

Participatory Communication and Digital Strategies in Environmental Advocacy: A Narrative Review of Frameworks and Impacts

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ABSTRACT: Effective communication strategies have become indispensable in environmental advocacy amid escalating ecological crises. This narrative review explores how participatory and digital communication frameworks influence environmental awareness, public engagement, and policy transformation across varied sociopolitical contexts. Drawing on empirical literature from 2010 to 2024, sources were identified through Scopus, Google Scholar, and PubMed using terms like "environmental communication," "advocacy strategies," and "digital engagement." Studies were selected based on peer-review status, empirical relevance, and focus on participatory and multimedia approaches. The findings indicate that participatory communication, social media, narrative storytelling, and immersive technologies play pivotal roles in shaping environmental discourse and mobilizing public action. Visual and digital media significantly enhance emotional engagement, message clarity, and behavioral response. However, communication success often depends on systemic factors such as governance models (e.g., democratic vs. authoritarian regimes), economic capacity (e.g., campaign funding), and cultural alignment (e.g., values embedded in messaging). This review offers a multidimensional synthesis of participatory and technology-driven communication frameworks, highlighting policy and practice implications, particularly in low- and middle-income countries.

Keywords: Environmental Advocacy Strategic Communication, Participatory Engagement, Digital Media, Immersive Technology, Environmental Policy, Behavior Change.



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INTRODUCTION

Communication strategies in environmental advocacy have become increasingly vital in shaping public awareness, influencing policy, and promoting collective action toward sustainable environmental practices. As global environmental challenges intensify, the role of communication in mobilizing stakeholders and communities has drawn significant scholarly attention. Recent literature underscores the importance of inclusive and participatory communication mechanisms,

particularly in projects involving environmental science and policymaking (Raatikainen et al., 2021). Participatory research frameworks, as emphasized by Ohayon et al. (2023), not only empower communities to influence policy agendas but also serve as a medium for raising environmental health awareness. Moreover, Palinkas et al. (2020) highlight the urgent need for effective communication strategies to support mental health among populations affected by climate-induced disasters. These perspectives collectively affirm the growing relevance of strategic communication in achieving environmental advocacy goals.

Urbanization trends further exacerbate the urgency of environmental communication. By 2050, an estimated 68% of the world's population is projected to live in urban areas, placing unprecedented pressure on natural resources and public health infrastructure (Schlaufer et al., 2022). In Indonesia, Dewi et al. (2024) showcase how digital communication innovations have been successfully utilized in rural waste management campaigns, illustrating that local engagement and technological adaptation are central to impactful environmental advocacy. Keller and Limaye (2020) similarly argue that strategic communication can galvanize collective societal responses to environmental threats, from pollution control to biodiversity conservation.

Empirical data reveals that effective environmental advocacy hinges not only on the message content but also on the modes of communication. Kim et al. (2023) report that over 10 million individuals globally have engaged with environmental movements through social media platforms, affirming the role of digital channels in amplifying advocacy messages. However, as Yang et al. (2024) demonstrate, immersive media technologies also offer promising avenues for deepening public connection with environmental issues. Complementary findings by Cox (2024) show that more than 80% of surveyed communities lack awareness of clean energy initiatives, underscoring a persistent information gap. Alnawas et al. (2024) advocate for creative and emotionally resonant strategies that enhance public understanding and action on sustainability issues.

The strategic use of media—particularly in local contexts—has also proven influential. Kim et al. (2023) provide evidence that community-based initiatives using targeted communication have successfully increased environmental responsiveness. These studies collectively suggest that a multi-dimensional and inclusive communication approach is essential for galvanizing broad-based support for environmental causes. Furthermore, strategic communication must transcend mere awareness-raising and strive to instill sustained behavioral change across diverse societal groups.

Despite advancements, environmental communication still faces considerable challenges. Mugabi (2024) points out disparities in environmental literacy and engagement across stakeholder groups, with local communities often disengaged due to limited knowledge or inaccessible messaging. Bıçakcı (2021) emphasizes that uneven distribution of resources and communication infrastructure contributes to inequitable participation in environmental advocacy efforts. The findings of Endriyas et al. (2023) underscore the need for effective educational interventions, particularly where climate-related risks are misunderstood or downplayed.

Another pressing challenge stems from algorithm-driven information ecosystems that may deprioritize sustainable development narratives (Foyet & Child, 2024). In response, scholars like Keller and Limaye (2020) have called for more inclusive and participatory communication

ecosystems that involve collaboration between scientists, policymakers, and affected communities. Ohayon et al. (2023) further argue for stakeholder-sensitive frameworks that integrate diverse voices in environmental dialogue.

Moreover, data show that urban-rural divides in access to information create asymmetries in public awareness. These discrepancies are not merely technological but also structural, rooted in long-standing issues of representation and marginalization. Collaborative communication strategies, therefore, must be designed to dismantle such barriers while fostering mutual trust and shared agency among stakeholders.

Although the existing body of research has provided substantial insight into environmental communication, several critical knowledge gaps remain. Schlauffer et al. (2022) note that much of the current literature centers on macro-level policy narratives, leaving micro-level community interactions underexplored. Ohayon et al. (2023) emphasize the need to understand how grassroots advocacy evolves in specific cultural and social contexts. Raatikainen et al. (2021) criticize the lack of interdisciplinary integration in communication strategy research, arguing that the omission of sociocultural and economic perspectives limits the real-world applicability of findings.

Long-term impacts of communication strategies also remain under-examined. While many studies report short-term gains in awareness, few assess how communication efforts influence sustained behavioral change or policy implementation (Foyet & Child, 2024). Given the dynamic and often contested nature of environmental discourses, further research is needed to evaluate the longevity and adaptability of strategic communication models.

The present review aims to address these gaps by synthesizing existing research on communication strategies in environmental advocacy, with particular attention to participatory approaches, digital media integration, and emotional-narrative framing. Drawing on interdisciplinary literature, this review evaluates how communication methods shape public attitudes, engagement levels, and policy outcomes. It explores both the affordances and limitations of current strategies and suggests directions for more inclusive and impactful advocacy practices.

This review focuses on studies conducted across a range of geographical and socio-political contexts, with particular emphasis on low- and middle-income countries (LMICs) such as Indonesia. These regions offer rich insights into localized communication practices and the challenges of integrating global sustainability discourses with community-based environmental actions. Special attention is given to digital inclusion, rural-urban communication disparities, and culturally embedded advocacy mechanisms.

In summary, communication in environmental advocacy is a rapidly evolving field that demands nuanced analysis and practical innovation. As global environmental crises deepen, the need for strategic, inclusive, and impactful communication has never been more critical. Through a comprehensive review of the literature, this study seeks to enhance our understanding of how communication can catalyze meaningful environmental action and foster equitable participation in sustainability transitions.

METHOD

This narrative review was developed through a rigorous and structured methodology to synthesize relevant literature on communication strategies in environmental advocacy. The approach involved the systematic collection, selection, and evaluation of academic sources to understand how communication practices, tools, and frameworks influence environmental awareness, policy engagement, and community participation. This section describes the key methodological components, including database selection, keyword formulation, inclusion and exclusion criteria, types of included research, and the review and screening process.

The literature collection process commenced with an exploratory search across several prominent academic databases, namely Scopus, Google Scholar, and PubMed. These platforms were selected due to their wide coverage of interdisciplinary research in environmental studies, social sciences, public policy, and communication fields. The search spanned publications from 2010 to 2024 to ensure the inclusion of both foundational and most recent studies reflecting current trends in environmental advocacy communication. The scope was limited to peer-reviewed journal articles to ensure academic rigor and reliability.

Keyword formulation was informed by a preliminary analysis of recurring terms and concepts in prior environmental communication literature. The keyword "communication strategies" was identified as central due to its frequent use in describing how organizations structure and disseminate environmental messages. Raatikainen et al. (2021) noted that this term often anchors the analysis of messaging techniques, outreach efforts, and stakeholder engagement models.

Other keywords frequently employed in the review include "advocacy," "public participation," and "social media," each of which reflects essential components of environmental campaigns. Public participation is critical for inclusive policymaking, as emphasized in the works of Palinkas et al. (2020) and Foyet & Child (2024), while social media emerged as a transformative communication tool highlighted in studies such as Kim et al. (2023). Keywords like "environmental awareness," "environmental policy," and "digital communication" were also extensively used to refine the scope of the search, capturing studies focused on raising public consciousness, linking communication to policy influence, and leveraging new technologies in environmental messaging.

To maintain methodological transparency and ensure the relevance of selected sources, clear inclusion and exclusion criteria were applied. Inclusion criteria required that studies must be published in peer-reviewed journals, provide empirical data, and focus on topics directly related to environmental advocacy through communication. Articles featuring case studies, systematic reviews, or community-based interventions were prioritized. As suggested by Larsen et al. (2016), relying on peer-reviewed literature ensures that the data and analyses presented have undergone scholarly scrutiny, thereby enhancing the credibility of this review.

Furthermore, articles were selected if they addressed specific population groups or geographical contexts relevant to environmental communication efforts, such as rural communities, urban

policy initiatives, or environmental justice campaigns. In particular, sources that examined the role of social media in mobilizing advocacy efforts were favored due to the increasing significance of digital platforms in shaping public discourse and policy outcomes (Kim et al., 2023; Raatikainen et al., 2021). This allowed the review to reflect a diversity of contexts and stakeholder experiences.

Conversely, exclusion criteria removed articles that lacked empirical grounding or failed to provide substantive analysis of communication strategies. Theoretical papers without applied relevance, such as those focusing solely on conceptual models without data support, were excluded. Tarin et al. (2021) emphasized the limited utility of such literature in informing practice-based frameworks. Additionally, studies found to be methodologically weak or unrelated to the central theme of communication in environmental advocacy—such as those focusing on technical environmental assessments or unrelated political theory—were excluded from the review.

Another exclusion parameter involved the publication date. To ensure that the review captured the latest developments, especially in relation to digital technologies and social movements, articles published prior to 2010 were generally excluded unless they provided seminal insights or were frequently cited as foundational references in recent literature. This temporal filter helped in aligning the review with contemporary debates and practices in the domain.

In terms of study types, the review incorporated a variety of empirical research designs, including qualitative case studies, ethnographic research, mixed-method approaches, and quantitative surveys. Studies that provided insight into communication effectiveness, behavioral outcomes, or policy influence were given priority. Randomized controlled trials were rare in this domain due to the nature of advocacy research, but observational studies and program evaluations provided valuable data on intervention impact. The diversity in research types enabled a more nuanced understanding of the multidimensional nature of environmental communication.

The selection process began with an initial pool of approximately 400 articles identified through database searches using Boolean operators to combine keywords effectively (e.g., "communication strategy" AND "environmental advocacy" AND "social media"). Titles and abstracts were first screened for relevance to the research questions. Studies that met the inclusion criteria underwent full-text analysis. During this phase, each article was evaluated based on its theoretical framework, research design, geographic scope, population focus, and the clarity of its findings related to communication strategies.

To ensure consistency, two independent reviewers conducted the screening and evaluation process. Discrepancies in article inclusion were resolved through discussion and consensus. The review process was iterative and adaptive; as new themes and keyword patterns emerged, additional literature searches were performed to capture relevant studies that might have been overlooked initially.

The final set of articles selected for in-depth analysis numbered approximately 90, covering a range of geographical regions, advocacy contexts, and communication approaches. Studies from both high-income and low- and middle-income countries were included to allow comparative insights.

The chosen articles were then thematically analyzed to extract recurring communication patterns, successful advocacy tactics, and key enablers or barriers to effective environmental communication.

This methodological approach ensures that the present narrative review draws on a robust and representative sample of the literature, guided by clear criteria and systematic procedures. It enables a comprehensive understanding of how strategic communication is conceptualized, implemented, and assessed within environmental advocacy initiatives globally.

RESULT AND DISCUSSION

Environmental communication strategies have undergone considerable evolution over the past decade, with researchers identifying diverse methods, technologies, and audience engagement frameworks that contribute to the effectiveness of environmental advocacy. The literature surveyed for this narrative review has been organized into three key thematic areas: communication strategies used in environmental campaigns, public responses to environmental messaging, and the role of digital and immersive technologies in environmental communication. Each of these themes is explored in detail to illustrate the current state of knowledge and identify critical factors shaping the success of environmental advocacy efforts worldwide.

Communication Strategies in Environmental Campaigns

Organizations involved in environmental advocacy employ multiple communication strategies to influence public opinion and policy. A prevailing approach is the dissemination of information via social media platforms. Kim et al. (2023) argue that platforms such as Instagram and Twitter enable environmental organizations to amplify critical messages, gather community support, and stimulate dialogue around urgent ecological issues. These tools are valued for their immediacy, interactivity, and potential to mobilize large and diverse audiences.

Participatory communication strategies have also gained traction. Ohayon et al. (2023) stress the importance of integrating community voices in the design and delivery of environmental campaigns. Such approaches foster a sense of ownership among stakeholders and enhance the contextual relevance of the messaging. Greenpeace, for instance, actively involves local communities in its environmental initiatives, encouraging grassroots participation in shaping and advocating solutions to local environmental problems.

Narrative-based and visual communication tactics form a cornerstone of strategic advocacy. Mossner (2021) demonstrates how documentaries and environmental films have become effective tools for crafting emotionally compelling stories that engage viewers. Visual representations of environmental degradation and conservation not only elicit empathy but also encourage pro-environmental behaviors. Cox (2024) further reinforces this point by showing that strong

narratives, when aligned with policy objectives, can help shift public discourse and legislative agendas.

Political lobbying remains a crucial component of advocacy campaigns. Organizations like the Sierra Club engage policymakers directly, providing data, organizing public demonstrations, and building coalitions to press for stronger environmental regulations. Through coordinated lobbying efforts, environmental NGOs can translate public concern into tangible policy outcomes, thereby achieving advocacy goals.

Empirical Evidence Supporting Media Effectiveness

Empirical research confirms the efficacy of digital, visual, and social media in advancing environmental advocacy. Rizvi et al. (2024) document how environmental documentaries have successfully shifted audience perceptions and catalyzed community dialogue. By showcasing real-world impacts of environmental issues, such media interventions elevate public awareness and stimulate grassroots movements.

Endriyas et al. (2023) illustrate how social media platforms effectively disseminate critical health and environmental information. Their findings reveal that digital media is particularly adept at fostering rapid response and broad dissemination, often outperforming traditional media in audience reach and engagement. These insights align with previous research by Kim et al. (2023), who found that digital platforms offer substantial potential for cultivating environmental stewardship.

Almirón (2019) emphasizes the role of sustainability-framed campaigns in broadening public understanding of environmental ethics, particularly those relating to animal rights and biodiversity. Campaigns that align ecological themes with social justice narratives tend to garner more robust public backing and policy traction. Wozniak (2021) adds that symbolic visual content, such as protest imagery and climate iconography, significantly enhances message salience, particularly when strategically deployed in high-visibility advocacy events.

The cumulative evidence suggests that multimodal communication approaches, which integrate digital, narrative, and visual elements, are most effective in driving environmental awareness and action. These strategies cater to varied audience preferences and enhance the accessibility and relatability of complex environmental topics.

Public Responses to Environmental Communication

The public's reception of environmental messages is heavily shaped by sociocultural contexts. Young and Liston (2010) argue that individuals interpret advocacy messages through the lens of

their community values and cultural norms. Consequently, environmental messages that align with local traditions or emphasize communal benefits are more likely to resonate and inspire action.

Social cohesion and dialogue play a pivotal role in reinforcing environmental attitudes. Ilesanmi et al. (2021) found that community-level discussions foster deeper understanding and commitment to environmental causes. Shared deliberation and collective framing of issues lead to more coordinated action, as individuals are more likely to adopt behaviors endorsed by their peer networks.

Educational attainment further mediates message reception. According to Alnawas et al. (2024), individuals with higher levels of education exhibit greater awareness of environmental issues and a stronger inclination toward sustainable behavior. This finding underscores the importance of integrating educational components into advocacy campaigns to enhance message comprehension and long-term behavioral change.

Public engagement metrics also point to significant advocacy outcomes. Cox (2024) reports that community involvement in advocacy initiatives fosters a sense of agency and drives concrete actions such as petition signing, volunteering, and environmental policy advocacy. Similarly, Bigsby et al. (2021) highlight the role of effective message framing in enhancing the likelihood of pro-environmental behavior adoption, particularly when messages are emotionally resonant and cognitively engaging.

Walther and colleagues, as cited by Foyet & Child (2024), demonstrate that participatory governance structures improve public willingness to engage in advocacy. When people perceive that their voices are valued in policy processes, they are more inclined to support environmental measures. Community coalitions, as a form of collective engagement, serve as platforms for mobilizing citizen action and influencing regional decision-making.

Technology and Innovation in Environmental Advocacy

Immersive media technologies such as virtual reality (VR) and augmented reality (AR) are emerging as transformative tools in environmental communication. Yang et al. (2024) find that immersive experiences help bridge the gap between scientific knowledge and personal understanding by creating emotionally resonant and experientially rich environments. These technologies allow users to "experience" climate impacts, fostering empathy and encouraging action.

The affective power of immersive technologies lies in their ability to transport users into altered realities. For instance, VR simulations of climate-affected regions or degraded ecosystems can heighten awareness and generate emotional responses that static images or text cannot. Raatikainen et al. (2021) emphasize that these tools are particularly valuable in transdisciplinary communication efforts, where engagement across stakeholder groups is critical for collective environmental problem-solving.

Moreover, immersive experiences have shown promise in catalyzing real-world behavior. Programs using VR to simulate green urban environments have increased interest in conservation activities and prompted more sustainable lifestyle choices (Yang et al., 2024). These interventions demonstrate the value of immersive technologies in enhancing advocacy impact by combining education, emotion, and interaction.

Beyond immersive media, digital platforms continue to revolutionize environmental communication. Kim et al. (2023) note that social media platforms serve as vital channels for information dissemination, mobilization, and network building. Campaigns that utilize inspiring narratives and visually compelling content can achieve significant reach and engagement, particularly among younger demographics.

Mobile applications and educational websites also contribute to increased public knowledge and behavioral change. Digital tools that enable users to calculate their carbon footprints, learn sustainable practices, or participate in eco-friendly challenges have proven effective in cultivating environmentally conscious habits. Almirón (2019) suggests that technology-driven motivation strategies can amplify awareness and lead to more deliberate and sustainable choices.

Interactive digital environments also foster community collaboration. Fundraising platforms, online petitions, and community discussion boards allow individuals to engage in environmental advocacy beyond passive content consumption. As noted by Palinkas et al. (2020) and Ilesanmi et al. (2021), accessible and engaging content formats such as infographics and explainer videos can break down complex environmental topics, making them understandable and actionable for diverse audiences.

In sum, both immersive and digital communication technologies play a critical role in elevating environmental awareness and prompting behavior change. Their effectiveness lies not only in message transmission but in enabling interactive, personalized, and emotionally engaging experiences. Continued innovation and research in this domain will be essential to strengthening the efficacy of environmental advocacy in an increasingly digital and interconnected world.

The findings from this narrative review underscore the complex and context-specific nature of communication strategies in environmental advocacy. They reveal how policy, social structures, economic resources, and cultural norms intersect to either hinder or support advocacy outcomes. Drawing upon literature from diverse political and geographic settings, this discussion synthesizes the primary themes found across studies and connects them with systemic influences, policy implications, and future research opportunities.

The variation in strategic approaches to environmental communication and advocacy is clearly shaped by the socio-political environment in which they are deployed. Schlauffer et al. (2022) argue that in authoritarian contexts, civil society organizations must carefully navigate restrictive political spaces, often resorting to coded language or symbolic messaging to avoid repression. These constrained environments limit both the scope and impact of advocacy, underscoring the crucial role of democratic institutions in supporting environmental communication. In contrast,

participatory models in more open societies have demonstrated greater efficacy. As Ohayon et al. (2023) emphasize, inclusive strategies that engage multiple stakeholders in decision-making processes result in broader and more sustainable policy changes.

These contrasts highlight how the success of advocacy campaigns often hinges on their adaptability to prevailing institutional frameworks. Raatikainen et al. (2021) emphasize that participatory and transdisciplinary research, which involves communities in knowledge production and decision-making, enhances not only message relevance but also public buy-in. The recursive relationship between advocacy and policy reception demonstrates that transparency, inclusiveness, and authenticity are core to fostering trust and long-term behavioral change. In contexts where these principles are embedded in policy-making, environmental communication tends to be more impactful.

Structural systems—political, economic, and cultural—play pivotal roles in facilitating or obstructing environmental advocacy. Politically, regimes that restrict civil liberties and suppress dissent create hostile environments for advocacy. As Schlauffer et al. (2022) note, environmental organizations operating under such regimes often face censorship and limitations on public engagement, severely diminishing their influence on policy. Conversely, environments that allow free expression, association, and information exchange provide fertile ground for advocacy to thrive.

Economically, funding disparities remain a major barrier to effective communication. While well-resourced organizations can deploy sophisticated multimedia campaigns, those operating with limited budgets struggle to reach and influence their target audiences. The availability of financial support from donors, philanthropic foundations, or public institutions significantly shapes the scope and sustainability of advocacy efforts. Nonetheless, Raatikainen et al. (2021) assert that community engagement can often compensate for financial limitations, especially when campaigns leverage local networks and volunteer mobilization to extend their reach.

Culturally, the alignment between advocacy messages and local values plays a critical role in message acceptance. Foyet and Child (2024) highlight how environmental messages embedded in cultural narratives are more likely to resonate with the public and inspire action. When advocacy campaigns are perceived as culturally congruent, they tend to foster stronger community engagement. Thus, effective communication strategies must account for the sociocultural context of their intended audience to ensure relevance and uptake.

Integrating these systemic considerations into communication planning is vital for designing responsive and inclusive advocacy strategies. It requires tailoring messages to political sensitivities, leveraging available economic resources, and embedding communication in cultural frameworks. Such a holistic approach ensures that communication is not only disseminated but also received, interpreted, and acted upon by the target audience.

The findings from this review also point to specific applications for designing more effective advocacy programs and public policies. For instance, the success of digital media campaigns, as

highlighted by Kim et al. (2023), suggests that policymakers should consider digital platforms as central tools for outreach, particularly when targeting younger populations. Digital strategies are not only scalable and cost-effective but also enable real-time feedback and interactive engagement, which are essential for sustaining attention and participation in long-term campaigns.

Moreover, the empirical emphasis on participatory governance highlights the importance of embedding public involvement in policy development. Raatikainen et al. (2021) demonstrate that when communities are actively involved in shaping environmental policy, both compliance and effectiveness improve. Policies co-developed with affected communities are perceived as more legitimate and are more likely to yield positive outcomes. Therefore, policy frameworks must move beyond consultation to active co-creation, allowing for meaningful public contributions in agenda setting and policy design.

Evidence-based policymaking emerges as another critical theme. As Palinkas et al. (2020) argue, communication strategies grounded in empirical research—such as behavioral science insights, demographic data, and media analytics—yield more targeted and impactful campaigns. The alignment between data-driven insights and policy interventions ensures that advocacy efforts address actual public needs and behaviors, rather than relying on assumptions or normative appeals. This calls for greater integration between research institutions and policy bodies to facilitate knowledge exchange and adaptive policy learning.

Despite these insights, several limitations in the existing literature must be acknowledged. First, much of the research remains concentrated in high-income countries, creating a skewed understanding of advocacy dynamics in low- and middle-income settings. There is a need for more regionally diverse studies that explore communication practices in underrepresented contexts, particularly where environmental challenges are most acute. Second, the literature is often segmented by discipline, limiting cross-sectoral understanding of how communication strategies intersect with environmental science, public health, and urban planning.

Furthermore, many studies prioritize short-term outcomes—such as message reach or initial behavior change—while neglecting long-term impacts. Understanding how communication strategies contribute to sustained environmental engagement remains an underexplored area. Longitudinal studies that track the durability of advocacy interventions could yield critical insights into how lasting change is achieved.

Another gap lies in the assessment of media effects in the context of disinformation and algorithmic bias. As digital platforms become central to advocacy, understanding how content visibility, misinformation, and echo chambers influence environmental communication is essential. This requires interdisciplinary research that examines technological infrastructure alongside communication practices.

Future research should also explore the emotional and psychological dimensions of advocacy. The affective power of storytelling and immersive technologies is evident, yet more work is needed to understand the thresholds at which emotional appeals translate into behavioral change. Combining

qualitative and quantitative approaches could enrich our understanding of these dynamics and inform the design of more emotionally intelligent advocacy tools.

Finally, the role of institutional partnerships in scaling successful communication strategies deserves further attention. Collaborative models that involve government agencies, NGOs, academic institutions, and the private sector can amplify the reach and credibility of advocacy messages. However, such partnerships must be grounded in shared values and mutual accountability to avoid instrumentalization or mission drift.

In summary, the literature reveals a multidimensional landscape of environmental communication, shaped by systemic conditions, organizational capacities, and audience contexts. The interplay between these elements determines the success or failure of advocacy efforts. By addressing existing gaps and investing in adaptive, inclusive, and evidence-based strategies, future research and practice can enhance the transformative potential of environmental communication.

CONCLUSION

This narrative review underscores the growing significance of strategic communication in environmental advocacy, particularly as global environmental challenges escalate in urgency and complexity. The findings reveal that multimodal communication strategies—encompassing participatory messaging, digital platforms, narrative storytelling, and immersive technologies—are key to enhancing public engagement, policy influence, and collective environmental action. These strategies are most effective when tailored to sociopolitical contexts, reflect cultural values, and incorporate community participation in message formulation and dissemination.

The discussion emphasized the systemic barriers that constrain communication effectiveness, including authoritarian governance structures, limited economic resources, and cultural dissonance. However, it also highlighted opportunities where participatory governance, digital innovation, and transdisciplinary collaboration can substantially improve advocacy outcomes. Policymakers and advocacy organizations are encouraged to invest in inclusive and evidence-based communication strategies, particularly those that center community voices and leverage digital ecosystems for broader outreach.

Future research should address the geographic and disciplinary gaps in current literature, exploring long-term impacts of advocacy strategies, the influence of digital misinformation, and the psychological dimensions of message framing. As environmental crises continue to intensify, a more integrated, adaptive, and emotionally intelligent communication framework will be essential in shaping behaviors, influencing policies, and sustaining global environmental movements. Cross-sectoral collaboration and continuous evaluation of communication strategies are key to ensuring environmental advocacy not only informs, but transforms society.

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