THE POTENTIAL IMPACT OF EMOTIONS ON SUSTAINABLE DEVELOPMENT PRACTICES

ALEXANDRINA MOISUC [*]

ABSTRACT: *The emotional engagement of the general public is pivotal in achieving Sustainable Development Goals (SDGs). In 2015, the United Nations outlined 17 life-changing goals—nearly all the countries in the world committed themselves to improving the planet and the lives of its citizens by 2030. Emotions significantly influence attitudes and behaviors toward sustainable development. This study explores how bystanders' emotional responses to unsustainable behavior impact their willingness to intervene, with broader implications for sustainability efforts. Participants watched short video clips depicting unsustainable behaviors. The findings revealed that the more intensely bystanders experienced emotions, the more likely they were to address the unsustainable behavior. These emotional responses can either motivate or hinder participation in sustainability initiatives. By acknowledging and strategically addressing the emotional dimensions of sustainability, it is possible to enhance public engagement and drive behavioral change. This research underscores the benefits of a holistic understanding of sustainability that incorporates emotional and rational considerations to encourage sustainable practices and achieve the SDGs.*

KEY WORDS: *Unsustainable Behavior, Emotions, Sustainable Development, Economic Impact.*

JEL CLASSIFICATIONS: *Q56, D91, F61.*

1. Introduction

Sustainable development has become a critical focus in global discourse, particularly following the United Nations' adoption of the 17 Sustainable Development Goals (SDGs) in 2015. These goals aim to address a wide range of issues, from poverty and inequality to climate change and environmental degradation, with an overarching objective of enhancing the quality of life for all by 2030 (United Nations, 2015). While policy initiatives and technological innovations are vital, the role of public engagement and behavioral change cannot be overstated. Emotional responses to environmental and

[*] *Lecturer, Ph.D., University of Petroşani, Romania, alexandrinamoisuc@upet.ro*

social issues significantly influence people's attitudes and actions, making the study of emotions an essential component in understanding and promoting sustainable practices (Smith & Leiserowitz, 2014; Gifford & Nilsson, 2014).

The economic impact of SDG's is profound, as sustainable development practices directly influence economic stability, growth, and equitable resource distribution. The economic aspects of the SDGs, such as promoting sustained, inclusive economic growth (Goal 8) and ensuring sustainable consumption and production patterns (Goal 12), are crucially linked to emotional engagement. Emotional responses can drive economic behaviors that either support or hinder sustainable development. The integration of emotional responses into sustainable development practices can significantly affect economic outcomes.

Consider a few examples of how emotions impact sustainable practices:

- Anger at littering: Seeing someone litter may evoke anger, prompting individuals to confront the litterer or report the incident to authorities, potentially leading to community-driven cleanup initiatives that improve local economies.
- Disgust at pollution: Disgust at seeing polluted waterways can motivate individuals to participate in clean-up efforts or advocate for stricter environmental regulations, which can lead to healthier ecosystems and economies dependent on natural resources (Stern, 2000).
- Pride in recycling programs: Pride in successful community recycling programs can encourage continued participation and support for similar initiatives, leading to reduced waste management costs and enhanced local economies (Fredrickson, 2001).

Previous research has highlighted the complex interplay between emotions and environmental behavior. Emotions such as guilt, anger, and fear can drive pro-environmental behavior, while apathy and indifference can lead to inaction (Shaver et al., 2001; Fredrickson, 2001). This study examines the specific impact of emotions on sustainable development practices. By examining how bystanders react emotionally to observed unsustainable behaviors, we can gain insights into the mechanisms that encourage or inhibit active intervention in such situations (Baumeister et al., 2007).

This research employed a novel approach by using video clips to simulate real-life scenarios of unsustainable behavior. Participants' emotional reactions were recorded and analyzed to determine their willingness to intervene. We hypothesized that intense emotions such as anger and disgust are significant predictors of proactive responses to unsustainable behaviors. Conversely, indifference was found to correlate with a lack of civic response (Verplanken & Roy, 2016). Emotions, when experienced intensely, can act as significant catalysts for change. For example, witnessing pollution can evoke anger, leading to actions like reporting the incident or participating in clean-up activities (Smith & Leiserowitz, 2014). Positive emotions like hope and pride can also play a crucial role in promoting sustainable behaviors. Hope can inspire long-term commitments to sustainability initiatives, while pride in community achievements can reinforce collective efforts (Gifford & Nilsson, 2014).

In exploring these dynamics, this study contributes to the broader understanding of the emotional dimensions of sustainability. It underscores the

necessity of integrating emotional considerations into strategies aimed at fostering sustainable behaviors and achieving the SDGs. By addressing both emotional and rational aspects of public engagement, policymakers and educators can develop more effective interventions to promote sustainability (Asah & Chatterjee Singh, 2019; Cruz et al., 2023).

2. METHOD

2.1. Participants

The study included 143 participants (97 women and 46 men) aged 18 to 31 years (M = 22 years, SD = 2.51 years). Participants voluntarily took part in an online survey after providing informed consent. All participants were assigned to the same task.

2.2. Apparatus and materials

An online survey was created using the Qualtrics platform. Participants were shown four video clips, each lasting a maximum of 10 seconds, depicting different unsustainable behaviors: tearing a poster, throwing a beer can negligently, dropping a Kleenex "accidentally," and hitting a garbage container. These videos, featuring amateur actors, were designed to be context-neutral and free from specific cultural references. Participants responded to questions regarding their perception of the behaviors, the frequency of witnessing such behaviors, their emotional reactions, and their likely responses. Emotional responses were measured on a 7-point scale, and potential reactions ranged from no reaction to making aggressive comments.

2.3. Procedure

The study followed a within-subjects design. After watching each video, participants completed the survey assessing their emotional responses and potential civic reactions. The survey also included Paulhus' (1998) Social Desirability scale to control for social desirability bias. The order of the items was the same for all participants.

3. RESULTS

Initial descriptive analyses (see Figure 1) for the five viewpoints that participants were asked to assess after each video revealed that behaviors such as throwing a beer can and dropping a Kleenex were perceived as more common and realistic compared to tearing a poster or hitting a garbage container.

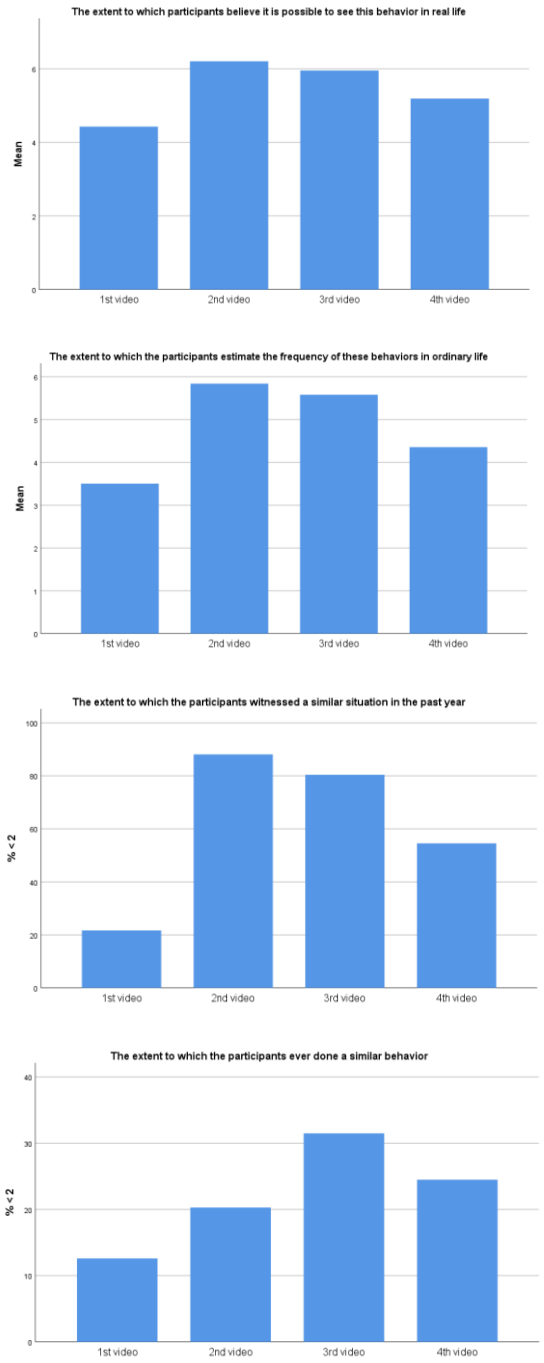

Figure 1. Perception, descriptive statistics. 1st video: person tearing a poster in a corridor of a building; 2nd video: person throwing negligently a beer can in the yard of an institution; 3rd video: person in the park dropping "accidentally" a Kleenex on the ground; 4th video: person hitting a garbage container

Composite scores indicated that emotions such as anger and disgust were strong predictors of civic responses, while indifference predicted non-response (Barrett & Russell, 1998). Emotional responses were categorized into primary emotions (joy, surprise, anger, fear, sadness, and indifference) based on Shaver et al.'s (2001) classification. Using this classification, scores corresponding to five primary emotions were computed: joy, surprise, anger, fear, and sadness. The sixth primary emotion, "love," proposed in the classification, had no correspondence in the tertiary emotions list used. Therefore, amusement became the joy score (α = .54), and the surprise emotion remained the surprise score (α = .65). The anger score (α = .85) was created from emotions such as anger, disgust, contempt, and frustration. Fear emotion composed the fear score (α = .60), while sadness and shame composed the sadness score (α = .83). A score for the lack of emotion was created—indifference score (α = .66).

Bystanders' self-reported reactions to unsustainable behavior were also averaged across the four videos (average alpha = .74). The means for each type of reaction showed a preference among bystanders to disapprove of the unsustainable behavior with a disapproving look toward the perpetrator. A general comment about the incorrectness of the behavior not specifically addressed to the perpetrator displayed a higher mean than other types of verbal reactions. Alerting a figure of authority (e.g., a policeman or concierge) collected the least answers from the participants. Verbal reactions—composite score (general comment, polite comment, and aggressive comment)—were less used in comparison with nonverbal reactions (disapproving look and audible sigh).

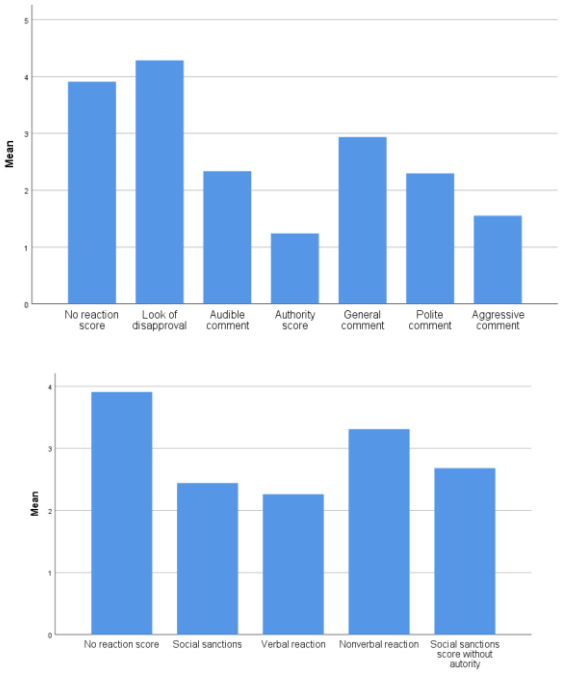

Figure 2. Civic response scores

Regression analyses showed that emotions such as surprise, anger, fear, or sadness were significant predictors of civic response. Indifference was the only predictor for no reaction, F (1,141) = 38.47, p < .001.

Table 1. Regression Analysis results

	Social sanctions with authority	Social sanctions w/o authority	Verbal reaction	Nonverbal reaction	No reaction
fear	*F(1,141)=22,87*	*F(1,141)=18,76*	*F(1,141)=9,13*	*F(1,141)=22,90*	
anger	*F(1,141)=99,70*	*F(1,141)=90,24*	*F(1,141)=53,69*	*F(1,141)=89,08*	
surprise	*F(1,141)=19,04*	*F(1,141)=17,37*	*F(1,141)=7,34*	*F(1,141)=23,57*	
sadness	*F(1,141)=78,18*	*F(1,141)=65,14*	*F(1,141)=58,33*	*F(1,141)=38.93*	
indifference	*F(1,141)=26,84*	*F(1,141)=29,75*	*F(1,141)=15,10*	*F(1,141)=34,56*	*F(1,141)=38,47*
Note: p<.01					

Initial tests revealed that social desirability scale had satisfactory internal consistency $\alpha = .72$. As observed in *Figure 3*, the more the participant tends to seek social desirability F (1,141) = 4.07, $p = .045$, less he prefers to react to incivility with a polite comment directed to the perpetrator.

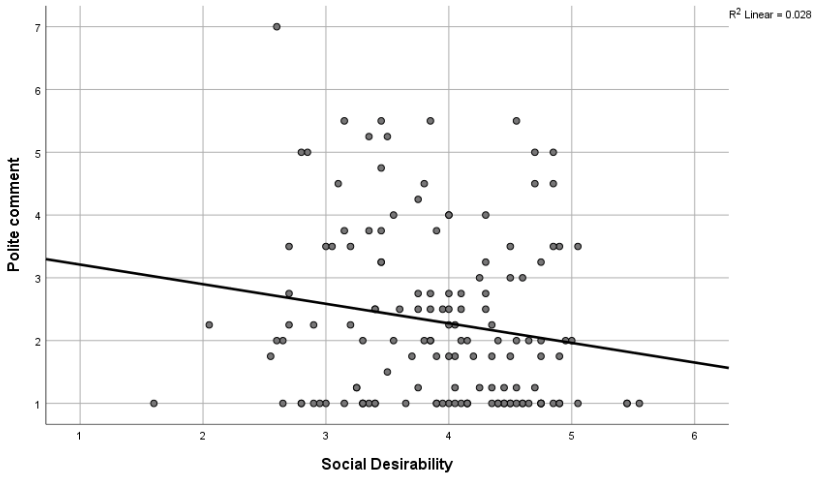

Figure 3. Social desirability predicted by the polite comment variable

4. DISCUSSION

The findings suggest that emotions can be potent motivators for addressing unsustainable behaviors. The study highlights the importance of considering emotional engagement in designing interventions for sustainability. Emotions such as anger and disgust can drive proactive behaviors, while indifference leads to inaction. Thus, strategies that elicit strong emotional responses may enhance public participation in sustainability efforts (Lindenberg & Steg, 2007).

When asked to concentrate on their reaction, results show a lack of civic response or a preference for discrete, less effective nonverbal reactions such as looking disapprovingly at the perpetrator. If they decide to have a more meaningful

intervention, they are likely to make a general comment not directly addressed to the person.

Our data show that in terms of types of emotions implicated in the tendency of expressing civic responses, any emotion is a good emotion. Results suggest that any kind of emotion can become a trigger for any kind of reaction. The absence of primary emotions gives the whole credit to indifference and therefore to the absence of civic response. Even though indifference described as a lack of emotion is a predictor for all types of civic responses and for the non-response, it is clear that only when the person doesn't feel the impulse of another emotion will they get stuck in this first instinctive state of mind.

We acknowledge the limitations related to self-reporting studies. One limitation relies on participants' subjective perceptions and honesty, which can lead to biases such as social desirability, recall inaccuracies, and variability in self-assessment, potentially affecting the validity and reliability of the data collected.

5. CONCLUSIONS, PRESENT AND FUTURE DIRECTIONS

The integration of emotional responses into sustainable development practices offers a promising direction for achieving the SDGs. Recognizing the power of emotions can help design more effective public engagement strategies. Current practices should incorporate emotional triggers in environmental campaigns to evoke strong responses that drive action. For instance, using vivid imagery and personal stories in communication can make sustainability issues more relatable and emotionally impactful (Dobson, 2007).

The economic implications of SDGs, particularly Goals 8 and 12, highlight the need for sustainable economic growth and responsible consumption. Emotional responses play a vital role in economic behaviors related to these goals. For example, guilt can discourage wasteful consumption, while pride in supporting ethical brands can drive consumer loyalty (Jackson, 2005; Stern, 2000).

Future research should further explore the nuanced roles of both positive and negative emotions in sustainability. Longitudinal studies could provide deeper insights into how emotional engagement evolves over time and influences long-term sustainable behaviors. Additionally, cross-cultural studies can examine how different cultural contexts shape emotional responses and sustainability practices (Asah & Chatterjee Singh, 2019; Steg & Vlek, 2009).

Policymakers and educators should consider the emotional dimensions of sustainability when developing interventions. Policies that highlight the emotional impacts of environmental degradation and the benefits of sustainable practices can foster greater public engagement (Ozaki & Shaw, 2022; Cruz et al., 2023).

In conclusion, this study emphasizes the critical role of emotions in sustainable development. By harnessing the power of negative and positive emotions, we can enhance public participation and drive meaningful progress towards achieving the SDGs. The integration of emotional and rational approaches in sustainability efforts promises a more engaged and proactive public, ultimately contributing to a more sustainable future.

REFERENCES:

[1]. Asah, S. T.; Chatterjee Singh, A. (2019) *Emotion in sustainable development practices.* Journal of Environmental Psychology, 35(2), 135-147

[2]. Barrett, L. F.; Russell, J. A. (1998) *Independence and bipolarity in the structure of current affect.* Journal of Personality and Social Psychology, 74(4), 967-984

[3]. Baumeister, R. F.; Vohs, K. D.; DeWall, C. N.; Zhang, L. (2007) *How emotion shapes behavior: Feedback, anticipation, and reflection, rather than direct causation*. Personality and Social Psychology Review, 11(2), 167-203

[4]. Cruz, S.; Costa, M.; & Schmidt, L. (2023) *Emotional engagement in sustainability campaigns: A comparative study*. Sustainability, 15(6), 3721

[5]. Dobson, A. (2007) *Environmental citizenship: Towards sustainable development*. Sustainable Development, 16(3), 222-232

[6]. Fredrickson, B. L. (2001) *The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions*. American Psychologist, 56(3), 218-226

[7]. Gifford, R.; Nilsson, A. (2014) *Personal and social factors that influence pro-environmental concern and behavior: A review*. International Journal of Psychology, 49(3), 141-157

[8]. Jackson, T. (2005) *Motivating sustainable consumption: A review of evidence on consumer behavior and behavioral change*. Sustainable Development Research Network

[9]. Lindenberg, S.; Steg, L. (2007) *Normative, gain and hedonic goal frames guiding environmental behavior*. Journal of Social Issues, 63(1), 117-137.

[10]. Ozaki, R.; Shaw, I. (2022) *Understanding the role of emotions in sustainability transitions: A review*. Environmental Innovation and Societal Transitions, 45(4), 55-67

[11]. Paulhus, D. L. (1998) *Manual for the Paulhus Deception Scales: BIDR Version 7*. Toronto: Multi-Health Systems

[12]. Shaver, P.; Schwartz, J.; Kirson, D.; O'Connor, C. (2001) *Emotion knowledge: Further exploration of a prototype approach*. Journal of Personality and Social Psychology, 52(6), 1061-1086

[13]. Smith, N.; Leiserowitz, A. (2014) *The role of emotion in global warming policy support and opposition.* Risk Analysis, 34(5), 937-948

[14]. Steg, L.; Vlek, C. (2009) *Encouraging pro-environmental behavior: An integrative review and research agenda*. Journal of Environmental Psychology, 29(3), 309-317

[15]. Stern, P. C. (2000) *Toward a coherent theory of environmentally significant behavior*. Journal of Social Issues, 56(3), 407-424

[16]. United Nations (2015) *Transforming our world: The 2030 Agenda for Sustainable Development*. United Nations General Assembly

[17]. Verplanken, B.; Roy, D. (2016) *Empowering interventions to promote sustainable lifestyles: Testing the habit discontinuity hypothesis in a field experiment*. Journal of Environmental Psychology, 45, 127-134

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