"Everybody Better Care": A Qualitative Exploration of Environmental Documentaries and Psychological Distance

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Severe problems like climate change, pollution, and biodiversity loss demand urgent action. Unfortunately, people can tend to view such problems as distant, failing to feel that they are relevant to their lives. Psychological distance may play a role in such perceptions. In order to understand how environmental documentaries, which are often used to educate the public about the environment, may influence perceptions of psychological distance, environmental film festival attendees and organizers were interviewed. Qualitative analysis revealed complex reactions to depictions of environmental issues in films, with perceived severity playing a key role in conceptions of spatial, social, and temporal distance. Additionally, participants expressed complicated reactions to documentaries, often feeling inspired and discouraged in response to the same film. Theoretical implications for researchers and practical implications for environmental communicators are discussed.

Keywords: documentaries, psychological distance, environmental communication, climate change

Environmental issues like climate change, pollution, and biodiversity loss threaten the wellbeing of humans and ecosystems across the planet. Media and events like film festivals that showcase environmental documentaries play an important role in educating the public about the environment and the threats it faces (Hughes, 2011; Norman, 2000). Documentaries have been used to raise awareness and prompt action related to many environmental topics, including wildlife conservation (Hughes, 2011), air pollution (Tu et al., 2020), animal agriculture (Lockwood, 2016), and climate change (Bieniek-Tobasco et al., 2020). Unfortunately, the public does not always view environmental problems as urgent. For example, although 72% of Americans believed climate change was occurring in 2020, only 43% thought it would pose a risk to them personally (Marlon et al., 2020).

Psychological distance from environmental problems can affect concern and willingness to act (Sargisson & Schöner, 2020). Media have the potential to make environmental problems feel near rather than distant

(Breves & Schramm, 2021; Loy & Spence, 2020; Schuldt et al., 2018; Duan et al., 2019), which could make media portrayals of environmental problems valuable in the public causing people to take action or support pro-environmental policies. However, bringing a concerning issue too close may evoke fear and inaction rather than progress (McDonald et al., 2015). Because portrayals of environmental issues can prompt both constructive and undesirable responses, it is important to understand how people react to media focused on these problems. The present research focuses on environmental documentaries shown during virtual environmental film festivals. Through semi-structured in-depth interviews, this work will help illuminate how people process media depictions of environmental problems, how documentaries affect perceptions of psychological distance, and how these perceptions may influence willingness to address environmental issues. Additionally, interviews with film festival organizers allowed for a comparison between intended and actual impacts of environmental films. Findings add to our understanding of psychological distance in relation to environmental problems and may help inform efforts to educate the public through environmental media and film events.

Literature Review

Perceptions of Environmental Issues

People often view environmental issues as distant. A survey of Gulf Coast residents in the United States showed that people's beliefs about the likelihood of sea level rise were associated with more distant future time frames, suggesting respondents viewed the topic as temporally distant (Shao et al., 2020). Meanwhile, Anderson et al. (2007) revealed that living conditions impacted whether respondents viewed water pollution as a community issue. These findings indicate that, while an environmental issue may impact a community, segments of the community may be more or less aware of it based on how likely they are to encounter the problem in their everyday lives.

Climate change is also frequently viewed as a distant issue, even if it is perceived as serious. In a study spanning multiple countries, individuals associated climate change with far off impacts like melting ice (Lorenzoni et al., 2006). Few respondents thought about local impacts or human health repercussions which, according to Lorenzoni et al. (2006), revealed that climate change was viewed as distant and not personally relevant. Consistent with this idea, research conducted in four countries found that perceived severity of environmental problems increased when people considered the issues at global or continent scales rather than country or local scales (Uzzell, 2000). Similarly, Spence et al. (2012) found that respondents in Great Britain believed the impacts of climate change would be worse in developing countries. These findings indicate that people often view environmental

issues as somewhat detached from their daily lives. A contributing factor to this view could be psychological distance.

Psychological Distance

Trope and Liberman (2010) defined psychological distance as "a subjective experience that something is close or far away from the self, here, and now" (p.440). This distance, they argue, is related to construal level, with more distant concepts being thought of more abstractly and more proximate concepts being thought of more concretely. Psychological distance has four dimensions: (1) spatial distance relates to how physically close or far away something is; (2) social distance refers to how similar someone views others to themselves; (3) temporal distance is about how close something is to the present; (4) and hypothetical distance can be defined as how likely something is to occur (Trope & Liberman, 2010).

Benefits of Issue Closeness

Psychological distance can impact concern for environmental problems and willingness to address them. Sargisson and Schöner (2020) found that people were less concerned about personal impacts and less willing to take action in response to water pollution as temporal, spatial, and probabilistic distance increased. Similarly, participants in a study by Zhang et al. (2014) rated water pollution as less severe as probabilistic and social distance increased. Conversely, reduced psychological distance can increase perceived relevance of information about environmental issues (Loy & Spence, 2020). Zhou et al. (2016) found that when people perceived air pollution as more personally relevant, risk perceptions increased, which the authors suggest could be helpful in garnering support for pollution reduction policies.

Interviews with college biology students have demonstrated that even people knowledgeable about the environment may tend to view environmental problems as spatially distant (Duke & Holt, 2022). Reducing perceptions of spatial distance can result in a more concrete understanding of environmental problems (Schuldt et al., 2018) and reduced spatial and temporal distance have been shown to be significantly related to increased threat perceptions of pollution, engagement in pro-environmental behaviors, and support for pro-environmental policies (Fox et al., 2020). Similarly, reduced spatial and temporal distance of policy benefits can lead to increased support for pro-environmental policies (Sparkman et al., 2021). Meanwhile, lower levels of hypothetical and social distance have been associated with greater concern for climate change and support for climate action policies (Singh et al., 2017). Moreover, interviews and participant observation in French households suggest that people who view plastic waste as a close issue across multiple dimensions of psychological distance tend to engage more consistently in proper recycling (Schill & Shaw, 2016). Finally, a review of literature on psychological distance and climate change found that

personally experiencing impacts of climate change, experiences in which the issue was psychologically close, can shape people's risk perceptions and willingness to take action (McDonald et al., 2015). Together, these findings suggest that reducing psychological distance can make environmental issues feel more relevant and serious, prompting greater support for personal action and policy solutions.

Drawbacks of Issue Proximity

However, it is possible for environmental issues to feel too close. McDonald et al. (2015) also included studies that showed decreased psychological distance may evoke stronger negative emotions, which the authors suggest could overwhelm people and discourage action. One experiment found that when effects of climate change were perceived as socially close, this resulted in significantly greater feelings of anger, fear, anxiety, sadness, guilt, and shame (Chu & Yang, 2019). Although Chu and Yang (2019) found that some of these negative emotions predicted increased concern, policy support, and pro-environmental behavior, the authors urge communicators to exercise caution in how they evoke negative emotions, as not all negative emotions resulted in positive outcomes. Doherty and Clayton's (2011) review of research on the psychological effects of climate change also points out that environmental issues can prompt anxiety, grief, and despair. Furthermore, Doherty and Clayton emphasize that people may engage in denial or apathy to cope. This suggests that it is possible for reduced psychological distance to backfire if negative emotions feel overpowering.

Media and Psychological Distance

Media has the potential to impact how distant people perceive issues to be. Viewing 360-degree videos can reduce temporal distance of environmental problems (Breves & Schramm, 2021), reading about local impacts of climate change can decrease social and spatial distance (Loy & Spence, 2020), and the way maps are formatted can increase spatial distance (Schuldt et al., 2018). Additionally, concrete colorful photographs showing specific effects of climate change reduce spatial and temporal distance compared to black and white, non-photographic images depicting the causes of climate change (Duan et al., 2019). Finally, playing video games focused on pollution can reduce multiple dimensions of psychological distance while motivating players to learn more or engage in efforts to reduce plastic pollution (Bekoum Essokolo & Robinot, 2022).

Effects of Environmental Films & Documentaries

Documentaries offer audiences the opportunity to view detailed, concrete depictions of environmental problems. These films can act as public pedagogy, illustrating how people impact the environment and educating

viewers on particular natural environments (Blewitt, 2011). Public pedagogy includes "spaces, sites, and languages of education and learning that exist outside the walls of the institution of schools" (Sandlin et al., 2009, p. 1), ranging from physical spaces such as museums to mass media. Films and film festivals are often used to teach audiences about social and environmental issues and inspire action to address problems (Patterson & Gaudelli, 2023). As environmental documentaries raise awareness of serious threats to specific species or entire ecosystems, they also expose viewers to new perspectives on the interconnections between humanity and the natural world (Blewitt, 2011). Apart from providing about issues, documentaries serve to sway audiences toward a certain viewpoint, often promoting a particular solution in response to a vividly depicted problem (Nichols, 2017). Together, these sources indicate that environmental documentaries are intended to educate and persuade from a pro-environmental perspective, motivating audiences to engage with and act to address environmental problems.

Recent research provides ample evidence that documentaries have the capacity to influence how people think about environmental issues, draw viewers close to problems, provoke conversation, and encourage action. In two experiments, Bieniek-Tobasco et al. (2020) found that watching an episode of a documentary series about climate change significantly increased risk perceptions and efficacy beliefs. Extensive surveys about air pollution before and after the release of the viral documentary *Under the Dome* revealed greater knowledge of health risks from pollution, increased risk perceptions, and more willingness to combat pollution after the film was released (Tu et al., 2020). Meanwhile, in an article examining his own reactions to a documentary about the negative environmental impacts of animal agriculture, Lockwood (2016) examined the key role emotion played as it "collapses the divide between individual/environment" (p.743). In other words, viewers were drawn close to the environment and the issues depicted through vivid representations and emotional involvement with the story.

A study of YouTube comments on a documentary about fossil fuel extraction in Canada revealed how documentaries can prompt impassioned conversation around a problem, allowing people from around the world to discuss their views on an environmental issue and the impact it might have on them (Piotrowski, 2015). Distance played an interesting role for these commenters, with some who were spatially close to the topic suggesting that viewers from outside Canada had no right to speak on the situation. At the same time, some viewers who were spatially distant but socially proximate, having experienced similar controversy in the country where they lived, felt that seeing similar issues in their home country allowed them to relate to the people and circumstances depicted in the film (Piotrowski 2015).

In order to apply best practices in environmental documentary-making and educate Alaskan residents about climate change, Banchero et al. (2021) produced a documentary about climate change in the region, putting particular

emphasis on local impacts and local solutions in order to portray the issue as something relevant to the community rather than a distant political debate. Surveys revealed that viewing the content increased concern and that portrayals of local impacts left viewers feeling motivated to get involved (Banchero et al., 2021).

The above findings demonstrate that documentaries can influence perceptions of distance as they draw viewers close to the problem, showcase issues relevant to nearby communities, or remind the audience of similar circumstances in familiar places. Filmmakers often use single events or exemplars to speak to larger issues (Nichols, 2017), thus it follows that such examples could provide a vivid avenue for drawing viewers close to an issue. Because documentaries influence perceptions of distance and because reductions in psychological distance may prompt both constructive and unhelpful reactions, it is important to understand how exactly documentaries impact perceptions of psychological distance and the effects that these perceptions of distance might have on emotions and behaviors. Therefore, the present work addresses the following research questions:

RQ1: Do environmental documentaries influence perceptions of spatial, social, hypothetical, and temporal distance? In what way?

RQ2: How do environmental documentaries impact emotional responses and pro-environmental behavior intentions?

RQ3: How do audience experiences align with event organizers' intentions?

Method

Interviews provide rich insight into how people think about and act in response to environmental issues (e.g. Carolan, 2010). Furthermore, Jones et al. (2019) suggest that qualitative methods may be particularly helpful in understanding effects of nature documentaries on people and how films might catalyze engagement in conservation. This study used semi-structured interviews to evaluate reactions to documentaries shown at environmental film festivals. Film festivals are one venue where people encounter environmental documentaries. Through these events, attendees expand their understanding of complex interactions between environmental and social issues, hear different perspectives on environmental topics, and learn about how to engage with environmental problems (Chiu & Arreglo, 2011; Norman, 2000). The present research focuses on environmental film festival attendees and organizers.

I reached out to five festivals about recruiting participants and received favorable responses from two. Because this research was conducted during the COVID-19 pandemic, all interviews took place virtually via a phone or video call. Eight interviews (N = 8) were conducted with attendees and two interviews (N = 2) were conducted with festival organizers. All but one of the interviewees was female, the majority were white, and ages ranged

from young adults to retirees. The semi-structured interviews lasted between 18 and 36 minutes. Examples of questions asked during the interviews of attendees include: *Which film did you watch? What was the film about? How did you feel about the issues covered in the film? What are the impacts of those issues? Do you think these issues could affect you personally?* Examples of questions asked during the interviews of film festival organizers include: *How do you select films for the festival? What do you hope viewers walk away from the experience with? How do you feel films can make a positive environmental impact?*

To recruit participants, film festival organizers shared information about this research in post-event emails and granted me permission to share information via chats during the virtual film screenings. Additionally, I reached out via social media to people who had publicly posted about attending the festivals. All participants have been assigned pseudonyms to preserve anonymity, and this project was exempted by the researcher's Institutional Review Board.

For the initial stages of data analysis, a phronetic iterative approach was taken (Tracy, 2020). Interview text was analyzed in an initial round of coding to identify prominent ideas. Next, these labels were organized into categories, resulting in second-level codes. Finally, common themes shared among interviews were identified and consistent codes were applied across interview transcripts. In the final stages, a more directed approach (Hsieh & Shannon, 2005) was taken to answer some of the research questions, and common themes were grouped into categories based on the dimensions (spatial, social, temporal, and hypothetical) of psychological distance. Additionally, participants' takeaways from the films and perceptions of environmental issues were compared and contrasted with festival organizers' intentions.

Results

Many participants had past involvement in film festivals as attendees or volunteers, and some self-identified as people highly involved in environmental topics through activism, education, or research. Two participants had not attended these festivals before and did not express a high level of prior involvement in environmental issues. Thus, participants' prior knowledge of and experience with environmental issues likely predisposed them to agree with many pro-environmental arguments and recommendations made in the films they saw. Such predispositions are not necessarily a problem and may in fact be expected. Scholars have noted that it is common for documentary audiences to view a film with their own preexisting beliefs about a topic and that filmmakers "often seek to tap into the assumptions and expectations [viewers] bring as a way of establishing rapport" (Nichols, 2017, p. 71-72).

The documentaries that participants discussed included *Maxima*, *San Marcos River Project*, *The New Corporation*, *Youth v Gov*, *Microplastic*

Madness, *Kiss the Ground, 2020 Urban Water Cycle Tour*, and *Gather*. According to interviewees, environmental issues covered in these films included negative impacts of mining, watershed health, water conservation, unsustainable corporate practices, plastic pollution, soil health, climate change, and unsustainable agricultural practices. All films were fairly critical of current practices and advocated for changes, rather than engaging in greenwashing to bolster the status quo. Each film had some sort of success element, showing progress towards addressing environmental issues, although some were more centered on success stories than others. A few films took a global perspective while others focused upon specific locales. Although these films varied in content and scope, they all provided information about environmental problems and solutions.

Impacts of environmental documentaries on psychological distance

Spatial Distance

Many participants noted that people everywhere would be affected by problems portrayed in the documentaries. Interviewees noted that problems like microplastics and insufficient government action to protect the environment affect many different people and places. Additionally, participants expressed a desire to see people in many places concerned and involved: "Everybody better care" (Alice) about these problems, and people around "the whole world" must recognize that "we're in it together" (Beth). At the same time, there was a recognition among some that certain areas could be impacted more severely, such as rising sea levels affecting Bangladesh and New Orleans.

Many participants used phrases close to "not in my backyard," however it was never in relation to themselves and instead associated with people who did not care about environmental issues. Alice said that businessmen disregarded the impacts of mining because they thought "it's not in my backyard. So, I don't care. It doesn't count." Similarly, Jane and Helen felt that people disregarded the negative effects of plastics and pipelines because the problems were not in their backyards. This indicated a belief that spatial distance might dampen concern for environmental issues, but that interviewees saw others as more affected by this than themselves.

Altogether, interviewees viewed issues as spatially close, while assuming others were more likely to see the problems as spatially distant. Moreover, the suggestion that worse impacts could occur in specific regions indicated that some interviewees did maintain some level of spatial distance when thinking about the most severe consequences of these problems.

Social Distance

Participants also expressed that these issues would impact all kinds of people, including people like themselves. Fiona noted that even though "the

people who are most impacted are probably currently the most interested," "everyone should be concerned" about the loss of indigenous food." Similarly, Helen felt that although "there might be people who seem to be more impacted… or who are more vocal or educated," everybody needs a healthy environment and should be concerned about environmental preservation. Moreover, Alice reflected on how problems from mining connect to her life through the precious metals used to manufacture electronics, and Jane expressed alarm over the fact that "everybody has plastic now in their body" due to microplastics. These sentiments suggested that these issues were perceived as socially close, impacting interviewees and people like them.

In contrast, several participants also viewed issues through a lens of diversity and intersectionality, noting that some people bear heavier consequences from environmental problems than others based on race or socioeconomic status. According to Alice, "you can't have these… mining projects without sacrifice zones. And coincidentally, these sacrifice zones are not in White neighborhoods." Similarly, Fiona felt that "the people impacted the most" by unsustainable food practices "would be the people with the lowest incomes… Indigenous communities on reservations… majority Black and Hispanic neighborhoods." Jane and Darla likewise thought that lower-income individuals would be most impacted by the problems outlined in the films they watched. This recognition of the complex interaction of environmental threats, race, and socioeconomic status showed that, while participants understood that they and people like them could be impacted by environmental problems, other groups of people might suffer more.

Similar to perceptions of spatial distance, it seems that interviewees viewed some of the worst effects of the environmental issues as somewhat socially distant. Prior research has highlighted the important role of environmental film festivals in raising awareness of environmental justice issues while also acknowledging that these events too often lack diversity and primarily appeal to "mostly affluent and Caucasian" audiences (Chiu & Arreglo, 2011, p. 225). Although the festivals studied here were free to attend and easily accessible through virtual platforms, it is possible that they still had potential to foster greater diversity in attendees.

Hypothetical Distance

There was no doubt among interviewees that these issues were likely to pose serious threats. When asked about severity, all participants felt that environmental problems were extremely important and likely to be highly relevant in the future. Some participants chose to assess perceived severity on a scale of one to ten, and all chose high numbers like eight or ten to express the likelihood that these problems would be serious. Two participants noted that the reality of these problems had been reinforced in their minds through the films and they felt new levels of concern. These comments suggest that environmental problems from the films were consistently perceived as hypothetically close.

Temporal Distance

Perhaps the facet of distance that presented the widest gulf for participants was the gap between present and future. It was clear that all interviewees believed these problems were happening here and now since they had seen them depicted in documentaries. Similarly, they all felt action should be taken to address these problems now. However, many expressed a belief that the most severe consequences would manifest in the future. Beth felt water shortages could impact her, but she followed up by saying they could also "affect [her] kids or [her] grandkids." When asked about who would be most impacted by microplastics, Jane answered "definitely the children," while Alice noted that "our young people…are facing a future where there is at some point going to be a lot less than there is now." Eric, although he felt action must be taken soon, expressed concern for the welfare of "our children and grandchildren" rather than himself.

This view of temporal distance follows the pattern seen with spatial and social distance. Essentially, participants felt problems were close, but the more severe impacts seemed farther away. Thus, the worst consequences were thought of as more relevant to people in more vulnerable places, more vulnerable social groups, and a more vulnerable future. Participants viewed issues in a middle ground, close enough to recognize problems as serious but far enough to believe the worst outcomes were distant.

Impacts of environmental documentaries on emotional responses and behavior intentions

Uncertainty and Helplessness

In this tension between present problems and distant worst-case scenarios, there was also tension between alarm and action. While Alice felt that mining companies had to adopt more environmentally friendly practices, she also repeatedly expressed sentiments along the lines of "I don't have any magic bullet answers." Other participants appreciated the solutions they saw, but they either felt these would not truly solve environmental problems or felt discouraged that people engaged in harmful activities alongside helpful ones. Meanwhile, some interviewees reflected on a lack of progress on environmental issues in their lifetimes and uncertainty about when substantial change would occur. Jane said she felt that "it's really pretty devastating… I feel like I've spent most of my life trying to circumvent this moment that I knew about since 1979." In these comments, there was uncertainty about the best path forward, either in light of unclear solutions or a poor track record of past action. Ultimately, although the stories and solutions in documentaries left participants feeling hopeful, interviewees struggled to feel as positively when reflecting on their experiences with slow environmental progress.

Past and Future Actions

However, discouragement did not equate to inaction. Many participants connected what they saw in films to past personal actions such as activism, sharing environmental information with friends, environmental research, buying local food, or reducing personal plastic use. Some interviewees also felt inspired to engage in more actions in the future. Beth wanted to "be an advocate for waters" and had begun thinking more critically about her own water use. Eric planned to connect with organizations from the documentary he watched, and Darla wanted to host her own film screening.

While some participants voiced clear plans of action, others expressed a desire for large-scale solutions without identifying how they could be involved. Gail said she would like to see vacant shopping centers "torn down and just pull up all that asphalt and concrete and reclaim the soil underneath it." Meanwhile, Fiona felt that the government should "pay some sort of restitution for the harm it caused" to Indigenous peoples. Both Gail and Helen felt that documentaries could be quite impactful if they were shown in schools.

These reactions indicate a belief that these somewhat near, somewhat distant issues could be partially addressed through personal actions. However, more complete solutions were difficult to define or impossible for individuals to enact.

Comparing audience experiences and event organizers' intentions

The organizers from both events made it clear that the goal of their work was to promote pro-environmental action with the films serving as starting points. According to Camille, it was important that films allow audience members to "feel a connectedness to the story" in order to "drive empathy. And then empathy can drive action." The steps towards action had different labels for Ingrid, and she described the festival's goal to "educate, motivate, and inspire" so that viewers could then act.

Ingrid and Camille also explained that the annual film selection process for both events took great care to consider the "fine line" between motivating people and scaring them. If films were too dire, Camille noted that people may "walk out of the room" or "shut down," while Ingrid observed that those kinds of portrayals could leave people thinking "oh my god, we're all doomed, this is terrible." To combat these reactions, Ingrid said her event aimed for balance between films that showed the severity of problems as well as films that functioned as "inspirational calls to action." Likewise, Camille sought balance within films through stories that were "solution-oriented" and that presented replicable answers so people could think about engaging in similar actions.

Many attendees expressed admiration for the films they saw, using words like encouraged, inspired, hopeful, and impressed. Participants also learned

about problems they may not have been aware of before. Moreover, some had specific ideas for actions they wanted to engage in after the films, while others had ideas for solutions they would like to see even if they did not know how to be personally involved. Thus, the films did serve as catalysts, as intended, for either particular actions or desires to see solutions enacted. At the same time, participants did tip over that fine line from inspiration into less positive feelings as they reflected on the complexity, immensity, or endurance of problems. However, these positive and negative reactions to films coexisted. Uncertainty or discouragement did not totally frighten participants into inaction, nor did inspirational content completely alleviate fears, particularly about distant locations, social groups, and futures.

Discussion

Environmental film festivals offer a unique opportunity to educate the public on environmental problems and solutions. This study provides rich insight into reactions to films and perceptions of environmental issues. Some participants had a history of involvement with environmental topics, while others were new to learning about certain issues or attending film festivals. Participants' responses to the environmental documentaries they viewed were likely informed by their prior interest in and knowledge of environmental topics. Thus, some findings may be unique to people highly involved in environmental issues. However, a reality of environmental film festivals is that they may be more likely to attract people interested in the environment. Therefore, participants in this study were not entirely atypical environmental film festival attendees. Furthermore, responses from these environmentally minded participants offer insights into struggles that a range of concerned individuals might have in viewing environmental issues as a close reality and deciding how to act in response to complicated problems. If even well-informed and highly involved viewers experience such reactions, less engaged audiences may also wrestle with similarly complex responses to environmental films.

Regardless of prior involvement, all participants expressed appreciation for the films they watched and a desire to see problems addressed. Overall, participants viewed environmental problems as urgent, but most urgent for more distant times, places, and people. As intended by film festival organizers, interviewees expressed hopefulness alongside desire to take action. However, those reactions were intermingled with discouragement and uncertainty about the best way forward. These findings offer opportunities for scholars interested in studying the psychological distance of environmental problems as well as event organizers, environmental educators, and communicators.

Theoretical Implications

Participants expressed complex views of psychological distance. Although issues were consistently viewed as hypothetically close, the

spatial, social, and temporal aspects of distance were more complicated. While participants acknowledged that problems were serious, – they were happening in the present, they could impact people like the participants, and they were often global issues that affected many different places – the most severe effects of these problems were viewed as farther away. The worst impacts of environmental problems were thought of as most dire for distant locales, segments of society, and futures. These findings align with prior studies on environmental discourses and rhetoric. Some work has revealed that predictions of future severe climate change impacts that will worsen over large timeframes contribute to perceptions that environmental issues will only be a significant problem for future generations (Hanson-Easy et al., 2015). Other research has highlighted that climate change is often viewed as abstract and global, fueling a disconnect between such a large-scale problem and seeming smaller local weather and environmental issues (Adams, 2022).

Findings have implications for how psychological distance might be studied in communication research. Some studies ask about distance in what may be an over-simplified manner. For example, Duan et al. (2019) asked participants about beliefs regarding "negative effects of climate change" (p. 834), and Yu et al. (2017) used questions about climate change in general. Loy and Spence (2020) did ask about both "serious consequences of climate change" (p. 5) and climate change generally, although these phrases were not used in equal proportion. Because interviewees viewed problems as close while simultaneously thinking of more severe impacts as distant, communication and mass media researchers should consider the potential impacts of the level of severity with which they describe environmental problems in study questionnaires or stimuli. Describing an issue generally (e.g. climate change or air pollution) may prompt different perceptions of distance compared to more severe terminology (e.g. climate crisis or deadly air pollution). Manipulating levels of severity in messages to examine effects on psychological distance could be of interest. Alternatively, perceived severity prior to exposure to stimuli in media experiments could be examined as a moderator of psychological distance.

Practical Implications

One major opportunity for promoting action might come from reducing temporal distance of environmental issues. The unfortunate reality of long-term problems is that they are easier to respond to before their worst impacts manifest. Many participants put a great deal of emphasis on the bleak future facing future generations but did not express the same level of concern about how environmental problems are affecting present generations. To prompt action now that could stave off acute future realities, it could benefit educators and communicators to emphasize not just the fact that environmental problems are occurring now but also the repercussions they have for people in the present. Additionally, highlighting benefits of pro-environmental

actions that might be enjoyed by current generations rather than just future generations could help inspire action. Communicators may look to youth climate activists for guidance in this respect, as they commonly make use of rhetoric that can "draw the future into the present" (Andersen, 2023, p. 9) in order to advocate for urgent pro-environmental action. Meanwhile, transformative environmental solutions are often depicted as temporally distant (Sovacool et al., 2020), but selecting documentaries focused on present success would allow festival attendees to see how innovative solutions might be enacted in the present.

Finally, while festival organizers spoke about viewer reactions as dichotomous, either inspired or despairing, interviewees experienced both sorts of feelings. While feeling inspired by films, they also felt discouraged by the magnitude of problems or lack of progress. Expressions of sadness and accounts of individual action sprang up in the same conversations. This suggests that viewer reactions to even inspiring films are complex, riddled with positive and negative feelings based on personal experiences and concerns. While this insight may not impact the sorts of films shown at festivals, perhaps it could help inform the kinds of panel discussions or question and answer sessions that some event organizers host directly after film screenings. Those post-film events could benefit from cultivating both space to grieve and space to dream.

Limitations

While the variety of films discussed by participants in this research painted a broad picture of reactions to different topics, focusing on viewers of one film could yield more thorough insights into reactions to a particular environmental problem or certain aspects of a film. Additionally, many interviews were conducted two weeks to a month after participants had watched the films due to the time required to recruit participants and schedule interviews. While interviews still yielded rich data, many participants apologized for not remembering films more clearly. Future studies could conduct interviews closer to the time that people view a film, perhaps even recruiting participants and scheduling interviews before the film screening occurs. Relatedly, this work focused on audience members' reactions to the films broadly without examining in much detail the specific film elements that prompted these responses. Further work could more closely analyze how artistic choices in documentaries impact viewers' perceptions of psychological distance alongside emotional reactions and behavioral intentions, similar to other scholars' in-depth investigation of players' reactions to various elements of an environmental video game (Bekoum Essokolo & Robinot, 2022).

Conclusion

Environmental documentaries can educate and inspire. Vivid depictions

of global problems and local success stories prompt people to consider environmental issues in a new light and contemplate how they might take action. Interviews with environmental film festival attendees revealed complex interpretations of psychological distance in response to such films, with participants perceiving problems to be relatively close while considering their most severe consequences to be farther off, more relevant to distant locations, social groups, and futures. Equally complex were participants' reactions to the environmental issues they saw, with uncertainty and helplessness coexisting alongside plans of action, desired solutions, or recollections of past engagement in pro-environmental behaviors. Further research into the psychological distance of environmental issues should carefully consider the severity of problems depicted in studies. Moreover, environmental educators and communicators should consider strategies for reducing temporal distance and opportunities for allowing people to process complicated reactions after viewing environmental media.

References

Adams, P. C. (2022). "Not a big climate change guy" semiotic gradients and climate discourse. *Environmental Communication, 16*(1), 79–91. https://doi.org/10.1080/17524032.2021.1964998

Andersen, I. V. (2023). Rhetorical citizenship and the environment. *Climate Resilience and Sustainability, 2*(2), e249. https://doi.org/10.1002/cli2.49

Anderson, B. A., Romani, J. H., Phillips, H., Wentzel, M., & Tlabela, K. (2007). Exploring environmental perceptions, behaviors and awareness: Water and water pollution in South Africa. *Population and Environment, 28*(3), 133-161. https://doi.org/10.1007/s11111-007-0038-5

Banchero, P., Rector, T. A., & VanBallenberghe, J. (2021). Best practices in climate change communication as applied to an informal education documentary about Alaska. *Journal of Geoscience Education, 69*(2), 138-149. https://doi.org/10.1080/10899995.2020.1768003

Bekoum Essokolo, V.-L., & Robinot, E. (2022). «Let's go deep into the game to save our planet!» How an immersive and educational video game reduces psychological distance and raises awareness. *Sustainability, 14*(10), 5774. https://doi.org/10.3390/su14105774

Bieniek-Tobasco, A., Rimal, R. N., McCormick, S., & Harrington, C. B. (2020). The power of being transported: Efficacy beliefs, risk perceptions, and political affiliation in the context of climate change. *Science Communication, 42*(6), 776-802. https://doi.org/10.1177/1075547020951794

Blewitt, J. (2011). Critical practice and the public pedagogy of environmental and conservation media. *Environmental Education Research, 17*(6), 719-734. https://doi.org/10.1080/13504622.2011.618625

Breves, P., & Schramm, H. (2021). Bridging psychological distance: The impact of immersive media on distant and proximal environmental issues. *Computers in Human Behavior, 115*, 1-9. https://doi.org/10.1016/j.chb.2020.106606

Carolan, M. (2010). Sociological ambivalence and climate change. *Local Environment, 15*(4), 309-321. https://doi.org/10.1080/13549831003677662

Chiu, B., & Arreglo, C. (2011). The intersection of theory and practice: Environmental sustainability and social justice at the Finger Lakes Environmental Film Festival (FLEFF). *Environmental Communication, 5*(2), 221-227. https://doi.org/10.1080/17524032.2011.562652

Chu, H., & Yang, J. Z. (2019). Emotion and the psychological distance of climate change. *Science Communication, 41*(6), 761–789. https://doi.org/10.1177/1075547019889637

Doherty, T. J., & Clayton, S. (2011). The psychological impacts of global climate change. *The American Psychologist, 66*(4), 265-276. https://doi.org/10.1037/a0023141

Duan, R., Takahashi, B., & Zwickle, A. (2019). Abstract or concrete? The effect of climate change images on people's estimation of egocentric psychological distance. *Public Understanding of Science, 28*(7), 828-844. https://doi.org/10.1177/0963662519865982

Duke, J. R., & Holt, E. A. (2022). Seeing climate change: Psychological distance and connection to nature. *Environmental Education Research, 28*(7), 949–969. https://doi.org/10.1080/13504622.2022.2042205

Fox, J., McKnight, J., Sun, Y., Maung, D., & Crawfis, R. (2020). Using a serious game to communicate risk and minimize psychological distance regarding environmental pollution. *Telematics and Informatics, 46*, 101320. https://doi.org/10.1016/j.tele.2019.101320

Hanson-Easy, S., Williams, S., Hansen, A., Fogarty, K. & Bi, P. (2015). Speaking of climate change: A discursive analysis of lay understandings, *Science Communication, 37*(2), 217-239. https://doi.org/10.1177/1075547014568418

Hsieh, H., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research, 15*(9), 1277-1288. https://doi.org/10.1177/1049732305276687

Hughes, H. (2011). Humans, sharks and the shared environment in the contemporary eco-doc. *Environmental Education Research, 17*(6), 735-749. https://doi.org/10.1080/13504622.2011.620702

Jones, J. P. G., Thomas-Walters, L., Rust, N. A., & Veríssimo, D. (2019). Nature documentaries and saving nature: Reflections on the new Netflix series Our Planet. *People and Nature, 1*(4), 420-425. https://doi.org/10.1002/pan3.10052

Lockwood, A. (2016). Graphs of grief and other green feelings: The uses of affect in the study of environmental communication. *Environmental Communication, 10*(6), 734-748. https://doi.org/10.1080/17524032.2016.1205642

Lorenzoni, I., Leiserowitz, A., De Franca Doria, M., Poortinga, W., & Pidgeon, N. F. (2006). Cross-national comparisons of image associations with "global warming" and "climate change" among laypeople in the United States of America and Great Britain. *Journal of Risk Research, 9*(3), 265-281. https://doi.org/10.1080/13669870600613658

Loy, L. S., & Spence, A. (2020). Reducing, and bridging, the psychological distance of climate change. *Journal of Environmental Psychology, 67*, 101388. https://doi.org/10.1016/j.jenvp.2020.101388

Marlon, J., Mildenberger, M., Leiserowitz, A., & Wang, X. (2020). *Yale climate*

opinion maps 2020. Yale Program on Climate Change Communication. https://climatecommunication.yale.edu/visualizations-data/ycom-us/.

McDonald, R. I., Chai, H. Y., & Newell, B. R. (2015). Personal experience and the 'psychological distance' of climate change: An integrative review. *Journal of Environmental Psychology, 44,* 109-118. https://doi.org/10.1016/j.jenvp.2015.10.003

Nichols, B. (2017). What makes documentaries engaging and persuasive? In *Introduction to Documentary*. 3rd Edition. Indiana University Press.

Norman, M. E. (2000). Public education through community-based film programs: A report on the environmental film festival in the nation's capital. *The Journal of Environmental Education, 31*(2), 28-30. https://doi.org/10.1080/00958960009598636

Patterson, T. J., & Gaudelli, W. (2023). *Pedagogy of global events: Insights from concerts, film festivals and social network happenings* (1st ed.). Routledge. https://doi.org/10.4324/9780429281570

Piotrowski, M. (2015). Speaking "out of place": YouTube documentaries and viewers' comment culture as political education. *Journal of Curriculum and Pedagogy, 12*(1), 53-72. https://doi.org/10.1080/15505170.2015.1008076

Sandlin, J. A., Schultz, B. D., & Burdick, J. (2009). Understanding, mapping, and exploring the terrain of public pedagogy. In J. A. Sandlin, B. D. Schultz & J. Burdick (Eds.), *Handbook of Public Pedagogy: Education and Learning Beyond Schooling* (pp. 1-6). Routledge.

Sargisson, R. J., & Schöner, B. V. (2020). Hyperbolic discounting with environmental outcomes across time, space, and probability. T*he Psychological Record, 70*(3), 515-527. https://doi.org/10.1007/s40732-019-00368-z

Schill, M., & Shaw, D. (2016). Recycling today, sustainability tomorrow: Effects of psychological distance on behavioural practice. *European Management Journal, 34*(4), 349–362. https://doi.org/10.1016/j.emj.2016.05.004

Schuldt, J. P., Rickard, L. N., & Yang, Z. J. (2018). Does reduced psychological distance increase climate engagement? On the limits of localizing climate change. *Journal of Environmental Psychology, 55*, 147-153. https://doi.org/10.1016/j.jenvp.2018.02.001

Shao, W., Moftakhari, H., & Moradkhani, H. (2020). Comparing public perceptions of sea level rise with scientific projections across five states of the U.S. gulf coast region. *Climatic Change, 163*(1), 317-335. https://doi.org/10.1007/s10584-020-02893-1

Singh, A. S., Zwickle, A., Bruskotter, J. T., & Wilson, R. (2017). The perceived psychological distance of climate change impacts and its influence on support for adaptation policy. *Environmental Science & Policy, 73*, 93-99. https://doi.org/10.1016/j.envsci.2017.04.011

Sovacool, B. K., Bergman, N., Hopkins, D., Jenkins, K. E. H., Hielscher, S., Goldthau, A., & Brossmann, B. (2020). Imagining sustainable energy and mobility transitions: Valence, temporality, and radicalism in 38 visions of a low-carbon future. *Social Studies of Science, 50*(4), 642–679. https://doi.org/10.1177/0306312720915283

Sparkman, G., Lee, N. R., & Macdonald, B. N. J. (2021). Discounting environmental policy: The effects of psychological distance over time and

space. *Journal of Environmental Psychology*, 73, 101529. https://doi.org/10.1016/j.jenvp.2020.101529

Spence, A., Poortinga, W., & Pidgeon, N. (2012). The psychological distance of climate change. *Risk Analysis, 32*(6), 957-972. https://doi.org/10.1111/j.1539-6924.2011.01695.x

Tracy, S. J. (2020). Data analysis basics a phronetic iterative approach. In *Qualitative research methods: Collecting evidence, crafting analysis, communicating impact* (pp. 208–235). John Wiley and Sons, Inc.

Trope, Y., & Liberman, N. (2010). Construal-level theory of psychological distance. *Psychological Review, 117*(2), 440-463. https://doi.org/10.1037/a0018963

Tu, M., Zhang, B., Xu, J., & Lu, F. (2020). Mass media, information and demand for environmental quality: Evidence from the "Under the Dome". *Journal of Development Economics, 143*, 102402. https://doi.org/10.1016/j.jdeveco.2019.102402

Uzzell, D. L. (2000). The psycho-spatial dimension of global environmental problems. *Journal of Environmental Psychology, 20*(4), 307-318. https://doi.org/10.1006/jevp.2000.0175

Yu, T. -Y., Yu, T. -K., & Chao, C. -M. (2017). Understanding Taiwanese undergraduate students' pro-environmental behavioral intention towards green products in the fight against climate change. *Journal of Cleaner Production, 161*, 390-402. https://doi.org/10.1016/j.jclepro.2017.05.115

Zhang, W., He, G. -B., Zhu, Y., & Cheng, L. (2014). Effects of psychological distance on assessment of severity of water pollution. *Social Behavior and Personality, 42*(1), 69-78. https://doi.org/10.2224/sbp.2014.42.1.69

Zhou, Y., Song, Y., & Tian, J. (2016). Risk perception of air pollution: An exploration of self-relevancy. *Human and Ecological Risk Assessment, 22*(7), 1506-1518. https://doi.org/10.1080/10807039.2016.1190635