

Entitlement Predicts Lower Proenvironmental Attitudes and Behavior in Young Adults

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Abstract

Environmental advocates commonly describe ecological problems as being caused, at least in part, by the psychological construct of human entitlement. Nevertheless, the concept of trait entitlement, as an individual difference variable, has not yet been considered in relation to proenvironmental attitudes and behavior. This research examined whether entitlement among young adults correlates with environmental attitudes and actions. Results showed that individuals who were high in entitlement scored lower in attitudes in favor of protecting the environment, self-reported environmental behavior, and were less likely to engage in observable environmental action by way of donating money earned from the study to an environmental cause. Conversely, those high in entitlement were more in favor of human utilization of the environment and supported geoengineering efforts. Mediation analysis showed that environmental attitude mediated the links between entitlement and both donating and conservation behavior. Together, these results highlight the role of trait entitlement as a barrier to environmentalism.

Key Words: Entitlement—Environmental attitudes—Proenvironmental behavior—Personality—Conservation—Geoengineering.

Introduction

Today, individuals diverge greatly in the perceived importance of environmentalism as a social issue (Kempton, Boster, & Hartley, 1995; Leiserowitz, 2005). This discrepancy has existed even in the face of ever-mounting evi-

dence that humans are drastically and rapidly altering the climate. Human-caused emission release, waste production, and excessive consumption are activities linked to diminishing environmental quality (IPCC, 2019). Owing to the inclement rate of climate change, there is general consensus among climate scientists that humans must act to alleviate some of their negative effects on the environment, in large part by altering our everyday consumption, development, and conservation practices (IPCC, 2018). For this reason, it is important for researchers to identify reliable personality characteristics that may be associated with individual differences in environmental concern and behavior.

One individual difference trait that might impact environmental attitudes and behavior is *entitlement*, which is defined as a stable and pervasive belief that one deserves more or better than others, which can be reflected in desired or actual behaviors (Campbell, Bonacci, Shelton, Exline, & Bushman, 2004). Entitlement has previously been linked to status seeking (Lange, Redford, & Crusius, 2019) and power seeking (Redford & Ratliff, 2018), both of which, in turn, confer greater prestige and social dominance (Lange et al., 2019). Entitled individuals also exhibit lower levels of guilt (Solomon & Leven, 1975). Guilt has been identified as a predictor of proenvironmental behavior, such that those who feel more guilt over the state of the environment are more likely to engage in public and private environmental protection efforts (Mallett, 2012). Entitlement has also been linked to materialism (Żemojtel-Piotrowska et al., 2013), which has been highlighted as detrimental to living a more simplified proenvironmental life (Kasser, 2010). Additional research has shown that entitled individuals promote their own achievement at others' expense (Tamborski, Brown, & Chowling, 2012) and attempt to dominate others through the use of costly tactics such as aggression, especially after receiving a negative evaluation by others (Campbell et al., 2004). Moreover, entitled individuals appear willing to engage

in behaviors that benefit themselves, even at the expense of a younger generation (e.g., taking candy from children; Campbell et al., 2004). The concepts of status and power seeking, wielding this power over others, and acting to benefit the self at the expense of future generations have long been recognized as global factors that drive the current climate crisis (Arnocky, Dupuis, & Stroink, 2014; Stanley, Milfont, Wilson, & Sibley, 2019).

Popular press articles often highlight the incongruity between entitlement and environmental sustainability, with declarations describing the current state of our planet as being due to “entitlement to power, control, domination and ownership. The presumed right to use and abuse something and then walk away to conquer and colonize something new” (Bianco, 2018), within an economic and social system where we believe that one is “entitled to as great a share of the world’s resources as your money can buy ... You can burn as much fuel as you like. Every pound or dollar secures a certain right over the world’s natural wealth” (Monbiot, 2019). Ostensible links between entitlement and environmental issues have also been highlighted in academic writing, wherein researchers have argued issues surrounding established ecological benchmarks, which assume “polluters are entitled to pollute at chosen levels regardless of the effects on others ... [and] the inappropriateness of viewing emissions cuts as ‘sacrifices’ made by the entitled” (Reed Gibson, 2019).

Inherent to this argument is the notion that perceiving oneself as being entitled to things such as power, status, and never ending resources compels the pursuit of these outcomes at the cost of environmental quality; for entitled individuals, it is a price that they are more than willing to pay. However intuitive, these purported links are nevertheless anecdotal; we are unaware of any extant empirical research that actually examines individual differences in entitlement in relation to environmental attitudes and behavior. Rather, previous personality research has focused almost entirely on the Big Five traits in relation to environmentalism (Brick & Lewis, 2014; Hirsh, 2010; Markowitz, Goldberg, Ashton, & Lee, 2012; Milfont & Sibley, 2012). This research is limited due to the constraints it places on personality, which has recently been considered to be more complex than the typical Big Five constellation dictates. Exploring additional personality dimensions that appear conceptually linked to the environmental crisis may elucidate a deeper understanding of individual differences in environmentalism. Indeed, previous research has shown that entitlement is distinct from the Big Five facets, being only modestly correlated with agreeableness and emotional stability (Campbell et al., 2004). The study of entitlement is particularly important because those who are high in entitlement could also feel entitled to environmental quality, even if they are unwilling to

sacrifice in other entitled domains to achieve it. This could have implications for support for large-scale geoengineering initiatives, where the climate could conceivably be altered to benefit some individuals with little expense or effort on the part of the entitled individual directly. Accordingly, this research examines individual differences in entitlement in relation to environmental attitudes and behavior, as well as in support for geoengineering.

Entitlement and environmentalism

There are both direct and indirect lines of evidence underlying the hypothesis that entitled individuals will be lower in proenvironmental attitudes and behavior. Campbell et al. (2004) found that entitled participants desired to harvest a greater number of trees than those who felt less entitled in a common dilemma task. Frantz, Mayer, Norton, and Rock (2005) found that entitled individuals were less likely to feel connected to nature, although it is unclear whether this relationship would extend into proenvironmental attitudes and behavior. There are further circumstantial reasons to predict a negative relationship between these variables.

First, entitlement is related to other personality dimensions, such as narcissism (Campbell et al., 2004) and disagreeableness (Pryor, Miller, & Gaughan, 2008), such that entitlement may underlie these broader personality dimensions (Paunonen & Ashton, 2001). Interestingly, both narcissism and disagreeableness have independently been linked to lower scores on environmental attitude and behavior measures (Desrochers, Albert, Milfont, Kelly, & Arnocky, 2019; Hirsh, 2010; Milfont & Sibley, 2012; Nisbet, Zelenski, & Murphy, 2009). Nevertheless, it is presently unclear whether entitlement specifically, as merely one of many traits comprising narcissism, is itself linked with lower environmentalism, or whether other components of narcissism are driving the effect. This issue is further confounded by the empirical deficiencies of entitlement subscales in extant measures of narcissism, which has compelled researchers to focus more specifically on the measurement of entitlement as a stand-alone construct (Campbell et al., 2004). Moreover, recent research has highlighted key conceptual differences between entitlement and narcissism, with the former being more focused on self-centrism in relation to others with a higher reliance upon social relationships, and the latter being more focused on overt independence and low reliance upon others (Rose & Anastasio, 2014). Second, there is a sex difference in entitlement that maps on to the established sex difference in environmentalism, such that men are both more entitled (Campbell et al., 2004) and less proenvironmental than women (Desrochers et al., 2019).

Conversely, some research has shown a *positive* relationship between entitlement and the more general construct of prosociality,

which at first glance might suggest that entitled individuals could be more oriented toward engaging in proenvironmental action. However, it is important to note that this positive relationship exists only when the prosocial behavior was also *self-serving* for the participants (Eberly-Lewis & Coetzee, 2015; Kauten & Barry, 2014). This appears consistent with the notion that active entitlement can sometimes contribute positively to well-being, where the individual is behaving to benefit themselves (Candel & Turluc, 2017). Performing prosocial actions can be viewed as self-serving if the participant gains something in return, whether it is tangible or something less tangible such as enhancing their self-esteem (Kauten & Barry, 2014). For instance, Eberly-Lewis and Coetzee (2015) found that adolescent narcissism, which is characterized by a grandiose and entitled view of the self, was correlated with public and opportunistic prosociality only within the context of personal gain. Moreover, the positive relationship between prosocial behavior and adolescent narcissism was found to be more prevalent for males, and to only exist using self-report but not peer reports, suggesting prosociality (or feigning prosociality) may be strategic for enhancing the entitled individual's status (Kauten & Barry, 2014).

Proenvironmental behavior is widely viewed as a prosocial act, and is closely aligned with individual difference variables that are not directly self-serving, such as empathy (Arnocky & Stroink, 2011a), and holding a meta-personal self-construal that includes all living things within one's concept of self (Arnocky, Stroink, & Decicco, 2007). Accordingly, environmental behavior is not usually a self-serving endeavor, but rather an effort undertaken for the global good (Gagnon Thompson & Barton, 1994). In addition, at the core of the definitive characteristics of entitlement, entitled people were found to be greedier, less empathetic, more self-focused, and selfish than nonentitled individuals (Campbell et al., 2004; Zitek, Jordan, Monin, & Leach, 2010). This suggests entitled individuals should be less inclined to act prosocially toward the environment, especially in a Western industrialized and high-socioeconomic context where the immediate and personal effects of climate change are not particularly severe or impactful upon daily life.

Beyond traditional altruistic or sacrificial forms of conservation behavior, there has been a growing interest in studying geoengineering, or the use of technologies (likely by government) to alter the climate (Pidgeon et al., 2012). Geoengineering is a controversial behavioral strategy given that little is known about its effectiveness and risks. Accordingly, researchers have observed differences between support for geoengineering and more traditional proenvironmental behaviors at the individual level (Landry, Gifford, Milfont, Weeks, & Arnocky, 2018). For instance, those who are more individualistic are both lower in environmental concern and more likely to support geoengineering (Kahan, Jenkins-Smith, Tarantola, Silva,

& Braman, 2012). Given that geoengineering requires little of the individual yet still offers a potential solution to the environmental crisis (a gain), it is possible that entitled individuals will be more likely to endorse support for geoengineering.

Current study

This study extends the study of individual differences in personality in relation to environmentalism by examining the predictive role of entitlement in relation to (1) environmental attitudes, (2) proenvironmental behavior (conservation and sacrifice of personal gain), and (3) support for geoengineering. Extant research on entitlement and environmental resource sharing suggests that entitled people are less likely to care about the environment (Campbell et al., 2004). However, other research on prosocial behavior shows that entitled individuals are likely to engage in prosocial behavior, but only if there is something for them to gain.

We anticipated that entitlement would correlate negatively with attitudes in favor of environmental protectionism, and positively with attitudes in favor of environmental utilization (Hypothesis 1), and negatively with self-reported conservation behavior and two *in vivo* measures of environmental behavior: (1) donating money earned in the study to an environmental cause and (2) indicating willingness to join an on-campus environmental organization (Hypothesis 2). Conversely, we anticipated that entitlement would correlate positively with support for geoengineering, given that such support would ostensibly confer a benefit in the way of more suitable climate for the individual without having to sacrifice or put forth effort personally (Hypothesis 3). Finally, we anticipated that environmental attitudes would mediate links between entitlement and each behavior-dependent variable (Hypothesis 4), given previous research demonstrating the mediating role of attitudes and associated environmental behaviors (Arnocky & Stroink, 2011a, 2011b; Arnocky et al., 2007).

Methods

Participants

This research was approved by the Institutional Research Ethics Board, in accordance with Canada's tri-council policy statement: Ethical Conduct for Research Involving Humans, protocol number 101140. As part of a larger study on environmental psychology (Desrochers et al., 2019; Landry et al., 2018), 437 undergraduates (244 women) were recruited from a Canadian university ($M_{age} = 20.6$, $SD = 4.32$). The majority (>80%) of the participants were white, with a small percentage of Indigenous (9.4%), Asian (8%), black (3.2%), Latin (1.1%), and Arab (0.7%) population. The participants came from a range of religious backgrounds: Roman Catholic (34.2%), other

Christian faith (23.2%), Islam (1.4%), Hinduism (1.8%), Sikhism (1.4%), Buddhism (0.9%), Judaism (0.7%), or nonreligious backgrounds (38.6%). To address the current research question, participants completed a series of well-validated self-report measures through a paper-and-pencil survey on entitlement, environmental concern, and behavior in a counter-balanced package. Participants received \$5 CAD as remuneration.

Measures

Entitlement. Trait entitlement was assessed using the Psychological Entitlement Scale (PES; Campbell et al., 2004). The PES consists of nine items anchored along a 7-point Likert-type scale ranging from 1 = *strongly disagree* to 7 = *strongly agree*. Example items include “I honestly feel I’m just more deserving than others,” “I deserve more things in my life,” and “I feel entitled to more of everything.” Previous psychometric examination of the measure indicates that scores are generally stable over time (Campbell et al., 2004). In this study, the PES demonstrated good internal consistency ($\alpha=0.84$).

Environmental attitude. Proenvironmental attitudes were measured using the brief version of the Environmental Attitude Inventory (EAI-24; Milfont & Duckitt, 2010). The EAI-24 consists of 24 items scored using a 7-point Likert-type scale anchored at 1 = *strongly disagree* and 7 = *strongly agree*. Items assess enjoyment of nature, support for interventionist conservation policies, environmental movement activism, conservation motivated by anthropocentric concern, confidence in science and technology, environmental fragility, altering nature, personal conservation behavior, human dominance over nature, human utilization of nature, ecocentric concern, and support for population growth policies. Following previous published use of the measure, items were combined and averaged to form two subscales assessing general attitudes toward environmental protectionism ($\alpha=0.82$) and utilization ($\alpha=0.75$), whereby preservation reflects the belief that priority should be given to preserving and protecting nature, and where utilization reflects the belief that it is appropriate for nature to be used and altered for human objectives.

Self-report proenvironmental behavior. Participants indicated how often they engaged in 12 proenvironmental behaviors during the past year using a 5-point scale (1 = *never* and 5 = *very often*). A “not applicable” response was also provided “if there was no opportunity for the action” ($\alpha=0.83$) (Schultz et al., 2003). For this study we recoded the “not applicable” options as a 1 for having never engaged in the action, given that we were interested solely in the degree to which the respondent had or had not engaged in the behavior, to

coincide with other research using the measure that has not allowed for the not applicable option. The recode did not affect the internal consistency of the measure in this data set ($\alpha=0.80$).

Geoengineering support. After reading the definition of geoengineering as: *The use of large-scale engineering projects designed specifically to combat global climate change*, participants reported their awareness of, and support for, geoengineering using a 5-point Likert-type scale (1 = *I have not heard of geoengineering/strongly oppose* and 5 = *I know a great amount about geoengineering/strongly support*) (Pidgeon et al., 2012).

In vivo proenvironmental behaviors. At the end of the survey, participants were given the opportunity to either keep their \$5 remuneration or donate it to a well-known environmental organization. Participants were also given the opportunity to join a bogus on-campus environmental activism organization by providing their contact information.

Results

We first examined bivariate correlations between entitlement, environmental attitudes, and three measures of environmental action: support for geoengineering, self-reported proenvironmental behavior, and *in vivo* monetary donation to an environmental organization (Table 1). Results demonstrated that entitlement correlated negatively with environmental protectionism and the composite environmental attitude, as well as positively with environmental utilization attitudes. Results also demonstrated that entitlement correlated positively with support for geoengineering, and negatively with self-reported conservation behavior and donating the \$5 earned in the study to an environmental organization. Conversely, entitlement did not correlate with willingness to join a campus environmental group.

In this study, men ($M=3.4$, $SD=1.12$) reported higher entitlement scores than women ($M=2.91$, $SD=1.00$), $t(423)=4.26$, $p=0.0001$. Thus before testing our mediation models, we first examined whether gender moderated links between entitlement and environmental variables using a moderated regression model through the PROCESS macro for SPSS (Hayes, 2013). Results demonstrated that gender did not moderate links between entitlement and any environmental variables, with regression weights for the gender X entitlement interaction ranging from $b=-0.04$, $p=0.57$ to $b=0.03$, $p=0.64$.

In determining which variables were eligible for further mediation modeling, average environmental attitude (i.e., the mediator) correlated with all environmental action variables with the exception of attitudes toward geoengineering, which precluded this variable from

Table 1. Descriptive Statistics and Bivariate Correlations Between Entitlement, Environmental Attitudes, Support For Geoengineering, Self-Report Environmental Behavior, and Environmental Donation Behavior

	<i>N</i>	<i>M</i>	<i>SD</i>	MIN.	MAX.	01	02	03	04	05	06	07
01. Entitlement	425	3.09	1.07	1.00	6.78	–						
02. Environmental protectionism attitude	437	5.08	0.76	2.14	6.86	–0.23***	–					
03. Environmental utilization attitude	437	3.38	0.84	1.00	7.00	0.28***	–0.60***	–				
04. Total environmental attitude	437	4.90	0.71	2.25	6.79	–0.29***	0.92***	–0.87***	–			
05. Self-report behavior	435	3.22	0.72	1.00	5.00	–0.12*	0.54***	–0.37***	0.50***	–		
06. Support for geoengineering	437	3.80	1.17	1.00	7.00	0.13**	0.02	0.09 [†]	–0.07	0.01	–	
07. Donation of \$5 to World Wildlife Fund	437	–	–	–	–	–0.31***	0.22***	–0.24***	0.25***	0.11*	–0.11*	–
08. Join campus environmental group	437	–	–	–	–	0.02	0.21***	–0.12**	0.21***	0.10*	0.02	0.07

Missing data excluded listwise.

[†] $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

being explored further in our mediation models. Similarly, because entitlement was not meaningfully related to opting in to an on-campus environmental group, we elected to limit our mediation model testing to (1) self-reported conservation behavior and (2) donating one's remuneration to an environmental cause.

Next we examined whether proenvironmental attitude mediated the relationships between entitlement and each of our remaining environmental behavior-dependent variables, controlling for age. Relevant to each tested model, we confirmed that entitled participants had lower proenvironmental attitudes than those who were less entitled ($b = -0.19$, $SE = 0.03$, $t = -6.09$, $p = 0.0001$). Next, the total effects model for entitlement as a predictor of self-reported conservation behavior was examined. Entitled participants were less likely to report engaging in conservation behavior relative to those who were less entitled ($b = -0.07$, $SE = 0.03$, $t = -2.06$, $p = 0.04$). With both entitlement and environmental attitudes in the model, environmental attitude predicted self-reported conservation behavior ($b = 0.51$, $SE = 0.04$, $t = 11.45$, $p = 0.0001$), indicating a full mediation effect whereby the original link between entitlement and self-report conservation behavior was reduced to statistical nonsignificance by inclusion of the mediator ($b = 0.03$, $SE = 0.02$, $t = 1.06$, $p = 0.28$, bootstrapping: 95% LL = -0.14 , 95% UL = -0.06) (Fig. 1, top panel).

Next we examined the total effects model for entitlement as a predictor of overt donating behavior. Entitled participants were less likely to donate their remuneration relative to those who were less entitled ($b = -0.65$, $SE = 0.10$, $Z = -6.70$, $p = 0.0001$). With both entitlement and

environmental attitudes in the model, environmental attitude predicted donating behavior ($b = 0.58$, $SE = 0.17$, $Z = 3.38$, $p = 0.0007$), indicating a partial mediation effect whereby the original link between entitlement and donating behavior was statistically significantly reduced by inclusion of the mediator ($b = -0.58$, $SE = 0.12$, $Z = -4.93$, $p = 0.0001$, bootstrapping: 95% LL = -0.20 , 95% UL = -0.04) (Fig. 1, bottom panel).

Discussion

This study investigated entitlement, as a novel individual difference variable, in relation to proenvironmental attitudes and behavior. Participants with high levels of self-reported entitlement reported weaker protectionist attitudes and stronger utilization attitudes toward the environment, and were less willing to donate to the World Wildlife Foundation and self-reported a lower frequency of performing conservation behavior, yet reported more support for geoengineering initiatives.

This study supports the idea that more entitled individuals care less about the environment and are less willing to allocate time, money, and effort toward performing proenvironmental behavior relative to those who are less entitled. These findings correspond with previous research demonstrating that entitled people are more selfish, lack empathy, and are less likely to identify with others' perspectives (Campbell et al., 2004; Watson & Morris, 1991). Interestingly, these closely related traits might help to account for why entitled people are less likely to be concerned for the environment. For example, a self-immersed perspective among participants related to viewing

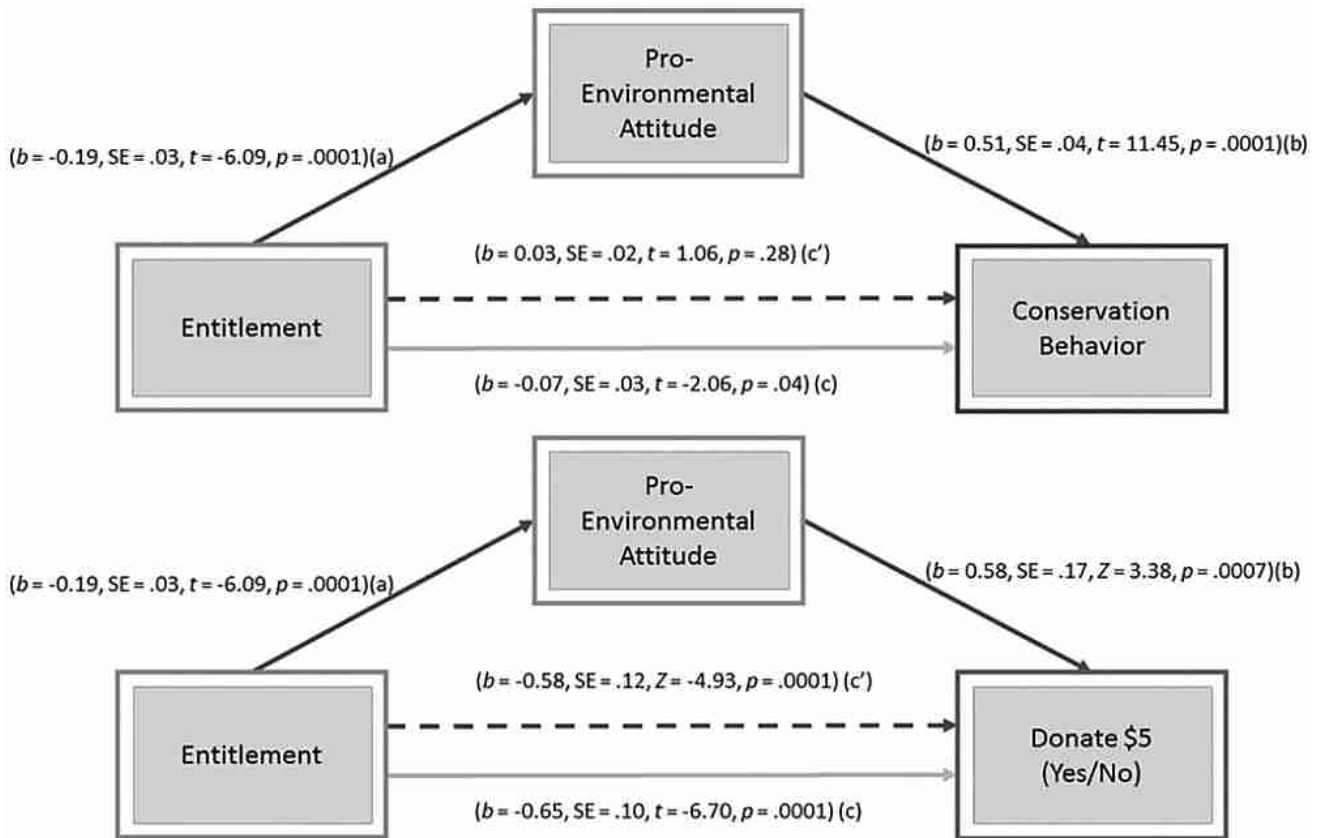


Fig. 1. Models depicting the mediating effect of environmental attitude upon the relationship between entitlement and conservation behavior (*upper panel*), and the partial mediation effect of environmental attitude upon the relationship between entitlement and *in vivo* donating behavior toward an environmental organization (*lower panel*).

proenvironmental behavior as less important and costlier, which, in turn, corresponded with less engagement proenvironmental behaviors (Hou, Sarigöllü, Jo, & Liang, 2017). Arnocky and Stroink (2011a) showed that empathy is an import predictor of proenvironmental attitudes and behaviors. Similarly, Sevillano, Aragonés, and Schultz (2007) showed that induced perspective taking and empathy mattered for predicting biospheric concerns. Together, this suggests that entitlement and closely related traits may represent a novel and individual difference factor that is important to understanding why some individuals refrain from engaging in proenvironmental action. Future research would benefit from examining entitlement, empathy, selfishness, and perspective taking together as predictors of proenvironmental attitudes and behaviors in conjunction with more traditional broader measures of personality (Big Five or HEXACO) to

determine the extent to which entitlement accounts for unique variance in environmentalism above and beyond these factors. In the current data set we had a brief 10-item measure of Big Five personality (TIPI; Gosling, Rentfrow, & Swann, 2003), as reported in Desrochers et al. (2019). Controlling for extraversion, openness, conscientiousness, neuroticism/emotion stability, and agreeableness in a partial correlation did not meaningfully change any of the results reported in this article, suggesting that the predictive role of entitlement is unique from other personality traits in understanding environmentalism. Nevertheless, studies using more comprehensive measures of personality would be useful to confirm this finding.

Although entitlement was resoundingly related to lower proenvironmental attitudes and behaviors, there was one variable that diverged from this trend. Entitled individuals were *more* likely to

have favorable attitudes toward geoengineering, relative to those who were less entitled. This may be due to geoengineering being viewed as a measure to fix the ecological problem without any meaningful cost or action required of the entitled individual. Previous literature examining the perception of geoengineering found those who are more individualistic were less concerned about climate change risk and were more likely to have favorable attitudes in support of geoengineering as a solution to climate change (Kahan et al., 2012), and the findings from this study appear to mirror this relationship. Support for geoengineering remains a drastically understudied yet important area.

Given that the predictors of support for geoengineering appear to diverge from, and even contrast with, predictors of other behavior aimed at augmenting global warming and sustainability, it would be valuable for future research to more comprehensively examine individual differences in support for such initiatives. This finding suggests that entitled individuals may not necessarily always be lacking in environmental concern, but rather, their environmental concerns and attitudes may be more egocentric. Future research should consider whether entitled individuals score higher than those who are less entitled on measures of egoistic versus social altruistic or biospheric concerns (Schultz, 2001; Stern & Dietz, 1994), and whether such concerns might mediate links between entitlement and support for geoengineering. Given a growing interest in studying individual differences in support for geoengineering (Landry et al., 2018), it would be worthwhile to consider developing more comprehensive measures of this construct.

Taken together, the findings from this study are important to the field of environmental psychology because identifying traits that serve as barriers to environmental action may help to identify solutions for increasing engagement in proenvironmental behavior. For instance, perhaps entitled individuals may be enticed by an alternative framing of their actions leading to some tangible gain for them, rather than for society at large, given previous research showing that entitled individuals will engage in prosocial behavior when there is a reward attached to it (Zitek et al., 2010). Rather than framing environmental messaging toward saving the planet, messages that highlight the personal benefit of proenvironmental action, such as “if you recycle your glass bottles you will receive money,” may be more effective among entitled individuals. In 2007, the Ontario provincial government enacted the “Ontario Deposit Return Program” under the Liquor Control Act (Ontario Government, 2017). This program allows people to receive money for returning their empty alcohol bottles and cans. It can be viewed as an example of how to frame environmental behavior, such as recycling bottles, as a personal gain, by receiving money.

In an effort to best motivate people to act proenvironmentally, future research could look into how framing messages differently reaches individuals possessing different personality traits, and whether providing a tangible reward increases environmental behavior among individuals high in entitlement. It would also be interesting to determine whether entitlement maps on to other meaningful environmental actions relevant to self-interest versus altruistic sacrifice. Recently in this journal, Davis, Stroink, and Arnocky (2019) reported links between higher scores on the new ecological paradigm and lower interest in having children, which is one of the most ecologically impactful decisions individuals make over their lifetimes (Arnocky, Dupuis, & Stroink, 2012). It is possible the entitlement might moderate this relationship, such that individuals with a proenvironmental worldview who are also low in entitlement would be most likely to forego having children.

Limitations

This study is not without limitations. First, the participants were university and college students. Previous literature has shown younger and well-educated individuals are more environmentally concerned than the general population (Fransson & Garling, 1999), making this sample potentially less generalizable to the broader community. Future studies should replicate this study in a wider and more representative sample.

Second, 66% of participants were unwilling to donate their \$5, but rather kept it for themselves. There are various factors that might influence their choice. Recruitment materials highlighted the \$5 reward for participating in the study. This might make participants feel more entitled to receive the reward after giving their time. Also, the study did not include a control variable to examine whether the donating behavior was due to general altruism (Kaiser & Byrka, 2011) or rather as an environmental action specifically. However, to account for this, donating behavior was significantly positively correlated with the other environmental variables, such as attitudes and self-report behavior (ranged from $r=0.14$ to $r=0.27$). This indicates that individuals who were more environmentally oriented donated more to the environmental cause, suggesting an accurate measure of environmentalism.

Third, as with all research pertaining to environmental concern and behavior, socially desirable responding may be an issue. Research has shown that social desirability correlates with responses on environmental concern and behavior measures (Milfont, 2009). Although research has shown that the measure of psychological entitlement is unrelated to social desirability (Campbell et al., 2004), future research might still consider including a control for socially desirable responding.

Conclusion

Results from this study provided new insight into our understanding of individual differences in environmental attitudes and behaviors by highlighting trait entitlement as a potentially important barrier to action that extends beyond more general (Big Five) personality characteristics. We demonstrated that although entitlement was negatively correlated with environmental attitudes and behaviors, it was positively related to a potentially dangerous strategy for remediation of the environmental crisis—geoengineering. Together these findings highlight the danger of entitlement to ecological sustainability, as well as the pressing need for future research surrounding how to address this barrier.

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No competing financial interests exist.

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