

A Relational Approach to Shifting Gen Z and Millennial Environmental Beliefs



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Abstract: While survey data identifies that most members of Gen Z and Millennial generations are anxious about climate change, supportive of climate activists, and agree that climate change is anthropogenic, that same data fails to nuance these generations' intersectional and relational environmental beliefs. The problem is both methodological and rhetorical, because assumptions built into closed-question public opinion surveys can fail to match younger generations' perceptions on the environment. Additional research methods concerned with capturing these relations, including the cognitive interviews that survey designers already employ, could illuminate these environmental perspectives. We see models for this approach in the preliminary interviews used in large-scale surveys, in the field of climate psychology, and in arguments for ecological rhetoric in communication studies. Building from these fields, we provide example questions that are emblematic of these relational environmental and argue for increasing numbers of smaller, qualitative studies which investigate the many relations that younger generations already experience.

Keywords: methods, methodology, survey design, generational research, climate psychology, ecological rhetoric

Through numerous public opinion surveys, a great deal of data has been gathered about how Millennials (born between roughly 1980-1996) and members of what has become known as Generation Z, or “zoomers” (born 1997-2012), feel about a range of environmental issues, including green consumerism, biodiversity loss, and climate change (Dimock, 2019). American Millennials and Gen Z generations tend to share many opinions, and typically score within a few percentage points of each other, or even within a study’s margin of error, in response to most questions. For example, we know that somewhere between 89% and 98% of Gen Z believe climate change is happening (YPulse, 2020; Jenkins, 2020). We also know that a smaller number, about 54-56% of Millennials and Gen Z, say global warming is anthropogenic (Parker & Igielnik, 2020), and about 49% believe that the phenomenon can be slowed, but not stopped (Jenkins, 2020). These numbers generally align with other survey results, since about 44% of Millennials and Gen Z feel that the environment has passed “the point of no return” (Deloitte, 2021). Members of these generations also report feeling increasing helplessness and anxiety, as 79% worry about climate change with some frequency; over half worry about climate change more than once a month, 18% worry about it multiple times a week, and 13% worry about the issue daily (YPulse, 2020). These younger generations are experiencing what some call an “atmos-fear,” partially derived from the media they consume (Kundzewicz *et al.*, 2020). Between 40 and 45% of Millennials and Gen Z report engaging with climate change content on social media, a substantially higher percentage than Gen X or Baby Boomers (Tyson *et al.*, 2021, p. 25). This anxiety can also manifest in seemingly contradictory ways, as while roughly 62% “strongly” or “somewhat” support climate activists (Ballew *et al.*, 2020), only 32% of Gen Z and 28% of Millennials have taken action to address climate change in the last year (Tyson *et al.*, 2021, p. 5). This action is unlikely to happen at the individual level, either, as only 33% of American Millennials always recycle, compared with 51% of all American adults; Millennials likewise lag in other common actions, such as reusing containers, minimizing water usage, and unplugging electronics (Head, 2013). Further, while 42% of Gen Z reports changing what they buy because of climate change (YPulse, 2020), this is not always reflected in their actual purchases, nor does it show up in environmental volunteering efforts, where they likewise fall behind older generations (Coughlin, 2018).

Public survey data like this can distinguish how younger generations get their information, how they socialize, what they see as important, and which climate actions they take, yet it is less able to identify why contradictions exist in these positions. Unfortunately, it also does little more than identify that younger generations are increasingly rejecting the label “environmentalist.” Just 32% of Millennials say the term describes them very well, compared with at least 40% among all older generations (Pew, 2014). Several possible reasons for this increased reluctance stand out. First, because younger generations may see individual action as offering little impact to global climate change, and because they may be aware that 71% of global carbon emissions are produced by just 100 companies, they may not see their actions or identities as making much difference—reusable water bottles and straws paling in impact to industrial-scale plastic waste, for example (Griffin, 2017). The label of “environmentalist” may suggest an identity more aligned with the greenwashed capitalism of Baby Boomers than one to which they feel much connection. Finally, the term “environmentalist” can appear like a stand-alone description, and younger generations are more attuned toward the intersectional relationships between racial, economic, political, social, and environmental issues. This focus on intersectionality means that environmental issues that engage these interrelationships take precedence. Rather than concentrating on wilderness conservation or species preservation, as older generations of environmentalists might, Millennial and Gen Z populations gravitate towards explicitly intersectional and relational issues. Unfortunately, large-scale public opinion surveys are unlikely to locate why younger generations hold these beliefs, and instead simply identify that they exist.

While large-scale public opinion surveys about the environment can identify some societal trends, they often fail to capture nuance within shifting generational positions. Significantly, we can define this problem as both rhetorical and methodological. A rhetorical difficulty develops because the generations studied by these surveys appear to have beliefs that are unlikely to be fully uncovered by the questions being asked. Most large-scale public opinion surveys rely on closed questions refined to separate opinions into discrete categories, but when the issue at hand involves complex, interrelated values and commitments, as do modern “environmental” topics, those same methods fail to adequately probe the nuances of public opinion. We may know *that* younger generations fail to identify with the term “environmentalist,” for example, but we know little about *why*, as the multiple hypotheses

offered above suggest. This is also a methodological problem, as the method fails to fit the audience it is being used to discover more about. In response, we—as members of Millennial and Gen Z generations—argue that changing generational perspectives should encourage a set of rhetorically appropriate research practices concerned with distinguishing not just *that* environmental beliefs are shifting, but also *why* they are shifting and *how* the values and concerns behind these opinions overlap. In this brief article, we advocate for a relational approach to public opinion-oriented environmental research by grounding research methods in the assumptions of ecological rhetorics. We also identify an existing disciplinary sympathy in the field of climate psychology, one that could be more fully engaged in the future development of public opinion studies. Finally, we locate example questions that could be used in future generational interviews, if only as a starting point for the hard work of explicating shifting generational opinions on the environment. Ultimately, we argue for advancing smaller, qualitative studies which investigate the many relations that younger generations already experience.

Relational Environmentalism

Nikayla Jefferson, a Sunrise Movement organizer, explains that modern, youth-led environmental movements are intersectional, meaning that the demographics of those who think of themselves as “environmentalists” have increasingly shifted to center Black and Indigenous activists, as well as those in other marginalized communities. This definition of intersectionality aligns with Kimberlé Williams Crenshaw’s (1989) initial use of the term to illuminate the multidimensionality of Black women’s experiences in anti-discrimination legal contexts. In her comments, Jefferson also suggests that recent youth-led environmental movements are not only more intentionally diverse, but that those in environmental movements also see “environmental” issues as overlapping and interconnected with many other social, economic, and political ones. According to an op-ed posted in response to Joe Biden’s 2018 presidential campaign, Jefferson explained, “This isn’t just the white climate kids’ movement anymore—this is an intersectional movement for justice. Racial justice, economic justice, immigration justice—its’ all climate justice” (2020). A broadened concept of who environmentalists are goes hand-in-hand with an expansion of the concerns they share. The Sunrise Movement is not alone in this sentiment either, as Fridays for the Future and Extinction Rebellion have offered similar opinions, with Extinction Rebellion US offering the following as one of their demands:

a just transition that prioritizes the most vulnerable people and indigenous sovereignty; establishes reparations and remediation led by and for Black people, Indigenous people, people of color and poor communities for years of environmental injustice (n.d.).

This plural, intersectional framework for thinking about the environment considers the needs of many groups and their multiple, diverse perspectives—in contrast with the perception of older forms of environmental commitments, which were dominated by white, Western voices and white, Western concerns.

Another way to understand the goals of these climate activist groups is to consider how the term “environmental justice” has been frequently replaced by “#intersectionalenvironmentalism,” a social media hashtag *and* perspective on the environment. While the goals of environmental justice and intersectional environmentalism are largely the same, they can be differentiated by how environmental justice emphasizes, as activist Paul Meija explains: how “environmental degradation affects peoples,” whereas attention to intersectionality stresses how people “bring [their] struggles to different places” (Oglesby, 2021). This distinction is one of emphasis away from how the environment *impacts* people to how the environment is *comprised of* people. In this formation, intersectionality becomes a lens for identifying the multiple, varied ways that inequities and power imbalances function together, on and through people’s bodies, in the locations and environments they inhabit. A focus on intersectionality allows for multiple perspectives to be valued within an attention to environmental concerns, broadly understood.

In much the same way that Baby Boomers, whether they were environmental activists or not, experienced a shift in attention toward environmental policy issues throughout the 70s (albeit before embracing capitalism and deregulation in the 1980s), younger generations are today experiencing a shift in environmental beliefs. The difference, however, is that for Millennial and Gen Z generations, the “environment” is less likely to be seen as a distinct category of concern—whether for policy action or as a region in the world—and therefore “environmentalist” is perhaps less attractive as a unique identity. Younger generations’ understanding of environmental concerns can be described as increasingly relational, where distinctions between what “counts” as “environmental” is blurred within work, social life, social media, consumerism, mental health, and identity—as well as with social justice. What is frustrating about public opinion surveys on the

environment, then, is why they seem to rely on questions that fail to probe these relations.

Survey Methodology

Many public opinion environmental surveys employ yes/no, Likert scale, or multiple-choice questions—ones that can be tabulated from thousands of respondents. These surveys gather these closed question responses to affirm or disprove hypotheses about environmental beliefs across populations and assist environmental communication efforts. However, in most survey designs, these closed questions are whittled down from a larger bank of potential questions and answers. This approach to pre-survey research emerged from the Cognitive Aspects of Survey Methodology (CASM), in which researchers employed insights from cognitive psychology to create heuristics for pre-survey cognitive interviews (CIs) (Jabine *et al.*, 1984). CASM survey design frequently employs these interviews, which Paul Beatty (2003) has defined as a methodology that uses draft questions to collect information about survey responses, to “help determine whether the question is generating the information that its author intends” (Beatty & Willis, 2007, p. 288). CIs often use of think-aloud protocols, wherein survey participants answer with detail that elucidates what they are thinking about as they formulate their answers. This method, combined with more open questions, can help cut down on errors and “satisficing” behavior, wherein survey participants disengage with questions, offering either hasty answers or answers the participants believe the survey questions—or researchers—“want” (Lyberg & Weisberg, 2016, p. 32). This method appears to work, too, insofar as it improves the number of correct details and only slightly increases the number of incorrect details (Memon & Gawrylowisz, 2019).

Pre-survey cognitive interviews have become extremely useful in social science fields where gathering public opinion on complex topics is key, including surveys of environmental beliefs. While think-aloud interview protocols were initially intended to enhance participant recall and information retrieval in situations where participants witnessed a specific event, a CASM-based CI can also have an intentional structure, one focused on determining cognitive response to potential questions. This structure is thought to be “central to designing questions and to understanding and reducing sources of response error” (Willis, 2005, p. 23). Roger Tourangeau *et al.* (2000) noted that “high-road responses” (i.e., quality thinking on behalf of the participants that leads to honest answers) fall into specific cognitive categories, and suggested that researchers should

design CIs, and therefore surveys, through these question categories. Because of these advantages, CIs became a default survey design mechanism for many (Willis, 2005).

Environmental opinion surveys will frequently rely on CIs, talk-aloud protocols, and open-ended questions, but *only* as a preliminary mechanism to design closed-question surveys. The Pew Research Center, for example, explains that their researchers create a series of pilot studies, which use open-ended questions:

to discover which answers are most common. They will then develop closed-ended questions based off that pilot study that include the most common responses as answer choices. In this way, the questions may better reflect what the public is thinking, how they view a particular issue, or bring certain issues to light that the researchers may not have been aware of (n.d.).

Open-ended questions are there for exploratory purposes, as they assist in gathering ideas, recognizing new areas of research, or clarifying questions. Other studies (Jennifer Price *et al.*, 2014, among many others) have explained how workshops, conversations, and interviews, conducted with a much smaller sample population of intended survey participants, have helped design closed-question surveys. Frustratingly, however, the results from these qualitative methods are used to tune closed-ended questions; the results from the open-ended workshops, conversations, and interviews are rarely, if ever, coded or published.

To refocus—our aim here is neither to dispute research on survey design and methodology, nor refute the results from those quantitative surveys—after all, their findings have built the existing knowledge we have about changing environmental beliefs. However, we are more interested in the benefits of studies (quantitative, qualitative, and mixed methods) that emphasize intersectional relations, especially when they are designed for the generational groups that are highly concerned with these same intersectional environmental relationships. We believe that the contextual richness of the preliminary methods mentioned above, including features of cognitive interviews, can be more than a means to identify survey language for closed questions, which, despite their reliability, can overly rely on “problematic response options” (Robinson & Leonard, 2018, p. 97). The intersectional relationships that younger generations increasingly have with environmental issues can and should be explored through methods that bring about and represent their complexity. Studies that

explore these relationships can better determine, as social policy research Robert Walker notes, “what things ‘exist’ [rather] than determin[ing] how many such things there are” (1985, p. 3). These approaches need not be solely qualitative, so long as they interrogate the relational characteristics of environmental belief. Open-ended questions in particular offer more opportunities to think through intersectional relationships than closed-ended questions; reporting results may rely more on generalizations, or what William Firestone (1993) calls “analytic generalizations,” but are likely to be more representative of how younger generations make sense of environmental issues.

Ecological Rhetoric

As a methodological instrument, closed questions are unlikely to elucidate the subtle differences in why environmental opinions are shifting and are especially unlikely to show specific relationships between different environmental issues. For example, while they can identify whether a participant group believes combating environmental racism is important, they are less equipped to locate why a participant group feels the way they do about the connections between environmental racism and their decisions as voters, roles as students, choices as media users, or actions as consumers. If these surveys were grounded by assumptions that intentionally valued complex relations, including the relations that exist in the lives of survey participants, they might discover answers with additional depth. This methodological attention appears even more important for research on younger generations’ environmental concerns, as Gen Z and Millennial generations appear to rely less on the categorizations established by previous generations. While closed questions can and do gather significant data about these groups, this methodology appears to lack some measure of audience awareness.

An ecological rhetoric perspective on survey question design would take the relationships between people, places, non-human animals, and non-human things seriously as a fundamental assumption in question design. Ecological rhetoric developed in the work of Richard Coe (1975), Marilyn Cooper (1986), Margaret Syverson (1999), Jenny Edbauer (2005), and others who framed public rhetoric from an ecological standpoint and emphasized how language flows through a series of complex exchanges and mutations. Their models of public discourse attend to the morphing dynamics of meaning and how communicative and rhetorical acts change and interact with other ideas, actors, and systems. Rhetoric, in this understanding, is less about intentional persuasion and

more descriptive of the capacity to perceive and act within a complex ecology of forces. Rai and Gottschalk Druschke argue that rhetoric is:

tethered to the many forces and tools, histories and consequences, ideas and discourses, things and processes, desires and hopes, public memories and cultural narratives, people and other beings, symbols and materialities, ways of knowing and relating, and all manner else, that constitute and enable the powers of persuasion in any particular place. (2018, p. 2)

An ecological definition of rhetoric situates it as a nuanced observation of, and engagement in, relations—one that bears a striking similarity to ecology.

Connections between rhetoric and ecology have been expanded upon by DiCaglio *et al.* (2018) and their recognition that “ecology does not study any organism in isolation, but studies how these organisms interact within larger contexts, environments, or systems” (p. 440). Because of this methodological similarity, they consider how ecology and rhetoric could operate together in research and science communication efforts. Druschke and McGreavy (2018) also make this connection about the significance of rhetoric *for* ecology. “Like ecology,” they explain, “rhetoric focuses on multiple scales and seeks to understand the quality and outcomes of many different types of interactions. [...] Like ecology, it focuses on relationships, and how these dynamically change over time due to the internal and external conditions in which they occur” (p. 51). Significantly, the connections between rhetoric and ecology also mirror what younger generations believe about the environment. That is, like younger generations’ perspectives on the environment, an ecological rhetoric approach to relations has also “retreated from the term “environmentalism,” which can tend to position “the environment” as a fixed and passive container separate from human activity” (Wells *et al.*, 2018, p. 7). Wells *et al.* suggest an approach to communicative relationships can be built from the foundations of ecological thought—an approach that values relational connections, the capacities that can be maintained through those relations, and the networks of concern that can emerge from those capacities.

What might an ecological rhetoric framework mean for generational public-opinion research on environmental issues? It might mean that the cognitive interviews, talk-aloud protocols, and open-ended questions are used as more than a preliminary mechanism to design closed-question surveys. It could mean

moving away from a methodological adherence and allowing for public opinion surveys to probe younger generations' environmental relations through smaller-scale conversations and interviews. Approaches could borrow from other fields, like climate psychology, that have been exploring similar ground in the last decade.

Climate Psychology

The field of climate psychology emerged from the larger discipline of environmental psychology in the early 2010s, as part of a trans-disciplinary approach to understand how environmental degradation, climate change, and biodiversity loss has impacted people's emotional and mental states. Much of this research came about because of a greater awareness of widespread feelings of anxiety, grief, distress, mourning, guilt, and impacts to mental health (Dodds, 2011). Work by Sally Weintrobe (2013), Rosemary Randall and Andy Brown (2015), Matt Adams (2016), and Donna Orange (2017) contributed to these commitments, though the definition and purpose of the movement might be best expressed by Paul Hoggett, and his explanation that climate psychology can offer:

a more complete understanding of the non-rational dimensions of our collective paralysis in the face of worsening climate change. It does this by focusing on the role of the emotions and psychic defences as they are manifest in individual lives and group experience and by examining the mediating role of identities and discourses in shaping meanings and facilitating or inhibiting action. (2019a, p. 10)

Hoggett's edited collection, *Climate Psychology: On Indifference to Disaster* (2019b), showcases how theories and research methods could be tuned to study climate psychology—with the additional goal of changing how researchers gather data.

Hoggett explains that we need to develop better methods for understanding people's reactions to our changing climate. He notes that while survey data explains that 90% of UK adults are aware of climate change, most are indifferent and apathetic towards the phenomenon (Hoggett, 2019a, p. 16). The next challenge is “to understand the many reasons why this is the case,” instead of simply stating the case (Hoggett, 2019a, p. 16). One method to address this gap in “why” has been to adapt qualitative methods, focus on smaller research studies, and emphasize interviews and conversations. Some of these methods are employed in applied

social work because of the growing recognition that social workers are increasingly the primary point of engagement with a public traumatized by the effects of climate change. The 2018 conference on *Ecology, Psychoanalysis and Global Warming*, followed by a special issue of the *Journal of Social Work Practice*, framed this commitment to new methodological approaches and highlighted smaller, qualitative studies, like Randall and Brown's (2015) carbon conversations project and Caroline Hickman's (2020) work with younger generations and climate anxiety. As an emergent field, climate psychology emphasizes an increasing realization: if we want to know more about how people experience environmental change, our methodological assumptions should likewise change. Further clarity could come from a move toward open-ended conversations and interviews that highlight the intersectional relationships people experience.

Question Design

While climate psychology researchers emphasize the importance of smaller scale interviews and conversation groups, rather than large, public opinion surveys, there are useful lessons to carry forward into designing questions that might better coordinate with how younger generations think about the environment. A good survey or interview question should probe the beliefs of participants and elicit "high-road" responses, i.e., responses wherein the participant is thinking through the relations suggested in the question. To do this, questions should also prompt participants to think aloud while responding and allow for open-ended answers. Here, climate psychology's beliefs about qualitative interview and conversational methods, and ecological rhetoric's awareness of relationality and intersectional commitments in communication are conjoined. Engagement with lessons from both fields of study could result in questions modelled after the CIs used as preparatory methods for survey design. Here, we offer examples of some possible questions, though these are examples only, and are of course devoid of context from a specific research project.

An example of a typical "closed" survey question might be: "How much do you think the federal government is doing to... Protect air quality?" The survey participant is then prompted to choose from the following: "too much; too little; about the right amount; no answer" (Tyson, Kennedy & Funk, 2021, p. 89). The results obtained from this question led to the survey report noting that "about two-thirds of Gen Zers (66%) and Millennials (65%) say the federal government is doing too little to protect air quality" (p. 50). Like many other closed questions, this one identifies a single

environmental issue and offers a snapshot of what a demographic believes. Answers are intended to be straightforward, easy to quantify, and lead to increased knowledge about an environmental belief.

In contrast, the following questions are open-ended and intentionally connect more than one environmental issue:

Q1: Imagine your friend and their family are grieving the loss of their home to an unprecedentedly severe hurricane. They have come to stay with you. After a long evening having dinner and light conversation, you bring up climate change, but they respond with “now is not the time to talk about that—we just lost our home.” How do you feel? How might you respond?

Q2: Has widespread Internet access made us more adept at combating climate change? Why or why not?

Q3: Are there particular social media platforms (TikTok, Twitter, Facebook, Instagram, Tumblr, etc.) that are best suited for creating social media posts about environmental concerns? Why do you think so? What makes them “better”? Could you give examples?

Q4: How long should a shirt you buy last? Why do you think so?

Q5: When was the last time you took a selfie with “natural” background? What kind of background was it? What is that setting supposed to say about you?

Q6: Have you ever paid for nature? Could you describe a situation where you did or would pay for an experience with the environment?

In these questions, interview participants are asked to associate a set of relations. In Q1, participants are prompted to connect physical and emotional loss, friendships, and the anxiety of climate change. Q2 and Q3 focus on the benefits of networked communication to the formation of public opinion and the connection between opinions and actions, with Q3 specifically attuned to how participants understand the value of specific platforms for creating and delivering environmental information. Q4 is a simpler prompt, but aims to engage participants’ opinions about personal image, fast fashion, waste, and their role as consumers. Q5 again draws in participants’ beliefs about identity, the environment, and social media platforms, while Q6 asks participants to consider consumerism and their experiences with forms of nature that exemplify their beliefs about the “environment.” In each of these questions, interview participants are prompted to make connections between multiple relations, and

engage in higher-order levels of thinking. Of course, these questions may elicit responses of “I don’t know,” itself an important reaction (Schuman & Presser, 1996, p. 2), but the goal is to engage the multiple relations that are in play for study participants.

Conclusion

Closed questions in large-scale public opinion surveys are still valuable as we strive to understand more about how environmental beliefs change as they are both passed down to, rejected by, or changed by younger generations. These methods provide a quantitative picture of shifting cultural and emotional difference, yet, like many quantitative studies, they often provide a “a snapshot of a phenomenon,” and generally fail to “to ascertain deeper underlying meanings and explanations” for the concepts under study (Rahman, 2017, p. 106). Smaller-scale, interview-based methods can fill in these gaps, especially as they can scrutinize the intersectional environmental relations that younger generations already experience. The choice of methodology, then, comes down to rhetorical appropriateness: closed questions may gather data about younger generations’ environmental opinions, but are unlikely to delve further into how and why they have those perspectives. As an audience under study, Gen Z and Millennial generations do not experience what counts as the “environment” in ways that align with the assumptions that have been built into many closed question surveys. An intersectional, relational perspective on the environment is not best represented by a reliance upon closed questions that have been keenly refined into discrete categories.

An ecological rhetoric approach to environmental opinion studies may not be immediately applicable to those more invested taking snapshots of younger generations’ perspectives. Smaller-scale studies, more time-intensive methods, and more difficult to analyze results are not applicable for every public opinion study. Further, analyzing and generalizing results from these approaches may also prove challenging, but the effort to examine more than one relation at a time, as we have explored above, perhaps delivered in conversational or interview formats, meets younger generations where they are—experiencing environmental issues as part of many other concerns. We believe that a more responsible approach to understanding Gen Z and Millennial environmental views should be likewise grounded in the assumptions made by those groups. There is room for increasing our attention to *why* perspectives are changing about the environment, not just that they are changing.

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