

Differential Association Between Values of Health and Environment, and Emotions of Pride and Compassion*

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The relationship between emotions and health and environmental values remains understudied, particularly regarding the specific functions and roles of individual emotions. This study addressed this gap by exploring the associations between two positive trait emotions (pride and compassion) and two negative trait emotions (anger and disgust) with health and environmental values. A survey of 407 participants was conducted using the validated scales for emotions and values. Multiple regression analyses showed that pride was significantly associated with health values, while compassion was strongly associated with environmental values. On the other hand, negative emotions (anger and disgust) showed no significant associations with either health or environmental values. These findings extend existing research by highlighting the differential associations of emotions with values and showing that distinct positive emotions promote different values. The study contributes to understanding the emotional underpinnings of health and environmental values, offering implications for designing targeted interventions to promote health behaviors and environmental stewardship.

Keywords: Emotions, Health Value, Environmental Value, Pride, Compassion

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1. Introduction

Addressing pressing public health and environmental challenges necessitates understanding the psychological factors that drive relevant individual behaviors. While personal values, such as prioritizing health or the environment, are recognized as significant predictors of corresponding actions (Costa, Jessor, & Donovan, 1989; Grob, 1995; Lau, Hartman, & Ware, 1986; Li, Zhang, Li, & Chen, 2021), the origins and underpinnings of these values themselves warrant deeper investigation. Emerging perspectives suggest that stable emotional dispositions, or trait emotions, may play a foundational role in shaping or reinforcing an individual's value priorities (cf. Sagiv & Schwartz, 2022). Although emotions are also known to directly influence behavior (Lerner, Dorison, & Kim, 2023), their potential role as antecedents or correlates of specific values represents a distinct and important avenue of inquiry.

This potential link gains theoretical plausibility when considering the functional properties of specific emotions and values. Emotion science highlights that distinct emotions serve different purposes; for instance, pride often arises from self-accomplishment and reinforces focus on personal standards and achievements (Tracy & Robins, 2007), reflecting a self-oriented motivation. In contrast, compassion is typically evoked by others' needs and motivates prosocial, other-oriented helping behaviors (Goetz, Keltner, & Simon-Thomas, 2010; Pfattheicher, Sassenrath, & Schindler, 2016). Similarly, value theories distinguish between value orientations: Health values, emphasizing personal well-being, align with self-focused concerns, whereas environmental values, often concern-

ing broader ecological or societal welfare, align with more other-focused or self-transcendent orientations (Schultz, 2001; Schwartz, 1992).

Given this parallel structure—the self-orientation of pride potentially mirroring the self-focus of health values, and the other-orientation of compassion potentially mirroring the other-focus of environmental values—it is hypothesized that these emotions may be differentially associated with, and potentially predictive of, these respective value domains. Specifically, individuals dispositionally high in pride might be more likely to endorse health values, while those high in compassion might be more likely to endorse environmental values. Examining these specific emotion-value linkages is crucial because it could illuminate the affective foundations of why certain individuals prioritize particular values over others, offering insights beyond the established value-behavior link. While some research has explored general affect-value connections (e.g. Nelissen, Dijker, & De Vries, 2007), the specificity of how distinct trait emotions like pride and compassion differentially relate to health versus environmental values remains largely untested empirically.

Therefore, the primary purpose of this study is to investigate the differential associations between specific trait emotions and distinct value domains. Utilizing multiple regression analyses, we examine whether trait pride and compassion, along with the negative emotions of anger and disgust (included for comparative purposes), differentially predict individual differences in the endorsement of health values and environmental values. By testing these hypothesized relationships, this research aims to clarify the potential role of distinct emotional dispositions in underpinning specific value priorities, thereby en-

hancing our understanding of the motivational architecture leading ultimately to health and environmental engagement.

2. Literature Review

1) Defining value

Values are defined as standards that guide people's judgments of what is important, shaping their goal-oriented behaviors (Rokeach, 1973; Schwartz, 1992; Verplanken & Holland, 2002). They influence attitudes and actions, leading individuals to adopt behaviors consistent with their values. Consequently, values not only explain specific behaviors but also serve as predictors of various outcomes (De Groot & Steg, 2008).

Values are organized into four core motivations: openness to change, conservation, self-enhancement, and self-transcendence. Openness to change embraces new experiences, while conservation emphasizes stability. Self-enhancement focuses on personal well-being, while self-transcendence prioritizes the well-being of others. These values also vary by personal or social focus, forming a circular "value wheel" that reflects their interconnectedness (Schwartz et al., 2012).

While numerous values - economic, social, cultural, and political — shape human decision-making, health and environmental values are foundational as they underpin both individual well-being and the sustainability of human civilization. Health, as both an intrinsic and instrumental value, is a fundamental human right and a prerequisite for productivity and

social stability (Grad, 2002; Sen, 2015). Likewise, environmental values are indispensable, as ecosystem degradation threatens essential resources such as clean air, water, and food, directly impacting human survival (Rockström et al., 2009). In other words, without health, individuals cannot contribute meaningfully to society, and without a stable environment, human survival itself is at risk.

(1) Health value

Health value refers to the importance individuals place on their well-being, shaping their health-related behaviors (Lau et al., 1986). Individuals who prioritize their health are more likely to engage in protective behaviors, such as regular exercise, information-seeking, and maintaining a healthy diet (Costa et al., 1989; Norman, 1995; Wallston, Maides, & Wallston, 1976).

Interestingly, research suggests that people place the highest value on health when facing direct threats, such as life-threatening conditions, making health value more predictive of behavior in high-risk situations (Costa et al., 1989; Lau et al., 1986; Kristiansen, 1985). This predictive role has often been overlooked due to the assumption that everyone values health equally (Lau et al., 1986). Within Schwartz's value framework, health aligns with conservation values and falls within the realm of personal focus (Schwartz et al., 2012).

(2) Environment value

Environmental value refers to the importance individuals place on the natural environment and its protection (Tamir et al., 2016). Environmental value can be thought of as guiding principles for environmental responsibility and conservation efforts (McMillan, Wright, & Beazley, 2004; Wang et al., 2023). Research

shows that environmental values are stronger predictors of pro-environmental behavior than environmental knowledge or awareness (Grob, 1995; Li, Liu, & Wuyun, 2022).

Individuals with strong environmental values are more likely to engage in sustainable consumption, such as purchasing eco-friendly products and preferring organic foods (Li et al., 2021). However, eco-friendly behavior is also driven by other factors, including financial incentives, pollution reduction, and cost savings, indicating that environmental values alone may not fully explain such behaviors (Ünal, Steg, & Gorsira, 2018). In Schwartz's (2012) value framework, environmental care is aligned with self-transcendence and socially focused values within the motivational continuum.

2) Emotions and values

Emotions, alongside values, play a critical role in shaping decisions and behavior. Defined as “modes of relating to the environment: states of readiness for engaging, or not engaging, in interaction with that environment” (Frijda & Mesquita, 1994, p.51), emotions evolved to help humans navigate both natural and social environments (Darwin, 1872). Through the appraisal tendency framework, emotions are understood to carry specific motivational properties, creating predispositions toward future actions (Cavanaugh, Bettman, Luce, & Payne, 2007).

Like values, emotions are goal-related constructs. While emotions react to situations based on goal relevance, values act as guiding principles for achieving goals. Both can be classified as self-oriented or others-oriented, depending on the focus of motiva-

tion (Lerner & Keltner, 2000; Sagiv & Schwartz, 2022). Emotions can further be distinguished into state emotions, which are temporary, and trait emotions, which are enduring tendencies. Although both state and trait emotions can influence behavior, they guide behavior in distinct ways and connect differently to values (Hudlicka, 2002; Steiger & Reyna, 2017; Tarditi, Hahnel, Jeanmonod, Sander, & Brosch, 2020). Frequent experience of a particular emotion can influence behavior in ways that lead individuals to adopt or recognize certain values as personally important (Nelissen et al., 2007). Some trait emotions such as contempt may also lead to diminished moral values (Steiger & Reyna, 2017). In other words, there may be an association between trait emotions and value endorsement.

Moral emotions, specifically pride, compassion, anger, and disgust, are central to this research alongside health and environmental values as they help explain why individuals engage in behaviors that promote sustainability and well-being or, alternatively, react strongly to threats against these values. Moral emotions differ from basic emotions in that they are intrinsically linked to social norms and ethical considerations, shaping how individuals respond to moral and environmental issues (Haidt, 2003).

Pride fosters motivation and reinforces behaviors aligned with social and personal values, while compassion enhances concern for others, making it particularly relevant for pro-environmental and health-related behaviors (Tangney, Stuewig, & Mashek, 2007). Conversely, anger and disgust function as moral emotions by signaling perceived violations of ethical or social norms, with anger often directed toward in-

justice and disgust serving as a mechanism to avoid contaminants or moral transgressions (Rozin, Lowery, Imada, & Haidt, 1999).

We chose to focus on pride, compassion, anger, and disgust to systematically examine how emotions vary in both valence (positive vs. negative) and focus (self vs. other). Pride and anger can be viewed as self-focused emotions, whereas compassion and disgust are typically oriented toward others.

Selecting these four emotions allows us to avoid possible conflating influences of two key motivational dimensions—positive versus negative valence and self- versus other-focus—and further might enable a more nuanced investigation into the ways in which different emotional states drive behavior and cognition.

(1) Pride

Pride is a self-conscious emotion linked to ego enhancement, reflecting feelings of satisfaction and accomplishment (Oatley, Keltner, & Jenkins, 2014; Oveis, Horberg, & Keltner, 2010; Shiota, Keltner, & John, 2006). It arises from being socially valued and recognized for one's achievements (Lazarus, 1991). Pride motivates individuals to reinforce their self-image and distance themselves from perceived weaknesses (Horberg, Oveis, & Keltner, 2011; Oveis et al., 2010). This desire for distinction may have evolutionary roots, as individuals with higher status were historically favored for their ability to produce healthy offspring (Fletcher, Tither, O'Loughlin, Friesen, & Overall, 2004).

Individuals with high trait pride are likely to place significant value on their health, driven by pride's core motivations: self-enhancement, achievement,

and social recognition. These motivations naturally lead individuals to prioritize their physical health, as it is both observable and often closely tied to body image (Gilchrist, Sabiston, Castonguay, Pila, & Mack, 2018; Librett, Yore, Buchner, & Schmid, 2005). Positive outcomes, such as weight loss or fitness milestones, can evoke pride, reinforcing the importance of health and motivating continued effort (Consedine & Moskowitz, 2007). Furthermore, external recognition, such as praise for maintaining good health, amplifies pride and strengthens the individual's commitment to valuing their health.

Unlike health-related achievements, which often bring immediate social recognition, contributions to environmental protection are typically long-term and global, offering less direct personal acknowledgment. As a result, the sense of immediate satisfaction and accomplishment is less tangible. Environmental values prioritize societal well-being over individual benefits, whereas pride is closely tied to concerns about personal status and hierarchy (Aviste & Niemiec, 2023; Horberg et al., 2011). Thus, engaging in environmentally friendly behaviors may not evoke the same level of pride as health achievements. This suggests that pride may not be associated with environmental value.

- **Hypothesis 1.** Pride will be associated with health value, but not with environmental value.

(2) Compassion

Compassion is an emotion elicited by the suffering of others, driving a desire to care and help, ultimately leading to prosocial actions (Cova, Deonna, & Sander, 2015; Goetz et al., 2010; Oatley et al., 2014).

Evolutionarily, compassion likely emerged as part of caretaking behaviors, initially toward offspring and later extending to close social groups (Oatley et al., 2014). As compassion stems from recognizing and responding to others' suffering, individuals prone to this emotion find fulfillment in enhancing the well-being of others. Compassion also fosters a greater sense of similarity between oneself and others, encouraging selflessness and prioritizing collective welfare over personal interests (Lerner, Han, & Keltner, 2007; Oveis et al., 2010).

Individuals with high levels of compassion are likely to place significant value on the environment (Pfafftheicher et al., 2016). Compassion, driven by motivations like caretaking, social cohesion, and concern for others' well-being, often leads to altruistic behaviors such as reducing waste, volunteering, and donating—behaviors commonly associated with strong environmental values (G. Li et al., 2021; X. Li et al., 2022). Compassion fosters a sense of responsibility toward the environment, as protecting it benefits all living beings, especially the vulnerable. This deep sense of care for the environment suggests a meaningful association between compassion and environmental value.

While compassion can inspire caregiving and concern for others' health challenges, it does not inherently motivate personal health maintenance or improvement. Health values, by contrast, focus on individual well-being, emphasizing personal health and self-care. Compassion is primarily oriented toward altruistic actions, prioritizing the well-being of others over individual accomplishments (Mantzios & Egan, 2017; Phillips & Hine, 2021). As compassion centers on collective well-being rather than personal

health outcomes, it is more likely to be associated with environmental values than health values.

- **Hypothesis 2.** Compassion will be associated with environmental value, but not with health value.

(3) Anger

Anger arises from perceptions of injustice and undeserved slights (Keltner, Haidt, & Shiota, 2006; Lerner, Li, Valdesolo, & Kassam, 2015). While it is often linked to hostility and retaliation, anger can also foster an approach-oriented mindset, where individuals perceive less risk and are more motivated to pursue goals (Frijda, 1986; Keltner, Ellsworth, & Edwards, 1993; Lerner & Keltner, 2001). Anger has a complex relationship with health values. On one hand, it can negatively affect health, contributing to chronic pain, heart disease, and heightened cardiovascular arousal (Herrald & Tomaka, 2002; Suinn, 2001). On the other hand, anger can drive proactive behaviors such as seeking medical care or adhering rigorously to treatment plans, especially when directed toward overcoming personal health challenges.

In the context of environmental values, anger can be a powerful catalyst for action, fueling activism, policy advocacy, and personal behavior changes aimed at environmental protection (Harth, Leach, & Kessler, 2013; Reese & Jacob, 2015). However, if not channeled constructively, anger may result in impulsive reactions or misplaced aggression, undermining long-term environmental efforts. Anger has therefore a dual role as a motivator for positive action and a potential risk, leading to a research questions rather than hypothesis.

- **Research question 1.** Will anger be associated with health value?
- **Research question 2.** Will anger be associated with environmental value?

(4) Disgust

Disgust is an emotion triggered by the perception of purity violations, often caused by encountering or being exposed to something perceived as repulsive or indigestible (Keltner et al., 2006; Lazarus, 1991; Oatley et al., 2014). It influences decision-making by heightening risk aversion and prompting the removal of potential threats. In other words, disgust leads individuals to avoid perceived dangers, often resulting in conservative or risk-averse attitudes (Han, Lerner, & Zeckhauser, 2010). Disgust plays a key role in avoiding health risks and is linked to behaviors that promote fitness, such as dietary preferences (Hamilton, 2006). It also motivates preventive health actions, including maintaining personal hygiene, avoiding spoiled food, and steering clear of environments that pose health threats. However, when excessive, disgust can drive disproportionate avoidance behaviors, potentially leading to anxiety or obsessive-compulsive tendencies that negatively impact mental health.

Disgust can play a crucial role in shaping environmental attitudes, as pollution and contamination often elicit strong reactions that motivate support for environmental protection and waste reduction efforts (Haidt, McCauley, & Rozin, 1994). Concerns about cleanliness and hygiene can drive individuals to endorse conservation initiatives and sustainable practices. However, disgust can also lead to avoidance behaviors, with individuals feeling over-

whelmed by the scale of environmental issues and becoming disengaged due to perceived risks. This emotional response may contribute to inaction, as disgust can heighten risk aversion and deter active involvement in environmental solutions. Like anger, disgust also plays a dual role as a motivator and as a barrier against action. Hence the research questions:

- **Research question 3.** Will disgust be associated with health value?
- **Research question 4.** Will disgust be associated with environmental value?

3. Method

1) Participants

Data for this study was collected through an online survey distributed by a Korean research firm to a survey pool comprising Korean aged 20 to 69 years old through email. Of the 563 people of the survey pool who accessed the survey link, 429 completed it between January 19 and 24, 2024. After excluding 22 invalid responses due to inconsistency, the final sample consisted of 407 participants (male = 219, female = 188, $M = 47.92$, $SD = 13.37$). Before accessing the survey, participants received a brief introduction about the study, an explanation about personal information protection, and a guidance on risks and rights, then filled demographic information after providing informed consent. This research was conducted with the approval of the Institutional Review Board (IRB approval number: XXXX-IRB-2023-086-001).

2) Measures

This study used emotions as independent variables and values as dependent variables. Sex, age, and subjective social status (SSS) were used as control variables. Both independent and dependent variables were measured using a 7-point Likert type scale ranging from (1) Strongly disagree to (7) Strongly agree.

Health value was measured using the four-item scale developed by Lau et al. (1986): “If you don’t have your health you don’t have anything”, “There are many things I care about more than my health”, “Good health is of only minor importance in a happy life”, “There is nothing more important than good health.” ($\alpha = 0.662$)

Environmental value was also measured with a four statement scale, this time by Li et al. (2022): “Preventing pollution (protecting natural resources) is important”, “Respecting the earth (harmony with other species) is important”, “Unity with nature (fitting into nature) is important”, “Protecting the environment (preserving nature) is important.” ($\alpha = 0.932$)

Pride was measured with the same five-item scale used by Shiota et al. (2006): “I feel good about myself”, “I am proud of myself and my accomplishments”, “Many people respect me”, “I always stand up for what I believe”, “People usually recognize my authority.” ($\alpha = 0.882$)

Compassion was also measured with the five statement scale used by Shiota et al. (2006): “It’s important to take care of people who are vulnerable”, “When I see someone hurt or in need, I feel a powerful urge to take care of them”, “Taking care of others gives me a warm feeling inside”, “I often notice people who need help”, “I am a very compassionate person.” ($\alpha = 0.854$)

Anger was measured with the top four items related to trait anger from the scale used by Chon et al. (2023): “I get angry easily”, “I get furious when criticized in front of others”, “I have a hot temper”, “I get mad when I receive a bad evaluation despite doing a good job.” ($\alpha = 0.822$)









Disgust was measured by the four statement scale used by Van Overveld, De Jong, Peters, Cavanagh & Davey (2006): “I screw up my face in disgust”, “Disgusting things make my stomach turn”, “I experience disgust”, “I find something disgusting.” ($\alpha = 0.884$)

4. Results

1) Preliminary analysis

All analyses were performed using R Statistical Software version 4.2.1 (R Core Team, 2022). Descriptive statistics were first calculated for all variables, and sex differences were examined using t-tests (see Table 1).

<Table 1> Descriptive Statistics and Mean Comparison by Sex

Variable	<i>M</i>	<i>SD</i>	Histogram	<i>M</i> : Male	<i>M</i> : Female	<i>p</i>
Age	47.92	13.37		48.85	46.82	0.131
Subjective Social Status	5.11	1.49		5.15	5.07	0.581
Pride	4.27	1.07		4.22	4.34	0.277
Compassion	4.80	0.90		4.75	4.84	0.319
Anger	4.13	1.10		4.10	4.17	0.572
Disgust	4.40	1.22		4.27	4.55	0.025
Environmental value	5.91	0.98		5.83	6.00	0.072
Health value	4.26	0.70		4.29	4.23	0.355

Note: *N* = 407, Male's *n* = 219, Female's *n* = 188; *M* = mean, *SD* = Standard Deviation: 7-point scale except age; Mean comparison by sex: two-sided independent t-test

A correlational analysis was conducted to examine the relationships among the study variables (see Table 2). The results showed that both pride and compassion were positively associated with health value, with compassion demonstrating a stronger correlation, $r = .35$, $p < .001$. Similarly, pride and compassion were also correlated with environmental value, with pride showing a higher correlation, $r = .22$, $p < .001$. In contrast, anger and disgust did not exhibit significant correlations with health value. However, a weak but positive correlation was found between disgust and environmental value, $r = .10$, $p = .049$, while anger did not correlate significantly with environmental

value. Finally, health and environmental values were not significantly associated, $r = .05$, $p = .301$.

2) Main analyses

Before analysis, multicollinearity was assessed using Variance Inflation Factors, all of which were below 1.5, indicating no significant issues. To account for potential non-linearity, heteroscedasticity, and outliers, robust regression analyses were conducted alongside ordinary least squares (OLS) regressions. Given the lack of association between health and environmental values, separate regression analyses

<Table 2> Correlations (Pearson) of Study Variables

Variable	1	2	3	4	5	6	7	8
1. Age	1							
2. Subjective Social Status	0.14**	1						
3. Pride	0.13**	0.42***	1					
4. Compassion	0.23***	0.13*	0.41***	1				
5. Anger	-0.04	-0.01	0.01	0.04	1			
6. Disgust	0.06	-0.02	0.09	0.2***	0.47***	1		
7. Health Value	0.21***	-0.04	0.16**	0.35***	0.04	0.09	1	
8. Environmental Value	0.07	0.09	0.22***	0.18***	0.06	0.1*	0.05	1

Note: * $p < .05$, ** $p < .01$, *** $p < .001$; SSS = Subjective Social Status, *N* = 407

were performed for each. Sex, age, and subjective social status were included as control variables to ensure robust results.

(1) Association between health value and emotions

Multiple regression analyses were conducted to explore the relationships between health value and four emotions. The results indicated that only pride had a significant association with health value, $B = 0.12$, $SE = 0.04$, $p = .003$. Compassion showed a marginal relationship, $B = 0.07$, $SE = 0.04$, $p = .087$. When robust regression was applied to account for potential outliers and model stability, the association between pride and health value decreased, $B = 0.05$, $SE = 0.04$, $p = .092$, yet remained more pronounced than that of compassion, $B = 0.00$, $SE = 0.04$, $p = .931$ (see Table 3).

To validate the model's external reliability, a 10-fold cross-validation was performed. The data were divided into 10 subsets, with 9 used for training and 1 for validation, repeated across 100 iterations.

The average cross-validated coefficient of determination closely mirrored the original analysis, confirming the model's external validity.

(2) Association between environmental value and emotions

Multiple regression analyses were conducted with environmental value as the dependent variable to assess how the four emotions relate differentially with environmental value. The findings revealed that only compassion had a significant association with environmental value, $B = 0.32$, $SE = 0.05$, $p < .001$. Robust regression confirmed this result, showing that compassion remained the sole emotion significantly linked to environmental value, $B = 0.36$, $SE = 0.07$, $p < .001$. A 10-fold cross-validation confirmed the model's external validity, ensuring robust and reliable findings (see Table 4).

Interaction analyses between pride and compassion showed no significant effects on either health value, $B = 0.01$, $SE = 0.03$, $p = .610$, or environmental

<Table 3> Regression Coefficients of Emotions on Health Value

Variable	OLS Regression				Robust Regression			
	<i>B</i>	<i>SE</i>	<i>t</i>	<i>p</i>	<i>B</i>	<i>SE</i>	<i>t</i>	<i>p</i>
Constant	3.29	0.27	12.03	< .001***	3.79	0.21	18.44	< .001***
Sex (Male = 0, Female = 1)	-0.09	0.07	-1.36	0.174	-0.11	0.05	-2.09	0.038*
Age	0.00	0.00	0.30	0.764	0.00	0.00	0.55	0.584
Subjective Social Status	0.00	0.03	-0.01	0.994	0.03	0.02	1.34	0.182
Anger	0.02	0.04	0.62	0.536	0.03	0.03	1.18	0.238
Compassion	0.07	0.04	1.72	0.087+	0.00	0.03	-0.09	0.931
Disgust	0.03	0.03	0.96	0.340	0.00	0.02	0.02	0.985
Pride	0.12	0.04	3.00	0.003**	0.05	0.03	1.69	0.092+
R ²	0.07				0.03			
Adjusted R ²	0.05							

Note: *B* = unstandardized regression coefficient; *SE* = standard error of the coefficient.

Significance levels: *** $p < .001$, ** $p < .01$, * $p < .05$, . + $p < .1$.

<Table 4> Regression Coefficients of Emotions on Environment Value

Variable	OLS Regression				Robust Regression			
	<i>B</i>	<i>SE</i>	<i>t</i>	<i>p</i>	<i>B</i>	<i>SE</i>	<i>t</i>	<i>p</i>
Constant	3.65	0.36	10.15	< .001***	3.63	0.51	7.06	< .001***
Sex (Male = 0, Female = 1)	0.16	0.09	1.72	0.085	0.26	0.09	2.79	0.005**
Age	0.01	0.00	3.37	0.001***	0.01	0.00	2.62	0.009**
Subjective Social Status	-0.08	0.03	-2.52	0.012*	-0.09	0.03	-2.83	0.005**
Anger	0.03	0.05	0.59	0.558	0.01	0.05	0.23	0.819
Compassion	0.32	0.06	5.75	< .001***	0.36	0.07	4.88	< .001***
Disgust	0.00	0.04	-0.11	0.915	0.02	0.04	0.51	0.611
Pride	0.06	0.05	1.18	0.240	0.03	0.05	0.60	0.550
R ²	0.16				0.19			
Adjusted R ²	0.15				0.18			

Note: *B* = unstandardized regression coefficient; *SE* = standard error of the coefficient.

Significance levels: *** $p < .001$, ** $p < .01$, * $p < .05$.

value, $B = -0.05$, $SE = 0.04$, $p = .150$. These results suggest that pride and compassion operate independently in their associations with health and environmental values.

5. Discussion

This study examined the differential associations of pride, compassion, anger, and disgust with health and environmental values. The key findings of the study revealed that pride was significantly associated with health value, but not with environmental value, while compassion was associated with environmental value, but not with health value. Also, both anger and disgust which are negative emotions, did not show any significant association with either health value or environmental value.

Before discussing these results and their broader implications, it is important to clarify why the study focuses on the regression results. For example, the correlation matrix indicated significant positive asso-

ciations for both pride and compassion with health value. However, in the multiple regression model, only pride retained a significant (or near-significant) unique association. This discrepancy likely arises because zero-order correlations do not account for shared variance among predictors. Pride and compassion, while distinct positive emotions, were positively correlated in this sample, suggesting some overlap in their underlying variance. Multiple regression analysis, by its nature, isolates the unique statistical contribution of each predictor after accounting for this shared variance with other variables—in this case demographic controls (gender, age, subjective social status). Therefore, the focus on the multiple regression findings is appropriate, as they reveal the unique associations of each emotion with the value domains, aligning with the study's goal of exploring how distinct positive (pride, compassion) and negative (anger, disgust) emotions are differentially related to health and environmental values.

The findings highlights a significant distinction between positive emotions and their influence on

these values. Pride was strongly linked to health value, suggesting that individuals who experience pride tend to prioritize personal well-being. In contrast, compassion's association with environmental value reflects a focus on collective responsibility and concern for others. These results align with previous research showing that pride is self-centered, while compassion is oriented toward others (Jacobs & McConnell, 2022; Shiota et al., 2006).

The absence of a significant association between pride and environmental value, and between compassion and health value, suggests that the motivational drivers behind these emotions are context-specific. This study thus contributes to the literature by demonstrating the contrasting associations of distinct positive emotions and values. Research on positive emotions is relatively new, as negative emotions have historically been considered more differentiated, leading most research to focus on them (Lerner et al., 2023). The differential association between pride and compassion with health and environmental values offers a novel perspective on the link between values and emotions. Although both values and emotions are key drivers of behavior, the effectiveness of promoting particular behaviors may depend on understanding the interaction between specific values and emotions. This study, therefore, opens new avenues for exploring which emotions are most closely associated with relevant values when aiming to foster certain behaviors.

A notable finding in this study is the absence of significant associations between negative emotions (anger and disgust) and health or environmental values. Indeed, anger and disgust did not show significant associations with health values, and only

a weak positive correlation between disgust and environmental value was observed. This suggests that negative emotions might not be strong motivators for valuing health or the environment. However, previous research has demonstrated that negative state emotions can foster health and prosocial behaviors (Han et al., 2010; Harth et al., 2013; Li et al., 2022), making the current results somewhat unexpected. One potential explanation is that anger and disgust, rather than functioning as transient emotional states, may reflect more stable personality traits. Therefore, anger and disgust may not be as effective in driving sustained behavioral changes or value shifts compared to more transient emotions.

This perspective aligns with findings from research suggesting that trait-like negative emotions are associated with habitual patterns of behavior that do not necessarily lead to proactive value-driven actions (Watson & Clark, 1984). Interestingly, this divergence only applies to negative emotions. Positive emotions, such as compassion or pride, tend to function similarly across both trait and state dimensions, consistently promoting health and environmental values. This may be because positive emotions are inherently constructive, motivating individuals to engage in value-driven behaviors, whether these emotions are contextually triggered (state) or ingrained personality traits (trait). This divergence warrants further investigation.

This cross-sectional study, though informative, has several limitations. The design prevents causal inference, and the reliance on self-reported data introduces the possibility of common method bias. Additionally, the characteristics of the sample may limit the generalizability of the findings, while meas-

urement limitations and potential spurious correlations may influence the results. Future research should address these issues by employing longitudinal designs, more diverse samples, and multiple data collection methods. The study's focus on a limited range of emotions may have excluded other relevant emotions, such as fear, joy, or surprise. While these emotions may have less direct connections to health and environmental values, their omission could narrow the scope of the findings. Future research should consider a broader range of emotions to provide a more nuanced understanding of the emotional drivers behind health and environmental values.

Despite these limitations, this study offers valuable insights into the role emotions play in shaping health and environmental values. The findings enhance our understanding of how different emotions contrib-

ute to the formation and prioritization of health and environmental values, demonstrating that positive emotions are crucial in promoting healthy and prosocial behaviors and highlight the need for future research to explore a wider range of emotions. Beyond theoretical contributions, the study has practical implications for addressing global challenges. By fostering positive emotions like pride and compassion, policymakers and practitioners can design targeted interventions to promote personal health behaviors and encourage environmental stewardship. In short, by understanding the distinct roles that different positive emotions play in motivating these values, policymakers and practitioners can design more targeted and effective interventions to address the pressing issues of our time.

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건강 및 환경 가치와 자부심 및 자비 감정 간의 차별적 연관성

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감정과 건강 및 환경 가치 간의 관계는 여전히 충분히 연구되지 않았으며, 특히 개별 감정의 구체적인 기능과 역할에 관한 연구는 부족한 실정이다. 본 연구는 이러한 공백을 해소하기 위해, 긍정적 성향 감정(자부심과 자비)과 부정적 성향 감정(분노와 혐오)이 건강과 환경 가치에 어떻게 연관되는지를 탐구했다. 자부심은 자기 돌봄과 성취와 관련되어 건강 가치와 연관될 것으로, 자 비심은 타인과 자연에 대한 공감으로 환경 가치와 연관될 것으로 예상했다. 407명의 참가자를 대상으로 감정과 가치를 측정하는 검증된 척도를 활용해 설문조사를 실시했으며, 다중 회귀분석 결과 자부심은 건강 가치와 유의미한 관계를 보였고, 자비는 환경 가치와 강한 연관성을 나타냈다. 반면, 부정적 감정인 분노와 혐오는 건강 및 환경 가치와 유의한 연관성을 보이지 않았다. 이러한 결과는 개별 감정이 서로 다른 가치를 촉진한다는 점에서 감정과 가치 간의 차별적 연관성을 강조하며, 건강 및 환경 가치의 감정적 기초를 이해하는 데 기여한다. 본 연구는 건강 행동 및 환경 보호를 촉진하기 위한 맞춤형 개입 설계에 유용한 시사점을 제공한다.

주요어: 감정, 건강 가치, 환경 가치, 자부심, 자비