

Decolonial considerations of environmentalism: Observations from a (US) State Park

Abstract

In this contribution to the special issue, we explore implications of decolonial theory for understanding climate change skepticism and environmental concern. The empirical portion of this project entailed interviews about perceptions of recent extreme weather, climate change, and environmental concern with N = 41 visitors to a Kansas (USA) state park, a population we selected for their (presumed) high environmental concern. Although most respondents reported personal experience of extreme weather, only a smaller subset believed these events reflected anthropogenic climate change (ACC). Consistent with other research, this tendency to be skeptical of climate change and its connection to extreme weather was greater among white participants than participants of color, a pattern we interpret as collectively motivated white ignorance about the role of modern/colonial violence in the production of the ecological crisis. Results also revealed an environmental concern characterized by wilderness preservation and individual action. We conclude by situating climate change perceptions and environmental concern within a decolonial perspective as an alternative foundation for environmentalism and psychology.

Introduction

This paper addresses the topic of social justice in environmental psychology from the perspective of decolonial theory. Although approaches vary, decolonial perspectives emphasize two important points. The first point is a distinction between colonialism and coloniality. Whereas *colonialism* refers to the invasion, settlement, subjugation, and exploitation of one region and people by another, *coloniality* refers to patterns of

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thinking and ways of being produced by, reflective of, and integral to racialized power and colonial violence (Mignolo, 2011). Although colonialism occurs within a bounded historical period, coloniality persists in cultural psychological forms long after the end of formal colonial rule. The second point is to highlight coloniality as the inherent dark side of Eurocentric global modernity (Mignolo, 2011), a point that theorists reinforce via the linked concept of *modernity/coloniality*. From this perspective, the cultural and material growth associated with modern progress and development of a privileged global minority was not a racially innocent project. Instead, violent dispossession and underdevelopment of the racialized global majority have been necessary features in the ongoing constitution of Eurocentric modernity/coloniality (Rodney, 2018).

In similar fashion, decolonial approaches suggest that one cannot understand present-day ecological degradation associated with modernity (the Anthropocene) without attention to histories of racism and colonialism that are central to the rise and persistence of Eurocentric global domination. We consider implications of coloniality/modernity for two senses of *environmental concern*. In the first sense, we consider how coloniality persists in popular understandings of environmental concern that emphasize the preservation of pristine nature and the *cult of wilderness*. In the second sense, we consider how defense of coloniality/modernity informs racialized skepticism about the threat of climate change.

Climate change skepticism

As early as 2004, Oreskes (2004) reported that scientists were in overwhelming agreement about the existence of anthropogenic climate change (ACC). Despite this scientific consensus and growing recognition of climate change as a major threat, politicians and substantial proportions of the general public – approximately 26% of U.S. adults according to a recent study (Leiserowitz et al., 2021) – continue to express doubt or are dismissive about the facts of ACC. A pressing issue for policy makers, psychologists, and other behavioral scientists is to identify factors that mitigate this skepticism, promote environmental concern, and generate political will to make necessary changes before the window for effective action closes.

Among the factors relevant to a discussion of climate change skepticism are issues of racial identity (McCright et al., 2016; Mackay et al., 2021). In the U.S., research in various disciplines suggests that doubt and dismissiveness about climate change are more frequent (Leiserowitz et al., 2021), and concern about the threat of climate change is weaker (Collins, 2014; Dietz & Whitley, 2018), among adults who identify as white versus another racial identity category (see also Elias et al., 2019).¹ This racialization

¹ In the U.S. context, it is presently a norm to use the term “people [or participants] of color” to refer to people who identify with any racial identity category other than “white.”

of climate change perceptions has become a core component of white Christian nationalist politics of collective nostalgia and racial resentment – a willingness to invest in whiteness at the expense of humanity – fueled by feelings of threat in reaction to changing demographics of U.S. society (Lies, 2021).

While researchers have explored the identity dynamics of climate change skepticism outside of the U.S. (Krange et al., 2019), to our knowledge, researchers have not demonstrated a racialization of climate change skepticism in other settings (McCright et al., 2016). However, a growing body of work illuminates the racialization of environmental concern more generally. For example, hegemonic forms of environmental concern rooted in WEIRD (Western, Educated, Industrialized, Rich, and Democratic; Henrich et al., 2010) settings of the Global North typically do not foreground issues of inequality and systemic injustice, nor do they challenge the “world politics of growth” (Dauvergne, 2016: 78). In contrast, several authors have noted that conceptions of environmentalism and environmental concern in many settings of the Global South tend to foreground these issues (Guha, 2000; Nixon, 2011). This perspective suggests that conceptions of environmental concern and engagement are not ‘just natural,’ but rather, reflect particular racial positioning.

Why might relatively many white Americans be less concerned about climate change? With respect to constructions of the past, white Americans’ skepticism or relative lack of concern about climate change can obscure or deflect attention away from the catastrophic consequences of settler colonialism and Eurocentric modern development, awareness of which might otherwise challenge the legitimacy of Eurocentric global domination. With respect to imagination of the future, white Americans’ skepticism about climate change can reflect feelings that the cure is worse than the disease, or the idea that mitigation efforts would require an intolerable disinvestment from modern/colonial ways of being and the “American way of life” (see Campbell & Kay, 2014). With this in mind, what might ultimately convince skeptical white Americans of the risk posed by climate change?

Extreme weather as wake-up call

Scientists warn that extreme weather (flooding, drought, wildfires) will become increasingly more frequent as the global climate continues to change. Recent increases in the intensity and incidence of extreme weather events demonstrate that these effects are already occurring (IPCC, 2021). With specific reference to North America, climate scientists predict that a hotter atmosphere will increase the evaporation of water and the water holding capacity of air, resulting in more intense and prolonged precipitation (Fischer et al., 2014). In 2019, the U.S. experienced historic flooding and its second wettest year on record, causing an estimated \$20 billion in damages and taking

dozens of lives in the Midwest U.S. (Almukhtar et al., 2019; LeCompte, 2020; National Weather Service, 2021).

As scientific predictions regarding the impacts of climate change have come to pass, one might anticipate that direct experience of extreme weather would serve as a “wake up call” or “focusing event” convincing skeptics of the risk posed by ACC (Demski et al., 2017: 150; Gilchrist, 2021). Do people who witness or experience extreme weather events link them to ACC? Research on this question does not yield a clear answer.

A study with U.S. participants found that experience with extreme weather prompted a modest increase in climate change concern, but only for recent extreme weather and not activity that occurred over longer periods of time (Konisky et al., 2016). Another study in the U.S. demonstrated that connections between extreme weather and climate change were most common in communities where climate change belief was already high, in communities that experienced more significant damage, and in communities in which “elites” framed the events in terms of climate change (Zanocco et al., 2018: 363). In Colorado, USA, researchers found little evidence to support a link between personal flood experience and climate change concern (Albright & Crow, 2019), but found a link between experience of Hurricane Irma and climate change concern in Florida, USA (Bergquist et al., 2019). Most recently, personal experience of wildfires in the U.S. was associated with a subjective attribution of these events to climate change (Wong-Parodi & Rubin, 2022).

Outside the U.S., the state of knowledge is similarly inconclusive. On one hand, UK researchers found no differences in climate change concern when comparing residents who experienced flooding to those who did not (Whitmarsh, 2008). On the other hand, several studies have suggested a link between personal experience of extreme weather and climate change. For example, a majority of sampled Ghanaian farmers attributed changes in local weather patterns to human causes such as bush fires and deforestation (Ndamani & Watanabe, 2015). Similarly, experience with extreme weather predicted climate change mitigation and adaptation among participants in the Czech Republic (Krkoška Lorencová et al., 2019), and personal experience of extreme weather-related damages was associated with an anticipation of future climate-related hazards in Norway (Lujala et al., 2015). In summary, the current state of knowledge about the relationship between extreme weather experience and climate change concern entails several qualifications.

In the case of the 2019 U.S. floods, the link to ACC was a matter of public debate. In response to a direct question about the role of climate change in prompting this unprecedented flooding, Kansas State Representative Annie Kuether stated that

climate change “absolutely” played a role and offered a warning about future extreme weather. In contrast, the response of fellow Kansas state legislator Jeff Longbine, was “I don’t think we know” (Shorman, 2019). What about the general public?

One of us (TL) happened to be in an affected area, working during the summer at Cheney State Park, near Wichita, Kansas, USA. He took the opportunity to conduct participant observation field research. The original purpose of the project was to explore how park visitors conceived of their connection to the park and expressed environmental concern. More specifically, we intended to investigate whether participants expressed a racialized or colonial form of environmentalism that Martinez-Alier has referred to as the *cult of wilderness* – a concern with “the preservation of pristine nature by setting aside natural areas from where humans would be excluded, and the active protection of wildlife for its ecological and aesthetic values, and not for any economic or human livelihood value” (Martinez-Alier, 2015: 65). This sentiment, which has its origins with naturalist John Muir and the first national parks in the United States (Martinez-Alier, 2016: 97), accompanied the appropriation and setting aside of Indigenous land for European settler enjoyment (Guha, 2000). Aspects of the cult of wilderness persist in the ambitions of many contemporary state and national park systems which aim to craft a close-to-nature experience, shielded from the woes of modern development. In addition to investigating this expression of environmental concern, the salience of recent extreme weather events provided an opportunity to consider visitors’ understandings of these events and their relationship to climate change at Cheney State Park.

Research setting: Cheney State Park

The state of Kansas established Cheney State Park (CSP) in 1964 on the North Fork of the Ninescah River 17 miles west of Wichita, Kansas. Ninescah is an Osage name – the first part of which means ‘water’ and the second part of which connotes clear, salt, spring, good, and white water (City History, n.d.). CSP is part of the Kansas state park system, the mission of which – to conserve and enhance the natural heritage of Kansas, to provide opportunities for the public to appreciate the state’s natural resources, and to encourage the public to visit and travel in Kansas (About KDWP, n.d.) – resonates strongly with cult of wilderness expressions of environmental concern. In the words of the State Parks Director, Kansas State Parks “striv[e] for experiences that not only look good on the outside but also feel good on the inside” (Lanterman, 2019: 3).

The Kansas state government constructed Cheney reservoir to provide not only a “supplemental source of municipal water supply,” but also “substantial benefits with respect to flood control, conservation of fish and wildlife, irrigation and recreation” (Howse, 1962: H-4). Today, CSP is a popular recreation destination for locals and

interstate travelers alike. It features over 600 campsites, three hiking trails, and a 5,200-acre wildlife area. It has a reputation as one of the U.S.'s "windiest lakes," making it ideal for windsurfing, sailing, and kiteboarding (Cheney State Park, n.d.; Ibsen, 2013).

The role of Cheney Reservoir in flood control is particularly relevant for the present topic. The Ninnescah River meets the Arkansas River, which then joins the Mississippi River, which ultimately flows into the Gulf of Mexico near the city of New Orleans, Louisiana. In the spring and early summer of 2019, the U.S. Army Corps of Engineers in Tulsa, Oklahoma, which controls the water level of Cheney Reservoir, released little to no water from the reservoir to prevent more consequential flooding downstream on the Mississippi River. As a result, the water level in Cheney Reservoir rose to nine feet above conservation level causing significant damage to park vegetation and structures and two-month long closures to nearly all facilities. As the floodwaters receded and the park began to reopen in late July 2019, visitors returned to the park. During the first weekend in which most park facilities were reopened for use, TL conducted the interview study that we report in this article.

Research questions

We designed the empirical portion of this project to explore three research questions. The first question concerned the idea of extreme weather as a wake-up call. We considered whether personal impact from recent flooding would be associated with tendencies to acknowledge the scientific consensus of ACC. Researchers have increasingly explored the relationship between psychological distance from climate change and environmental concern (Demski et al., 2017; Chu & Yang, 2018; Ogunbode et al., 2019; Chen, 2020). Personal proximity to the flooding event in question, as well as relatively high levels of "environmental responsibility" (Nash, 1977: 25; Groshong et al., 2018) suggest that park visitors might be especially inclined to perceive a link between the flooding and climate change.

The second research question concerned racial differences in the tendency to recognize a link between recent flooding and ACC. Researchers have documented consistent gender (Guha, 2000; Nagel, 2016) and racial differences (McCright & Dunlap, 2011; Elias et al., 2014) in various forms of environmental concern. Specifically, researchers have identified a "conservative white male effect" (McCright & Dunlap, 2011: 1164) such that conservative white men are unusually high in acceptance of risks and denial of ACC both in the U.S. and abroad (Kahan et al., 2007; Krange et al., 2019). On one hand, as indicated by their environmental engagement in the park, visitors might be especially motivated to engage in pro-environmental behavior and with climate change (Vaske et al., 2001). On the other hand, participation in the cult of wilderness and the racialized space of U.S. state parks might be associated with skepticism about the existence of

climate change and/or skepticism about a link between extreme weather and climate change. In this investigation, we explored whether the racialization of climate change perceptions extended to a denial of experience of climate change and a decreased tendency to attribute recent flooding to climate change.

The third and final question contained two components. The first component concerned how participants understood their connection to nature and the local environment. Public statements of purpose from the Kansas Department of Wildlife, Parks and Tourism suggest a construction of environmental concern – similar to the cult of wilderness (Martinez-Alier, 2015) – that prioritizes conservation of pristine nature, and highly engaged park visitors may be especially likely to share this form of environmental concern (Vaske et al., 2001; Groshong et al., 2018). The second component of this question considered whether this racialized environmental concern varied as a function of participant racial identity.

Method

To investigate these questions, TL conducted ($n = 41$) semi-structured interviews with visitors to CSP. He entered all interviews with a predetermined set of questions but asked participants to elaborate on their responses when appropriate. All interview activities took place on the historic homelands of the *Gáuigú* (Kiowa), *Ntumuntu* (Comanche), Kaw (Kansa), *ᖃᖅᖅᖅ ᖅᖅᖅᖅ ᖅᖅᖅᖅ ᖅᖅᖅᖅ* (Osage), and Wichita peoples in the area now known as Cheney State Park in Kansas (US).

Participants

Participants ranged from 22 to 78 years of age ($M_{age} = 44.66$, $SD = 13.23$). In terms of racial identity categories mandated by the American Psychological Association, 32 identified as white (78.05%) four identified as biracial or multiracial (9.76%), three identified as Hispanic (7.32%), one identified as African American (2.45%), and one identified as Asian American (2.45%). Ideally, we were interested in variation in perception across many racial identity categories. However, as a function of both the scope of the research and the demographics of the sample, we examined the unique relationship between whiteness and climate change skepticism, and we compare white participants to disempowered others as a binary. This convention is problematic but commonplace in the U.S. concerning discussions of racial categorization. Twenty-five participants were women (60.98%) and 16 were men (39.02%). Twenty-eight participants (68.29%) were from Kansas, nine (21.95%) were from another U.S. state, two (4.87%) were from Mexico, and two did not provide this information. On a single-item measure of political orientation from 1 (Strongly liberal) to 7 (Strongly conservative), the sample leaned conservative ($M = 4.15$, $SD = 1.30$).

Interviews and interview procedure

TL conducted all interviews in early August of 2019 at a variety of public park facilities at CSP including campgrounds, day-use areas, and beaches. He conducted thirty-nine interviews in English and two in Spanish at the request of two Spanish-speaking participants. After participants consented to participate, he asked them to step away from others to ensure a confidential conversation. He asked participants a brief series of questions about their perceptions of extreme weather, experience with recent flooding, beliefs about a relationship between recent flooding and climate change, and relationship with the park and understanding of environmentalism (Table 1). Finally, he asked participants to complete a brief demographics questionnaire, debriefed them regarding the purposes of the study, and compensated them for their participation in the form of a drink insulator worth USD \$2.

Table 1: Interview Prompts

1. How many times per year do you visit Cheney State Park?
2. What are your views about nature, the environment, and conservation?
3. Has the recent flooding affected you, or do you know anyone who has been affected by it?
4. The weather has been kind of crazy around here since the spring. Why do you think this has been happening?
5. Some people are saying that the recent flooding in the Midwest may be linked to climate change. What do you think about that?
6. Some people also say that climate change is caused by humans. Do you have any thoughts about that?
7. Has climate change affected you personally?
8. Do you believe that the flooding at Cheney State Park is related to climate change?

Note: Questions appear in the order of their occurrence in the interview protocol.

Approach to data analysis

The interview coding scheme consisted of categorical judgments about the presence or absence of themes that we selected for analysis via inductive and deductive strategies. As an example of inductive coding, we made categorical judgements about whether participants answered “yes,” “no,” or “I don’t know” to the question “Has climate change affected you personally?” As an example of deductive coding, TL made dichotomous judgements of whether participants endorsed particular manifestations of environmental concern over the entire course of the interview. Of primary interest in data analysis (using SPSS Version 27) were relationships between these categorical variables. We used McNemar’s test to evaluate differences in proportions across different outcomes within participants. We used Fisher’s Exact Test to evaluate differences in proportions between white participants and participants of color on these categorical outcomes.

Findings

As an indication of connection to Cheney State Park, most participants ($n = 23$, 56.1%) reported that they visit the park four or more times per year. Consistent with the design and mission of the park, many participants discussed their connection in terms of recreation. Indeed, one of the more salient ways in which participants reported personal impact from extreme weather and climate change concerned their ability to access the park and the recreational opportunities that it provides. For example, of the 31 participants who reported personal experience of flooding, nearly all ($n = 26$, 83.9%) reported that the flooding interfered with their usual recreational pursuits. (The others mentioned damage to homes and farmland.) As one participant commented, “I mean it completely changed our summer. You know, I’m a teacher so I don’t work in the summer and coming out here frequently is typically what we do.” Another participant said, “We haven’t been able to go do as many things. Like, a lot of the places that we usually go to are totally flooded.”

Similarly, of the 15 participants who reported personal experience of climate change, a substantial proportion ($n = 6$, 40%) stated that climate change had affected their recreation and access to park facilities. Another seven participants reported that they noticed more extreme weather and shifts in weather patterns. One participant shared that, “I’ve noticed over these 17 years that my trees used to bloom during spring break and now they don’t bloom until almost the middle of April. You know, every year it seems like it’s getting pushed back even further.” Another participant remarked that, “If we get into a drought situation, it’s going to be a severe drought situation. Or if it starts raining it’s going to be a lot of rain.” One participant reported a personally beneficial effect of climate change as a worker in the wind industry “[...] where it’s making my job really take off.”

Extreme weather as wake-up call?

The first research question concerned the relationship between personal impact from extreme weather and acknowledgement of ACC. As the preceding paragraphs suggest, results indicate a disconnect between these tendencies. Although most participants ($n = 31$, 75.6%) reported that they or someone whom they knew personally had been affected by recent flooding, a significantly smaller proportion ($n = 15$, 36.6%) reported that they had been affected by climate change, $McNemar = \chi^2(1, N = 41) = 11.25, p < .001$. Indeed, of the 31 participants who reported personal impact from flooding, only 13 (41.9%) reported personal impact from climate change, and the relationship between these tendencies was not statistically significant ($\Phi = .196, p = .21$).

Aside from items about personal experience with flooding and climate change, participants responded to a direct prompt about what they thought caused the recent extreme weather. The modal response to this question ($n = 20$, 48.8%) was climate

change or global warming. Seven participants (17.1%) reported that they were unsure, one participant did not respond, and the remaining participants ($n = 13$, 31.7%) proposed other causes that included “natural cycle,” “God,” and “geoengineering.” In contrast to the idea that personal experience of extreme weather might prompt acknowledgement of climate change, participants who reported personal impact of recent flooding were less likely to cite climate change or global warming as the cause of recent extreme weather ($\Phi = -.355$, $p = .023$).

In response to a final interview prompt, participants indicated whether they believed that humans are responsible for climate change. The modal response ($n = 24$, 58.5%) was “yes.” Among the remaining participants, 7 (17.1%) disagreed, another 7 (17.1%) were unsure, and one refused to answer (2.4%). Among those who disagreed one participant said, “I don’t think so...it’s just the way the world is.” Another referred to geological scientific authority to suggest that changes in climate were part of naturally occurring cycles. “I personally think that we’re at one of those cycles cause you see it in the past, in the sediment layers. I mean you see it.” Yet again, there was no evidence of a positive relationship between the tendency to report personal impact from recent flooding and belief in ACC ($\Phi = .038$, $p = .81$).

Racial differences in linking flooding to climate change

Results suggest that the answer to the first research question may be *no* – there was no link between personal experience of extreme weather and greater recognition of or belief in the scientific consensus regarding ACC. What about the second research question? Are there racial differences in the tendency to make this link? Here, results suggest that the answer is yes. Specifically, Fisher’s Exact Test indicates that the proportion of participants who reported that they were affected by recent flooding was greater among white participants ($n = 27$, 84.4%) than participants of color ($n = 4$, 44.4%), $p = .014$. Yet, despite being more likely to report personal impact from recent flooding, white participants ($n = 21$, 37.5%) were no more likely than participants of color ($n = 3$, 33.3%), to report being affected by climate change (37.5% versus 33.3%), $X^2(1, N = 40) = 0.29$, $p = .82$, or to report belief in ACC ($n = 16$, 56.7% versus $n = 6$, 66.7%). Even more striking, Fisher’s Exact Test indicated that the proportion of participants who attributed the recent extreme weather to climate change or global warming was significantly smaller among white participants ($n = 12$, 38.7%) than participants of color ($n = 8$, 88.9%), $p = .008$.²

Participants of color were almost unanimous in attributing the recent extreme weather to climate change or global warming. One 49-year-old woman who identified as white

² A competing explanation is that political conservatism drives racial differences in climate change skepticism. Notably, white participants ($M = 4.25$, $SD = 1.34$) did not significantly differ from participants of color ($M = 3.78$, $SD = 1.09$) on the single-item measure of political orientation $t(39) = -.97$, $p = .34$

and Native American stated that the cause of the extreme weather was “Probably global warming...there’s a lot of things happening just because of what we do. I mean, I know everything that we do on a daily basis affects what we live with.” Additionally, a 40-year-old woman who identified as Hispanic described her viewpoint like this: “Well, science says that it is climate change and as I have a little bit of knowledge of God, I think that what is happening, religiously, I think that there are things that have to be fulfilled based on the bible. But as I said, the science says it’s climate change.”

For white participants, there was not a clear consensus regarding the cause of recent extreme weather. Those who attributed extreme weather to climate change or global warming did so in a straightforward and unambiguous manner. For example, a 36-year-old white man said, “I definitely think it’s due to climate change,” and a 54-year-old white man referred specifically to human action by mentioning “gases from the refineries.” Of the nineteen white participants who suggested other causes for recent extreme weather, four response categories emerged. Eight participants cited natural causes; for example, one 34-year-old white man stated “I’m not an expert in that area. I just assumed it was just a cycle.” Seven participants said that they did not know or that they were unsure about the cause of the extreme weather. Three participants offered religious explanations; for example, one 78-year-old white man commented “I just think the good Lord’s trying to tell us something.”

Environmental concern

How do park visitors experience and express environmental concern? Insight into the third research question comes from responses to a direct prompt regarding “views about nature, the environment, and conservation.” Responses to this prompt focused on two explicit themes. First, participants highlighted the responsibility to clean up after oneself within the park ($n = 13, 24.4\%$). As one participant put it “I would just say clean up. Clean up after yourself.” Second, participants stressed the responsibility to preserve the natural environment ($n = 20, 48.8\%$). In the words of one participant, “Everybody needs to do their part as far as the longevity of the environment and taking care of it.” These themes come together in the response of another participant who elaborated, “I have a degree in wildlife biology, so I’m conservation aware, and I love nature. I do my best to leave it as I found it.”

A noteworthy feature of these responses is a tendency to limit the scope of environmental concern. One form of limitation in scope is spatial. Perhaps because of the inclusion of “conservation” in the prompt, responses focus on the preservation of circumscribed natural sanctuaries in a pristine form that visitors can come and enjoy as a break from everyday activities in ordinary places. They do not mention expressions of environmental concern outside the conservation of particular spaces that they

consider “natural.” Another form of limitation is the scope of social action. The responses focus on individual responsibility to care for the park and nature, but they do not mention a responsibility to engage in broader collective mobilization or political action toward the kind of systemic changes required to address the ecological crisis of climate change.

Indeed, the theme of collective mobilization was evident in responses of only two participants, both of whom mentioned it as a contrast to their own conception and experience of environmental concern. One participant said, “I’m not a big advocate to where I’m out there doing things that a lot of other environmentalists are.” The other stated “I think some people go too far one way or the other with it...Sometimes you can’t do something that hurts everybody because of one certain situation.” Although it is difficult to know exactly what this participant meant, the response recalls the objection that the cure is worse than the disease – the idea that forceful action to address climate change or ecological devastation will cause harm to economic livelihoods or intolerable disruption to modern ways of life that outweigh its benefits.

Just as important as themes that participants did mention are themes that they did not mention. No participants spontaneously mentioned climate change or global warming. No participants mentioned issues related to environmental justice or environmental racism. No participants referred to or endorsed alternative conceptions of environmentalism. Instead, participants emphasized preservation and maintenance of the park for its recreation and aesthetic value, representing the cult of wilderness.

To explore the second component of this question, we considered whether endorsement of the personal responsibility or conservation threads of environmentalism were related to participant race. Fisher’s Exact Test indicated that there was no statistically significant difference between the tendency for white participants ($n = 15, 46.9\%$) compared to participants of color ($n = 5, 55.6\%$) to endorse a responsibility to conserve and preserve the natural environment, $p = .65$. Similarly, there was no difference in the tendency for white participants ($n = 9, 22\%$) and participants of color ($n = 4, 44.4\%$) to stress the responsibility to clean up after oneself in the park, $p = .35$. In summary, there is no evidence in the current study that participants varied by racial group in their expression of these manifestations of environmental concern. This remains an interesting direction for future research.

Discussion

The primary goal of the current work was to explore the construction and experience of environmental concern among visitors to a state park in a region with a reputation for white Christian nationalist politics and hostility to mainstream forms of environmentalism. Promotional materials represent the park as a public good for

private consumption, whether as a pleasure-ground for active recreation or as a nature reserve for refuge from the stresses of modern life. To the extent that visitors to state parks are high in environmental concern, one might anticipate that they are particularly inclined to believe the scientific consensus regarding the fact of ACC and to perceive its impact on their own lives (but see Watson et al., 2015). Indeed, more than half of the park visitors who participated in the interviews indicated a belief in climate change, and roughly half perceived climate change or global warming as the cause of recent extreme weather. Yet, results also suggested a disconnect between personal impact from extreme weather, which most participants reported, and personal impact from climate change, which most participants did not report.

On one hand, this disconnect could be a result of the relatively lower intensity of the extreme weather events which were the focus of this study, as recent research has found that severity of impact is associated with increased climate change concern (Zanocco et al., 2018). On the other hand, to the extent that this disconnect is a form of disengagement with the issue of ACC, results extend previous research documenting greater skepticism among white Americans than among other racial groups in the U.S (McCright & Dunlap, 2011). Although the vast majority of white participants reported personal impact from the recent flooding, only a minority of white participants reported personal impact from climate change or directly linked recent extreme weather to ACC. In contrast, all but one of the nine participants of color directly attributed the flooding to ACC, and three of the four who reported personal impact from the flooding also reported personal impact from climate change. This result conceptually replicates previously documented ethnic group differences in pro-environmental orientations (Elias et al., 2019) and climate change concern (Collins, 2014; Dietz & Whitley, 2018).

Participant responses also suggest a concern with preservation through an ideology of 'leave it as [one] found it' that seeks to minimize traces of human activity on a pristine nature reserve. These responses suggest a delimitation of environmental concern to parks and wilderness areas and of environmental action to individual behavior in those spaces. Concomitantly, the responses resonate with underlying aspects of "the cult of wilderness" which entail not only a focus on individual fulfillment and freedom (of/in the wild), but also an escape from socio-political dynamics and evasion of responsibility for patterns of consumption and wealth production in everyday life (Cronon, 1996).

A decolonial perspective suggests that these main findings – racialized minimization of environmental concern and an engagement with environmental concern as cult of the wilderness – are not a mere coincidence. Instead, the form of environmental concern

associated with the cult of wilderness reflects and reproduces the same materially extractive and historically abstracted orientation toward nature which is integral to colonial conquest. An implication of this understanding is that the promotion of environmental concern as the cult of wilderness will not solve ecological devastation born out of imperialism and colonialism. Rather, an adequate response to climate change requires an interrogation of central components of the cult of wilderness and related colonial forms of environmental engagement.

Limitations

An important limitation of this study is directly related to our use of “participants of color” as a benchmark against which to compare white participants. In the first place, this white-centric category aggregates across a diverse set of “Other” social identities associated with their own epistemic standpoints (see Elias et al., 2019). Yet, even with this aggregation, the resulting sample size is insufficient for confident quantitative analysis. Accordingly, we urge readers to interpret our evidence regarding racial differences with appropriate qualification. A related limitation is that participants may have been especially likely to express environmental concern characterized by the cult of wilderness *because* they were in a state park at the time of the interview. Future research could explore manifestations of environmental concern in settings where such issues are less salient.

Decolonial considerations

Perspectives of decolonial theory provide a useful lens through which to interpret these results. Decolonial approaches emphasize that one cannot understand the modern world without consideration of the racist colonial violence that constituted it (Mignolo, 2011). Viewed through this lens, climate change is but a profound manifestation of modernity’s colonial shadow, an outcome inherent to the pursuit of Eurocentric global modernity.

Recognition of a link between modernity/coloniality and climate change, as well as the (defensive) denial of that link, are not recent phenomena. With respect to the geographic context of this investigation, recognition and skepticism about climate change were evident over a century ago in separate entries in an edited book, **History of Wichita and Sedgwick County Kansas: Past and Present** (1910). In one entry, James R. Mead, trader and co-founder of Wichita – the largest city in the state of Kansas – lamented recent ecological changes to the Arkansas River:

“To some extent the river was used in Kansas as a highway of travel and traffic until the coming of the white man, who robbed it of its water and exterminated the millions of bison and other forms of animal life which once grazed on the bordering

luxuriant meadows and quenched their thirst in its rippling waters [...] The breaking up of the soil consequent upon the settlement of the country allowed the rainfall to soak into the ground, and the river soon ceased to carry its normal volume of water [...] Thus for the past ten or fifteen years we have observed the evolution of a great river into a sandy waste or insignificant stream” (Mead, 1910: 522-523).

Within a few decades of European settlement, the volume of water in the once navigable river had decreased to the extent that it often ceased to flow, a change that Mead attributed to settler colonialism and associated agricultural practices.

The possibility that settler land use practices might degrade local ecology or negatively impact climate constituted a threat to the modern/colonial narrative of progress and the notion that white settlement and agriculture improved an otherwise desolate land. Skepticism of a possible link between modern/colonial development and a change in global climate came a mere 80 pages later in an entry titled “So-called change of climate” by Richard H. Sullivan (1910). Sullivan, who was forecaster for the weather bureau in Wichita, drew upon scientific authority to dismiss the claims of climate change:

“The United States seem to offer the most favorable conditions for answering the question as to the extent to which increasing cultivation of large districts of country may result in change of climate. In the east there has been an extraordinary decrease in territory formerly covered by forests; while on the other hand, a good deal of planting has been done in the western prairies and plateaus. No corresponding change in temperature or in precipitation has, however, thus far been demonstrable.” (Hann, n.d., as cited in Sullivan, 1910: 608-609).

Sullivan is particularly emphatic in his conclusion that, “a whole series of states, much less the man with his plow, is unable to control climate” (608).

This reference to “the man with his plow” is particularly significant. Sullivan wrote his remarks during a period that author Timothy Egan refers to as “The Great Plowup” (Egan, 2006: 14) in his synthesis of research by environmental historians (see Worster, 2004). During the early 20th century, the U.S. government offered financial incentives for people to purchase land in the Midwest and Southwest United States for agricultural development. Farmers and ranchers quickly capitalized on the seemingly empty landscape, which many early European settlers had referred to as the “Great American Desert” (Egan, 2006: 36). They transformed the region using agricultural practices that had served them well in other climate zones. The abrupt ecological transformation unsettled the landscape and set the stage for the ecological catastrophe known as “The Dust Bowl” in 1930 (Egan, 2006). A mere 20 twenty years after Sullivan’s dismissal of

the ecological effects of plowing, the plowed-up topsoil lost moisture and blew away, precipitating extensive loss of livelihoods and a mass exodus of environmental refugees.

These voices from more than a century ago echo in contemporary debates about climate change. The harmful effects of modern/colonial development on climate conditions and environment that Mead noted in 1910 are increasingly evident in our colonial present. Effective mitigation of these harmful effects requires that people take notice of the available evidence and abandon modern/colonial lifestyles for more sustainable alternatives. Yet, despite their material interest in anticipating ecological catastrophe, white American investment in whiteness and the Eurocentric modern/colonial order means that they also have an interest in the denial of evidence that would further delegitimize the modern/colonial present and challenge their imagination of white settler futurity. As our findings demonstrate, experience with extreme weather may not uniformly promote recognition of climate change, and in this case, was actually associated with a decreased tendency to recognize the reality of ACC. As in other cases, interests related to investment in whiteness trump interests related to self-preservation, to the detriment of all humanity (Metzl, 2019; Lies, 2021).

A decolonial lens also foregrounds the close relationship between coloniality and the cult of wilderness. For instance, this form of environmentalism suppresses the historical relationship between “wilderness spaces” and colonialism, and masks modern/colonial dynamics in the present behind superficially pro-environmental behavior and concern. Specifically, the cult of wilderness has been closely tied to the European colonial conquest, seizure, and enclosure of Indigenous North American lands. In 1872, U.S. President Ulysses S. Grant signed the Yellowstone National Park Protection Act, which created the first national park in the world. Following the U.S. government’s forced removal and murder of hundreds of Bannock, Crow, Salish, Shoshone, Nez Perce, and Northern Paiute from the area that would become Yellowstone National Park, Grant declared that the area be “dedicated and set apart as a public park or pleasuring-ground for the benefit and enjoyment of the people” (Moran, 2020). Park officials thereafter banned members of these tribes from entering the area to “protect tourists” (Merchant, 2002: 148; Keller & Turek, 2005).

A similar dynamic has also been at work historically in African spaces. In 1900, European colonial powers met in London for the world’s first ever environmental conference to discuss the protection of wildlife in Africa (Guha, 2000). Delegates from seven European countries – there were no Africans present – signed a ‘convention for the Preservation of Animals, Birds and Fish in Africa,’ which offered protection to only a few species of animal and left others subject to continued decimation. As Guha writes, “If there was indeed a ‘crisis of African wildlife,’ this crisis had been created by the

white man's gun and rifle, not the native spear and sling shot" (Guha, 2000: 47). Yet, the delegates framed conservation efforts as European intervention to save the landscape from "African despoliation," and they instituted measures to ban Africans from hunting in game reserves and entering national parks.

In the present, the ongoing relationship between coloniality and the cult of wilderness is reflected in the park system and visitors' valuation of conservation and the recreation experience and also in neoliberal deployments of leisure and conservation associated with modern/colonial individualist abstraction from context (Readsura Decolonial Editorial Collective, 2022). For example, the forms of outdoor recreation associated with parks are closely tied with consumerism and commodification, not only in relation to the consumption and marketing of material goods used for leisure activities but also the commodification of outdoor experience and the selling of images of freedom, authenticity, and a certain kind of white subjectivity associated with the pursuit of high arousal positive affect (i.e., *fun*; Tsai, 2007). Furthermore, "current neo-liberal discourses" often "use wilderness protection as a Trojan horse for multinational business interests" (Vannini & Vannini, 2016: 150). In this context, the idea of wilderness continues to both enable and mask forms of modernity/coloniality related to neoliberal individualism as it is linked with preservation of local ecologies despite ongoing exploitation and devastation elsewhere.

Conclusion

Political ecologists emphasize that there is no concept of environmental action or concern divorced from politics (Caminero-Santangelo, 2014). In similar fashion, a decolonial critique emphasizes the extent to which hegemonic forms of environmental activism have roots in modern/colonial worldviews, including understandings of society and ways of being that abstract people from cultural context. The point of this critique is not to abandon certain forms of environmental engagement and concern. Rather the point is to highlight decoloniality and the more relational worldviews of many Indigenous Peoples (see Wildcat, 2009), predicated on the fundamental embeddedness and interdependence of social existence, as critical components of environmental justice.

Indeed, this critique demonstrates how certain forms of environmental engagement and concern may perpetuate, rather than alleviate, deep-rooted and persistent ecological problems. One implication of this perspective is to foreground racial justice and decolonization as central concerns of an environmental psychology rather than an optional topic relevant to a peripheral few (see Adams, 2021). Another is that efforts to identify factors that may generate the political will to address climate change, such as experience with extreme weather, will be inadequate without explicit attention to colonial history and racial justice.

References

About KDWP (n.d.) Kansas Department of Wildlife and Parks. <https://ksoutdoors.com/KDWP-Info/About-KDWP>. Date retrieved or accessed: 14 August 2021.

Adams, M (2021) Critical psychologies and climate change. **Current Opinion in Psychology**, **42**, 13-18.

Albright, E A, & Crow, D (2019) Beliefs about climate change in the aftermath of extreme flooding. **Climatic Change**, **155(1)**, 1-17.

Almukhtar, S, Migliozi, B, Schwartz, J, & Williams, J (2019, September 11) *The Great Flood of 2019: A Complete Picture of a Slow-Motion Disaster*. The New York Times. <https://www.nytimes.com/interactive/2019/09/11/us/midwest-flooding.html>.

Bergquist, M, Nilsson, A, & Schultz, P (2019) Experiencing a severe weather event increases concern about climate change. **Frontiers in psychology**, **10**, 220.

Caminero-Santangelo, B (2014) **Different shades of green: African literature, environmental justice, and political ecology**. University of Virginia Press.

Campbell, T H, & Kay, A C (2014) Solution aversion: On the relation between ideology and motivated disbelief. **Journal of personality and social psychology**, **107(5)**, 809.

Chen, M F (2020) Effects of psychological distance perception and psychological factors on pro-environmental behaviors in Taiwan: Application of construal level theory. **International Sociology**, **35(1)**, 70-89.

Cheney State Park (n.d.) **Kansas Department of Wildlife and Parks**. <https://ksoutdoors.com/State-Parks/Locations/Cheney>. Date retrieved or accessed: 7 August 2021.

Chu, H, & Yang, J Z (2018) Taking climate change here and now – mitigating ideological polarization with psychological distance. **Global Environmental Change**, **53**, 174–181.

City History (n.d.) Clearwater Kansas. <https://www.clearwaterks.org/254/City-History>. Date retrieved or accessed: 7 August 2021.

Collins, J (2014) Race to Sustain: The Policy Implications of Racial Differences in Climate Change Public Opinion Attitudes. **Harvard Journal of African American Public Policy**, 45–60.

Cronon, W (Ed.) (1996) **Uncommon ground: Rethinking the human place in nature.** WW Norton & Company.

Dauvergne, P (2016) **Environmentalism of the rich.** The MIT Press.

Demski, C, Capstick, S, Pidgeon, N, Sposato, R G, & Spence, A (2017) Experience of extreme weather affects climate change mitigation and adaptation responses. **Climatic Change, 140(2)**, 149-164.

Dietz, T, & Whitley, C T (2018) Environmentalism, norms, and identity. **Proceedings of the National Academy of Sciences, 115(49)**, 12334-12336.

Egan, T (2006) **The worst hard time: The untold story of those who survived the great American dust bowl.** Houghton Mifflin Harcourt.

Elias, T, Dahmen, N S, Morrison, D D, Morrison, D, & Morris, D L (2019) Understanding Climate Change Perceptions and Attitudes Across Racial/Ethnic Groups. **Howard Journal of Communications, 30(1)**, 38-56.

Fischer, E M, Sedláček, J, Hawkins, E, & Knutti, R (2014) Models agree on forced response pattern of precipitation and temperature extremes. **Geophysical Research Letters, 41(23)**, 8554-8562.

Gilchrist, K (2021, August 10) UN climate report is our 'final wake-up call,' say environmental experts. CNBC. <https://www.cnn.com/2021/08/11/ipcc-un-climate-report-is-our-final-wake-up-call-say-experts.html>.

Groshong, L, Stanis, S W, & Morgan, M (2018) Climate change impacts in Missouri State Parks: Perceptions from engaged park users. **Journal of Outdoor Recreation and Tourism, 24**, 11-20.

Guha, R (2000) **Environmentalism: A global history.** Longman.

Henrich, J, Heine, S, & Norenzayan, A (2010) The weirdest people in the world? **Behavioral and Brain Sciences, 33(2-3)**, 61-83.

Howse, A E (1962, June 1) **Summary Report: Long Range Water Program for Wichita.**

Ibsen, K (2013, May 28) Cheney Lake Ranks Top 10 Windiest Lakes in the Nation – Kiteboarders Rejoice. Travel KS. <https://www.travelks.com/blog/stories/post/cheney-lake-ranks-top-10-windiest-lakes-in-the-nationkiteboarders-rejoice/>.

IPCC, 2021: Climate Change 2021: **The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change** [Masson-Delmotte, Zhai, V P, Pirani, A, Connors, S L, Péan, C, Berger, S, Caud, N, Chen, Y, Goldfarb, L, Gomis, M I, Huang, M, Leitzell, K, Lonnoy, E, Matthews, J B R, Maycock, T K, Waterfield, T, Yelekçi, O, Yu, R, and Zhou, B (eds.)]. Cambridge University Press. In Press.

Kahan, D M, Braman, D, Gastil, J, Slovic, P, & Mertz, C K (2007) Culture and Identity-Protective Cognition: Explaining the White-Male Effect in Risk Perception. **Journal of Empirical Legal Studies**, **4(3)**, 465-505.

Keller, R H, & Turek, M F (2005) **American Indians and National Parks**. Univ. of Arizona Press.

Konisky, D M, Hughes, L, & Kaylor, C H (2016) Extreme weather events and climate change concern. **Climatic Change**, **134(4)**, 533-547.

Kränge, O, Kaltenborn, B P, & Hultman, M (2019) Cool dudes in Norway: Climate change denial among conservative Norwegian men. **Environmental Sociology**, **5(1)**, 1-11.

Krkoška Lorencová, E, Loučková, B, & Vačkářů, D (2019) Perception of climate change risk and adaptation in the Czech Republic. **Climate**, **7(5)**, 61.

Lanterman, L (2019, April) **Welcome**. *Kansas State Parks Guide*.

LeComte, D (2020) U.S. Weather Highlights 2019: The Second-Wettest Year on Record. **Weatherwise**, **73(3)**, 14–23.

Leiserowitz, A, Roser-Renouf, C, Marlon, J, & Maibach, E (2021) Global Warming's Six Americas: A review and recommendations for climate change communication. **Current Opinion in Behavioral Sciences**, **42**, 97-103.

Lies, T S (2021) **Investment in Whiteness and Climate Change Skepticism**. (Publication No. 28775727) [Master's thesis, University of Kansas]. ProQuest Dissertations Publishing.

Lujala, P, Lein, H, & Rød, J K (2015) Climate change, natural hazards, and risk perception: the role of proximity and personal experience. **Local Environment**, **20(4)**, 489-509.

Mackay, C M, Schmitt, M T, Lutz, A E, & Mendel, J (2021) Recent developments in the social identity approach to the psychology of climate change. **Current Opinion in Psychology**, **42**, 95-101.

Martinez-Alier, J (2015) **Degrowth: A vocabulary for a new era** (D'Alisa, G, Demaria, F, & Kallis, G Eds.). Routledge, Taylor & Francis Group.

Martinez-Alier, J (2016) 30. Environmentalism(s). In Adamson, J, Gleason, W and Pellow, D N (Eds.) (2016) In **Keywords for Environmental Studies** (97-100). New York University Press.

McCright, A M, & Dunlap, R E (2011) Cool dudes: The denial of climate change among conservative white males in the United States. **Global Environmental Change**, **21(4)**, 1163-1172.

McCright, A M, Marquart-Pyatt, S T, Shwom, R L, Brechin, S R, & Allen, S (2016) Ideology, capitalism, and climate: Explaining public views about climate change in the United States. **Energy Research & Social Science**, **21**, 180-189.

Mead, J R (1910) A Dying River. In O. H. Bentley (Ed.) (1910) **History of Wichita and Sedgwick County Kansas: Past and Present** (Vols. 1 & 2, pp. 522-524). Chicago, IL. C. F. Cooper & CO.

Merchant, C (2002) **The Columbia guide to American environmental history**. Columbia University Press.

Metzl, J M (2019) **Dying of whiteness: how the politics of racial resentment is killing America's heartland**. Hachette UK.

Mignolo, W (2011) **The darker side of Western modernity: Global futures, decolonial options**. Duke University Press.

Moran, T (2020, February 5) Birth of a National Park. National Park Service. <https://www.nps.gov/yell/learn/historyculture/yellowstoneestablishment.htm>.

Nagel, J (2016) **Gender and climate change: Impacts, science, policy**. Routledge, Taylor & Francis Group.

Nash, R (1977) The value of wilderness. **Environmental Review: ER, 1(3)**, 14-25.

National Weather Service.(2021, August 3) NWS Preliminary US Flood Fatality Statistics. Weather.gov. <https://www.weather.gov/arx/usflood>.

Ndamani, F, & Watanabe, T (2015) Farmers' perceptions about adaptation practices to climate change and barriers to adaptation: A micro-level study in Ghana. **Water, 7(9)**, 4593-4604.

Nixon, R (2011) **Slow Violence and the Environmentalism of the Poor**. Harvard University Press.

Ogunbode, C A, Demski, C, Capstick, S B, & Sposato, R G (2019) Attribution matters: Revisiting the link between extreme weather experience and climate change mitigation responses. **Global Environmental Change, 54**, 31-39.

Oreskes, N (2004) The scientific consensus on climate change. **Science, 306(5702)**, 1686-1686.

Readsura Decolonial Editorial Collective (2022) Decoloniality as a social issue for psychological study. **Journal of Social Issues, 78(1)**, 7-26.

Rodney, W (2018) **How Europe Underdeveloped Africa**. Verso Trade.

Shorman, J (2019, November 13) 'Land of extremes': In Kansas, a year of damaging floods and forecast of more to come. **The Wichita Eagle**. <https://www.kansas.com/news/politics-government/article237295564.html>.

Sullivan, R H (1910) The United States Weather Bureau. In O. H. Bentley (Ed.) (1910) **History of Wichita and Sedgwick County Kansas: Past and Present** (Vols. 1 & 2, pp. 594-614). Chicago, IL. C. F. Cooper & CO.

Tsai, J L (2007) Ideal affect: Cultural causes and behavioral consequences. **Perspectives on Psychological Science, 2(3)**, 242-259.

Vannini, P, & Vannini, A (2016) **Wilderness**. Routledge, Taylor & Francis Group.

Vaske, J J, & Kobrin, K C (2001) Place attachment and environmentally responsible behavior. **The Journal of Environmental Education**, **32(4)**, 16-21.

Watson, A, Martin, S, Christensen, N, Fauth, G, & Williams, D (2015) The Relationship Between Perceptions of Wilderness Character and Attitudes Toward Management Intervention to Adapt Biophysical Resources to a Changing Climate and Nature Restoration at Sequoia and Kings Canyon National Parks. **Environmental Management**, **56(3)**, 653–663.

Whitmarsh, L (2008) Are flood victims more concerned about climate change than other people? The role of direct experience in risk perception and behavioural response. **Journal of Risk Research**, **11(3)**, 351-374.

Wildcat, D R (2009) **Red alert! Saving the planet with indigenous knowledge**. Fulcrum.

Wong-Parodi, G, & Rubin, N B (2022) Exploring how climate change subjective attribution, personal experience with extremes, concern, and subjective knowledge relate to pro-environmental attitudes and behavioral intentions in the United States. **Journal of Environmental Psychology**, **79**, 101728.

Worster, D (2004) **Dust bowl: the southern plains in the 1930s**. Oxford University Press.

Zanocco, C, Boudet, H, Nilson, R, Satein, H, Whitley, H, & Flora, J (2018) Place, proximity, and perceived harm: extreme weather events and views about climate change. **Climatic Change**, **149(3)**, 349-365.