

# The Efficacy Of Humor In Climate And Environmental Communication: A Systematic Literature Review On Global And Indian Implications

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## Abstract

Communicating climate change effectively remains a persistent challenge, as fear-based and information-dense narratives often overwhelm or disengage audiences. Humor has recently gained attention as an alternative communication strategy that can lower resistance, enhance message recall, and foster affective engagement. While research from Western contexts underscores humor's persuasive potential, its relevance to the Global South, particularly India, has not been systematically examined despite the region's acute climate vulnerabilities and communication complexities. This paper presents a systematic literature review on the efficacy of humor in climate and environmental communication, with emphasis on its applicability within Indian contexts. Employing the PRISMA framework (Preferred Reporting Items for Systematic Reviews and Meta-Analyses), a structured search was conducted across Scopus, Web of Science, and Google Scholar for studies published between 2000 and 2025. Of 246 records identified, 37 peer-reviewed articles met the inclusion criteria for synthesis and analysis. The findings highlight humor's dual role: as a peripheral cue within the Elaboration Likelihood Model that facilitates message processing, and as a cognitive-affective device explained by Incongruity and Relief Theories. The review concludes that humor, when culturally contextualized, can enhance public engagement with environmental issues in India, though risks of trivialization remain.

**Keywords:** Humor in communication, Climate change awareness, Environmental communication, Elaboration Likelihood Model (ELM), Systematic literature review

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## 1. INTRODUCTION

### 1.1. Overview

Climate change communication has become an increasingly urgent field of inquiry as the global community confronts escalating environmental challenges. Conventional approaches to climate communication have relied heavily on information-dense, fear-based, or technocratic narratives (O'Neill & Nicholson-Cole, 2009). While these strategies are essential for highlighting the severity of the crisis, research indicates that they may also produce unintended consequences, including disengagement, desensitization, or a sense of helplessness among audiences (Moser, 2010). In contexts such as India, where climate vulnerabilities intersect with socio-economic inequalities, developing communication strategies that are both accessible and resonant is particularly vital (Dubash et al., 2018).

Humor has recently emerged as an alternative rhetorical strategy in climate and environmental communication. Unlike traditional fear-based appeals, humor has the potential to lower psychological resistance, increase message recall, and promote positive affective engagement (Skurka et al., 2018). Its growing use in stand-up comedy, memes, and social media campaigns illustrates its potential to reach wider and younger audiences (Boykoff & Osnes, 2019). Yet, humor's role in the dissemination of climate awareness remains underexplored in the Indian context, where cultural, linguistic, and socio-political dynamics shape message reception differently than in Western contexts.

Scholarship in Western contexts has documented the persuasive and mobilizing potential of humor in climate communication. Nabi et al. (2007) demonstrated that humorous messages can function as peripheral cues that enhance persuasion, as articulated in the Elaboration Likelihood Model (Petty & Cacioppo, 1986). Similarly, Skurka et al. (2018) found that humor can reduce counter-arguing and foster message acceptance.

Boykoff and Osnes (2019), in their work on “Creative Climate Communications,” highlighted the role of performance art, satire, and comedy in engaging audiences beyond conventional scientific discourse. Research on digital media further underscores humor’s significance. Anderson (2017) argued that online humor, particularly memes, facilitates the viral spread of climate-related content, making environmental issues more relatable. Becker and Waisanen (2013) analyzed American satirical programs and found that humor not only entertained but also informed audiences, creating new avenues for civic engagement.

Despite this progress, most studies have concentrated on Euro-American contexts, with little attention to the Global South. India, with its diverse media ecosystem and rapidly expanding digital sphere, presents a distinctive yet under examined case.

### **1.2. Research Gaps**

Despite the growing scholarly interest in creative and alternative approaches to climate communication, three significant research gaps persist regarding the role of humor in disseminating environmental awareness. First, the literature remains heavily skewed toward Euro-American contexts, with limited exploration of humor’s efficacy in the Global South, particularly India, where socio-cultural diversity and climate vulnerability demand context-specific strategies (Wibeck, 2014; Dubash et al., 2018). Second, although humor is inherently shaped by cultural and linguistic norms, few studies systematically address how these factors influence its reception and impact across diverse audiences (Meyer, 2000). Third, while individual empirical investigations highlight humor’s potential in climate discourse (Skurka et al., 2018; Nabi et al., 2007), the absence of a systematic synthesis leaves theoretical and practical insights fragmented. This lack of integrative review limits our understanding of humor as both a persuasive cue and a socio-cultural practice in climate communication.

### **1.3. Rationale for the Study**

Given India’s dual position as both a major emitter and a highly climate-vulnerable nation, the effectiveness of environmental communication is a matter of urgency. Humor’s potential to connect with large, diverse, and youthful audiences makes it a promising yet insufficiently understood tool. A systematic literature review guided by PRISMA offers a rigorous method for synthesizing global findings while situating them in the Indian context. The study also contributes theoretically by applying the Elaboration Likelihood Model (Petty & Cacioppo, 1986), which explains how humor can act as a peripheral cue in persuasion, and Humor Theories such as Incongruity and Relief Theory (Meyer, 2000), which illuminate humor’s cognitive and affective appeal. By integrating these frameworks, the study advances both communication theory and practice.

### **1.4. About the Study**

This study systematically reviews literature on humor in climate and environmental communication, with emphasis on its efficacy and applicability in India. Following PRISMA guidelines (Page et al., 2021), the review draws from Scopus, Web of Science, PubMed, and Google Scholar databases, covering studies published between 2000 and 2023. The synthesis identifies recurring themes, strengths, limitations, and cultural variations in the use of humor as a communication tool. The study aims to critically evaluate the efficacy of humor in climate and environmental communication and assess its relevance to India.

The major objectives of the study are to;

- Systematically review global scholarly literature on humor and climate/environmental communication,
- Identify theoretical frameworks underpinning humor’s role in persuasion and engagement,
- Evaluate cultural and contextual variations in humor’s effectiveness, with focus on India, and
- Highlight gaps and propose directions for future research and practice in climate communication strategies.

### **1.5. Significance of the Study**

This research holds significance for multiple stakeholders. For scholars, it advances theoretical understanding of humor as a persuasive tool within climate communication. For practitioners, including NGOs, policymakers, and climate activists, it provides evidence-based insights into the strategic use of humor in Indian campaigns. The study also contributes methodologically by applying PRISMA to consolidate scattered literature, ensuring rigor and transparency. Importantly, the review addresses cultural dynamics often

overlooked in global debates, positioning India as a critical case for innovation in environmental communication.

### **1.6. Limitations**

While systematic reviews strengthen validity, certain limitations remain. The reliance on English-language publications may exclude relevant regional studies in Indian languages. Additionally, the review synthesizes existing scholarship rather than generating new empirical data. Finally, the dynamic nature of humor, shaped by rapidly evolving media trends, means that findings may require continuous updating.

## **2. METHODOLOGY**

### **2.1. Research Design**

This study adopts a Systematic Literature Review (SLR) approach to critically examine existing scholarship on the efficacy of humor in climate and environmental communication, with particular emphasis on its applicability to the Indian context. The review was conducted following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA 2020) guidelines (Page et al., 2021), ensuring methodological rigor, transparency, and replicability.

### **2.2. Theoretical Framework**

This review is grounded in a triangulated theoretical framework that integrates persuasion theory and humor theory, providing a multidimensional understanding of humor's role in climate and environmental communication.

At its core, the analysis draws on the Elaboration Likelihood Model (ELM) developed by Petty and Cacioppo (1986). The ELM posits that persuasion operates through two distinct routes: the central route, which involves careful and effortful consideration of message arguments, and the peripheral route, which relies on heuristics, cues, and affective triggers. In the context of climate communication, scientific and data-driven appeals typically engage the central route, demanding higher levels of motivation and cognitive ability from audiences. Humor, by contrast, functions as a peripheral cue. It lowers psychological resistance, reduces counter-arguing, and fosters a more receptive communicative environment (Nabi et al., 2007). Importantly, by framing serious issues in a lighter tone, humor can enhance message recall and facilitate affective connections, especially among audiences that may otherwise disengage from information-dense or fear-laden messages.

Complementing the ELM are two classic humor theories that help explain why humor works in the emotionally and cognitively demanding terrain of climate communication. Incongruity Theory posits that humor arises from the resolution of an unexpected cognitive mismatch (Meyer, 2000). Applied here, humorous framings of climate issues generate surprise and novelty, prompting audiences to reappraise environmental problems from fresh perspectives. Relief Theory, on the other hand, interprets humor as a psychological mechanism for releasing tension and anxiety (Meyer, 2000). Given the overwhelming and often anxiety-inducing nature of climate change discourse, humorous communication can provide emotional relief, enabling individuals to engage with otherwise distressing issues without feeling paralyzed or helpless.

Taken together, these frameworks offer a dual interpretive lens. From a persuasive standpoint, humor is conceptualized as a peripheral cue that enhances engagement and message acceptance (ELM). From a socio-cultural standpoint, humor is understood as a cognitive-affective practice that reconfigures how climate issues are experienced and interpreted (Incongruity and Relief Theories). This integration allows for a nuanced evaluation of humor not only as a communication technique but also as a cultural practice that can either amplify or undermine environmental discourse, depending on context.

### **2.3. Data Sources and Search Strategy**

A comprehensive search was conducted across four major academic databases: Scopus, Web of Science, and Google Scholar. The search covered literature published between January 2000 and December 2023 to capture two decades of research on climate communication and humor. The following Boolean search strategy was designed to ensure both breadth and precision in identifying relevant studies. Search terms were grouped into three categories: (i) humor-related expressions, (ii) climate and environmental communication

terms, and (iii) geographical or contextual markers. The combined Boolean string was as follows: (For global scholarship the last section was omitted)

("humor" OR "humour" OR "comedy" OR "satire" OR "parody" OR "irony" OR "meme\*" OR "cartoon\*" OR "stand-up comedy" OR "humorous framing")

AND

("climate change" OR "global warming" OR "climate crisis" OR "environmental communication" OR "sustainability awareness" OR "ecological communication" OR "climate action")

AND

("India" OR "South Asia" OR "developing countries" OR "Global South")

#### 2.4. Inclusion and Exclusion Criteria

Studies were included if they met the following criteria: i. Published in peer-reviewed journals; ii. Empirically or theoretically examined humor as a tool in climate or environmental communication; iii. Published between 2000–2023, and iv. Written in English.

Exclusion criteria included Grey literature (reports, blogs, opinion pieces); studies not directly related to climate or environmental communication, and non-english publications.

#### 2.5. Screening and Selection Process

The database search initially identified 246 articles. After removing duplicate records (n = 61), 185 studies remained. Titles and abstracts were screened for relevance, resulting in 97 studies assessed for full-text eligibility. Following the application of inclusion and exclusion criteria, 37 studies were retained for qualitative synthesis. The entire process adhered to the PRISMA flow diagram, ensuring transparency in study identification, screening, eligibility assessment, and inclusion.

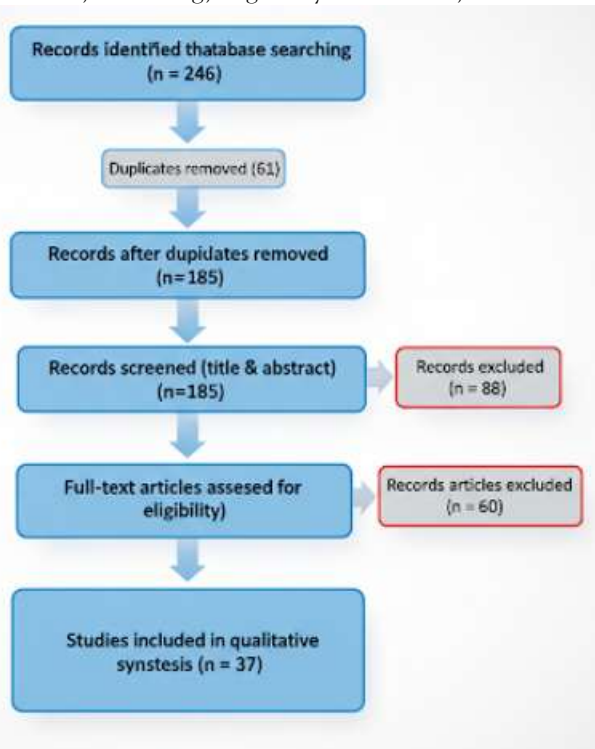


Figure 1: PRISMA flow diagram

#### 2.6. Data Extraction and Coding

A structured data extraction matrix was developed to capture key information from each study, including: Author(s), year, and country; Type of humor employed (satire, parody, memes, stand-up, etc.); Communication medium (digital, broadcast, live performance, etc.); Audience characteristics (general public, youth, policy stakeholders); Theoretical framework(s) employed; Reported outcomes (e.g., awareness, engagement, persuasion, behavior change).

Two independent reviewers coded the data to minimize bias, with discrepancies resolved through discussion until consensus was achieved. A narrative synthesis approach was employed to analyze the studies, with thematic clustering across three dimensions: 1) Persuasive efficacy of humor (ELM-based central vs. peripheral processing); 2) Affective and cognitive mechanisms (Incongruity and Relief Theory). 3) Cultural and contextual relevance, with emphasis on India and the Global South. Patterns, similarities, and divergences across studies were systematically compared to derive integrative insights.

### 3. RESULTS AND DISCUSSION

#### 3.1. Bibliometric Analysis

The systematic search across Scopus, Web of Science, and Google Scholar initially identified 246 records published between 2000 and 2023. After removing duplicates and applying inclusion/exclusion criteria, 37 studies were retained for synthesis and analysis. The distribution of identified records across databases revealed Scopus as the largest contributor (110 records), followed by Web of Science (78) and Google Scholar (58). This indicates that humor in climate and environmental communication is documented across both multidisciplinary and specialized academic platforms, though still limited in scope compared to broader climate communication studies.

A bibliometric analysis was conducted on the final corpus of 37 studies retained through the SLR process. The purpose of this analysis was to map research productivity, thematic orientations, and geographical trends in scholarship addressing humor in climate and environmental communication.

**Temporal Distribution of Publications:** The earliest studies in the dataset appeared in the early 2000s, coinciding with the consolidation of climate communication as a field (Moser, 2010; O'Neill & Nicholson-Cole, 2009). Research attention to humor specifically began to intensify after 2010, with a notable surge between 2017 and 2023, reflecting a growing recognition of humor as a strategic resource in engaging publics with climate issues (Feldman, 2017; Kaltenbacher & Drews, 2020; Skurka & Cunningham, 2023). This upward trend aligns with broader academic and societal interest in creative and affective approaches to climate communication, paralleling the rise of digital platforms such as memes, TikTok, and comic strips as vehicles for environmental discourse.

**Geographical Distribution:** The geographical mapping reveals a marked imbalance. The majority of studies originate from the Global North, particularly the United States, the United Kingdom, and Western Europe (e.g., Feldman, 2017; Brewer & McKnight, 2017; Lyytimäki, 2021). In contrast, contributions from the Global South are sparse but noteworthy. Indian scholarship has recently begun to emerge, focusing on indigenous forms such as comic strips (Dutta & Mohanty, 2024), folk theatre (Yakshagana) (Kabbinahithilu Venkataramana & Kumar, 2022), and environmental movements on digital platforms (Chauhan & Kumar, 2025). This disparity underscores a pressing research gap, suggesting that while humor in climate communication is well-studied in Western contexts, its cultural adaptability and resonance in South Asia and other developing regions remain underexplored.

**Disciplinary Orientation:** The studies span multiple disciplines, reflecting the interdisciplinary nature of the field. Communication and media studies dominate the corpus (e.g., Boykoff & Osnes, 2019; Carroll-Monteil, 2023), but contributions also emerge from psychology (Nabi et al., 2007; Skurka et al., 2018), education (Russell et al., 2023), literary and cultural studies (Panda, 2020; Haroon & Ali, 2025), and environmental sciences (Dubash et al., 2018; Omoyajowo et al., 2024). This diversity highlights humor's utility as a cross-cutting communicative strategy that transcends disciplinary silos while also creating opportunities for richer, multi-perspective analyses.

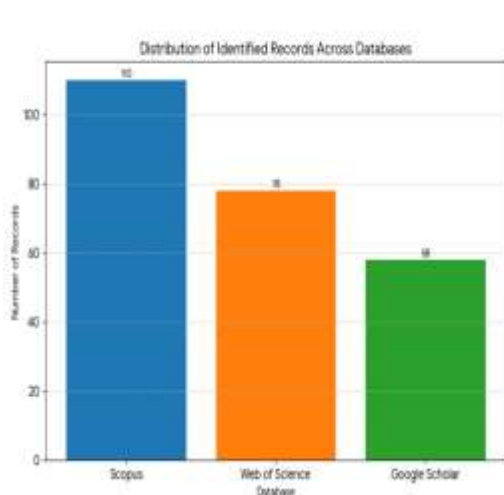


Figure 2: Number of Publications across databases

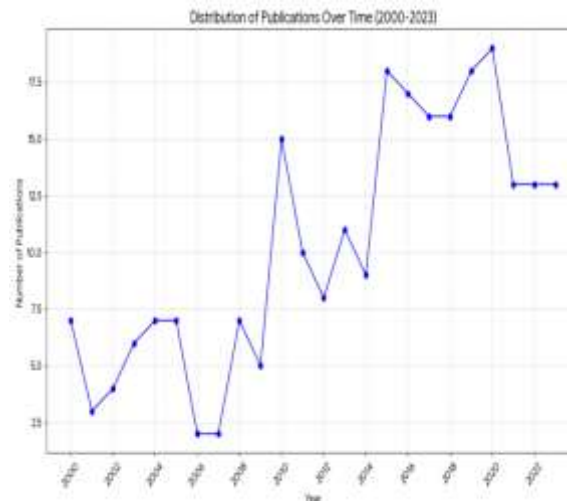


Figure 3: Distribution of Publications over 2000-2023

### 3.2 Humor as a Persuasive Cue: Insights from the Elaboration Likelihood Model

The Elaboration Likelihood Model (ELM) provides a useful framework for understanding how humor functions in climate communication. Within ELM, persuasion occurs through either the central route, characterized by careful and deliberate processing of information, or the peripheral route, where less effortful cues influence attitudes (Petty & Cacioppo, 1986). Humor typically operates as a peripheral cue: it lowers resistance, increases message receptivity, and facilitates heuristic rather than analytical processing (Nabi et al., 2007). In the context of climate change, which is often perceived as abstract, distant, or overly complex, humorous framings can interrupt counter-arguing and attract audiences who may otherwise disengage (Skurka et al., 2018).

Empirical work suggests that humorous appeals not only enhance message acceptance but also improve attention, recall, and affective involvement (Brewer & McKnight, 2017; Feldman, 2017). However, this comes with limitations: while humor can expand the audience base, it may encourage superficial processing rather than durable attitude change (Lee & Jang, 2013). Hart and Feldman (2016) further caution that humorous climate content may attract those already predisposed to engagement, but struggle to mobilize deeply skeptical groups.

In the Indian context, where climate impacts intersect with diverse sociocultural and economic realities, humor has emerged as an innovative communicative strategy. Comic strips, satire on social media, and short video parodies simplify complex narratives, making them more approachable for lay audiences (Dutta & Mohanty, 2024; Chauhan & Kumar, 2025). These formats reach younger demographics especially well, who are otherwise saturated by infotainment content but respond positively to satirical takes on governance and environmental policy. At the same time, the reliance on peripheral processing raises critical questions about whether humor contributes to long-term behavioral shifts or merely creates fleeting awareness. Humor, therefore, operates as a double-edged persuasive cue: powerful in attracting attention and breaking resistance, yet potentially shallow in sustaining commitment to climate action.

### 3.3 Cognitive and Affective Mechanisms: Incongruity and Relief Theories

Beyond persuasion models, theories of humor illuminate the cognitive and affective mechanisms through which humor influences climate discourse. Incongruity Theory posits that humor arises when expectations are violated in surprising ways, creating a pleasurable resolution of tension (Meyer, 2000). This makes humor particularly useful in climate communication, as environmental issues are often technical, data-heavy, and inaccessible to non-expert publics. By reframing complex phenomena, such as melting glaciers or erratic monsoons, through humorous exaggeration or satire, communicators create cognitive “entry points” for audiences (Feldman, 2017). In this sense, humor becomes not merely entertainment but a pedagogical tool that reconfigures how audiences interpret environmental narratives (Skiveren, 2024).

Relief Theory, on the other hand, emphasizes humor's ability to release tension and anxiety in the face of overwhelming threats (Morreall, 2009). Climate change communication often invokes fear and uncertainty, which can trigger avoidance or denial. Humor mitigates these defensive reactions by allowing audiences to acknowledge the seriousness of the issue while simultaneously reducing emotional strain (Buijzen & Valkenburg, 2004). In this way, humor becomes a psychological safety valve that transforms despair into manageable concern (Carroll-Monteil, 2023). Boyd (2023) further notes that humor fosters communal resilience by shifting the affective tone of discourse from paralysis to hope, thereby making engagement more sustainable.

In India, this dual role of humor, cognitive disruption and affective relief, can be seen in popular memes, cartoons, and comic strips. These formats not only highlight governance failures and climate inaction but also help people laugh through their anxieties about air pollution, water scarcity, and unpredictable monsoons (Dutta & Mohanty, 2024). However, the same mechanisms that make humor effective also introduce risks. By trivializing or oversimplifying complex realities, humor can undermine urgency, particularly when the threat is existential (O'Neill & Nicholson-Cole, 2009). Thus, while humor aids in cognitive accessibility and emotional regulation, its careful calibration is essential to prevent distraction from the gravity of climate challenges.

### **3.4 Media and Digital Platforms in Climate Humor**

The rise of digital media has transformed humor from a supplemental strategy into a central force in climate communication. Platforms such as TikTok, YouTube, and Twitter enable humorous content to circulate virally, reaching audiences who might otherwise avoid scientific or policy-oriented messages (Hautea et al., 2021). Through memes, parodies, and satirical videos, humor functions as a form of cultural currency, allowing users to participate in environmental discourse in playful yet politically resonant ways (Omoyajowo et al., 2024). These practices create "affective publics" that gather not through shared ideology but through shared emotions and humor-driven engagement (Shiwakoti et al., 2024).

In India, digital humor has been particularly influential among youth. YouTube sketches, Instagram reels, and stand-up comedy performances have popularized environmental issues in a language accessible to diverse urban and semi-urban audiences (Chauhan & Kumar, 2025). Memes on Twitter and WhatsApp further amplify such discourses, often reframing local events such as floods or air pollution crises in satirical formats that resonate widely (Adiga & K, 2024). This humor-driven engagement not only attracts attention but also contributes to grassroots mobilization, albeit in fragmented and episodic forms.

Beyond digital-native formats, humor continues to operate through traditional media. Satirical television programs, late-night comedy, and stand-up performances have proven effective in blending entertainment with civic awareness (Becker & Waisanen, 2013; Boykoff & Osnes, 2019). However, scholars caution that the participatory dynamics of social media can cut both ways. Anderson (2017) and Schäfer (2012) argue that while digital platforms democratize communication, they also amplify cynicism, misinformation, and polarization. In a context like India, marked by linguistic heterogeneity and uneven digital access, the effectiveness of humorous climate messaging depends on its ability to adapt to diverse cultural registers while avoiding alienation or trivialization.

### **3.5 Cultural and Contextual Relevance: The Global South and India**

Humor's communicative potential is profoundly shaped by cultural and contextual dynamics. As Meyer (2000) notes, humor is inherently double-edged: it can build solidarity by fostering shared laughter, or deepen division when it reinforces stereotypes. This tension is especially evident in climate communication, where humor must balance accessibility with inclusivity.

In Euro-American contexts, climate humor often takes the form of satirical news shows or late-night comedy, where irony and parody serve to critique political elites (Feldman, 2017; Lyytimäki, 2021). By contrast, Global South traditions emphasize folk, performative, and community-driven modes of humor (Zekavat & Scheel, 2023). In India, cultural forms such as Yakshagana, street plays, and cartoons have long integrated environmental consciousness into satirical storytelling (Kabbinahithilu Venkataramana & Kumar, 2022). These practices demonstrate how humor can be indigenized to resonate with local audiences, reinforcing the importance of cultural proximity in shaping reception.

Contemporary Indian studies underscore this dynamic. Comic strips and memes often exaggerate governance failures, reframing climate inaction as absurd and thereby stimulating public discussion (Dutta & Mohanty, 2024). Similarly, YouTube and stand-up comedy channels blend satire with activism, appealing to younger audiences accustomed to infotainment-driven media (Chauhan & Kumar, 2025). Haroon and Ali (2025) highlight that humor rooted in vernacular traditions fosters inclusivity, particularly in multilingual societies where environmental discourse otherwise remains elitist. Panda (2020) adds that humor has potential to overcome barriers of literacy and technical knowledge, democratizing access to climate narratives.

Yet humor's cultural embeddedness also makes it risky. As Chauhan and Kumar (2025) observe, Indian satire has at times polarized audiences, with humor that critiques governance perceived as partisan or disrespectful. In such cases, humor risks undermining solidarity by reinforcing social and political divides. Thus, in the Global South, humor's effectiveness depends not only on its persuasive appeal but also on its cultural sensitivity and ethical calibration.

### 3.6 Risks and Ethical Considerations

Despite its communicative strengths, humor carries ethical and strategic risks that must be acknowledged. By framing climate change in entertaining terms, humor risks trivializing urgent and existential threats (Moser, 2010). While satire can attract attention, it may simultaneously reduce the perceived severity of the crisis, as audiences interpret humorous framings as cues to downplay risk (Brewer & McKnight, 2017; O'Neill & Nicholson-Cole, 2009). Carroll-Monteil (2023) warns that this dynamic can generate "ironic detachment," where audiences engage affectively but disengage cognitively, leaving the underlying issue unaddressed.

These risks are particularly salient in India and other vulnerable regions of the Global South, where climate impacts such as extreme weather, resource scarcity, and displacement are immediate and severe (Dubash et al., 2018). Here, humor may inadvertently foster complacency rather than mobilization. At the same time, scholars emphasize that humor can also serve as a resource for hope and resilience, allowing communities to confront otherwise overwhelming challenges with collective spirit (Boykoff & Osnes, 2019; Boyd, 2023). Kaltenbacher and Drews (2020) stress that the ethical challenge lies in ensuring that humor complements rather than undermines scientific accuracy, urgency, and inclusivity.

An ethically grounded approach to climate humor requires sensitivity to context, audience, and form. It demands attention to power dynamics, recognizing that satire aimed at elites may empower marginalized voices, while satire aimed at vulnerable communities risks reinforcing inequality. It also requires reflexivity in balancing humor's affective appeal with the moral responsibility of climate communication. In this sense, humor should not be dismissed as trivial, but neither should it be uncritically celebrated. Instead, it should be strategically deployed as one component of a broader communicative ecology that fosters awareness, inclusivity, and sustained engagement.

## 4. CONCLUSION

This systematic review has synthesized insights from 37 peer-reviewed studies examining the intersection of humor and climate or environmental communication across diverse geographical contexts, including North America, Europe, and the Global South. Collectively, these studies underline humor's ambivalent yet powerful role: on one hand, it functions as a persuasive tool capable of lowering psychological resistance and enhancing message receptivity, as framed by the Elaboration Likelihood Model (Petty & Cacioppo, 1986). On the other hand, humor resonates with audiences through cognitive mechanisms such as Incongruity (Meyer, 2000) and affective pathways such as Relief (Morreall, 2009), demonstrating its dual potential as both a cognitive stimulant and an emotional release.

The review highlights that humor, when strategically employed, can render abstract, technical, or anxiety-inducing issues of climate change more accessible to a wider public. Several studies indicate that humor fosters engagement among audiences who might otherwise disengage from information-heavy or fear-driven messages (Brewer & McKnight, 2017). Nonetheless, the findings also emphasize caution: humor can trivialize climate challenges, dilute the urgency of the crisis, and even foster apathy when misapplied or framed inappropriately (O'Neill & Nicholson-Cole, 2009). This dual-edged nature underscores the necessity of contextual sensitivity in deploying humor within climate communication strategies.

A particularly significant contribution of this review lies in situating humor within the Indian context. While Euro-American scholarship remains dominant, emerging studies from India illustrate the cultural adaptability and pluralistic expressions of humor in climate communication. Research on digital forms such as memes demonstrates how humor circulates within online publics, often simplifying complex issues into sharable, affectively engaging formats. Equally, scholarship on folk performance traditions such as street plays and regional theatre illustrates the long-standing cultural repertoire through which humor mediates public understanding of environmental concerns in India. Together, these studies reveal that humor in the Indian context is not merely an imported communicative strategy but is deeply embedded in both traditional and digital-native cultural practices.

For India, humor holds particular promise as a bridge between the abstract, technical discourse of climate science and the lived experiences of diverse publics. Its potential is especially pronounced among younger, urban, and digitally active populations, who consume and circulate humor-laden content through memes, stand-up comedy, and cartoons. However, the efficacy of humor in this setting depends on three interrelated factors: (i) cultural contextualization, ensuring that humorous framings resonate with local idioms and sensibilities; (ii) ethical framing, avoiding the trivialization of climate threats while maintaining accessibility; and (iii) balanced simplification, whereby humor informs without oversimplifying or misrepresenting complex scientific realities.

Future scholarship would benefit from a three-pronged research agenda. First, there is an urgent need for more empirical studies situated within India and South Asia, which remain underrepresented in the global corpus of climate communication research. Second, cross-cultural comparative studies should examine the differential reception and impact of humorous communication across diverse socio-cultural settings, thereby enriching theoretical understandings of humor's global adaptability. Third, research must pay closer attention to the efficacy of digital-native formats, including memes, parodies, stand-up performances, and cartoons, that are increasingly shaping how climate issues are framed, circulated, and contested in the public sphere.

By conceptualizing humor simultaneously as a persuasive cue (Petty & Cacioppo, 1986) and as a socio-cultural practice (Meyer, 2000; Morreall, 2009), this review contributes to advancing the field of climate communication. Importantly, it demonstrates that humor is not a one-size-fits-all solution; rather, it is a contingent tool whose impact is determined by context, framing, and cultural resonance. For policymakers, NGOs, educators, and media practitioners in India and beyond, humor offers a complementary strategy, when responsibly deployed, to foster engagement, enhance message retention, and encourage more inclusive climate conversations. Humor may not be a panacea, but it can serve as a vital communicative resource in navigating the affective, cognitive, and cultural complexities of climate change discourse.

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