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THE IMPACT OF CLIMATE NARRATIVES IN MEDIA ON ECONOMIC DECISIONS: THE ROLE OF MISINFORMATION

Introduction

In recent years, climate change has become a major topic in public discourse. It appears in media headlines, political speeches, and everyday conversations. Although scientists continue to research its long-term effects, news and political narratives often present these developments as immediate and, at times, alarming. For most people, knowledge about climate change is shaped primarily through media content encountered in everyday use of digital platforms.

Media communication does not simply present facts; it also tends to organise information into familiar storylines or patterns. Certain narratives emphasise environmental threats more dramatically, while others focus on economic challenges or new technological solutions. Although the phenomenon itself remains the same, these divergent perspectives may encourage distinct interpretations. People tend to remember simplified or illustrative examples rather than detailed data. However, the present-day information environment includes not only reliable reporting but also oversimplified claims and misleading interpretations. As a result, differentiating between supported arguments and questionable content becomes increasingly difficult.

The article examines how climate change is portrayed in media discourse and how such portrayals may relate to economic attitudes. It also includes findings from a survey of university students, enabling a closer analysis of how different narrative patterns are associated with perceptions of economic risks and possible responses.

1. Climate narratives in media discourse

1.1. The concept of media narratives

Public debates about complex issues rarely rely on facts alone. Media coverage usually includes interpretative elements that help audiences make sense of events. In communication studies, these patterns are described as narratives or frames, as they explain why some aspects receive more attention while others remain less visible. Entman defines framing as selecting aspects of perceived reality and making them more salient in communication¹. By emphasising specific elements of an issue, media narratives may shape how audiences interpret causes, consequences, and possible solutions.

This becomes particularly important in topics such as climate change, which involve scientific knowledge and long-term risks. Research on climate communication suggests that different interpretative frames may influence public engagement with environmental issues². These frames may highlight scientific evidence, economic consequences, or technological innovation, depending on which aspect of the issue is being emphasised.

2.1. Climate narratives in public debate

Media coverage rarely focuses exclusively on scientific findings. Instead, climate change is often discussed in relation to economic development, energy policy, and technological change, which leads to different ways of understanding the issue.

Studies analysing media coverage indicate that journalistic practices can influence public perceptions of climate change³. In some cases, attempts to present opposing viewpoints may unintentionally exaggerate scientific disagreement. When skeptical claims appear alongside scientific findings, audiences may perceive climate change as more controversial than it is.

Climate narratives also differ in the kinds of consequences they emphasise. Some focus on environmental risks and the urgency of climate action, while others highlight economic costs, energy prices, or industrial competitiveness.

Communication strategies sometimes use dramatic imagery or fear-based messages. Although such messages may attract attention, they do not

1 R. Entman, *Framing: Toward clarification of a fractured paradigm*, "Journal of Communication", 1993, vol. 43, no. 4, pp. 51-58.

2 M. Nisbet, *Communicating climate change: Why frames matter for public engagement*, "Environment", 2009, vol. 51, no. 2, pp. 12-123.

3 M. Boykoff, J. Boykoff, *Balance as bias: global warming and the US prestige press*, "Global Environmental Change", 2004, vol. 14, no. 2, pp. 125-136.

necessarily lead to deeper engagement. Research suggests that catastrophic narratives may create feelings of distance or helplessness rather than motivating behavioural change⁴.

3.1. Media as a factor shaping economic attitudes

Media narratives about climate change influence not only environmental awareness but also economic attitudes. When making everyday decisions about energy use, transport, or consumption, individuals often rely on publicly available information. Research on environmentally significant behaviour indicates that values, social norms, and access to information shape environmental actions⁵. Economic incentives alone cannot explain such behaviour, as knowledge and perceptions of ecological risk also matter.

Public perceptions of climate change also depend on how scientific findings are communicated. Studies of the scientific literature show a strong consensus regarding the human contribution to global warming, although public perceptions often suggest greater uncertainty⁶.

Another factor that may influence public attitudes is the circulation of misinformation. In media environments, inaccurate claims concerning climate science may become widely disseminated. Research shows that misleading information can continue to influence beliefs even after it has been corrected⁷.

2. Climate misinformation and media communication

Climate change is discussed within a complex information environment. While this environment allows broad access to information, it also creates conditions in which inaccurate or misleading claims may spread easily.

In the context of climate change, misinformation usually refers to claims that contradict well-established scientific evidence or selectively present research findings in a misleading way. These claims can take different forms. Some cast doubt on whether climate change is happening at all or question how serious it is. Others overstate the economic costs of environmental policies or suggest that scientific conclusions are still too uncertain to trust.

4 S. O'Neill, S. Nicholson-Cole, *Fear won't do it: Promoting positive engagement with climate change*, "Science Communication", 2009, vol. 30, no. 3, pp. 355-379.

5 P. Stern, *Toward a coherent theory of environmentally significant behaviour*, "Journal of Social Issues", 2000, vol. 56, no. 3, pp. 407-424.

6 J. Cook et al., *Quantifying the consensus on anthropogenic global warming in the scientific literature*, "Environmental Research Letters", 2013, vol. 8, no. 2, article 024024, pp. 2-6.

7 S. Lewandowsky, *Misinformation and its correction: Continued influence and successful debiasing*, "Psychological Science in the Public Interest", 2012, vol. 13, no. 3, pp. 106-131.

Because these messages circulate alongside reliable information, many people may find it difficult to tell what is accurate and what is misleading.

Research shows that misinformation may influence public understanding even when corrections are later provided. Once individuals become familiar with a particular interpretation, it can continue to shape their perception of an issue despite later clarification. This is often described as the continued influence effect⁸.

The spread of climate misinformation is also linked to the complexity of scientific communication. Climate science is built on long-term data, statistical modelling, and probability rather than simple certainty. Once this kind of information enters the media, it is often simplified to reach a wider audience. In that shift from research to public discussion, scientific uncertainty may easily be mistaken for ignorance or weak evidence, even though it is a normal part of how science works.

Studies of the scientific literature indicate a strong consensus on the human contribution to global warming. Nevertheless, public discussions sometimes present the issue as if scientific opinion were deeply divided. This gap between scientific consensus and public perception may create favourable conditions for the circulation of misleading narratives⁹.

Digital media environments make these dynamics even stronger. Online platforms allow information to spread quickly to large audiences, often without careful editorial review. In this environment, emotionally charged messages and simplified explanations can travel more easily than complex scientific discussions. As a result, such narratives may attract considerable attention.

Climate misinformation affects not only environmental awareness but also the way audiences evaluate policy choices and economic costs. Narratives that exaggerate the costs of climate policies or cast doubt on scientific knowledge may increase scepticism toward environmental regulation and sustainable consumption. Analysing such misinformation is therefore important for understanding how media narratives shape economic decision-making.

3. Media narratives and economic attitudes

Media narratives may also shape economic attitudes toward climate policy. Debates on climate policy often centre on energy prices, industrial competitiveness, and regulatory costs, and media coverage of these issues may

⁸ *Ibidem*.

⁹ J. Cook, *op. cit.*

influence how audiences perceive the economic consequences of climate action.

Economic behaviour related to environmental issues is rarely shaped by financial incentives alone. Research on environmentally significant behaviour shows that personal values, social norms, and access to information also influence individual decisions. Media communication can therefore affect economic attitudes by shaping the informational context in which individuals interpret environmental problems¹⁰.

Media narratives can shape economic attitudes in several ways. When climate change is presented as a serious environmental risk, people may be more willing to support environmental policies or make more sustainable choices. But when the focus shifts to economic costs, climate policies may begin to look like a financial burden. The level of trust in information sources also matters. Those who see climate information as reliable are generally more likely to accept the scientific basis of such policies. In contrast, misleading narratives can weaken trust in science and increase scepticism toward environmental regulation.

Research on misinformation suggests that inaccurate claims can influence economic and political attitudes even when they contradict established scientific evidence. When individuals repeatedly encounter narratives that question climate science or exaggerate policy costs, these messages may shape their perceptions of economic risk and policy effectiveness¹¹.

The gap between scientific consensus and public perception may influence economic attitudes toward climate policies¹². Although research shows strong scientific agreement on the causes of global warming, public debate still sometimes presents the issue as uncertain. When climate science is perceived as controversial, people may be less willing to support policies linked to economic costs. Understanding how media narratives shape economic attitudes, therefore, requires both theoretical and empirical analysis. The following section presents the results of a survey among university students, examining how they perceive climate-related media content and whether it influences their economic attitudes and everyday decisions.

10 P. Stern, *op. cit.*

11 S. Lewandowsky, *op. cit.*

12 J. Cook, *op. cit.*

4. Methodology

The empirical part of this study is based on an online survey conducted in March 2026 among students of the University of Gdansk. The questionnaire was distributed through a Google Forms link shared in student group chats and other communication channels. This method enabled efficient data collection among the target group and yielded 120 completed questionnaires.

The survey consisted of ten closed-ended questions prepared specifically for this study. The response formats varied depending on the question type. Questions concerning the frequency of exposure to climate information and verification habits used a four-point frequency scale (always, sometimes, rarely, never). Questions about the influence of media narratives on attitudes and behaviour used a four-point agreement scale (yes, strongly / yes, to some extent / not really / not at all). In contrast, questions about willingness and media role used a four-point evaluative scale (yes, definitely / rather yes / rather no / no). Perceived reliability of media information was measured on a five-point scale ranging from very reliable to very unreliable. One question allowed multiple responses, as respondents were asked to indicate all their main sources of climate information. The questionnaire was focused on four main areas: exposure to climate-related media content and sources of information, perceptions of the reliability of media coverage on climate change, awareness of climate misinformation, and the influence of media narratives on economic attitudes. In this study, economic attitudes were understood as self-reported tendencies regarding everyday consumption decisions and willingness to pay more for environmentally friendly products. The questionnaire did not include socio-demographic questions.

5. Survey results

5.1. Exposure to climate information

The results indicate that respondents frequently encounter information about climate change in the media. A clear majority of participants reported encountering such information often (28,3%) or occasionally (28,3%). Only a small group indicated that they rarely (17,5%) or never (1,7%) come across climate-related messages. Most respondents (72,5%) indicated social media platforms as one of their main sources of climate information. Online news portals and podcasts were also mentioned relatively frequently, while traditional television (30,8%) and scientific articles (18,3%) were selected less often.

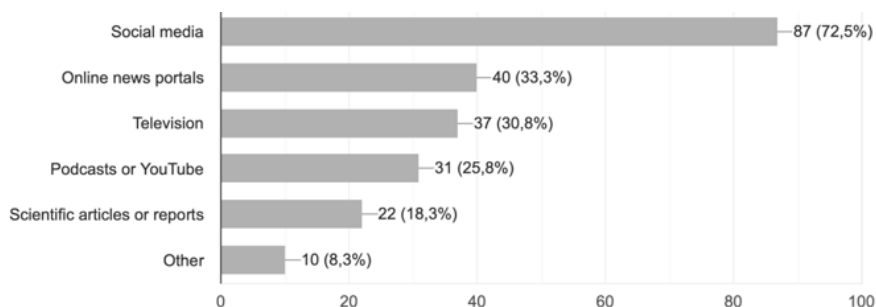


Figure 1. What are your main sources of information about climate change?

Source: Authors' own elaboration based on a survey conducted among students of the University of Gdansk.

5.2. Perceived reliability of media information

When asked about the reliability of climate-related information in the media, most respondents selected neutral (33,3%) or rather unreliable (32,5%) evaluations. Only a smaller group considered media information very reliable (1,7%). These results suggest that although media are a major source of climate information, trust in these sources remains limited.

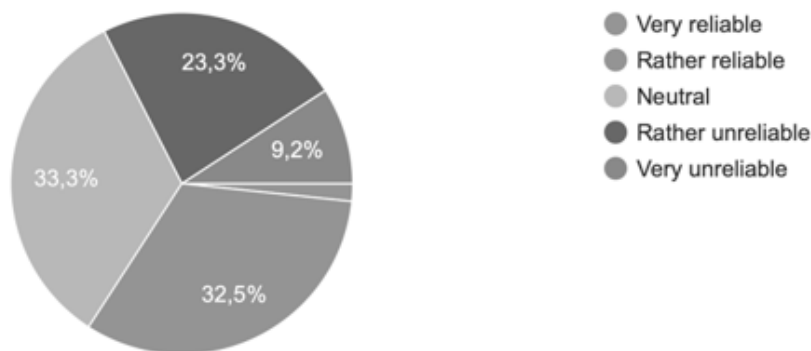


Figure 2. How reliable do you consider media information about climate change?

Source: Authors' own elaboration based on a survey conducted among students of the University of Gdansk.

5.3. Exposure to misinformation

A large proportion of respondents reported encountering misleading or false information about climate change in the media. Many participants reported encountering such information sometimes (40,8%) or frequently (24,2%). This result confirms that misinformation is a noticeable element of the contemporary media environment. At the same time, most respondents believed that misinformation about climate change affects public opinion. A majority selected either “yes, strongly” (23,3%) or “yes, to some extent” (46,7%). This suggests that participants are aware of the potential social impact of misleading climate narratives.

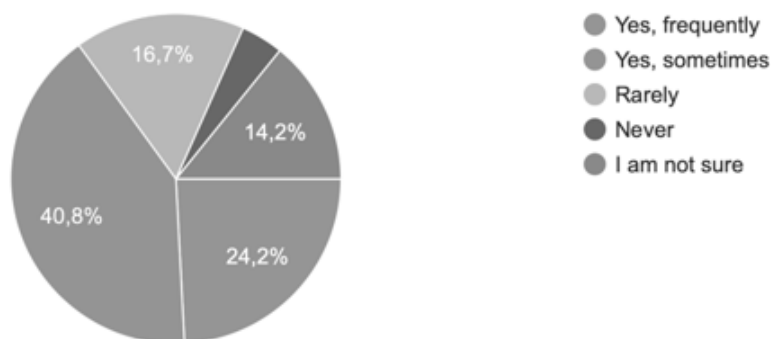


Figure 3. Have you ever encountered misleading or false information about climate change in media?

Source: Authors' own elaboration based on a survey conducted among students of the University of Gdansk.

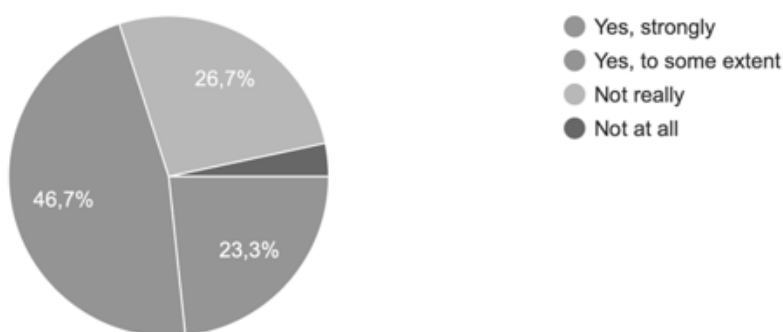


Figure 4. Do media narratives influence how serious you consider the problem of climate change?

Source: authors' own elaboration based on a survey conducted among students of the University of Gdansk.

5.4. Influence on economic attitudes

The results show that the relationship between media narratives and economic behaviour is not straightforward. Although many respondents acknowledged that media coverage influences how seriously they perceive climate change, this influence appears less evident in their everyday economic decisions. When asked whether climate-related media messages affect their consumer choices, most respondents selected “rather no” (45%) or “no” (18.3%). Climate narratives, therefore, do not seem to translate directly into changes in daily consumption patterns. A similar tendency can be observed in attitudes towards environmentally friendly products. Responses were relatively balanced, with 44.2% of participants willing to pay more for such products, while 55.8% were reluctant. This confirms that awareness of environmental issues does not mean that people are ready to spend more money on them. Further analysis reveals several interesting relationships. Respondents who frequently encountered misleading information about climate change were more likely to report that media messages influence their economic decisions: 62% answered “yes” or “rather yes”, compared to only 26% among those who encountered misinformation occasionally. A comparable pattern emerged in willingness to pay higher prices for eco-friendly products: among respondents frequently exposed to misinformation, 58% reported such willingness, compared with 40% among those who rarely or never encountered misleading content. This may indicate that higher exposure to climate content, including misinformation, goes hand in hand with stronger engagement with the topic and a greater declared openness to pro-environmental behaviour. That said, greater awareness and concern do not necessarily result in actual behavioural change.

The relationship between trust in media information and economic behaviour was also examined. Surprisingly, respondents who considered media information “rather unreliable” were more likely to report that media messages affect their economic choices (57%) than those who viewed it as “rather reliable” (33%) or remained neutral (20%). A possible explanation is that more sceptical respondents tend to engage with climate content more actively and think more critically about its social consequences, which may make them more aware of how such messages shape their own attitudes. In contrast, willingness to pay more for environmentally friendly products differed only slightly across groups with varying levels of trust in the media, ranging from 41% to 46%, suggesting that consumer willingness to accept higher prices is shaped by factors other than perceptions of media credibility.

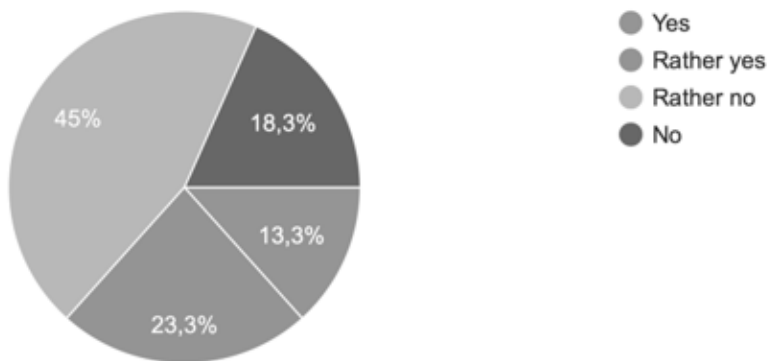


Figure 5. Do media messages about climate change influence your everyday economic choices?

Source: Authors' own elaboration based on a survey conducted among students of the University of Gdansk.

5.5. Verification of information

The survey also shows how often respondents verify climate-related information. Most respondents reported that they rarely (42,5%) or only sometimes (29,2%) verify climate-related information encountered in the media. Only a small number of participants stated that they always check the credibility of such information (13,3%).

5.6. Role of media in climate education

Finally, respondents were asked whether the media should play a stronger role in educating the public about climate change. The majority answered positively, selecting either "yes, definitely" (41,7%) or "rather yes" (38,3%). This indicates that participants expect media institutions to play an important role in communicating reliable climate information. Overall, the survey results suggest that media narratives play a significant role in shaping perceptions of climate change. At the same time, the influence of these narratives on everyday economic behaviour appears to be more limited.

Conclusion

The article examined the role of media narratives in shaping public perceptions of climate change and their potential influence on economic attitudes, understood as self-reported dispositions toward consumption choices and willingness to pay more for environmentally friendly products. The literature

analysis confirms that media framing and misinformation may affect how audiences interpret environmental problems and climate policies, consistent with previous research on misinformation and the gap between scientific consensus and public perception.

The survey results indicate that respondents frequently encounter climate-related information in the media, particularly on social media platforms. Many participants reported exposure to misleading information and expressed moderate trust in the reliability of media messages. Media narratives were found to influence perceptions of the seriousness of climate change. Among respondents who encountered climate content very often, 86% acknowledged at least some influence on how seriously they take the issue, compared to 33% among those who encountered such content rarely. This result aligns with international research suggesting that higher media exposure correlates with stronger environmental concern, although the direction of causality remains difficult to establish in survey-based designs. Nisbet (2009) found that the way climate change is framed in media coverage significantly shapes audience engagement with the issue, while Boykoff and Boykoff (2004) demonstrated that journalistic conventions, including the tendency to present opposing viewpoints, can amplify perceived scientific uncertainty and reduce public concern. The present findings are broadly consistent with these observations.

The impact of media narratives on everyday economic decisions appears to be more limited. A majority of respondents (63,3%) indicated that media messages do not directly influence their daily consumption choices. However, respondents who frequently encountered misleading climate content were more likely to report economic sensitivity to climate narratives, both in their everyday choices and in their willingness to pay more for eco-friendly products. This pattern is consistent with Stern's (2000) argument that environmental behaviour is shaped not only by economic incentives but also by values, social norms, and access to information. The finding that respondents who were sceptical of media reliability reported higher economic sensitivity than those who trusted media sources may reflect the kind of critical engagement described by Lewandowsky et al. (2012), who noted that repeated exposure to misinformation can reinforce issue salience and shape attitudes. These patterns suggest that the relationship between media exposure, misinformation awareness, and economic attitudes is not straightforward and merits further investigation using experimental or longitudinal designs.

Several limitations of this study should be noted. The survey was conducted among students of one university using a convenience sampling method. The data reflect self-reported attitudes and behaviours, which is standard practice in survey-based studies on media perception. The findings should therefore be

read as indicative rather than conclusive, providing a basis for future research with a larger, more diverse sample.

Future research should address these constraints by expanding the survey instrument, using larger and more diverse samples, and exploring statistical dependencies between media exposure variables and specific economic behaviours.

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Summary

The aim of this article is to examine how climate narratives in the media influence economic attitudes and the role that misinformation plays in this process, as it often shapes society's perception of climate change. The analysis is based on both the literature on how climate change is presented and empirical material collected through a survey conducted among students at the University of Gdansk. The questionnaire consisted of ten closed-ended questions and focused primarily on sources of information about climate change, the level of trust in media messages, and the possible influence of those

messages on economic attitudes. Additionally, a considerable share of respondents reported frequent exposure to climate-related content on social media, underscoring the growing importance of the digital information environment in shaping public opinion within the study group. The study involved 120 respondents.

The results clearly show that the media strongly influence how climate change is perceived; however, this influence translates far less directly into respondents' everyday economic decisions.

Keywords: climate narratives, misinformation, media communication, economic attitudes

WPŁYW NARRACJI KLIMATYCZNYCH W MEDIACH NA DECYZJE EKONOMICZNE: ROLA DEZINFORMACJI

Streszczenie

Celem artykułu jest analiza tego, w jaki sposób narracje klimatyczne obecne w mediach oddziałują na postawy ekonomiczne oraz jaką rolę w tym procesie odgrywa dezinformacja, która często wpływa na to, jak społeczeństwo postrzega zmiany klimatyczne. Analizę oparto zarówno na literaturze dotyczącej sposobu przedstawiania zmian klimatycznych, jak i na materiale empirycznym uzyskanym w badaniu ankietowym przeprowadzonym wśród studentów Uniwersytetu Gdańskiego. Kwestionariusz obejmował dziesięć pytań zamkniętych i dotyczył przede wszystkim źródeł informacji o zmianach klimatu, stopnia zaufania do przekazów medialnych, a także możliwego wpływu tych przekazów na postawy ekonomiczne. Dodatkowo zaobserwowano, że znaczna część badanych deklaruje częsty kontakt z treściami dotyczącymi zmian klimatycznych w mediach społecznościowych, co potwierdza rosnące znaczenie cyfrowego środowiska informacyjnego w kształtowaniu opinii społecznych w badanej grupie. W badaniu wzięło udział 120 respondentów.

Uzyskane wyniki wyraźnie pokazują, że media silnie wpływają na sposób postrzegania zmian klimatycznych, jednak znacznie słabiej przekłada się to na codzienne decyzje ekonomiczne respondentów.

Słowa kluczowe: narracje klimatyczne, dezinformacja, media, decyzje ekonomiczne