

Exploring Parents' Environmental Values, Coping Strategies and Behavior

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Background

Climate change already negatively affects the lives of Americans (NCA, 2014). Ecological degradation will likely affect mental health by increasing stress, anxiety, and depression (Clayton et al., 2014). Parents with young children may be particularly vulnerable given that they will likely bear the brunt of adaptation to climate change.

We use environmental coping (Homburg, Stolberg, and Wagner, 2007) and social-cognitive theory for environmental concern (Schultz, 2000) frameworks to understand how parents engage with the issue of climate change. Ecological coping behavior is proactive strategies adopted to prepare for potential future impacts of climate change to ameliorate or avert these impacts (Aspinwall & Taylor 1997).

People's attitudes about environmental issues depend on different forms of environmental concern: **egoistic** (i.e., value placed on oneself), **social-altruistic** (value placed on others), or **biospheric** values (value placed on plants and animals; Schultz, 2000).

We examine how environmental values influence stress responses and eco-coping strategies in parents (**Aim 1**) and how in turn stress and eco-coping affect parental depression and pro-environmental behaviors (**Aim 2**).

Methods

Participants

Using Amazon Mturk we recruited parents of at least one child between the ages of 3 to 10 who was living with them.

The final sample consisted of 346 people ages 20-60 ($M = 33.89$, $SD = 7.09$). Median income was \$63,402.96 ($SD = \$35,779.89$). The sample was predominantly white ($n = 282$) and included 11 American Indians, 18 Asian Americans, 38 African Americans, and 5 other race-identified people.

Twenty-two participants identified as Latino or Hispanic, 311 as non-Latino or Hispanic.

Methods cont.

Measures

Depression was a 10 item measure (Center for Epidemiological Studies Depression Scale; Radloff, 1977).

Pro-environmental behaviors was a 13 item measure that asked how often in the past month participants behaved in pro-environmental ways, such as using reusable bags at the grocery store (Brick & Lewis, 2014).

Environmental concern was a 12 item measure on 3 dimensions (Schultz, 2001): because of the consequences for egoistic reasons (e.g., my life), altruistic reasons (e.g., my country), and biospheric reasons (e.g., marine life).

Ecological stress was 4 items (Homburg, Stolberg, & Wagner, 2007) that asked how stressful participants find environmental problems such as pollution.

Ecological coping was a 6 item measure of 6 dimensions of methods to cope with anxiety related to environmental issues (Homburg, et al., 2007): wishful thinking, problem solving, expression of emotions, self-protection, pleasure, and denial.

Analysis

Descriptive and initial confirmatory factor analyses were conducted in R 3.2.2. Final SEM analyses were estimated in Mplus 7.4 with maximum likelihood with robust standard errors. We included age, gender, and income as controls.

Results

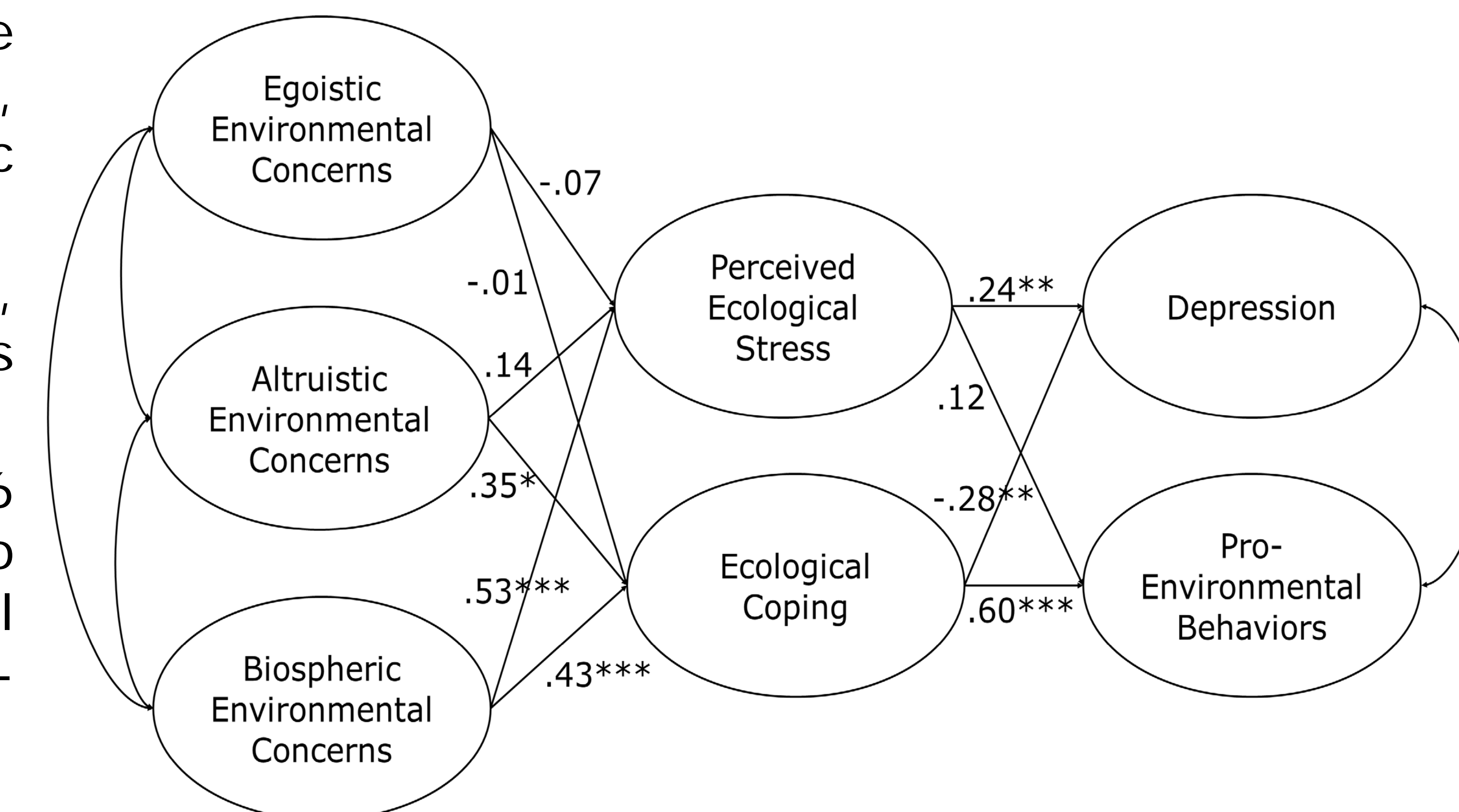
We found that biospheric environmental concern was positively associated with perceived ecological stress (Figure 1; model fit was acceptable, $\chi^2 = 968.89$, $df = 404$, $p < .001$, CFI = .916, TLI = .906, RMSEA = 0.06 [0.06, 0.07]).

Neither altruistic nor egoistic environmental concern were significantly associated with perceived ecological stress. Both biospheric and altruistic, but not egoistic, environmental concerns were positively associated with ecological coping.

Results cont.

Perceived environmental stress significantly positively predicted depression but did not significantly predict pro-environmental behaviors. Finally, we found that ecological coping negatively predicted depression and positively predicted pro-environmental behaviors.

The indirect effect of biospheric environmental concern on pro-environmental behaviors through ecological coping was significant* ($b = .28$, $p = .05$, 95% CI [.01, .55]). No other indirect effects were significant.



Conclusions and Implications

Egoistic parents perceive less stress as a result from global environmental changes or care less for engaging in eco-coping strategies than those motivated by altruistic or biospheric concerns.

A surprising result is that parents with high altruistic values do not report higher stress. It seems as if most participants do not perceive global environmental changes as having a profound effect on their family's life (yet), hampering their ability to adapt to the impending global changes that will occur.

Parents high in egoistic and altruistic values should be encouraged to engage in eco-coping strategies to increase pro-environmental behaviors and, therefore, dampen the impact human action has on increasing the negative effects of global environmental changes.

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