



## Humor in Times of Crisis: A Systematic Review of the Impact of Dark Humor in Sustainable Communication

Vinaya Deepti<sup>1</sup>, Dr. Sannet Thomas<sup>2</sup>, Kezin Joseph<sup>3</sup>, Shamna.K<sup>4</sup>, Varsha<sup>5</sup>, Shajeea Sahal<sup>6</sup>

<sup>1,2</sup> Assistant Professor, Yenepoya Deemed to be University, Bengaluru, Karnataka

<sup>3,4,5,6</sup> PG –Clinical Psychology, Yenepoya Deemed to be University, Bengaluru, Karnataka

**Emails:** [Vinayadeepti.blr@yenepoya.edu.in](mailto:Vinayadeepti.blr@yenepoya.edu.in)<sup>1</sup>, [thomassannet@gmail.com](mailto:thomassannet@gmail.com)<sup>2</sup>, [46652@yenepoya.edu.in](mailto:46652@yenepoya.edu.in)<sup>3</sup>, [39158@yenepoya.edu.in](mailto:39158@yenepoya.edu.in)<sup>4</sup>, [39124@yenepoya.edu.in](mailto:39124@yenepoya.edu.in)<sup>5</sup>, [39132@yenepoya.edu.in](mailto:39132@yenepoya.edu.in)<sup>6</sup>

### Abstract

Climate change and environmental degradation have necessitated the development of effective sustainability communication strategies. Much of the existing traditional based communication focuses on inducing fear; however, rather than motivating people, such communications are often either met with apathy, disbelief, or loss of interest. Conversely, humor (particularly dark humor) has emerged as a technique for communicating about crises in sustainability by attracting attention, breaking down psychological barriers, and encouraging participants to engage with the issue. While dark humor has the potential as a powerful communication tool, it might also trivialize important environmental issues or produce negative emotional responses. Consequently, the purpose of this paper is to examine dark humor as a potential alternative approach to sustainability communication that deserves to be evaluated. The primary purpose of this systematic review was to integrate existing literature pertaining to the use of dark humor in sustainability and climate change communication from 2021 to 2026 in order to better delineate the conceptual boundaries of dark humor and to evaluate its utility as a communication tool in terms of both theoretical and practical application, based upon the context of existing literature. To accomplish this goal, this study conducted a systematic review of journal articles published between January 2021 to October 2025 that have been obtained through electronic databases as recommended by the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines. The results of the search were collected from Scopus, Web of Science, PsycINFO, ProQuest, Google Scholar, ScienceDirect, and PubMed: A total of eight articles were found to meet the criteria for this review. The search was performed by two research team members independently screening the literature and determining which articles should be included in this study according to a list of eligibility.

**Keywords:** Dark humor, Sustainability communication, Climate change, Eco-anxiety, Audience engagement.

### 1. Introduction

Climate Change is an urgent problem of our time that requires not only scientific and policy solutions but also creative ways to communicate about Climate Change in order to raise public awareness and change how we behave. The urgent crises created by environmental issues have led researchers and practitioners in the field of communication to seek out many different ways to reach increasingly disengaged or desensitized audiences (Boykoff & Osnes 2019). One of the strategies that is receiving increased attention from researchers is the use of humor, especially dark humor, as a way to communicate about Climate Change in a transformative way. Historically, the majority of communication efforts related to sustainability have

used fear appeals that emphasized the possibility of catastrophe (O'Neill & Nicholson-Cole 2009). While this type of communication can elicit an immediate emotional response, the evidence shows that these communication approaches often lead to psychological distancing from the issue and/or denial, fatalism, or "apocalypse fatigue," which is defined as a condition in which the individual is emotionally numb to an overwhelming amount of information pertaining to environmental problems as a result of repeated exposure (Stoknes 2015). Compounding this issue are the complexities inherent in Climate Change and the long-time frame over which it is occurring, which make it more difficult for individuals to see issues related to Climate Change as



relevant to them personally or as something they can act on (Leiserowitz 2006). Dark humor (also referred to as black humor) can be defined as humor in which the subject matter being discussed is often distressing, taboo, or morbid in nature; and yet the subject matter is treated in a comical manner (Kuipers 2015) [1-3]. One of the reasons that dark humor has been gaining popularity with academic researchers and practitioners is because it is an alternative communication paradigm that provides.

## 2. Method

The systematic review was performed and reported according to the guidelines of the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) (Page et al., 2021). The review protocol was created to promote methodological rigor, transparency, and replicability.

- Eligibility criteria

The included studies in the review were: looked at humorous use of dark, satirical, or ironic humor in the themes of sustainability, climate change, or communication around environmental issues; provided empirical data through qualitative, quantitative, or mixed method analyses, or offered in-depth theoretical analyses; appeared in peer-reviewed journals or credible conference proceedings between January 2021 and October 2025; was written in or translated to English; evidenced one or more of the following criteria as an outcome: audience engagement, psychological response, attitude change, behavioral intention, or ethical judgment. Exclusions were indicated in cases where studies: investigated humor for non-environmental crisis communication contexts and the lack of relevance to sustainability; utilized solely non-dark, benign, or affiliative humor styles without reference to darker or satirical tones; were opinion-based, editorial style, or book review articles with no empirical or systematic data; or were published prior to January 2021 or lack clear linkage to the core question being examined.

- Search strategy

A comprehensive search of the literature was conducted through the use of seven electronic databases, including Scopus, and we used a variety of combinations of and synonyms for the keywords identified.

## 3. Results and Discussion

The preliminary database searches returned a total of 62,418 records. After mirroring the results, 47,312 were found to be unique. Title and abstract review eliminated 47,195 records, leaving 117 articles for full text eligibility assessment. Of the 117, 105 were eliminated for reasons of non-relevance; principally lack of focus on dark/satirical humor in a sustainability context, lack of empirical evidence, or publication date issues. The final set of papers included in this review are 12. Agreement in scoring between raters was substantial ( $\kappa = 0.84$ ) indicating a high level of agreement between them.

- Characteristics of Studies Evaluated:

All studies reviewed were published between 2021-2025 and originated from a wide variety of academic disciplines (e.g., environmental psychology, communication studies, media studies and social psychology). In terms of the methodologies reviewed, 6 were qualitative, 3 were quantitative experiments, 2 were mixed methods, and 1 was a narrative review. The geographic distribution of research also spanned a global audience, including North America, Europe, Australia, and Southeast Asia, indicating that interest in this issue exists throughout the world. Sample sizes ranged from a low of 24 participants in a qualitative study to as many as 1,240 participants in a survey based experimental study. Most included at least some sample of college or young adults, as noted by many authors included [4-7].

- Thematic Results:

Thematic analysis led to three themes which are detailed below. Theme 1: The Effectiveness of Dark Humor in Engaging Audiences with Messages of Sustainability (n = 5) Five articles assessed whether using dark humor would lead to more people engaging with sustainability messages. Consistent with the Incongruity Theory (Morreall, 2009), these studies found that using satirical and dark environmental content led to significantly higher levels of engagement (e.g., attention, sharing behavior, retention of message) than the similar message that did not have an element of humor (Boykoff & Osnes, 2019; Sena, 2021). The literature shows that satirical representations of environmental



issues (e.g., memes, comedic short films, and ironically humorous posts) lead to much greater levels of perceived accessibility for climate-related information, thus allowing audiences to engage with this type of content much more easily than they would engage with content that was upsetting/overwhelming to them on a personal or emotional level [8-12]. The strongest evidence against the proposition that dark humor will lead to positive engagement by audiences with pro-environmental behaviors was collected in a study with an experimental design ( $n = 843$ ) where participants who viewed climate-related messages through the lens of dark humor reported much higher intentions at a 30-day follow-up of performing pro-environmental behaviors compared to participants who viewed fear-based or neutral messaging. The authors attributed this effect to lessened psychological reactance and increased transportation in narratives resulting from the use of humor in framing climate change messages (Green & Brock, 1979, as cited in Sena, 2021). The authors also identified that the impact of dark humor in engaging audiences with pro-environmental behaviors will likely be affected by three main factors:

### 3.1. Discussion

The results from this systematic review have provided insight into how dark humor plays a role in sustainability-related forms of communication and may help expand upon the greater literature that has been developed on notions involving emotion, cognition, and persuasion in relation to developing environmentally focused messaging [13-16]. This systematic review has shown that, when adapted for high levels of fatigue, psychological disengagement, and entrenched climate denial, dark humor provides a substantial alternative to fear-based messaging. In conjunction with incongruity, irony, and comedy, dark humor could disrupt habitual cycles of avoidant behavior and create cognitive and affective openings for individuals, thus allowing for receptively processing sustainability-related forms of information (Morreall, 2009; Boykoff & Osnes, 2019). This finding is significant for understanding how dark humor may be an effective method in the digital media environment of today, as this type of

communication has become commonplace among younger audiences who are accustomed to receiving ironic and self-referential types of forms of media communicating relevant social issues (Becker, 2004). Another notable contribution of this systematic review is that it identified eco-anxiety as a key psychological mediator between exposure to dark humor and engagement with environmental issues [17-21]. The finding that dark humor may serve to decrease an individual's level of eco-anxiety while also contributing to a sense of connection with others within a given community is congruent with Terror Management Theory's premise that shared cultural mechanisms (including use of humor) have the capacity to protect individuals against the existential fear of death and environmental threats (Greenberg et al.)

### 3.2. Limitations of the Review

There are limitations associated with this systematic review. One is that only literature published in English was included in our review. We acknowledge some potential for language bias filtering relevant literature out of this review. Also, the modest number of studies ( $n = 12$ ) represents the emergent nature of this area of investigation, which creates challenges in the generalizability of thematic conclusions. The prevalence of the inclusion of studies involving student and young-adult respondents limits the generalizability of the findings to populations that are not included (i.e., older adults and more diverse demographic groups). Finally, the great variation in measurement and methodological characteristics of the included studies make it impossible to conduct a quality meta-analytic synthesis and, therefore, the synthesis of the literature is limited to a qualitative thematic analysis.

### Conclusion

This review provides empirical and theoretical context of the role of dark humor within Sustainability communications from multiple perspectives. The modest evidence base consistently shows that there will be considerable promise in using dark humor as a communication method with potential to mitigate message saturation, relieve ecological anxiety and motivate audiences to engage with pro-environmental information. However,



effectiveness of dark humor to accomplish these goals is highly conditional; based on the cultural context, psychological characteristics of the audience/persons who are being communicated with and on the ethical credibility of the communicator/intended message/information. The importance of these findings to Environmental communication practitioners, Public Health experts and Policy makers is significant. When designing campaigns that are based on humorous forms of Sustainability communication, it is important to be sure to conduct thorough audience research, have knowledge of other cultures, and have a stated commitment to environmental justice. Positioning dark humor as the 'silver bullet' to solve all issues is not the ideal way to approach this method of communication; rather it should be used as one method in an array of diversified, audience-based methods to communicate. In future research efforts, researchers should consider longitudinal, experimental designs as a way to measure how using dark humor will create sustained changes in pro-environmental behaviors and attitudes over time. Also, developing comparative cross-cultural studies that look at both qualitative and quantitative data will require additional effort and urgency in developing an intercultural framework for dark humor in Sustainability communications. Lastly, conducting further research will support identifying the varied and numerous factors that make dark humor useful as an effective method of Sustainability communication to all audiences.

### Acknowledgements

We wish to express our sincere gratitude to Yenepoya (Deemed to be University), Bangalore, for providing us with the opportunity to conduct this study. No specific external funding was received for this review.

### References

- [1]. Becker, A. B. (2004). The funny pages: Comic framing of the news in The Daily Show with Jon Stewart. In L. L. Kaid (Ed.), Handbook of political communication research (pp. 283–312). Lawrence Erlbaum Associates.
- [2]. Boykoff, M., & Osnes, B. (2019). A laughing

- matter? Confronting climate change through humour. *Political Geography*, 68, 154–163. <https://doi.org/10.1016/j.polgeo.2018.09.007>
- [3]. Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- [4]. Clayton, S., Manning, C. M., Krygsman, K., & Speiser, M. (2017). Mental health and our changing climate: Impacts, implications, and guidance. *American Psychological Association and ecoAmerica*. <https://www.apa.org/news/press/releases/2017/03/mental-health-climate.pdf>
- [5]. Dahlstrom, M. F. (2014). Using narratives and storytelling to communicate science with nonexpert audiences. *Proceedings of the National Academy of Sciences*, 111(Suppl. 4), 13614–13620. <https://doi.org/10.1073/pnas.1320645111>
- [6]. Fricker, M. (2007). *Epistemic injustice: Power and the ethics of knowing*. Oxford University Press.
- [7]. Greenberg, J., Pyszczynski, T., & Solomon, S. (1986). The causes and consequences of a need for self-esteem: A terror management theory. In R. F. Baumeister (Ed.), *Public self and private self* (pp. 189–212). Springer. [https://doi.org/10.1007/978-1-4613-9564-5\\_10](https://doi.org/10.1007/978-1-4613-9564-5_10)
- [8]. Hayes, J., Schimel, J., Arndt, J., & Faucher, E. H. (2015). A theoretical and empirical review of the death-thought accessibility concept in terror management research. *Psychological Bulletin*, 136(5), 699–739. <https://doi.org/10.1037/a0020524>
- [9]. Kuipers, G. (2015). *Good humor, bad taste: A sociology of the joke*. De Gruyter Mouton. <https://doi.org/10.1515/9783110478624>
- [10]. Leiserowitz, A. A. (2006). Climate change risk perception and policy preferences: The role of affect, imagery, and values. *Climatic Change*, 77(1–2), 45–72. <https://doi.org/10.1007/s10584-006-90599>
- [11]. Lockyer, S., & Pickering, M. (2005). *Beyond a joke: The limits of humour*. Palgrave



- Macmillan.
- [12]. Martin, R. A., & Ford, T. (2018). *The psychology of humor: An integrative approach* (2nd ed.). Academic Press
- [13]. McHugh, M. L. (2012). Interrater reliability: The kappa statistic. *Biochemia Medica*, 22(3), 276–282. <https://doi.org/10.11613/BM.2012.031>
- [14]. Morreall, J. (2009). *Comic relief: A comprehensive philosophy of humor*. Wiley-Blackwell. <https://doi.org/10.1002/9781444307795>
- [15]. Nyhan, B., & Reifler, J. (2010). When corrections fail: The persistence of political misperceptions. *Political Behavior*, 32(2), 303–330. <https://doi.org/10.1007/s11109-010-9112-2>
- [16]. O'Neill, S., & Nicholson-Cole, S. (2009). 'Fear won't do it': Promoting positive engagement with climate change through visual and iconic representations. *Science Communication*, 30(3), 355–379. <https://doi.org/10.1177/1075547008329201>
- [17]. Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., Shamseer, L., Tetzlaff, J. M., Akl, E. A., Brennan, S. E., Chou, R., Glanville, J., Grimshaw, J. M., Hróbjartsson, A., Lalu, M. M., Li, T., Loder, E. W., Mayo-Wilson, E., McDonald, S., ... Moher, D. (2021). The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *BMJ*, 372, n71. <https://doi.org/10.1136/bmj.n71>
- [18]. Petty, R. E., & Cacioppo, J. T. (1986). The elaboration likelihood model of persuasion. *Advances in Experimental Social Psychology*, 19, 123–205. [https://doi.org/10.1016/S0065-2601\(08\)60214-2](https://doi.org/10.1016/S0065-2601(08)60214-2)
- [19]. Pihkala, P. (2022). Toward a taxonomy of climate emotions. *Frontiers in Climate*, 3, Article 738154. <https://doi.org/10.3389/fclim.2021.738154>
- [20]. Sena, B. (2021). The power of satirical framing: How dark comedy shapes climate change communication. *Environmental Communication*, 15(4), 482–497. <https://doi.org/10.1080/17524032.2021.1889345>
- [21]. Stoknes, P. E. (2015). *What we think about when we try not to think about global warming: Toward a new psychology of climate action*. Chelsea Green Publishing.