Climate Change Communication in Vietnam's Online Newspapers and Its Implications for Climate Actions

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Article

Climate Change Communication in Vietnam's Online Newspapers and Its Implications for Climate Actions

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Abstract: Climate change has become a prominent global issue, garnering the attention of governments and their populations due to persuasive scientific evidence concerning its sources and effects. Despite the fact that a strong commitment to finding ways of reducing individual emissions is an important element for coping with climate change, initiatives to enhance public awareness of climate issues and engage them in climate activities seem to be overlooked. Individuals' reactions to climate change are influenced by their understanding of its causes, consequences, and implications, which are impacted by public communication on the subject. However, the public discourse on climate change is problematic due to insufficient comprehension and oversimplification. There is also widespread debate regarding the causes and implications of climate change. Moreover, there is a scarcity of published literature on climate change communication in developing countries. To address these information gaps and current discussions, an analysis was performed on 397 articles from Vietnamese online newspapers. The research employed content analysis and framing to examine the communication of climate change to the public in Vietnam over the last two decades. The findings indicated an anthropocentric framing of climate change, highlighting institutional solutions and rendering a psychological distance for the general public. Moreover, the pervasive propaganda advocating for eco-friendly solutions and methods may generate an optimistic perception that this issue can be resolved without altering individual habits.

Keywords: anthropocentrism**;** climate change; climate communication; psychological distance; framing; Vietnam

1. Introduction

Climate change is a significant environmental problem in the 21st century [1]. According to United Nations (1992), climate change refers to a shift in the Earth's climate that is caused by the accumulation greenhouse gases (CO_2, CH_4, NH_3, CFCs…) in the Earth's atmosphere [2]. These greenhouse gases, have the ability to absorb and retain heat radiation, which would otherwise be released into space. This leads to an increase in the Earth's surface temperature, commonly referred to as global warming. Global warming consequently leads to many environmental concerns, such as the rise in sea levels and the prevalence of extreme weather occurrences such as rainstorms and droughts [3]. Even though global levels of CO_2 and other greenhouse gases remain relatively constant, regional differences in the effects of climate change result from a variety of factors, including geographic location, ecological characteristics, and economic situations [4].

The accumulation of greenhouse gases come from both natural and man-made sources, with the primary human drivers being the use of fossil fuels and land-use changes in/for consumption, industry, agriculture, and deforestation [5–7]. Considering the primary human causes of climate change, cooperative action from individuals, families, businesses, communities, and governments at different levels must be taken to address the problem [4]. Solutions at an international level have been implemented by national governments [4]. However, despite the fact that government entities

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worldwide now make the majority of strategic decisions regarding the economic growth of specific nations and regions, the Kyoto Protocol has not been effective in convincing governments to address climate change [8]. In addition, although many of the effects of climate change are global, the causes of climate change operate at a much smaller scale [4]. Studies demonstrate that actions taken even at a family level can make a substantial difference. If a family changes its fundamental behavior relating to home insulation, carpooling, and the purchase of fuel-efficient cars, these actions taken at a small scale would cumulatively reduce their greenhouse gas emissions and their energy consumption by around 30 percent [4]. The influence of humans, in their roles as citizens and consumers, on climate change is increasingly recognized, along with their responsibility to mitigate greenhouse gas emissions by altering their behaviors and making significant changes to their everyday activities [9,10].

Several challenges, however, hinder the engagement of individuals in climate action. There is a widespread belief that the primary duty for addressing this issue rests with national governments or industries to enact systemic reforms, including new legislation and infrastructure [10,11]. Efforts spanning several decades to involve the public in taking action against climate change seem to be ignored. While enhancing public understanding of climate science and policy and raising awareness of climate issues are essential for motivating individual actions [11,13,14], the lack of access to scientific research in scientific publications and the consequences of climate change are often perceived as ambiguous, distant, and inconsequential to people's day-to-day lives [12]. Publics even in certain industrialized countries are increasingly apathetic towards climate actions due to a resurgence of climate skepticism and a pessimistic view of the viability of collective action [15].

Individuals' responses to climate change are often shaped by their perceptions of its causes, repercussions, and broader implications [16], which are considerably affected by the efficacy of public communication regarding climate change [17]. Due to their wide readership, media, especially newspapers play a vital role in disseminating information about climate change to the general public [18], thereby exerting a significant influence on public perceptions and opinions regarding the issue [11,17]. The media not only spreads information, but also functions as a hub for individuals to congregate and bring about societal transformation [11]. Also, the capacity of journalists to render scientific jargon comprehensible to the general audience varies from other modes of communication [17]. People thus rely on media representations to understand and assign importance to the complexities of climate science, politics, and policy formulation [19].

Despite recent significant media focus on the effective communication of climate change [11,17], public discourse remains contentious due to the lack of specific information, the oversimplification of certain elements, and the undue emphasis placed on divergent perspectives [13]. There is also widespread debate regarding the causes and implications of climate change across the globe, including how anthropocentric ideas have influenced how people perceive climate change [17]. Guidance on properly communicating climate change to bolster individuals' resilience is exceedingly inadequate [20]. Furthermore, despite the growing scholarly work on climate change, most of the research on this topic primarily addresses climate change mitigation in developed countries, with limited published information on communication in developing countries and adaptation contexts [20–22].

In response to these lacks of knowledge and ongoing discussions, a thorough analysis was conducted on a total of 397 articles obtained from Vietnamese online newspapers, published between December 2001 and August 2024. Vietnam is an ideal candidate for studying the communication of climate change due to its status as a developing nation that is significantly impacted by the adverse effects of climate change. Furthermore, a research study that rigorously analyzed academic databases (Scopus and Web of Science) and grey literature for English-language sources indicates that fifty percent of our comprehension of climate change framing derives from the United States [23]. Vietnam is clearly one of the countries that has received inadequate attention in this area.

The primary research inquiries revolve around the communication strategies employed by Vietnamese online newspapers regarding climate change, and their implications for policy making

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and public engagement in climate initiatives. This study employs a qualitative research methodology to answer the two research questions: (1) What are the dominating frame relating to climate change on Vietnamese online newspapers? (2) What are the implications of those framing on individuals' climate action? Content analysis was employed to scrutinize the presentation of climate change communication in Vietnamese newspapers during the past five years. A frame analysis was conducted to examine the influence of Vietnamese newspapers on the shaping of climate change discourse during the past 20 years, as well as its implications for climate actions in Vietnam.

The paper is structured as follows. Following the introduction, chapter 2 detailed theoretical perspectives of framing theory. Chapter 3 provides an in-depth explanation of the research methodologies used, while chapter 4 examines and analyzes the research findings. These findings are subsequently discussed in greater detail in chapter 5. The paper concludes with a final statement.

2. Frames and Framing

The notions of frame and framing have become very popular since the late 1980s [24]. Frames can be described as conceptual structures or frameworks that facilitate the organization of ideas or topics, constructing a narrative that spans both time and political dimensions and thereby establishing the widely accepted interpretation of occurrences [25]. These hidden clues, known as subtexts, play a crucial role in shaping the interpretation of a story and frequently guide the reader towards a specific mindset [17]. Frames largely shape the presentation of news or media content, hence enhancing understanding and serving as cognitive tools to link narratives with bigger concepts [25]. Frames possess significant influence since they compel us to selectively filter our perceptions of reality, so rendering certain dimensions of our multifaceted existence more prominent than others [26].

Framing, refers to the intentional process of highlighting specific characteristics of news subjects or certain facets of our world while rendering others less accessible [25,26]. This is an intrinsic element of the communication process, especially within the realm of public affairs and policy [11]. New narratives are analyzed and connected to theoretical concepts, so conveying distinct meanings to topics, acts, or events from a certain perspective [27]. When news discourse can be interpreted by audiences in various manners, framing helps elevate the significance of specific messages, and alter the evaluation of information [28]. Framing theory suggests that how something is presented to the audience influences the choices people make about how to process that information [25].

Climate change framing has become a topic of interest recently together with the increase global actions on this issue [29]. The prevalent frames recently employed in media discourse regarding climate change include: the existence of risk, the veracity of scientific assertions, anthropogenic activities as the source of risk, possible repercussions, and approaches to mitigating risk, alongside economic and environmental factors, disaster, and moral/ethical considerations. [23]. The identification of frames differs based on specific framing objectives. Research on climate change challenges emphasizes frames like economic/financial, developmental, national/international security, ethical/moral, technological/energy, institutional/governance, scientific, and communication [30]. The framing of climate futures emphasizes categories such as solutions to climatic and social repercussions, remote threats to humanity, economic prospects and remote threats to ecosystems [31]. Adaptation, mitigation, public engagement, environmental consciousness, alternative pathways conflict, political negotiation, economic effects, and governance are among of the frames that pertain to climate imaginary [11].

3. Research Methodology

This is qualitative research. Five online Vietnamese newspapers were selected as the objects for the research because they had large audiences and high reputation in journalistic perspective. They are VNExpress (164 M), Dan Tri (78 M), Tuoitre (68 M), Vietnamnet (56 M), and Thanh nien (51 M) [32]. We defined the analysis period as between December 2001 and August 2024 and accessed the

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data through the newspaper's online archive service using the terms *Hiện tượng nóng lên toàn cầu* (Global Warming), *Biến đổi khí hậu/Thay đổi khí hậu* (Climate Change), and *Hiện tương nhà kính/Hiệu ứng nhà kính* (Greenhouse effects). These search terms yielded 416 articles for examination. Throughout the coding process, 19 articles were excluded for just using the term "Climate change" while mostly addressing other subjects. Thus, the aggregate sample size comprised 397 articles.

Drawing from existing literature on climate change communication and the overarching objective of enhancing public knowledge for their climate actions, the author devised a coding scheme comprising four predetermined topic categories: evidence, causes, impacts, and solutions. To persuade the public of climate change as a genuine environmental concern, communication must furnish credible information along with its proof and consequences. To motivate individuals to participate in climate actions, journalistic communication must elucidate the causes of climate change and the potential remedies. Throughout the coding process, two additional categories (responsibilities and political issue) were added to the coding scheme, and relevant sub-categories were identified and incorporated into the topic categories. The author utilized five framing strategies proposed by Gamson and Modigliani (1989) to recognize the topic categories of each frame during the coding: metaphors, exemplars, catchphrases, depiction/portrayals, and visual images [33]. The frame was subsequently determined through the analysis of its topic categorization.

During the coding process, the author utilized memoing to record compelling ideas and information extracted from the relevant publications associated with the codes. Subsequent to coding, a content analysis was conducted to discern the underlying frames. The original percentages of the codes in each category were examined to determine the prevailing codes. The analysis of the dominant codes within each category facilitates the identification of major topics of the article, which collectively formed the common frames for each category.

4. Framing of Climate Change in Vietnamese Online Newspapers

The research findings revealed substantial changes in the journalistic framing of climate change within Vietnamese online publications over the past 24 years. Between 2001 and 2020, there was a paucity of articles on climate change, predominantly focusing on its evidences. From 2020 until the present, this problem has garnered heightened attention, especially in 2023-2024, with an intensified focus on climate change impacts and solutions.

The following six frames were identified as being used in Vietnamese online newspapers to communicate about climate change: Compelling evidence of global warming, Potential solutions to climate change, Governments and corporations' vital roles in climate mitigation; Profound impacts of the climate crisis, Greenhouse gases as the principal factor in climate change, Political issues related to climate change. The three first frames were dominant among the seven (Table 1).

Table 1. Six frames for climate change on Vietnamese online newspapers.

Frames	No of articles	%
Compelling proof of global warming	362	91.4
Potential solutions for climate change	278	70.2
Governments and corporations' vital roles in climate mitigation	238	60.1
Profound impacts of the climate crisis	230	58.1
Greenhouse gases as the principal factor in climate change	102	25.8
Political concerns for climate change	55	13.9

4.1. Compelling Evidences of Global Warming

The "Compelling evidences of global warming" frame, henceforth referred to as the evidence frame, predominated in climate journalistic communication in Vietnam. Over 90% of the articles in the sample cited some dark and murky evidences of global warming (Table 1). They mostly referenced both the increasing global temperature and rising temperature in Vietnam (Table 2).

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The terms such as *thảm hoạ khí hậu* (climate disaster) [34] , *thời tiết bất thường* (unsual weather) [35,36], *nhiệt độ khắc nghiệt* (extreme temperature) [37], *nóng thiêu đốt* (scorching heat) [38], *nóng kỷ lục* (record-breaking heat) [39] , *ngày nóng nhất lịch sử* (the hottest day in history) [40,41], *hành tinh nóng* (hot planet) [42] either in the headlines or throughout the contents of the articles, particularly from 2023-2024. Phrases/sentences with figures about temperatures were frequently appeared, such as "*nóng hơn 2.5oC so với thời kỳ tiền công nghiệp"* (Global temperatures will increase and exceed 2.5oC compared to pre-industrial times) [43], "*Đà Lạt vào buổi trưa tháng 3 nhiều năm trở lại đây khoảng 31°C"* (Dalat at noon in March in recent years is about 31°C) [44]. The subsequent weather patterns were aberrant, characterized mostly by increased rainfall and severe storms, as well as diminished rainfall and drought conditions. Pictures of drought, melting ice, rising sea levels, forest fires (mainly from foreign sources), people under scorching heat, flooding were displayed. National disasters such as strong storms, flooding was described in detail to underscore the reality of climate change and its associated threats. Headlines such as " *Cơn bão huỷ diệt*"(Storm of destruction), [45] "*Heavy rain that only happens once in 200 years falls on South Korea, many people die tragically*" [46], "*Lốc xoáy "xé toạc" nhà cửa, cuốn bay cây cối ở Trung Quốc"* [Tornado rips apart houses and blows away trees in China [47]. In over half of the publications, climate change was frequently mentioned alongside resonant elements like as La Niña and El Niño, resulting in an ambiguous and dark portrayal of the climate. Significantly, the majority of the evidence for climate change originated from foreign sources, including international organizations scientific journals (such as Nature, Global Environment Change, Our world in data, Earth System Science Data, as well as new media outlets (such as National Geographic, The Business Standard, BBC, Reuters and CNN, The Guardian, The Washington Post, Euro News) without proper citations and references, alongside information from government and international agencies (The Intergovernmental Panel on Climate Change (IPCC), United Nations Environment Programme (UNEP) , International Labour Organization (ILO), World Meteorological Organization (WMO), United States Agency for International Development (USAID)). The predominant evidence in journalistic communication is primarily located in the Mekong Delta, the largest agricultural region, and the center areas of the country, which are often affected by storms and drought.

Table 2. The evidence frame.

Sub-frames	No of articles	%
Rising temperature	191	48.1
Abnormal weather conditions	102	25.7
- *Abnormal weather (just mentioned the term)*	*68*	*17.1*
- *Increasing rainfall +storms*	*51*	*12.8*
- *Reduced rainfall/drought*	*68*	*17.1*
- *National disaster such as hail, storms, floods*	*30*	*7.6*
- *Strong wind, turbulence*	*10*	*2.5*
- *Seasonal changes*	*11*	*2.8*
Resonance factors	42	10.6
Source of evidence	329	82.9
- Foreign source	216	54.4
- Domestic sources	132	33.2

4.2. Potential Solutions to Climate Change

The "Potential solution to climate change" frame, henceforth termed the solution frame, was identified in 70.2% of articles (n=278). This encompassed eight topic categories (Table 3), in which the four first ones were predominant.

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Table 3. The solution frame.

Sub-frames	No of articles	%
Waste management and reduction	167	42.1
- *GHG Emission reduction and absorb*	*157*	*39.5*
- *Other waste reduction*	*43*	*10.8*
Sustainable development	147	37.0
Sustainable development (Only mentioned the term)	87	21.9
- *Renewable/alternative energy*	*81*	*20.4*
- *Green/Organic/low carbon/circulate economy*	*74*	*18.6*
- *Environmental protection and restoration*	*71*	*17.9*
Institutional solutions	134	33.8
Changing production methods	112	28.2
Market solutions	75	18.9
- *Net zero CO2 emission*	*56*	*14.1*
- *Carbon credits/footprints*	*31*	*7.8*
- *Carbon footprints*	*8*	*2.0*
- *Environmental fees/charges*	*4*	*1.0*
Providing the public with information on climate change	43	10.8
Reduced use of fossil fuels	37	9.3
Changing life styles (green/circulate life styles)	26	6.5

The reduction of greenhouse gas emissions was prominently emphasized, encompassing both natural absorption by forest and artificial absorption through technology. The subsequent principal focus of this frame was sustainable development which mainly focused on the transformation into the use of alternative/restored energies such as, solar energy, wind energy and hydraulic energy [48]. Specific terms, such as the green economy, organic economy, low carbon economy, /circulate economy, appeared frequently in those articles either in the speeches of governmental officers or commitments of business companies [49,50]. More than one third of the articles addressed the conservation of forests and the environment, along with the preservation of energy and other natural resources, particularly soil and water.

Institutional solutions (33.8% articles) were also mentioned. They included diverse national and municipal legislative frameworks, comprising initiatives, plans, policies, strategies, laws, projects, programs, and processes. They also included the involvement of Vietnam's government in international climate agreements, such as the IPCC, COP 26, COP 27, and COP 28 and obtained financing from international programs designated for nations susceptible to climate change [51–55].

The market solution (18.9% articles) included a commitment to carbon neutrality, net-zero emissions, net-zero transitions, low carbon energy/ economy, carbon credits/footprints, and environmental taxation. Appearing in both the headline and the body of the text, the adjectives "green" and "low-carbon" were employed spanning macro to micro contexts, such as green Vietnam, green transformation, green economy, green finance green industries, green agriculture, green travel, green city, green building, green steel, green fuel, green lifestyles etc. [56–58]. Changing life styles were referenced in merely 6.5% of publications, encompassing eco-friendly practices such as consumption reduction and the utilization of sustainable items, green mobility (public transit, car-sharing, bicycles, electric automobiles, etc.) [59,60]. The predominant responses relating to solutions were mostly coping and mitigating measures, with a minority of adaptive solutions identified (1.6% articles). They encompassed the selection of suitable plant types, modification of crop structure, and alteration of agricultural techniques, predominantly illustrated with examples from international sources. In general, the proposed remedies prioritize a green economy over lifestyle changes, notably in articles published in Tuoitre newspapers in 2024.

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4.3. Governments and Corporations' Vital Roles in Climate Mitigation

The frame "Governments and corporations' vital roles in climate mitigation", thereafter referred to as the responsibility frame, was recognized in 60.1% of articles (n=238) (Table 4). Nearly a half of the articles in the sample credited governments and politicians as the primary actors in coping and mitigating climate change in Vietnam and nearly a third mentioned the key roles of business actors.

Table 4. The responsibility frame.

Sub-frames	No of articles	%
Governments/politicians	192	48.4
Businesses/corporations	116	29.2
All people/citizens	26	6.5
Social organizations/Communities	26	6.5
Young people	11	2.8

The roles of the central and municipal governments were related to institutional solutions. Images of Vietnamese politicians and high-ranking officials who spoke at those occasions, as well as in the signing ceremonies, partnership programs with representatives of supporting countries (Europe, Noth America, Australia), members of foreign organizations (ADB, USAID, WB, Quỹ Đối tác Carbon Lâm Nghiệp (FCPF), The World Wide Fund (WWF), were strongly utilized [61,62]. There were also images depicted authorities delivering statements at a forum alongside businessmen and professionals [63]. Articles including images of natural disasters, such as landslides, flooding, and drought, also include photographs of government officials convening to devise remedies and personnel assisting communities in managing the circumstances [36,64,65]. One article in the Tuoitre newspaper on June 2024 said: "*In recent days, in many provinces and cities in the Mekong Delta, thunderstorms accompanied by strong winds have caused many houses to collapse, rice to fall and fishing boats to sink"*. Th earticle had the photo of the Chairman of the People's Committee of Phu Duc Commune, Long Ho District - said "*the whole commune had 358 hectares of rice that had fallen due to heavy rain. The locality has contacted the militia to help people bundle and tie the rice to reduce the damage*" [64].

Alongside with government officers, businesses and industrial companies were considered the most important actors for coping with climate change. News about Tổng Công ty Cấp nước Sài Gòn (SAWACO), Tập đoàn Dầu khí Quốc gia Việt Nam (PVN) engaged in climate actions by investing in forest plantations particularly the restoration of mangrove forest in the south of Vietnam [66,67]. This also related to the businesses in industries and agriculture to change to the low-carbon economy with the use of renewable energy and new technology to reduce waste and CO_2 emissions. The roles of businesses/corporations went along with waste reduction and market-oriented solutions such as the development of circular economy, green transformation, low carbon economy and net- zero emission [56,58,68]. Those actors also emerged in headlines regarding governments' engagement in international agreements with foreign partners [50].

4.4. Profound Impacts of the Climate Change

The frame "Profound impacts of the climate change", henceforth termed the impacts frame, was identified in 58.1% of articles (n=230). This included two primary categories: Negative impacts on human life and impacts on ecosystems, with the former being prominent (Table 5). In the impact frame, most of article mentioned the impact on human-interest issues, only 12.6% (n=50) mentioned the impacts of climate change on the ecosystem.

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Table 5. The impact frame.

Sub-frames	No of articles	%
Impacts on human life	230	57.9
- *Human living*	*105*	*26.4*
- *Decreased water resources*	*78*	*19.6*
- *Ice melting rising sea level*	*67*	*16.9*
- *Resource depletion*	*68*	*17.1*
- *Decreased production (fishery, agriculture)*	*47*	*11.8*
- *Flash flood, landslides*	*29*	*7.3*
- *Economic loss/damage*	*22*	*5.5*
- *Social instability*	*22*	*5.5*
Impact on ecosystems	50	12.6
- *Ecosystem degradation*	*28*	*7.1*
- *Species behaviors*	*23*	*5.8*
- *Species range shift*	*10*	*2.5*

Around 26.4% article detailed the impacts of climate change on human life, work and so on. Other depicted details of water stress, the flooding due to rising the sea level, resource depletion (mainly the soil), shrinking arable land, decreased of production (mainly in fishery and agriculture). Disasters like storm, flash flood, landslide related to increasing flooding and rainfall were highlighted with images [35,64,65]. Approximately 22% of the articles referenced economic loss or damage, including infrastructure destruction due to flooding, loss of citizens' homes and property, diminution of agricultural land, and crop loss [35,36,46,47]. A few articles (5,5%) cited social instability linked to migration due to droughts or floods [69]. Phrases like as heavy rain, severe flooding, highways transforming into rivers, dramatic landslides, catastrophic wildfires, and damaging storms were prevalent. Those phrases were accompanied with photographs illustrating various natural disasters [35,46,47,65].

Articles discussed the effects of climate change on ecosystems, including ecosystem degradation (deforestation, forest deterioration, coral bleaching, species extinction, adverse alterations in ecosystems, and alterations in species behaviors (premature flowering, species migration…) and species range shift [70,71]. Certain stories merely referenced the worldwide implications broadly, lacking precise specifics. The sources encompassed both scientific papers and social media.

4.5. Greenhouse Gases as the Principal Factor in Climate Change

The frame "Greenhouse gases as the primary factor in climate change," henceforth referred to as the cause frame, was identified in 14.9% of publications (n=59). Both direct and indirect sources of climate change were covered. The catch phrases were greenhouse gases (GHG), carbon dioxide emissions, methane emission, fossil fuel burning [72,73]. The primary reason, GHG emissions, is consistently addressed in most publications in this frame, predominantly emphasizing carbon dioxide (CO_2), while only a limited number of papers (N=20) discuss methane (CH_4) although methane was considered "25 times more effective than carbon dioxide at trapping heat in the atmosphere" [73]. Indirect factors primarily attributed to production (industries, agriculture) and various forms of fossil fuel combustion [56,57]. Activities related to living, including environmentally travel, reduced domestic waste, and consumption, were given insufficient attention (Table 6).

Table 6. The cause frame.

Sub-frames	No of articles	%
Direct causes: GHG emission	59	14.9
Indirect causes	55	13.9
- Production	32	8.1

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- Fossil fuel burning	33	8.3
- Travel	12	3.0
- Waste	7	1.8
- Household consumption	6	1.5

4.6. Political Issues Related to Climate Change

The frame "Political issues related to climate change", hereby referred as the political frame, was indicated in 13.9 % articles (n=55). The category of climate justice predominates. This subject encompassed social justice/justice/fighting inequality in responding to climate change, legal responsibility of polluting countries, fund for poor countries to respond (Loss and Damage), vulnerable areas and disadvantaged groups in climate change, human rights in responding to climate change …The political discourse predominantly originated from politicians and government agencies, including the Prime Minister, the Vice Prime Minister, and the Minister of Environment and Natural Resources, during international meetings such as IPCC, COP 26, 27, and 28 [34]. Approximately 16% of articles addressed international collaboration, aiding Vietnam in addressing climate change [51,53,55]; 15% pertained to discussions and disputes over climate matters, including climate justice and the obligations of developed nations for loss and damage funding (Table 7). This frame highlighted the collaboration between developed and developing nations through numerous international and regional agreements. The emphasis in this frame was mainly on the roles of government and corporate entities, rather than citizens and social organizations. Climate justice highlighted the consideration of vulnerable nations, social groups in climate solutions, and the obligations of developed nations for loss and damage funding [49,75]. Catch phrases such as "*if you want to go far, go together"* [76], and "*No one will be left behind*" [49,51] were emphasized with illustrating pictures.

Table 7. The political frame.

Sub-frames	No of articles	%
Climate justice	34	8.6
International cooperation in coping with climate change	16	4.0
Debate/conflicts around climate issues	15	3.8

In summary, climate change communication in Vietnamese online newspapers sketched a perilous image replete with evidence of the climate crisis, while simultaneously offering a glimmer of hope for potential solutions to climate mitigation. Climate change was framed as a mitigation issue. Governmental actions were a critical component of climate mitigation solutions, providing policies, regulations, plans, and strategies. Consequently, governments and corporations were regarded as the primary actors in climate action. The majority of stories articles the effects of aberrant weather conditions and the increasing global temperature on human life and well-being together with the presence of ominous evidence. The journalistic communication on climate change did not appear to emphasize political debates and the causes of the crisis.

5. Discussion

Notwithstanding the expanding academic discourse on climate change, there exists a paucity of published data about communication and adaptation scenarios in developing countries [20–22]. A content analysis of climate-related journalistic communication in five major Vietnamese online newspapers reveals that the issue is portrayed as frightening but far away in public discourse. The graphic emphasizes climate change as a human-centered issue that requires institutional solutions.

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5.1. Climate Change: A Menacing Image, Albeit a Far Danger for Individuals on the Street

The prevalence of publications presenting stark proof of global warming has led Vietnamese online newspapers to portray a grim portrayal of climate change. With astonishing temperature statistics effectively engage the audience's attention. The subsequent evidence and visuals demonstrated the concrete indicators of increasing temperatures and irregular weather patterns worldwide, aiding readers in grasping the essential information regarding climate change, including the global average temperature, its rise relative to the pre-industrial era, and the critical threshold figures. Readers also can see different expressions on changing weather across the globe. Articles on the consequences of global warming further validate the existence of climate change as an environmental disaster for humanity.

Nonetheless, the predominant focus of climate communication in Vietnamese newspapers has been on international proofs, rather than on domestic evidence, rendering the issue somewhat geographically remote for the Vietnamese populace. This strategy obviously intended to showcase persuasive evidence on climate change, may however convey the perception that it is not a significance concern for the Vietnamese populace. Furthermore, while several publications illustrated the global ramifications of climate change and proposed its future effects to underscore the gravity of the issue, they may, conversely, and reinforce that perception. The potential adverse effects of journalistic communication regarding climate change offered actual evidence for what referred to as "psychological distance" for the public, especially in terms of temporal and geographical dimensions. [77–81].

Research findings interestingly revealed the social distance about climate change in Vietnamese online newspapers. The emphasis was not on people from nations with differing developmental statuses (developed, developing), as highlighted by [79], but rather on specific social groups within a nation. One-fourth of the articles extensively cited the causes of climate change as the accumulation of greenhouse gases resulting from fossil fuel consumption, mostly highlighting the supply side (industry and agriculture). Online newspapers' climate communication neglected the impact of household consumption (the demand side) on climate, so failing to persuade individuals of their effects and perhaps dissuading them from altering their consumption practices. The solution frame emphasized a green economy instead of lifestyle alterations, particularly in articles in 2024 from Tuoitre newspapers, which targets a youthful audience. The focus on political and corporate entities diverted attention from individual accountability about climate change.

The findings also indicated the reciprocal influences among several dimensions of psychological distance, as noted by McDonald et al. (2015) [78]. The spatial and social factors together enhanced the perceived psychological distance in climate change journalistic communication in Vietnam. Focusing on unusual weather phenomena, such as flooding and drought, in the Mekong Delta and central Vietnam may cause urban dwellers and individuals outside the agricultural sector to view it as a less pertinent threat to their interests.

5.2. Anthropocentric Framing of Climate Change

The content analysis of the impact frame showed an anthropocentric framing of climate change in Vietnam. The term *anthropocentric* denotes the perspective that humans hold paramount significance in existence, hence rendering the environment devoid of intrinsic value [82]. This view is prevalent in research and media on climate change [17]. Critics of anthropocentric framing contend that this perspective regards climate change as consequential solely for its effects on humans, neglecting its impact on all forms of life, including the natural environment [17,83]. This viewpoint may shape public perception of climate change and subsequently influence individuals' responses [17]. Despite humanity's complete dependence on nature [85], anthropocentrism clearly acts as a significant driver of ecocide and the environmental crisis, as society has vigorously sought to establish a human centric world [84]. Anthropocentrism is thus particularly insufficient for biodiversity conservation [85–87]. Conversely, proponents of anthropocentrism argue that it is inevitable and potentially advantageous for environmental conservation [88–90]. Due to the presence

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of many valuable entities, inclusive environmental ethics, which incorporate specific features of nature, may complicate action determination [91]. The media's coverage of climate change in the sample emphasized human-centered issues, such as production in the agricultural and industrial sectors, rather than the intrinsic value of the environment. It outlined disruptions in industrial productivity and agricultural losses resulting from storms, floods, and droughts. These natural disasters were predominantly depicted about the devastation of residences, roadways, and other infrastructures, as well as the loss of human lives. The communication mostly overlooked the harm and disruption those disaster caused to ecosystems.

The most major impacts of climate change on human life and production, such as flooding and drought, have led to solutions that prioritize human advantages while neglecting potential further environmental costs. The central and provincial government invested in dam construction to mitigate flooding and establish water reservoirs to combat drought [54,92,93] neglecting the potential ecological consequences associated with the various activities during the construction and operation of these structures, including diminished water quality and impacts on aquatic ecology, soil, fauna, and flora [93,94]. Such human-centric perspectives on climate change effects have resulted in myopic solutions that prioritize short-term gains (mainly in economic aspect) while neglecting the long-term and broader consequences of those solutions not only on the environment but also on other aspects of human life. The pursuit of green/alternative energy in Vietnam is leading to the construction of hydropower dam projects, particularly in the central regions [95]. This development impacted the forest cover, flows of rivers, and biodiversity as well as local livelihoods (fisheries and agriculture) which were dependent on the environment [95,96]. The dam construction and operation also displaced tens of thousands of upland residents [97].

Human-centric perspectives in the news media regarding climate change may also distort the public's understanding of climate actions, so misguiding their engagement and responses. It is possible that readers will be misled into believing that the act of planting trees alone is sufficient for the absorption of carbon dioxide if they come across articles that feature companies like PVN and SAWACO participating in tree-planting programs to combat climate change [63,64]. Because the primary function of forests has become the absorption of carbon dioxide, a role that can also be fulfilled by trees planted alongside natural forests, this may provide justification for specific economic activities that require the loss of segments of natural forests in favor of forest plantations. This argument has largely overlooked the loss of biodiversity and the subsequent preservation of forests for the environmental benefits they provide.

Research findings further enhance the literature on media framing on the convergence and disparity across climate change framing in distinct socio-economic contexts [98]. The less focus on human daily activities as a cause of climate change and the prioritization of human interest/economic framing in Vietnam's online newspapers aligns with findings from other research in certain wealthy nations [29]. Likewise, climate change was predominantly depicted as a state crisis rather than an individual one [11,12,29]. However, the diminished emphasis on political issues and ecosystem impacts in the articles sampled contrasts markedly with other studies about the framing of climate change in the affluent countries [29,32]. This disparity may be attributed to the varying sociopolitical contexts among nations, as evidenced by a study analyzing the portrayal of climate change in US and Chinese newspapers [32]. It should come as no surprise that the majority of the information that we have with regard to climate change originates from studies carried out by experts in western countries [23]. The scarcity of information regarding climate change data and its impacts in various regions of developing countries, such as Vietnam, renders the catastrophe a remote concern for the general populace. Consequently, it is diminished as a subject of political debate in the nation. The scarcity of research on the local effects of climate change on ecosystems in Vietnam, coupled with limited access to global scientific findings, contributes to the inadequate understanding of this issue among news reporters, in contrast to the general public in various industrialized nations, who benefit from extensive knowledge and information derived from climate change studies. The more attention to political framing of climate change in wealthy nations may also be because of a growing skepticism

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toward the threats that are posed by climate change. The increased focus on the political framing of climate change may also stem from a rising pessimism over the concerns posed by climate change in affluent nations. The emergence of climate denial [15] and the potential impact of policies aimed at reducing carbon emissions on the economy highlight additional political issues associated with climate change.

5. Conclusions

Climate change has become a critical worldwide environmental issue. Greenhouse gas emissions, predominantly resulting from human activity, are the principal cause of the crisis. The world is rapidly seeking solutions to climate change challenges, primarily relying on institutions such as governments and corporations. Insufficient attention was given to changing individual consumption, which has been recognized as a vital factor in mitigating greenhouse gas emissions. The news media, because to their extensive audience reach, play a crucial role in educating the public about the importance of changing individual habits to reduce emissions. The paper took an example from news media communication in climate change in Vietnam.

In summary, Vietnamese online newspapers conveyed a perilous image of the climate crisis, replete with evidence, while simultaneously providing a glimmer of optimism for potential solutions to climate mitigation. The issue of climate change was presented as one of mitigation. Governmental actions were a critical element of climate mitigation solutions, as they provided policies, regulations, plans, and strategies. As a result, governments and corporations were considered the primary actors in climate action. The majority of narratives underscored the presence of ominous evidence, as well as the effects of aberrant weather conditions and the rising global temperature on human life and well-being. It was not apparent that the journalistic communication on climate change prioritized political debates and the underlying causes of the crisis.

The focus areas of journalistic climate communication in Vietnam reveal that public discourse on climate change is characterized by an anthropocentric framing of climate change, which shows the tendency of institution solutions and highlights the key roles of government and corporation to solve impacts on human living. Vietnamese newspapers on climate change communication predominantly emphasize production-related variables, neglecting individual consumption behaviors, which may foster mass manufacturing and further worsen the climate issue. Such framing may not be a good strategy because it is less likely to engage individuals, especially young people, in climate actions. The exclusive emphasis on the effects of climate change and human solutions may inadequately convey the full extent of its devastation on the natural environment, so misguiding public engagement in climate initiatives. The emphasis on facts and impacts from outside Vietnam may have inadequately linked science to daily living in Vietnam. Climate change appears to be a distant issue for individuals in various sectors and regions, given the localized facts, effects, and remedies focused on agriculture and industries, particularly in the Mekong Delta and central Vietnam.

The research findings provide the basis for the subsequent recommendations. *First*, to reduce the psychological distance the public perceives regarding climate change, it is imperative to undertake further research on the unique causes, evidence, and impacts of climate change across different regions of Vietnam. These studies should also focus on the implications of climate change on the country's ecosystem structure and functions, particularly in biodiverse natural habitats, and clarify how these environmental changes will be detrimental to both nature and mankind. The findings of these studies will equip policymakers and decision-makers with the necessary knowledge to make informed decisions on addressing and mitigating the impacts of climate change through both short-term and long-term measures. This knowledge should also be conveyed through news media using proper language to ensure public comprehension and facilitate their participation in climate initiatives. *Second*, the news media ought to highlight evolving lifestyles and offer guidance on actions that individuals can undertake in their daily routines to reduce emissions. This also serves to counteract the excessive spread of propaganda advocating institutional solutions and coping

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mechanisms for firms, which may foster a misleading belief that this issue can be readily resolved without altering individual actions. *Third*, legislators ought to enhance programs and policies within the industrial and service sectors that promote responsible consumer behavior concerning climate change.

Although the research was conducted in the five most prominent online newspapers in Vietnam, it is plausible that it does not comprehensively reflect the varied ways in which the news media frame climate change. To enhance the substance and framing of issues, greater research on climate framing across various news media in Vietnam is necessary. It is also crucial to examine how those framings actually influence decision making and public understanding of climate change across various sectors and areas in Vietnam.

Furthermore, due to potential discrepancies in climate change framing across various sociopolitical contexts, more research on media communication of climate change in other developing nations is essential to comprehend public perceptions of these issues and, consequently, to establish a foundation for effective strategies that encourage increased individual participation in climate actions.

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