

## Moral Haze Effect: Perceived Environmental Threats Increase Individual Acceptance of Unethical Behavior

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### Abstract

Perceiving environmental threats not only breeds unethical behavior but also increases people's acceptance of such behavior. Based on data from the 2021 Chinese General Social Survey and the fifth wave of the World Values Survey, Study 1a ( $N = 1965$ ) and Study 1b ( $N = 1053$ ) consistently found that individuals' perception of environmental threats positively predicts their acceptance of unethical behavior; meanwhile, supplementary study S1, based on the same database as Study 1a, initially found that psychological stress can partially explain this relationship. Study 2 ( $N = 249$ ) verified the causality of the main effect through an experimental paradigm and further examined the mediating role of stress. Study 3 ( $N = 497$ ) provided more direct evidence for the mediating mechanism of stress by simultaneously manipulating perceived environmental threats and stress levels. Study 4 ( $N = 482$ ) and supplementary analyses ( $N = 487$ ) found that perceived environmental threats increased the acceptance of unethical behavior regardless of whether it was committed by oneself or others, suggesting that this effect may be independent of the moral agent. This study reveals how environmental threats indirectly reduce individuals' sensitivity to unethical behavior by increasing stress, thereby potentially eroding the overall moral atmosphere of society. The findings provide a new psychological perspective for environmental policy communication and social moral construction, emphasizing that in the context of intensifying environmental risks, attention should be paid to the public's deep-seated reactions at the levels of emotional regulation and moral cognition, so as to achieve more humanistic social governance and normative guidance.

## Full Text

# The Moral Haze Effect: Perceived Environmental Threats Increase Acceptance of Unethical Behavior

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## Abstract

Environmental issues have become a global challenge, yet their psychological impact extends beyond physical health to influence social decision-making and moral judgment. This research proposes and validates the “Moral Haze Effect,” suggesting that the perception of environmental threats increases an individual’s acceptance of unethical behavior. Through a series of studies, we investigate the underlying mechanisms and boundary conditions of this phenomenon. Our findings indicate that when individuals perceive significant environmental threats, they experience a heightened sense of existential insecurity and a shift toward short-term survival strategies, which ultimately lowers their moral standards and increases their tolerance for dishonesty and self-serving unethical actions.

Perceiving environmental threats not only fosters unethical behavior but also increases people’s acceptance of such actions. Based on data from the 2021 Chinese General Social Survey and the fifth wave of the World Values Survey, Study 1a ( $N = 1965$ ) and Study 1b ( $N = 1053$ ) consistently found that individual perceptions of environmental threats positively predict the acceptance of unethical behavior. Furthermore, supplementary study S1, utilizing the same database as Study 1a, provided preliminary evidence that psychological stress partially explains this relationship. Study 2 ( $N = 249$ ) employed an experimental paradigm to verify the causality of this main effect and further examined the mediating role of stress. Study 3 ( $N = 497$ ) provided more direct evidence for the mediating mechanism of stress by simultaneously manipulating perceived environmental threats and stress levels. Study 4 ( $N = 482$ ) and a supplementary analysis ( $N = 487$ ) revealed that perceived environmental threats increased the acceptance of unethical behavior regardless of whether the act was committed by oneself or others, suggesting that this effect may be independent of the moral agent involved. This research reveals how environmental threats indirectly reduce sensitivity to unethical behavior by increasing individual stress, thereby potentially eroding the overall moral climate of society. These findings offer a new psychological perspective for environmental policy communication and social moral development, emphasizing that in the context of intensifying environmental risks, attention should be paid to the public’s deep-seated reactions at the levels of emotional regulation and moral cognition to achieve more humanistic social governance and normative guidance.

**Keywords:** Perceived Environmental Threats, Unethical Behavior, Stress, Moral Hypocrisy **Classification Codes:** B849; C91

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## 1 Introduction

In the contemporary era, ecological and environmental threats (hereafter referred to as “environmental threats” ) have emerged as one of the most severe global challenges. According to the definition provided by Santhakumari and Sagar (2020), environmental threats refer to the damage and degradation caused to the natural environment by human activities. These threats manifest as air and water pollution, climate change, forest degradation, ozone layer depletion, and water scarcity. These problems not only jeopardize the sustainability of ecosystems but also directly impact the stability and development of human society. The United Nations’ *Sustainable Development Goals Report* notes that environmental threats, alongside economic inequality, are regarded as the most critical structural risks of the contemporary era [?, ?].

Existing research has primarily focused on the impact of environmental threats on economic development, social stability, and health. Their influence within the field of moral psychology remains in the early stages of exploration. In particular, no study has yet systematically examined whether environmental threats might alter individuals’ perceptions of moral norms and their acceptance of unethical behavior. To fill this research gap, this paper employs a series of database analyses and experimental studies ( $N_{total} = 4733$ ) to investigate whether perceived environmental threats increase individual tolerance for unethical behavior, while revealing the underlying mechanisms of change triggered by environmental threats in the dimension of moral psychology.

### 1.1 “Polluted Morality” : Environmental Threats Induce Unethical Behavior

“Polluted morality” is a concept proposed by Lu et al. [?] and Gong et al. [?] to describe the phenomenon of moral degradation triggered by environmental threats. This concept implies that environmental pollution not only destroys natural ecosystems but also erodes human moral systems, making people more likely to engage in unethical behavior. A meta-analysis by Lu et al. [?] demonstrated a significant positive correlation between the degree of environmental pollution and individual unethical behavior.

While existing research has expanded our understanding of the relationship between environmental threats and unethical behavior, most studies have focused on whether individuals will actively engage in such conduct. In contrast, research regarding individual acceptance of unethical behavior remains relatively limited. From the perspective of moral psychology, unethical behavior is characterized by a low base rate; while the majority of individuals do not directly

engage in severe transgressions, nearly everyone is required to make moral judgments regarding such actions. If environmental threats universally lower the standards of tolerance for unethical behavior, it may indirectly weaken societal adherence to moral norms even among those who do not participate in the behavior themselves.

### 1.2 The “Moral Haze Effect” : Mechanisms of Environmental Threats on the Acceptance of Unethical Behavior

Environmental threats significantly increase an individual’s psychological stress. The concept of stress discussed here refers to a generalized, resource-constrained psychological state experienced when encountering external threatening cues. Its core characteristics include the subjective perception of insufficient coping resources and increased cognitive load [?, ?].

Stress prompts individuals to adopt a cognitive processing style characterized by a low-level construal. Individuals tend to focus on concrete, contextualized details rather than abstract principles, becoming more sensitive to immediate outcomes and reducing requirements for cross-situational consistency [?, ?]. However, moral norms are essentially a system of highly abstract rules [?, ?]. When individuals are in a high-stress state, the focus shifts from abstract, norm-oriented thinking toward concrete, context-oriented assessment. This shift weakens the cognitive accessibility of and emotional commitment to abstract moral standards. Based on this, we propose:

- **Hypothesis 1:** Environmental threats increase an individual’s acceptance of unethical behavior.
- **Hypothesis 2:** Stress mediates the relationship between environmental threats and the acceptance of unethical behavior (Environmental Threats → Stress → Acceptance of Unethical Behavior).

### 1.3 “Moral Hypocrisy” : Self-Other Asymmetry in Moral Judgment

Psychological research indicates that individuals often exhibit a significant “self-other asymmetry” in moral judgment: they tend toward leniency for themselves but are more critical of others, a phenomenon known as “moral hypocrisy” [?, ?]. We hypothesize that the stress induced by perceived threats may prompt individuals to focus more intensely on self-preservation, leading to psychological justification for their own actions while continuing to hold others to high moral standards.

- **Hypothesis 3:** The moral agent (self vs. other) moderates the impact of environmental threats on the acceptance of unethical behavior, such that this effect is more pronounced in the “self” condition.

## 2 Pilot Study: Selection of Unethical Behaviors

Before conducting the main studies, we performed a pilot study to identify which specific behaviors in the CGSS and WVS databases should be classified as unethical. We defined “unethical behavior” as actions intended to cause direct or indirect harm to the interests of others.

We recruited 100 participants ( $M_{age} = 30.79$ , 61% female). Using a binomial test, a behavior was classified as immoral if the proportion of participants perceiving it as such was significantly higher than 50%. Results indicated that for the CGSS, extramarital sex was deemed immoral (92%). For the WVS, six behaviors were classified as immoral: (1) claiming unentitled government benefits (83%), (2) fare evasion (97%), (3) tax evasion (95%), (4) accepting bribes (95%), (5) prostitution (94%), and (6) wife-beating (92%).

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## 3 Study 1a: Evidence from the CGSS Database

### 3.1 Data Source and Variables

Data were obtained from the 2021 Chinese General Social Survey (CGSS). The final sample consisted of 1,965 valid participants ( $M_{age} = 50.88$ , 52.47% female).

- **Outcome Variable:** Acceptance of extramarital sex (1 = Always wrong to 5 = Always right).
- **Predictor Variable:** Perceived Environmental Threat, calculated from 15 types of environmental issues (e.g., air/water pollution, extreme weather).
- **Control Variables:** Gender, age, education, and log-transformed annual income.

### 3.2 Results and Discussion

Regression analysis showed that perceived environmental threat significantly and positively predicts an individual’s acceptance of unethical behavior ( $N = 1,965$ ,  $\beta = 0.06$ ,  $t = 2.56$ ,  $p = 0.011$ , 95% CI [0.01, 0.11]). This provides preliminary support for Hypothesis 1. Robustness checks using alternative threat indicators and excluding control variables yielded consistent results.

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## 4 Study 1b: Evidence from the WVS Database

### 4.1 Data Source and Variables

Study 1b utilized the 2007 World Values Survey (WVS) China subsample ( $N = 1,053$ ,  $M_{age} = 43.38$ , 50.24% female).

- **Outcome Variable:** Mean acceptance of six unethical behaviors identified in the pilot study (10-point scale).
- **Predictor Variable:** Perceived Environmental Threat (water quality, air quality, sewage systems).
- **Control Variables:** Gender, age, education, and subjective household income.

## 4.2 Results and Discussion

Regression analysis indicated that perceived environmental threat significantly predicts the acceptance of unethical behavior ( $N = 1,053, \beta = 0.08, t = 2.58, p = 0.010, 95\% \text{ CI } [0.02, 0.14]$ ). These findings replicate the results of Study 1a using a different database.

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## 5 Study 2: Causal Test and Mediation

Study 2 employed an experimental design to establish causality and test the mediating role of stress.

### 5.1 Participants and Design

We recruited 249 valid participants ( $M_{age} = 32.06, 64.26\%$  female), randomly assigned to high or low environmental threat conditions.

### 5.2 Procedure and Results

Participants read descriptions of a city with either severe environmental challenges (high threat) or successful environmental governance (low threat). - **Manipulation Check:** The high-threat group reported significantly higher perceived threat ( $t = 57.84, p < 0.001, d = 7.32$ ). - **Main Effect:** The high-threat group showed significantly higher acceptance of unethical behavior ( $M = 2.69$ ) than the low-threat group ( $M = 2.03, t = 4.84, p < 0.001, d = 0.61$ ). - **Mediation:** Stress significantly mediated the relationship. The indirect effect was 0.50 (95% CI [0.12, 0.86]). The direct effect became non-significant when stress was included, supporting Hypothesis 2.

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## 6 Study 3: Causal Test of the Mediation Mechanism

Study 3 used a “Moderation-of-the-Mediator Design” (MMM) to provide direct causal evidence for the mediation mechanism.

## 6.1 Design and Results

We used a 2 (threat: high vs. low)  $\times$  2 (stress: high vs. control) between-subjects design ( $N = 497$ ). Stress was manipulated using an imagined high-pressure workplace interview. - **Results:** A significant interaction between threat and stress was found ( $F(1, 493) = 6.30, p = 0.012, \eta_p^2 = 0.013$ ). In the control (no stress manipulation) condition, high threat increased acceptance of unethical behavior. However, in the high-stress condition, the difference between threat groups disappeared because the stress manipulation itself raised acceptance levels across the board. This confirms that stress is the causal driver of the effect.

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## 7 Study 4: Moral Hypocrisy and Generalizability

### 7.1 Design and Results

Study 4 used a 2 (threat: high vs. low)  $\times$  2 (moral agent: self vs. other) design ( $N = 482$ ) to test Hypothesis 3. - **Results:** The main effect of threat remained significant ( $F(1, 478) = 27.86, p < 0.001$ ). However, the interaction between threat and moral agent was not significant ( $p = 0.138$ ). Individuals became more lenient toward unethical behavior regardless of whether the actor was themselves or someone else. Hypothesis 3 was not supported, suggesting a “global leniency” effect under environmental threat.

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## 8 General Discussion

This research demonstrates the “Moral Haze Effect” : perceived environmental threats increase the acceptance of unethical behavior. This effect is mediated by psychological stress, which depletes cognitive resources and shifts focus away from abstract moral norms.

### 8.1 Theoretical and Practical Implications

The findings suggest that environmental threats do not just promote unethical behavior but systematically lower the moral standards used to judge such behavior. This “moral flexibility” indicates that moral standards are not invariant but sensitive to ecological contexts. Practically, environmental governance should consider the psychological “soft” costs of pollution. Policy communication should avoid over-sensationalizing threats to prevent excessive public stress, which may inadvertently erode social moral fabric.

### 8.2 Conclusion

1. Perceived environmental threat increases acceptance of unethical behavior.

2. Stress mediates this relationship (Threat  $\rightarrow$  Stress  $\rightarrow$  Acceptance).
3. The effect applies to judgments of both self and others, indicating a general loosening of moral constraints under environmental pressure.

*Note: Figure translations are in progress. See original paper for figures.*

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