairs is tragic, given India's ancient belief systems that approached nature as a divine entity. For centuries, forests and trees have been worshiped here, and the conservation of nature has been an important aspect of the ethics of Indian culture (Anthwal et al., 2010). Sacred groves and forests have been repositories of floral and faunal diversity, sustainably conserved by local communities. Some Indian communities have harvested rainwater for centuries through systems specific to the topography of the given region. The stepwells of Gujarat, the johads of Rajasthan, and the Zabo System of Nagaland are a few examples. Clearly, it is time for us to pay attention to the good practices of the past and take necessary actions that can protect the Earth's future. There has to be an interdisciplinary and multi-dimensional response to the environmental concerns plaguing us. Since the 1990s, countries have debated how to combat global warming. Negotiations have led to various international treaties. Some of the most widely known are the UN Framework Convention of Climate Change (1992), the Kyoto Protocol (1997), and the Paris Agreement (2015). As part of the Paris Agreement, governments set targets with the goals of preventing global average temperatures from rising 2°C above pre-industrial levels and attempting to keep the change below 1.5°C. While governments agree on the reasons for climate change, there are disagreements on who is responsible, how to monitor goal attainment, and how to compensate hard-hit countries. Moreover, USA, the world's second-largest emitter, is the only country to have withdrawn from the agreement twice (Maizland & Fong, 2025).

The Potential of Environmental Psychology

Environmental psychology is an interdisciplinary field that is quickly gaining ground, given the current

ecological crisis. This branch of psychology focuses on the interplay between individuals and their surroundings. Humans are understood to be in transactional relationships with their environments, constantly altering them and, in turn, being influenced by them. The term environment is defined broadly here and encompasses natural environments, built environments, social settings, and digital environments. Environmental psychology is highly application-oriented. Its goal is to enhance our relationship with the natural environment and make the built spaces that we occupy more humane. Climate change is a pressing concern for environmental psychologists worldwide. Many communities have begun to experience disruptions and displacements due to natural disasters and rising water levels. With these developments, the adverse mental health consequences of climate change, like uncertainty, anxiety, and feelings of loss, have begun to come to the fore (Palinkas & Wong, 2020). Eco-anxiety has been increasingly cited as a common response to ecological crises, including climate change. An APA survey published in early 2020 reported that over 50% of participants considered climate change to be the most critical issue today. About 68% of those surveyed said they had “at least a little ‘eco-anxiety,’” or anxiety about climate change. Several young adults mentioned feeling stressed over climate change in their everyday lives (Schreiber, 2021).

Contrary to common assumptions, the relationship between environmental attitudes and environmental behaviours has been found to be negligible (Ahuja & Dhillon, 2018). Therefore, an urgent task for practitioners in the field is identifying methods and means to encourage pro-environmental behaviour. So far, research indicates that attempts to promote climate actions can be most efficacious under specific conditions, for example, if they address important antecedents of a person's actions. Personal beliefs and values play important roles in determining climate-related behaviours. Regarding beliefs, individuals are more inclined to participate in climate change mitigation actions and endorse related policies if they perceive climate change as genuine, caused by human activities, and resulting in adverse effects (Val

Valkengoed et al., 2021). Four types of values seem pertinent to ecological behaviour. Two among these- hedonic values and egoistic values inhibit climate change mitigation actions because such actions can involve personal costs, at least in the short term. The other two sets of values- altruistic (e.g., helpful) and biospheric- encourage people to care for the environment. Those with strong biospheric values tend to see climate change as real and believe that their behaviours contribute to it. They are more inclined to support climate policies, practice environmental activism, and boycott companies that harm the environment. Emotions play a part here as well. Holding back from pro-ecological behaviours may elicit negative emotions, like shame. Anticipation of such emotions can foster climate actions. The stronger our biospheric values are, the more likely we are to worry about climate change. This may increase feelings of responsibility to take appropriate action (Bouman et al., 2020). Kurth & Pihkala (2022) believe that eco-anxiety can be conceptualised as a phenomenon that sensitises us to challenging decisions about climate change and brings a certain sense of reflection aimed at helping us deal with the difficulties we encounter. It can be a valuable emotion in the way it motivates us to make better decisions about the environment. However, others have argued that high amounts of eco-anxiety is detrimental to mental health in the form of distress, rumination, somatic disturbances, and hopelessness (O'Brien & Elders, 2021). It can become clinically significant when it becomes hard to manage and impacts one's daily functioning (Clayton, 2020). The main issue with “eco-anxiety” is that it is still a poorly understood concept and warrants further research, especially with the Indian population. The operationalization of the term is still unclear, with varied definitions and terminology being used in research (Coffey et al., 2021).

Social factors play a critical role in shaping ecological behaviours. Research has found people to be more likely to engage in pro-ecological behaviour when they perceive that other members of their group support biospheric values and participate in climate actions too (Bouman, Steg & Zawadzki, 2020). Furthermore, people engage in climate actions when

they think this would demonstrate something positive about them. At workplaces, corporate environmental responsibility can increase employees' motivation to engage in climate actions (Sharpe et al., 2022). Specifically, the more employees feel that their organization contributes to protecting the environment, the more they feel responsible and committed to taking action. The findings have strong implications for designing effective interventions. For example, given the power of social factors, highlighting that most of one's group members care about the environment and act to save it can promote climate actions. It may also be helpful to emphasize that an increasing number of people are starting to adopt the behaviour. Discussions with peers can promote actions by fostering an understanding of novel options and addressing questions about the feasibility of ecological behaviour. Environmental goals set by organizations can motivate employees who are not strongly motivated to protect the environment, as they may embrace organizational goals as their own (Sharpe et al., 2022).

In recent years, studying behavioural policy interventions based on nudges has become increasingly popular. Thaler and Sunstein (2003) define nudges as behavioural interventions that make certain actions more salient. To qualify as a nudge, the designers of the intervention must use only the power of suggestion and offer no economic incentives for compliance with certain behaviours. Chakravarty and Mishra (2019) analysed the results of a field experiment that involved providing an environmental nudge by reinforcing pro-ecological norms. Posters asking people to use a reduced amount of paper were placed on printers and in office cubicles of two IT firms around Delhi. A third firm served as the control and did not get the nudge. During the intervention, employees in offices that received the conservation message used fewer sheets in comparison to the pre-intervention period. Once the nudge was removed, the paper wastage for one firm that received it did not increase significantly over the next month and a half. For the other firm, it did, but was lower than the pre-nudge period. Firms that received nudges demonstrated a reduction in the amount of paper used many weeks after the nudge was removed.

For the firm serving as the control group, the usage or wastage of paper did not change significantly.

Consumer behaviours and household practices are important targets for environmental psychology interventions. As an example, an intervention was designed and implemented in 217 German households to promote the prevention of food wastage (Schmidt, 2016). The intervention was based on a theoretical framework created by the authors using certain perceptual, motivational, and behavioural predictors. It consisted of components such as sharing knowledge, public commitment, and goal setting. The central objective was to prevent food wastage in the homes by altering participants' relevant food behaviours (e.g., planning grocery shopping in advance). The intervention was found to be effective by revealing higher levels of improvement in the experimental group than the control group four weeks after its implementation. Hanss and Bohm (2013) investigated whether the provision of information to consumers about how they can help reduce environmental damage through daily purchasing decisions could strengthen their intent to buy sustainable groceries, promote buying of sustainable groceries, and strengthen self-efficacy in the area of sustainable development. The findings indicated that the intervention worked by augmenting participants' intentions to purchase ecological products and the purchase of such products. Yet effects on self-efficacy beliefs were nonsignificant, indicating the need for more long-term interventions.

The research presented above demonstrates just some of the ways in which environmental psychology can contribute to addressing the climate change crisis and other ecological issues. At the same time, practitioners must realise that several structural and psychological barriers prevent the behaviours that would help. Many people are unaware of the exact nature of the problem. They may not know what to do differently or may discredit experts. Cognitive barriers may include thinking that ecological degradation occurs due to unchangeable factors. A person may come to believe that others should take action or that their own actions will do little to help. He or she may perform certain actions they believe are helpful, but in

reality are not. Lack of time, money, low efficacy, and hopelessness are also commonly acknowledged barriers (Quimby & Angelique, 2011). In a seminal paper, Gifford (2011) suggested that while people do engage in some helpful action, many could do a lot more. Yet they are hindered by seven “dragons of inaction” or psychological barriers which are (i) limited cognition about the issues (ii) problematic worldviews that prevent pro-ecological attitudes and behaviour (iii) comparisons with key others (iv) sunk costs (v) discrediting of experts (vi) perceived risks of change, (vii) inadequate behaviour change. According to Gifford, these barriers can be over-ridden, although it shall take time and persistent effort. Targeted messages, rewards or incentives, strong leadership, improved knowledge of technology, enabling infrastructure, inclusive policies, clear goals, direct feedback, norm-setting, and the spreading of norms through social networks can be immensely useful. However, for long-lasting change, environmental psychologists must work closely with other disciplines, government agencies, and technical experts.

Another key area for future research is understanding how Indian psychology with its emphasis on the interconnectedness of individuals and environments, indigenous wisdom and spiritual traditions, can be employed to promote sustainability. Drawing on the concept of mindfulness, Indian psychology promotes awareness of one's impact on the environment and encourages sustainable consumption along with simple living. Indian traditions are rooted in a deep reverence and consequent sense of responsibility towards the environment. This perspective suggests that sustainability is not just an environmental issue, but a psychological and behavioural one. Recognizing the diversity of Indian cultures, Indian psychology, through approaches like action research, can tailor sustainability interventions to specific contexts and values. Integrating mindfulness and ethical considerations into the Indian educational system can help students develop a deeper understanding of sustainability from a cultural perspective. Engaging key Indian communities in ecological projects can foster a greater sense of ownership and responsibility. Finally, applying Indian

psychological principles to organizational culture can promote sustainability within businesses and other institutions.

Conclusion

Environmental psychology can enhance our comprehension of the actions that contribute to climate change, particularly through the development of behavioural models grounded in empirical research. It can also enable more informed decisions on how communication and dissemination methods can be used with the public and offer valuable insights into how people react to various policy measures. The strength of the field lies in its ability to work with various stakeholders and tailor interventions accordingly. This is important because strategies of behaviour change that are effective for large corporations may not necessarily translate well to individuals and households due to factors such as emotional reactions to available choices. Yet, focusing on individuals is crucial, as the success of interventions may depend on their match with the specific traits or habits of individuals. In some countries, policymakers are regularly seeking guidance from behavioural scientists to develop improved conceptual frameworks and effective implementation strategies to protect the environment. It is becoming increasingly critical to develop such collaborations in India as well. Of course, the foundation for this will come from an augmentation of the full-time courses offered in Indian Universities and the creation of employment opportunities for those who pursue environmental psychology.

References

- Ahuja, K. K., & Dhillon, M. (2018). Whose environment is it anyway? A study of environmental attitudes and behaviour among Indian female college students. *IAHRW International Journal of Social Sciences Review*, 6(1), 67-72.
- Anthwal, A., Gupta, N., Sharma, A., Anthwal, S., & Kim, K. H. (2010). Conserving biodiversity through traditional beliefs in sacred groves in Uttarakhand Himalaya, India. *Resources, Conservation and Recycling*, 54(11), 962-971. <https://doi.org/10.1016/j.resconrec.2010.02.003>
- Awasthi, P. (2024, November 8). In first 9 months of 2024, Kerala suffers most fatalities due to extreme weather events. *The Week*. <https://www.theweek.in/news/india/2024/11/08/in-first-9-months-of-2024-kerala-suffers-most-fatalities-due-to-extreme-weather-events.html>
- Bouman, T., Steg, L., & Zawadzki, S. J. (2020). The value of what others value: When perceived biospheric group values influence individuals' pro-environmental engagement. *Journal of Environmental Psychology*, 71, Article 101470. <https://doi.org/10.1016/j.jenvp.2020.101470>
- Bouman, T., Verschoor, M., Albers, C. J., Böhm, G., Fisher, S. D., Poortinga, W., Whitmarsh, L., & Steg, L. (2020). When worry about climate change leads to climate action: How values, worry and personal responsibility relate to various climate actions. *Global Environmental Change*, 62, Article 102061. <https://doi.org/10.1016/j.gloenvcha.2020.102061>
- Chakravarty, S., & Mishra, R. (2019). Using social norms to reduce paper waste: Results from a field experiment in the Indian Information Technology sector. *Ecological Economics*, 164, Article 106356. <https://doi.org/10.1016/j.ecolecon.2019.106356>
- Clayton, S. (2020). Climate anxiety: Psychological responses to climate change. *Journal of Anxiety Disorders*, 74, Article 102263. <https://doi.org/10.1016/j.janxdis.2020.102263>
- Coffey, Y., Bhullar, N., Durkin, J., Islam, M. S., & Usher, K. (2021). Understanding eco-anxiety: A systematic scoping review of current literature and identified knowledge gaps. *The Journal of Climate Change and Health*, 3, Article 100047. <https://doi.org/10.1016/j.joclim.2021.100047>
- Frumkin, H., Bratman, G. N., Breslow, S. J., Cochran, B., Kahn, P. H., Jr., Lawler, J. J., Levin, P. S., Tandon, P. S., Varanasi, U., Wolf, K. L., & Wood, S. A. (2017). Nature contact and human health: A research agenda. *Environmental Health Perspectives*, 125(7), Article 075001. <https://doi.org/10.1289/EHP1663>
- Gifford, R. (2011). The dragons of inaction: Psychological barriers that limit climate change mitigation and adaptation. *American Psychologist*, 66(4), 290-302. <https://doi.org/10.1037/a0023566>
- Hanss, D., & Böhm, G. (2013). Promoting purchases of sustainable groceries: An intervention study. *Journal of Environmental Psychology*, 33, 53-67. <https://doi.org/10.1016/j.jenvp.2012.10.002>
- Igini, M. (2024, June 6). 5 biggest environmental issues in India. Earth.Org. <https://earth.org/environmental-issues-in-india/>
- Kurth, C., & Pihkala, P. (2022). Eco-anxiety: What it is and why it matters. *Frontiers in Psychology*, 13, Article 981814. <https://doi.org/10.3389/fpsyg.2022.981814>
- Maizland, L. & Fong, C. (2025, January 21). Global climate agreements: Successes and failures. *Council on Foreign Relations*. <https://www.cfr.org/background/paris-global-climate-change-agreements>
- O'Brien, A. J., & Elders, A. (2021). Climate anxiety: When it's good to be worried. *Journal of Psychiatric and Mental Health Nursing*, 29(3), 387-389.

<https://doi.org/10.1111/jpm.12817>

Palinkas, L. A., & Wong, M. (2020). Global climate change and mental health. *Current Opinion in Psychology*, 32, 12-16. <https://doi.org/10.1016/j.copsyc.2019.06.023>

Quimby, C. C., & Angelique, H. (2011). Identifying barriers and catalysts to fostering pro-environmental behavior: Opportunities and challenges for community psychology. *American Journal of Community Psychology*, 47 (3-4), 388-396. <https://doi.org/10.1007/s10464-010-9389-7>

Schmidt, K. (2016). Explaining and promoting household food waste-prevention by an environmental psychological-based intervention study. *Resources, Conservation and Recycling*, 111, 53–66. <https://doi.org/10.1016/j.resconrec.2016.04.006>

Schreiber, M. (2021, March 1). Addressing climate change concerns in practice. *Monitor on Psychology*, 52(2). <https://www.apa.org/monitor/2021/03/ce-climate-change>

Sharpe, E., Ruepert, A., van der Werff, E., & Steg, L. (2022). Corporate environmental responsibility leads to more pro-environmental behavior at work by strengthening intrinsic pro-environmental motivation. *One Earth*, 5(7), 825-835. <https://doi.org/10.1016/j.oneear.2022.06.006>

Thaler, R. H., & Sunstein, C. R. (2003). Libertarian paternalism. *American Economic Review*, 93(2), 175-179.

Ulrich R. S. (1984). View through a window may influence recovery from surgery. *Science*, 224(4647), 420–421. <https://doi.org/10.1126/science.6143402>

van Valkengoed, A. M., Steg, L., & Perlaviciute, G. (2021). Development and validation of a climate change perceptions scale. *Journal of Environmental Psychology*, 76, Article 101652. <https://doi.org/10.1016/j.jenvp.2021.101652>

Wilson, E.O. (1984). *Biophilia: The human bond with other species*. Harvard University Press.