



# News coverage of climate change and generation Z

Alison N. Novak<sup>1</sup>

Received: 30 January 2023 / Accepted: 14 April 2024  
© The Author(s) 2024

## Abstract

This study examines 2021 and 2022 news coverage of Generation Z and climate change to understand how this discursive relationship is constructed. This is important to understanding how Generation Z's climate change activism is perceived by other groups such as other generations, activist groups, and journalists. This study answers the central question: In what ways do news articles construct and represent the relationship between Generation Z, climate change, activism, and intergenerational relationships? The study identifies five common discourses from the most popular news articles on the subject that reflect nuances in reporting and discursive construction of the group and issue: (1) climate change as inherited and chosen by Generation Z, (2) passive and active motivations for activism, (3) activism negatively impacting relationships with older groups, (4) future responsibilities, and (5) overuse of figureheads. The nuances of these news discourses impact opinions of Generation Z and the impact the group have on climate change activism with the potential to impact activist group outreach strategies, policy development, and relationships with the news media.

**Keywords** Generation Z · Discourse analysis · News media · Activism · Climate change

## 1 Introduction

In a January 2021 Pew Research Center report, climate change was singled out as a “defining issue” for Generation Z (Tyson et al. 2021; para. 5). Featuring the findings of a survey of nearly 10,000 members of Generation Z U.S. citizens, climate change was repeatedly identified as a top priority impacting the group's interests, activism actions, and digital media engagement. The Pew study confirmed what many journalists, political pundits, and academics theorized about the newest generation: climate change interest permeated the

---

✉ Alison N. Novak  
Novak@Rowan.edu

<sup>1</sup> Ric Edelman College of Communication & Creative Arts, Rowan University, Glassboro, NJ 08107, USA

group (Tao et al. 2024; Ross 2020). Other U.S. institutions recognized a connection between Generation Z and climate change. In 2023, President Biden launched the Climate Corps to “Train Young People” and build upon the generation’s existing interest (The White House 2023; para. 1). Activist and nonprofit groups like the Sierra Club and the League of Conservation Voters launched initiatives to recruit Generation Z based on perceived climate change interest (LCV 2024).

While connections between Generation Z and climate change are prevalent across sectors, popular news articles impact generational perception in three ways. First, their reach ensures that discourses related to group interests are spread widely and likely to be replicated by readers (Hayes and Silke 2019). Second, the credible nature of news makes discursive constructed relationships more likely to be believed (Almadana et al. 2022). Third, readers, who may direct other institutions, use these discourses to identify future audience trends and interests for their own positioning (Fasbender & Wang, 2017). Thus, understanding the nature of this coverage is critical to anticipating and constructing future climate change activism and intergenerational relationships.

According to Google’s News Popularity Matrix,<sup>1</sup> 2500 news articles were published digitally with “climate change” activism and “Generation Z” (or “Gen Z”) in 2021 and 2022 among U.S. news sources (publications with primarily U.S. distribution). This includes any article published in a recognized news outlet using this specific phrasing. This overshadows the 1900 articles with keywords “social justice” and the 800 about “COVID-19.” Importantly, scholars recognize that social justice, COVID-19, and climate change are interconnected, and some articles reference two or three topics.

Despite climate change’s popularity amongst members of the generation and journalists, few scholarly studies have examined the nature of this coverage. Understanding popular discourses can help journalists identify areas of misrepresentation or conflicting descriptions in reporting. For policymakers, studying discourses can inform policy direction and language to be consistent with public interest and use. For activists, understanding these discourses can inform recruitment techniques and outreach strategies across generational groups.

Discursively, climate change is a cover term adopted to represent a variety of sub-issues, political positions, and related terms of reference (Alcock 2020). Climate change is used instead of related terms such as “global warming” and “climate crisis.”<sup>2</sup> Alcock (2020) reflects journalists, politicians, and even members of the public are likely to adopt “climate change” as a cover term for other related topics and issues in part because of journalistic use. As a result, climate change needs to be studied discursively because of its ability to invoke other meanings and uses depending on the speaker and audience. Critical discourse analysis applies meaning-making tasks that can investigate how a set of texts invokes terminology like climate change and relates it to a specific group, like Generation Z (Gee 2010). Other scholarship calls for studies that look at how journalists shape discourses about

<sup>1</sup> Google’s News Popularity Matrix statistically represents the amount of news articles written daily, monthly, and annually about topics, as well as publishes lists of the most popular news articles by impact and reach. Numbers of articles reflect recognized news outlets, which previous scholarship has examined and challenged. While a reliability study of Google’s News Popularity Matrix is outside the scope of this study, the numbers provide context for the popularity of the topic and a rough estimation of how this topic may compare to others.

<sup>2</sup> While scholarship recognizes that these are separate- yet related- areas of study, within popular discourse, cover terms are used to represent a variety of subjects and issues.

activism and climate change, particularly when these activist movements are led by young people (Olausson 2009; Chatterton et al. 2013). Thus, this study answers the question: how do news articles construct and represent the relationship between Generation Z, climate change, activism, and intergenerational relationships?

## 2 Climate change and news media coverage

News media play impact the development of any activist platform and activities. According to Atkinson (2017), news media have three distinct roles in the coverage of activist movements which contribute to the success of the group's goals: (1) raise awareness of the activist group, focus, or activities among non-members or outsiders, (2) shape public opinion of the activist group, focus, or activities, and (3) motivate new members to join or current membership to leave an activist group or activity. Groups engaged in activism must work with news media to ensure that they are represented favorably, and that coverage aligns with group goals. Historically, this is something that activist groups focused on climate change have struggled with, and previous scholarship identifies tensions that often exist between journalists and activist communities (Harmesn, 2013; Boykoff 2011; Marisa Dispensa and Brulle 2003).

Thus, despite the importance of positive or accurate news media coverage for activist movements, industry and cultural tensions often complicate the relationship between journalists and activists. This was established by the media coverage of war protests, racial justice movements, and gender equity activism (Roots 1982). Scholars also established that news coverage is important for environmental activist movements, particularly those oriented around issues of climate change (Boykoff 2011). Dispensa and Brulle (2003) argue that frustrations over news media coverage originate with early environmental activist movements, including some of the first groups focused on climate change in the 1990s. Global warming activists were frustrated over problematic or incorrect journalistic framing, ill-defined climate change, and translating threats of human behavior to environmental outcomes (Harmesn 2013). There were also frustrations over how the activists themselves were portrayed- often as unrealistic climate zealots who judged others for using everyday materials such as plastics and nonreusable resources (Boykoff 2011). According to Boykoff (2011), this early misrepresentation frustrated climate change activists who hoped that the news media would be a greater asset to translating movement goals for a larger audience.

Journalists also voiced frustrations in the coverage of early climate change activist movements. For many, interactions with activists were difficult due to distrust from activists and inconsistent leadership and points of contact. Scoville-Simonds (2018) notes that tensions persist in news coverage of climate change activist movements and are increasingly difficult to overcome because of their entrenched nature in journalistic reporting. Even in 2014 coverage of the Global Day of Action on climate change, Scoville-Simonds (2018) found discourses about the activists like the ones adopted in the 1990s, particularly the portrayal of the activists as extremists or zealots.

Discourses on politicized topics are also subject to institutional and personal biases of journalists that face pressure to replicate narratives or frames that support political leanings or opinions of leadership and investors. This is well documented when looking at differing discourses on environmental issues from traditionally liberal and conservative-leaning

publications (Watson 2014). Even within recent climate change coverage, Ugandan activists like Vanessa Nakate challenged legacy publications like the AP that reinforced racism in the representation of climate change leadership through photo editing (Bauder 2020). These recent controversies that publicize the impact of misrepresentation demonstrate the importance for discourse studies on news coverage.

The popularity of climate change activism among Generation Z also impacts how the group and topic are discursively constructed in the future. Scoville-Simonds (2018) calls for more research examining how a new generation's emergence, particularly alongside the growing legitimacy of climate change as a policy priority, may impact discursive norms in news coverage. While this study does not compare this earlier coverage, it does seek to establish what discourses are currently used in news coverage of climate change, which can be used to answer Scoville-Simonds (2018) calls: How do journalists construct the relationship between Generation Z and climate change? Answering this question is critical to understanding how other generational groups and institutions perceive Generation Z, thus impacting programming and outreach.

This project specifically looks at U.S. news sources. Other studies have looked at the construction of climate change in journalism outside of the U.S. without the generational component. This study seeks to add a U.S. and Generation Z focus to this area of research.

### 3 Generation Z and climate change activism

According to Pew, Generation Z is the only generational group where the majority identifies climate change as a "top five" policy concern (over 50% list it as the number 1 policy concern). Further, Generation Z is most likely to seek out information about climate change using digital media such as online news articles, social media content, or YouTube videos. Nearly 37% of Generation Z members say they have participated in some type of climate change activism including physical protest marches, signing digital petitions, and boycotting products or companies that do not support climate change policies. Generation Z is also most likely to seek out political candidates who share climate policy beliefs. For voting-eligible members of Generation Z, 45% say they have investigated a candidate's views on climate change before casting a vote.

Hess (2021) argues two elements drive Generation Z's interest in climate change. First, during childhood, members were exposed and incited to participate in climate change initiatives like the "school strikes." These physical protests demonstrated the issue's popularity among members of Generation Z and provided a structured way to be involved. Further, the popularity of these activities was reinforced by frequent news coverage (Hess, 2021). Second, the COVID-19 pandemic demonstrated the critical relationship between environmental, social, and physical health in the group (Hess, 2021). The physical threat these issues presented encouraged action and support for climate change.

While birthdates vary depending on generational theory, most scholars agree that Generation Z birthdates begin between 1997 and 2001 until 2012 to 2015 (Ross and Rouse 2020). This means that the oldest members of Generation Z are young adults and many are not yet voting-eligible in democratic countries (Seemiller and Grace 2016). Generation cohort theory suggests that other cultural boundaries, such as shared language and experiences better define generations (Mannheim 1952; Sessa et al., 2007). The Strauss-Howe

theory of generations demonstrates that shared language is a critical part of group formation, thus often isolating generational groups by regional and linguistic borders, such as countries (Orlova 2021). Ng et al.'s (2020) work demonstrates that generations, particularly recent generations like Generation Z, are primarily identified and studied within a Western or US context. Research in other regions, like China, Russia, and Sub-Saharan Africa, identifies different generational groups with different birth dates.

Large-scale events and socio-cultural movements also define the boundaries of generations. Freeman et al. (2023) argue that the Covid-19 pandemic, alongside the U.S. Black Lives Matter movement, framed Generation Z's interests. These defining moments or movements shape collective memory, language, and issue orientation. The ongoing process of forming values, attitudes, and opinions related to collective movements or moments can be informed by news coverage, as Harp et al. (2018) argue. Thus, studying news coverage is critical to understanding how climate change serves as a collective movement for Generation Z.

In part, studying generations, even within a regional context, is challenging because of the potential to homogenize and thus stereotype the group (Calasanti 2021). While studies demonstrate the importance of climate change activism to Generation Z, there are a variety of interpretations and political positions members of the group can take. Tao et al. (2024) argue that climate change positions are best understood as a spectrum, but most media, like fictional movies, adopt a binary of support instead, leading to further homogenization. This study, in part, identifies how the homogenization of Generation Z, as well as climate change positions, is discursively constructed by digital news sources. This is critical because homogenization can impact how groups perceive their own misrepresentation, thus diminishing journalism (Novak 2016).

The cultural context of generations highlights the importance of studying discourses associated with the group. As identified by Vidali (2010), discourses appear in the news about how other generational groups view Generation Z, as well as how Generation Z understands its role in social issues like climate change. First, studies on nearly all generation groups since the Baby Boomers in the 1960s conclude that news coverage is pivotal in how generational groups learn and evaluate each other's issue engagement (Harmsen, 2014). For example, negative news discourse from Baby Boomer protests of the 1970s around the Vietnam War negatively impacted how members of older generations viewed Baby Boomers. While far from a direct effect, repeated negative news discourses shaped how other groups viewed Baby Boomers by comparing protest actions against traditional models or expectations of issue participation. This news discourse effect was also found in coverage of Millennial involvement in the 2008 and 2012 elections (Novak 2016). While this study does not seek out information on the effect of news discourse, findings about effects demonstrate the importance of first identifying generational discourses.

Second, previous scholarship argues that the way news stories characterize the political engagement of a generation can impact self-view, or how that group (1) relates to the media, (2) relates to other generational groups, and (3) sees the value of its engagement (Jarvis and Han 2018). While this is clearly studied in generations, such as Millennials, this relationship or effect among Generation Z is understudied. This study seeks to begin this trajectory of research by first identifying how the news discursively constructs the group's relationship with climate change.

Generations are often segmented by more than just birthdates, including differences in group norms, patterns of identity, and cultural time-bound experiences (Seo 2021). Previous scholarship identifies “topics of interest” as an intersection of all three segmentation approaches (Ross and Rouse 2020). Generations share “topics of interest,” sometimes called “topical priorities,” making them a focus for researchers seeking to understand how the groups form, communicate, and act (Ross and Rouse 2020). Thus far, research on Generation Z reveals topics of interest to the group. These include social justice, healthcare equity, and climate change. According to Pew, 67% of Generation Z believes climate change should be the top priority for political leaders, making it a topical priority for the group worthy of study (Tyson et al. 2021).

Despite the conclusions of the Pew study and the group’s clear affinity for the topic, scholars note the term “climate change” is complicated and may hold different meanings for various groups, including sub-groups of Generation Z. Shared meanings can help define the boundaries of groups.

#### 4 Group identity and the meaning of climate change

The use of language can help establish generational boundaries. Antholis and Talbott (2010) found that Millennials born between 1980 and 2001 who communicated on Twitter about climate change used the online space to discursively construct a shared definition and define the term’s boundaries. For this group, climate change was defined as “the impact of human behavior on climate change and the environment.” Ray (2020) notes that these definitions emerge from many sources, including conversations on social media, communication by figureheads, and in-person activities.

No published studies offer Generation Z’s definition of “climate change,” and while outside the scope of this study, other related concepts are studied exhaustively within this group demonstrating its importance. For example, Generation Z’s “social justice” definition is explained in Gomes et al. (2023) as prioritizing equity and attention to inequality throughout critical issues facing society including racial relations, education, environmental issues, and housing (not an exhaustive list of issues). Definitions like this demonstrate the interconnected nature of concepts like social justice and climate change and the importance of understanding the nuance of a generation’s unique interpretation and usage.

Through these shared definitions, group membership is solidified because members must adopt and accept the meaning (Ross and Rouse 2020). Those who do not adopt the meaning are often excluded from the group, shamed into acceptance, and face long-term problems acculturating to the group. Scoville-Simonds (2018) notes that this is why news media coverage of climate change is so important: it often provides the audience with the discursive meaning to be shared or adopted. This may be particularly important for younger generational groups seeking to establish the boundaries of their membership through discursive adoption (Vidali 2010). Thus, studying media coverage of climate change and Generation Z may later give insight into how the group creates boundaries of membership and norms of activist engagement.

## 5 Discursive construction of youth in news media

News media coverage of young people, particularly those involved in political activities, provides multiple, sometimes conflicting, discourses. While this is not studied in Generation Z yet, past research on Millennials (the next oldest generation) demonstrates a duality of discourses: one that praises the group's creativity and innovation in political engagement, and a second that criticizes the group's failure to conform to traditional political norms and practices of citizenship (Novak 2016). This is consistent with the duality of representation of other generational groups in their youth, specifically Generation X and the Baby Boomer generations.

This duality has important ramifications for both the generation and the news media as it (1) impacts how the generation defines its own membership, (2) how the generation views the credibility of the news media, and (3) how other generational groups view the new one. Ultimately, discourses about youth political engagement matter and can shape long-term relationships within and between groups (Jarvis and Han 2018). Thus, studying recent coverage of Generation Z lends insight into how these relationships develop as the group ages and adopt more political engagement strategies.

The discursive construction of youth groups by news media matters because it can also impact the group's ability to effect change. Vidali's (2010) theory of active disengagement suggests that news media representation changes how young people view their own efficacy in political processes. Negative coverage can deter young people from voting, volunteering for political groups, and even seeking out political information. Often, media coverage is cited by young people as a reason for political disengagement, thus reinforcing its value as an area of scholarly attention. Even when the duality of discourses appears in the news media, young people often cite the negative coverage in their explanation of disengagement and fail to acknowledge the more positive coverage.

Scholars present a variety of reasons for the difficulty in discursive representation of youth in news media coverage. First, because youth often challenge traditional political norms, journalists must balance the older audiences' desires to resist such changes with representations of youth norms (Novak 2016). This often manifests in articles that highlight the disparity or tensions between the generational groups. Second, journalists often have limited access to youth (compared to older working professionals), making it difficult to provide first-hand youth experience and reflections (Vidali 2010). This over-utilizes the perspective of older generations and challenges the accuracy of youth representation. Finally, political norms evolve rapidly throughout a generation's youth and coming-of-age period (Jarvis and Han 2018). It can be difficult for journalists to continuously update stories about youth groups, especially if journalists rely upon previous experience.

## 6 Methodological approach

This study adopted a critical discourse analysis approach to study how journalists discursively construct the relationship between Generation Z and climate change. Discourse analysis allows researchers to critically examine a set of texts, such as news articles, to find patterns, terms of reference, and meaning-making tasks that construct a relationship for the audience. Adapted from Gee (2010), critical discourse analysis requires research-

ers to apply a set of seven meaning-making tasks to a set of texts: patterns of significance, practices, identities, relationships, politics, connections, and sign systems/knowledge (see Appendix A for definitions and examples of each). In this approach, the critical nature of the methodology demands researchers address issues of representation and the construction of power through language (Gee 2010). Chiluiwa's (2021) application of critical discourse analysis of news coverage found that the language of news articles can inform intergenerational relationships and group boundaries. This article applies Gee's (2010) methodology to similarly look for the language used to construct Generation Z and climate change within U.S. coverage.

Because this study specifically investigates journalistic coverage, 100 of the most popular news articles in 2021 and 2022 (200 total) were selected as a dataset. This technique was previously adopted and used by Creech (2020), Hainsworth et al. (2020) Chiluiwa (2021) in studies of popular news discourses, which reached saturation of findings after 100 articles per year. Google's News Popularity Matrix was used to identify these articles. It identifies articles based on their reach (social media shares, number of overall readers) and impact (duration of views, article engagement such as commenting). The news popularity matrix includes articles from news sources with an intended U.S. distribution. Digitally, this means articles that are either (1) published by U.S.-owned companies (*The Washington Post*), (2) with a U.S. section of their website (*BBC News*), or (3) with U.S. meta-keywords embedded within the code (*People*).

Articles published from January 1, 2021 until December 31, 2022 were considered for inclusion, but only the 100 most popular articles from each year were analyzed. Articles must feature "Generation Z" or "Gen Z" and "climate change." This period was selected for two key reasons. First, as identified by Kim et al. (2022), digital news engagement peaked during 2021 and 2022, a likely result of the increased use of digital media during the Covid-19 pandemic. The pandemic also drove public attention to environmental factors in public health (Kim et al. 2022). Second, the United Nations documents a rise in climate change conferences and events in 2021 and 2022 among state, nonprofit, and activist groups (UN, 2024). The dual increase in digital readership and increase in climate change organized activity suggests this is a key period for study.

The news articles in this analysis averaged 722 unique viewers, 1000+ shares on social media, and 11 comments per article.<sup>3</sup> The most common publications included *Forbes* (13 articles), *Washington Post* (8 articles), and *CNBC/NBC News* (10 articles). Legacy news sources, or ones with current print publications were the most frequent (124 articles) as opposed to digital-only sources. While readership type is outside the scope of this study, all articles were published in "news" sections of the website rather than editorial or blog sections, positioning them as objective rather than opinion-based news-seeking audience behavior.

To apply Gee's (2010) meaning-making tasks to the 200 articles identified by Google's News Popularity Matrix, a team of four researchers read and analyzed each article to identify patterns of discourses and examples of each task. Then, the team met to discuss findings, debate the exhaustive and exclusive nature of each task, and finalize a set of discourses that represent how journalists construct the relationship between climate change and activists

<sup>3</sup> The full dataset is available upon request now and will be published open-access at the time of this study's publication. This includes the statistical impact of each article as assessed by the Google News Popularity Matrix.



from Generation Z. For a step-by-step procedure, see Appendix B. This project seeks to answer three questions:

1. What is the constructed relationship between Generation Z activists and climate change?
2. What motivations for activism are represented in news?
3. How is climate change activism impact intergenerational relationships portrayed in news?

As a discourse analysis, evidence of each discourse is supported through quotes from the articles and limited statistical data (provided by the Google News Popularity Matrix) to enhance quixotic reliability of the findings. In the critical lens, researcher subjectivity and position also impact findings. Thus, the four researchers applied MacGilchrist's (2021) guided discussion approach which required the personal identification of biases and positions on both Generation Z and climate change through group interaction. Then, all four researchers analyzed all 200 articles to eliminate the possibility that any one researcher's biases or positions would impact a single article's analysis. This reflection on subjective positioning takes place within the research group, outside the final published article, thus exposing it early in the research process, giving language for the team to call out individual members when they perceive bias impacting results, and thus improving the reliability of finding reporting. This is consistent with the best practices established by Rogers et al. (2016) to address how generational identity, social issue affinity, and occupation can impact critical findings.

## 7 Discourses

### 7.1 Discourse 1: climate change activism as symbolic of Generation Z's politics

As readers are introduced to Generation Z's identity and relationship to climate change, news articles take two seemingly opposed discursive approaches. First, climate change is something forced upon Generation Z because of imminent physical threat. Second, global warming was Generation Z chosen because of its interest in environmental issues, social justice, and a focus on problem-solving. These two discourses present two views of the group, one where their activism is the byproduct of outside forces or activism stems from internal motivations.

### 7.2 Type 1: climate change as generation Z's inheritance

The language of inheritance was common among the articles included in this analysis, particularly used to explain why Generation Z pursued activism work. For example, in a *Scientific American* article from February 2022: "At the latest COP26 climate talks in Glasgow, young people from around the world were loudly protesting from the sidelines to hold their elders to task for the catastrophic climate mess Generation Z stands to inherit." The language of inheritance often drew upon discourses of practices and sign systems. Inheritance is often a passive act that a person or group does simply by existing rather than seeking out or pursuing. Even when this is partnered with passages about Generation Z's protest actions,

the implications of the inheritance discourse suggest that engagement emanated from the group's chronological existence, not their interests or other internal motivations.

The inheritance discourse also appears frequently with messages of “elders” or “older generations.” As in the earlier *Scientific American* article, climate change is something “inherited” from elders. The language of “elders” contextualizes the “inheritance” discourse, as it invokes that Generation Z is responding to the actions (or, in this case, inaction) of other groups rather than their own internal motivations. However, the vagueness of “elders” is important in this positioning. Rather than specifying another generation or group (such as Baby Boomers), the broadness of the term provides some cover and room for personal interpretation by the reader. For example, this November 2021 article from *Grist*: “Gallon believes the divide between younger generations and their elders stems from the simple fact that Gen Z faces a lifetime altered by climate change; they will have to deal firsthand with the implications of the decisions being made now.” The discourses of inheritance and elders are woven together and reinforce an extrinsic nature to Generation Z's relationship to climate change. Further, “elders” is typically associated with common phrasing that implies passivity in relationships, such as “respect your elders,” whereas a younger individual needs to be told how to behave towards another group, rather than adopting prescribed behaviors on their own. The concept of relationships is also a feature of discourse three.

There is an implied passivity to the inheritance discourse that eliminates or ignores more traditional internal political motivations that explain Generation Z's relationship to climate change. Within this discourse, by positioning Generation Z as inheritors of the issue, other motivations are downplayed or ignored completely. However, a secondary discourse about Generation Z choosing climate change activism challenges this passivity and provides a counter-discourse to inheritance.

### 7.3 Type 2: climate change activism as generation Z's choice

Alternatively, articles positioned Generation Z as actively choosing climate change as a focus for political action, rather than inheriting it. In this discourse, Generation Z is characterized by its personality, interests, and motivations rather than its relationship to the actions or inaction of elders. For example, in a September 2021 article from *The Guardian*: “Larrivee is one of countless members of Gen Z, a generation that roughly encompasses young people under 25, who are responding to the planet's rapidly changing climate by committing their lives to finding a solution.” Here, the discourses of commitment invoke an active selection of issues to prioritize (rather than one that was inherited). The commitment discourse implies the choice and selection of climate change as a priority based on Generation Z's assessment. Instead of passivity, it is an active step to identify and respond to climate change.

Just a few paragraphs later, the article reinforces the commitment discourse by reflecting on the efforts taken by members of Generation Z to respond to climate change even without the support of traditional political structures: “Young people are finding their way to these careers, though, with or without the federal government's support.” Here, the commitment is characterized as so strong, that it shapes entire careers even when those careers are not fully supported through government programs.

Unlike the inheritance discourse, the commitment discourse credits Generation Z for its interest in the issue. The group is positioned as controlling its interests rather than pas-

sively inheriting them from elders. For example, a CNBC article from August 2021 profiles 19-year-old Trinity Gbla who shares her willingness to pay more for sustainable agricultural goods, even when it means sacrificing financially elsewhere. Stories like Gbla's profile the choices made by Generation Z as a demonstration of commitment to climate change activism.

Choice is often a component of the commitment discourse because it reinforces the active nature of Generation Z's involvement in climate change activism. By profiling choices of Generation Z's shopping, career, and lifestyle habits, articles demonstrate the reflection and activity involved in a commitment to climate change as a political issue. Unlike the passivity of inheritance, choice implies activity. Discursively, this choice was explained as the result of three motivations in the second discourse.

## 7.4 Discourse 2: motivations for generation Z's relationship with climate change

When describing why Generation Z was involved with climate change activism, journalists adopted three explanations: (1) climate change aligns with other issues, (2) Generation Z's personality matches the nuances of climate change, and (3) Generation Z's desire to create lasting impact. First, journalists characterized Generation Z's interest in climate change activism as closely related to other political and cultural issues. Most commonly, Generation Z's activism in social justice was co-mentioned as an area of political and social activity. Of the 200 articles in this analysis, 56 mentioned social justice issues, often including racial and gender equity. This co-appearance was common despite many of the articles only mentioning social justice once or twice (the focus of the articles remained on climate change).

Many of the articles cited the 2021 Pew Research Center study that statistically analyzed the topics of highest interest to Generation Z. Of the 200 articles, 31 mentioned the Pew study which found that climate change and social justice were of importance to members of Generation Z voters. These mentions most often took the form of statistical evidence to contextualize the issue for readers rather than detailed explanations of the Pew study. While this is not a reception article of journalistic treatment of the Pew study, the frequent citation of this study likely drives the reason that social justice co-appeared in many of the articles. This reliance on survey data to demonstrate the co-support of social justice issues and climate change activism was often left without further explanation as if the two topics explained each other. For example, an April 2021 article from *USA Today* reflected, "As Earth Day is celebrated, Generation Z is grappling with the health of the planet and racism and social justice, according to a new survey." Quotes like this linked the two topics together and demonstrated support using survey data or a Pew reference but failed to provide further context for such a relationship.

The limited context of the co-support of issues is perhaps reflective of the brevity of these articles and the traditional news reporting techniques that exist within. Rather than feature quotes, qualitative insight, or editorial reflection from members of Generation Z, this information-sharing approach documented the Pew study without contextualizing it using other journalistic techniques. This type of reporting adopts an objective information-sharing approach that seeks to provide the audience with facts, statistics, or other quantitative measures. However, it fails to explain why social justice and climate change co-appear or the nature of the relationship.

Second, common personality traits of Generation Z were described and explained as the reason for climate change interest and activism. Specifically, Generation Z was described as “resistant” (18 articles), “change-makers” (10 articles), and “anxious” (28 articles) most commonly. These personality traits were used to explain why climate change activism grew popular amongst the group, often cited as adjectives for the entire group such as “anxious Gen Zers.” These adjectives and personality traits were rarely cited (unlike the earlier Pew study), but instead used to explain why climate change activism had grown popular.

As an identity discourse, these terms of reference depict Generation Z as a homogenous group with a causal relationship between personality and political activity. Although the effect is homogenization, this discourse is more contextualized than the information-sharing approach. In this case, journalists provided quotes or interviews with members of Generation Z to support personality assessment. For example, in a *Daily Iowan* article from October 2021, one Generation Z member was interviewed about eco-anxiety: “I’m hoping as a generation, we are able to have that energy and motivation to work collaboratively with other countries instead of acting divisively.” Here, the individual speaks in first person and discusses her goals associated with climate change activism. Most articles that featured quotes from Generation Z included one or two interviewees, failing to reflect the diverse views of the group on the subject.

Finally, a third motivation is constructed by journalists that describes Generation Z’s desire for long-lasting impact, regardless of the issue. In these articles, climate is the issue that Generation Z selected as a focus, rather than specifically related to its interests or personality. The group’s desire to create a long-lasting impact could have focused on many topics, thus rendering the generation’s relationship to climate change less important than the motivation for impact.

Articles about Generation Z’s desire to create lasting impact have two characteristics that make them unique. First, evidence cited within these articles almost always comes from non-members of the generation such as professors, journalists, politicians, and business leaders. Second, invoked within this evidence is a subtle critique that the generation’s interest in climate change is inauthentic and serves an alternative purpose than strictly environmental interests.

As a discourse-building technique, journalists cite evidence- most often quotes- from non-members of Generation Z. For example, a CNBC article from August 2021 about Generation Z’s desires to work for “green companies” featured HR representatives and CEOs of five organizations, all who shared stories of trying to recruit new college graduates by promoting their climate change friendly initiatives. Even when the article introduces “greenwashing” by a non-Generation Z, business consultant, it presents Generation Z as easily manipulated by companies that claim to be climate change advocates, even when they are not. As stated by Generation Z member Perri Russell: “It’s really difficult to be an ethical consumer. It requires a lot of thought and education and care, and that is because corporations have made it so difficult.” This combination of outsider perspective, limited evidence from Generation Z themselves, and the implication that the group fails to see through greenwashing, thus challenging their true impact on climate change- all combine to create a complicated motivation and affect discourse. It also invokes tension between Generation Z and other generational groups because it reflects a potential misunderstanding or misestimation of each other. This is part of the focus of the third discourse.

### 7.5 Discourse 3: generation Z and tension with other groups

Across news media coverage, Generation Z's climate change activism was characterized as tension or opposition to other generations. Like previous studies that found media representation often discursively constructed younger generations as opposed to the practices and norms of older ones, this discourse illustrates how Generation Z's relationship to climate change differs (Novak 2016). Two groups of older Generations were identified as the primary opponents of Generation Z's activism: Baby Boomers and the Greatest Generation. For example, in a NPR story from January 2022, Generation Z's activism is characterized as firmly opposed to the interests and norms of Baby Boomers: "We think so much about this country being divided, and clearly it is. But it's really divided by age. We look at Gen Z and millennials — two-thirds of them support candidates who are Democrats, not Republicans. And once you get to Baby Boomers and the Silent Generation, it's a different scenario." Here, Generation Z's interests and political affiliation are explained as directly opposite of Baby Boomers and the Silent Generation through the lens of political party affiliation.

Historically, opposition is a common discursive tool used to explain identity and group membership patterns. News media characterize groups as opposed to each other to denote differences and clearly define membership boundaries. However, this opposition construction can be problematic, as it can overemphasize differences and minimize similarities. In a December 2021 *Wall Street Journal* article, this generational tension is documented through the consumer activism related to global warming enacted by Generation Z. The article suggests that Generation Z's consumer preferences are responsible for the failure and closing of several of Baby Boomer's favorite brands, thus increasing tension between the two groups. In this article, Generation Z's activism is blamed for organizational failures, which frustrates older generations and emphasizes difference.

The primary focus of most articles was not the tension between generations. However, it was constructed as a byproduct of the activist actions of Generation Z. Tension or opposition was a natural repercussion of Generation Z's activism on climate change. For example, in a *New York Times* article about problems in the American wine industry, Generation Z's preference for sustainably harvested crops was blamed for the economic problems of wineries without such commitments. The article interviewed the owners of several wineries, often describing them as "Baby Boomer owner and CEO..." or "Mr. McMillan, who is also a Baby Boomer." By focusing on the age of owners of struggling wineries as well as the age of the generational group that is not supporting their business, the article demonstrates tension and opposition. While that tension is not the focus (the failing wine industry is), the relationship is cited as one of the reasons for this failure, thus emphasizing the opposition between the two groups.

Many articles include climate change as one of several reasons for tension between the generations. Other issues that reinforced differences between the groups included social justice initiatives, support of political candidates, and pandemic health and wellness. Importantly, these topics, in concert with each other, reinforce the differences between the groups as more than temporary reactions to a one-off issue. While no news stories directly editorialized the tension to suggest that it was replicable, by layering differences on multiple issues, this meaning is conveyed to readers.

## 7.6 Discourse 4: generation Z and the future

Language associated with Generation Z as “the future” was common throughout these articles. Chronologically, this makes sense as it positions Generation Z as the age group that is most likely to be alive the longest. However, it also presents a unique discourse about what that future looks like and how the group intends to shape it. For example, a *Forbes* article from December 2021 includes reflections from Generation Z members with eco-anxiety: “It’s important to think that we are the future and that the future is ours so we work to not go extinct, but we should avoid this narrative because we are all living the present and it must be an intergenerational fight.” In most future discourses, journalists fail to provide specific predictions but instead adopt broad language to reference the group’s relationship to it.

There are two primary ways that the future is referenced in these articles. First, Generation Z is characterized as the future. As in the quote above, “we are the future” (14 articles) or “Generation Z is the future” (12 articles) appeared frequently throughout the articles, most often appearing as quotes from Generation Z members, business leaders, or activist organizers. With a vague reference to “children are the future,” quotes like these suggest that the group is positioned, journalistically (and perhaps culturally) as responsible for changes to environmentalism and the trajectory of climate change. In a *National Observer* article from December 2021, one interviewed member of Generation Z demonstrates this ownership discourse and its relationship to the future: “We’re just making it clear that this is the kind of future we want, these are the leaders we want.” Again, the use of first-person language and the demands of Generation Z on climate change leadership and policy reinforce the ownership discourse of the future.

Second, the articles suggested that Generation Z must prevent or reshape the anticipated negative environmental future through climate change activism. While no specific predictions about the future appear in these articles, they are constructed as grimmer, requiring Generation Z intervention to prevent it. In the same *National Observer* article cited above, a Generation Z member says: “We’re quite literally fighting to survive.” The discourse constructed here combines Generation Z’s ownership over the future using first-person language, and an ominous prediction about the brutality of the future. By positioning the group as resistant or fighting against that future, Generation Z’s activism is closely tied to discourses and predictions of it.

## 7.7 Discourse 5: figureheads and role models of generation Z

Finally, although the articles referenced numerous examples of Generation Z members involved in climate change activism, two individuals regularly appeared as a type of discursive figurehead for the group: Greta Thunberg (61 articles) and Xiye Bastida (34 articles).<sup>4</sup> Mentions of both individuals often included their specific ages or their birth years as qualifications for membership within the generation. Each activist is presented as a type of figurehead for Generation Z’s involvement in the climate change movement. For example, this article from *Morning Consult* in September 2021 reflects “While many of the poll’s

<sup>4</sup> Thunberg, born in 2003, is a climate change activist known for a viral speech to the United Nations, arrests during climate change demonstrations, and support of National Walk Out for Climate Change. Bastida, born in 2002, is a climate change activist from Mexico and founder of Fridays for Future New York City and Re-Earth Initiative.

respondents are not yet able to vote, as the generation that has given the world activists such as Greta Thunberg and Xiye Bastida comes of age, its values will be of increasing relevance to policymakers.” The language of relevance positions the activists as a type of leader of the age group, recognized by both Generation Z and others (such as policymakers).

Thunberg and Bastida are not just individual members of Generation Z, they are positioned as famous examples of the group- fame originating from climate change activism. In a *Refinery 29* article from September 2021, Thunberg’s activism is directly related to her generational identity and positioned as motivating for other members: “Greta’s very Generation Z approach is a product of the mix of intense anxiety and impulse to act — out of dire need, not idealism — that has energized other activists of her generation... It’s also what’s made them ‘voices of their generation.”” Quotes like this both position Thunberg as a product of her generation and a leader or “voice.” By positioning these women as first products of their Generation Z membership, then leaders of the group, both are constructed as figureheads of the climate change movement and generation.

Many articles go further and illustrate the responsibilities of serving as a generational figurehead. In a December 2021 article in *Vogue*, Bastida is profiled with special attention to the difficulty of being a youth leader: “Like many activists in her generation, she scoffs at the notion, common in my youth, that individuals can head off environmental catastrophe by doing little things like recycling and changing our light bulbs.” In articles like this, Bastida’s life as a typical college student is placed in opposition to her activist lifestyle: “We are in her dorm, a residential tower at the University of Pennsylvania, where she leads a double life as a college sophomore, majoring in environmental studies with a concentration in policy... She does most of her reading on the Megabus, shuttling to New York for planning sessions with other activists, speaking engagements, and photo shoots.” This type of duality is used by journalists to set Bastida and Thunberg apart from their peers. Again, this reinforces their role as both products and leaders of the generation because of their relationship to climate change.

## 8 Discussion

Guided by Gee (2010), the discourses identified present an exhaustive and somewhat conflicting view of Generation Z’s relationship to climate change activism- consistent with earlier findings of generational groups in their youth (Vidali 2010). In some articles, the group is characterized by its creativity and authentic interest in changing the bleak environmental future identified by journalists. In other articles, the group is passively forced into a relationship with climate change and may lack the ability to take meaningful action. This duality reinforces earlier studies of discourses of youth and young generations- news coverage often fails to present a uniform or consistent set of discourses.

There are three important implications for the inconsistency of Generation Z construction. First, depending on which discourses readers regularly interact with, Generation Z’s relationship with climate change is portrayed as either an active choice or passive inheritance. Research by Vidali (2010) and Novak (2016) demonstrates that audiences tend to reproduce these discourses in their own communication about young generations, meaning discourse exposure impacts generational perception. Even exposure to conflicting discourses can impact inter-generational relationships by causing confusion.

Second, climate change is positioned as the most important issue to Generation Z, homogenizing the group and failing to represent nuances of opinions on this subject. Most articles do not discuss the group's opinions on this subject but instead use language such as "most important" and "key" (Calasanti 2021).

Finally, while Generation Z is the focus of these articles, infrequent interviews and direct quotes from the group mean members lack the ability to directly impact or challenge journalistic interpretations. As Harmsen (2016) and Bristow (2021) identified, this is an act of silencing that provides little opportunity for the group to participate in its own journalistic construction. When coupled with the reliance on two figureheads as spokespeople, again, the effect is the homogenization of the group.

Tao et al. (2024) warn that the homogenization of any generational group can negatively impact intergenerational relationships and how members of Generation Z may engage news sources. When a group like Generation Z perceives news sources falsely representing themselves, they become critical of the source and channel (Tao et al. 2024; Novak 2016). Homogenization, such as what is identified in this study, impacts long-term relationships with the news media and is one area of necessary future research. Thus, journalists and news leadership should be mindful of the risks of homogenization and the current representation of the group in news coverage.

These discourses are also important for policymakers interested in crafting policies that align with audience interests and activist groups engaging in community outreach. The homogenization of Generation Z, alongside the conflicting discourses of active and passive issue involvement, suggests that news discourses may not be a suitable source of audience information when developing public-centered policies or communication.

## 8.1 Future research

While the effect of this duality was outside the scope of this study, future research should examine if it changes the groups (1) relationship to the news media, (2) relationship to other generational groups, and (3) the way it views its own impact on climate change. Previous research on recent generational groups, such as Millennials, demonstrates that inconsistent representation in news discourses can affect how a generation engages in media, politics, and other groups (Vidali 2010; Novak 2016; Jarvis 2018). The diversity in discourses identified within this study may hold similar effects.

Other effects-based questions stem from earlier studies that suggest media coverage can motivate awareness and membership in activist movements. Although it is unclear if the articles from this study are readily accessed by Generation Z, their discursive potential may impact how the generation sees the value of participation in climate change activism. Further, the question of audience, or who these articles reached throughout 2021 and 2022, may shed light on the impact of each discourse. With a few exceptions, most news outlets in this study have older target demographics (Millennials, Generation X, and Baby Boomers most often). Thus, although the articles are about Generation Z, their impact may be on older readers. Previous scholarship notes that media coverage is one of the primary ways that generations learn about each other (Vidali 2010). Thus, discursive representation can change how generations interact, support, or critique each other (Vidali 2010). As generational tension is a primary feature of these discourses on climate change, studying how these discourses impact older readers may provide context for understanding this relationship.



## 8.2 Limitations

The use of the Google News Popularity Matrix limits this study's data to popular sources. As such, there are likely discourses in niche publications with limited reach yet high audience loyalty and interest that are not covered. This may include more fringe political publications with a narrow but intensely supportive readership. The popularity of new sources does not necessarily mean these discourses are more powerful or culturally impactful, as previous scholars identified (Tsou 2023).

Further, as critical discourse analysis, this project recognizes the impact of subjective interpretation. While the project implemented qualitative reliability measures adopted from MacGilchrist's (2021), other research recommends "member checks" as an alternative method, which may also improve the accuracy of findings (Baker 2019; p. 213). This may involve asking journalists or typical audience members to review the discourses to ensure correct data interpretation.

Finally, Generation Z is a nuanced and diverse group. As with most generation research, the homogenization of the group by academics and journalists is a risk when presenting findings. Discourses here should be understood as representative of news coverage but not necessarily representative of all interests and opinions of Generation Z.

As journalists attempt to make sense of and report on Generation Z's role in climate change, new discourses are likely to emerge. The generation continues to age into voting eligibility and leadership roles, including the rising popularity of new figureheads and role models. These changes may shift how journalists discursively construct the group and its relationship to climate change, thus impacting the efficacy of the group and its goals.

**Supplementary Information** The online version contains supplementary material available at <https://doi.org/10.1007/s10584-024-03731-4>.

**Funding** Open access funding provided by Rowan University

**Open Access** This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by/4.0/>.

## References

- Alcock (2020) The unconscious countermovement and the conscious Polanyian Movement: a New Vocabulary for Contemporary Polanyian Scholarship. *New Polit Econ* 1–16. <https://doi.org/10.1080/13563467.2020.1721452>
- Almadana AV, Suharnomo S, Perdhana MS (2022) Can generational differences and feeling trusted improve knowledge-sharing behavior? Consequences of high-performance work systems. *J Workplace Learn* 34(2):200–214. <https://doi.org/10.1108/JWL-05-2021-0058>
- Antholis, Talbott S (2010) *Fast forward ethics and politics in the age of global warming*. Brookings Institution
- Atkinson JD (2017) *Journey Into Social activism: qualitative approaches*. Fordham University
- Baker BMA (2019) We're just Family, you know? Exploring the discourses of Family in Gay Parents' relational talk. *J Family Communication* 19(3):213–227. <https://doi.org/10.1080/15267431.2019.1590365>

- Bauder D (2020) Photo cropping mistake leads to AP soul-searching on race. *AP* Retrieved from <https://apnews.com/article/6a853a81f34164ab85713e68a889976d>
- Boykoff M (2011) Who speaks for the climate? Making sense of media reporting on climate change. Cambridge University Press
- Bristow J (2021) Post-brexite Boomer blaming: the contradictions of generational grievance. *Sociol Rev* 69(4):759–774. <https://doi.org/10.1177/0038026119899882>
- Calasanti T (2021) Ageism, generational rhetoric, and the Rhetoric of Generation. *Contemp Sociol* 50(6):453–459. <https://doi.org/10.1177/009430612111050045a>
- Chatterton, Featherstone D, Routledge P (2013) Articulating Climate Justice in Copenhagen: antagonism, the Commons, and Solidarity. *Antipode* 45(3):602–620. <https://doi.org/10.1111/j.1467-8330.2012.01025.x>
- Chiluwa (2021) Resisting corruption in the Nigerian legislature: a critical discourse analysis of news and opinion articles on legislators' salaries. *Discourse Communication* 15(5):519–541. <https://doi.org/10.1177/175048132111017710>
- Chiluwa I (2021a) Resisting corruption in the Nigerian legislature: a critical discourse analysis of news and opinion articles on legislators' salaries. *Discourse Communication* 15(5):519–541. <https://doi.org/10.1177/175048132111017710>
- Creech B (2020) Fake news and the discursive construction of technology companies' social power. *Media Cult Soc* 42(6):952–968. <https://doi.org/10.1177/0163443719899801>
- Dispensa M, Brulle RJ (2003) Media's social construction of environmental issues: focus on global warming - a comparative study. *Int J Sociol Soc Policy* 23(10):74–105. <https://doi.org/10.1108/01443330310790327>
- Fasbender U, Wang M (2017) Intergenerational contact and hiring decisions about older workers. *J Managerial Psychol* 32(3):210–224. <https://doi.org/10.1108/JMP-11-2016-0339>
- Gee JP (2010) *An Introduction to Discourse Analysis: Theory and Method*, 3rd edition. New York City, NY: Routledge
- Gomes S, Lopes JM, Nogueira S (2023) Willingness to pay more for green products: a critical challenge for Gen Z. *J Clean Prod* 390:136092. <https://doi.org/10.1016/j.jclepro.2023.136092>
- Hainsworth, Shahmanesh M, Stevenson F (2020) Insights into the social context of living with a dual diagnosis of HIV and cancer: a qualitative, thematic analysis of popular discourse in London newspapers. *AIDS Care* 32(6):793–799. <https://doi.org/10.1080/09540121.2019.1653444>
- Harmsen S (2013) More than theoretical activism: a conversation with Dr. Todd Gitlin. *J Communication Inq* 37(3):191–199. <https://doi.org/10.1177/0196859913494811>
- Harp D, Grimm J and J. Loke.2018.Rape, storytelling and social media: how Twitter Interruptedthe News Media's ability to construct collective Memory.Feminist Media studies18 (6): 979–995
- Hayes K, Silke H (2019) Narrowing the discourse? Growing precarity in freelance journalism and its effect on the construction of news discourse. *Crit Discourse Stud* 16(3):363–379. <https://doi.org/10.1080/17405904.2019.1570290>
- Jarvis, Han S-H (2018) Votes that count and voters who don't: how journalists sideline electoral participation (without even knowing it). The Pennsylvania State University
- Kim SJ, Wang X, Malthouse EC (2022) Digital News Readership and Subscription in the United States during COVID-19: a longitudinal analysis of clickstream and subscription data from a Local News Site. *Digit Journalism* 10(6):1015–1036. <https://doi.org/10.1080/21670811.2021.1984972>
- LCV (2024) This week in climate change. *LCV* Retrieved from <https://www.lcv.org/media-center/this-week-in-climate-action-march-1-2024/>
- Macgilchrist F (2021) When discourse analysts tell stories: what do we do when we use narrative as a resource to critically analyse discourse? *Crit Discourse Stud* 18(3):387–403. <https://doi.org/10.1080/17405904.2020.1802767>
- Mannheim K (1952) *The Problem of Generations*. In essays on the sociology of knowledge, edited by P. Kecskemeti, London: Routledge and Kegan Paul, pp 276–320
- Novak (2016) *Media, millennials, and politics: the coming of age of the next political generation*. Lexington Books
- Olausson (2009) Global warming—global responsibility? Media frames of collective action and scientific certainty. *Public Underst Sci* 18(4):421–436. <https://doi.org/10.1177/0963662507081242>
- Orlova NV (2021) Semantic series as a discourse analysis Tool (discourse about generations). *Naučnyj Dialog (Online)* 1(7):108–122. <https://doi.org/10.24224/2227-1295-2021-7-108-122>
- Ray SJ (2020) *A Field Guide to Climate anxiety: how to keep your cool on a warming planet*. Univ Calif Press. <https://doi.org/10.1525/9780520974722>
- Rogers R, Schaenen I, Schott C, O'Brien K, Trigos-Carrillo L, Starkey K, Chasteen CC (2016) Critical discourse analysis in education: a review of the literature, 2004 to 2012. *Rev Educ Res* 86(4):1192–1226. <https://doi.org/10.3102/0034654316628993>

- Roots (1982) Todd Gitlin, *The Whole World is Watching: Mass Media in the Making and Unmaking of the New Left* (Book Review) [Review of *Todd Gitlin, The Whole World is Watching: Mass Media in the Making and Unmaking of the New Left* (Book Review)]. *Theory, Culture and Society*, 1(1), 111–. *Theory, Culture and Society*
- Ross, Rouse SM (2020) (Young) Generations as Social Identities: The Role of LatinoMillennial/Generation Z in Shaping Attitudes About Climate Change. *Political Behavior*. <https://doi.org/10.1007/s11109-020-09649-8>
- Scoville-Simonds (2018) Climate, the Earth, and God – entangled narratives of cultural and climatic change in the Peruvian Andes. *World Dev* 110:345–359. <https://doi.org/10.1016/j.worlddev.2018.06.012>
- Seemiller, Grace M (2016) *Generation Z goes to College*, 1st edn. Wiley, Incorporated
- Seo (2021) *Climate change and economics: engaging with future generations with action plans*. Palgrave Macmillan
- Sessa VI, Kabacoff RI, Deal J and H. Brown.2007.Generational differences in leader values andLeadership Behaviors.*Psychologist-Manager Journal*10 (1): 47–74
- Tao W, Tian S, Tsai S, W.-H., Seelig MI (2024) The Power of Emotional Appeal in Motivating Behaviors to Mitigate Climate Change among Generation Z. *Journal of Nonprofit & Public Sector Marketing*, 36(1), 37–64<https://doi.org/10.1080/10495142.2022.2133058>
- Tsou A (2023) *Political Discourse and Discussions of Fake News on Reddit: Prevalence, Popularity, and Perceived Credibility*. ProQuest Dissertations Publishing
- TysonA, KennedyB, FunkC (2021), January 5 GenZ, Millennials Stand Out for Climate Change Activism, Social Media Engagement with Issue. *Pew Research Center*: <https://www.pewresearch.org/science/2021/05/26/gen-z-millennials-stand-out-for-climate-change-activism-social-media-engagement-with-issue/>
- UN (2023) *Climate change events*. UN Retrieved from <https://www.un.org/en/climatechange/events>
- Vidali (2010) Millennial encounters with Mainstream Television News: excess, void, and points of Engagement. *J Linguistic Anthropol* 20(2):372–388. <https://doi.org/10.1111/j.1548-1395.2010.01075.x>
- Watson BR (2014) Assessing Ideological, Professional, and Structural biases in journalists' Coverage of the 2010 BP oil spill. *Journalism Mass Communication Q* 91(4):792–810. <https://doi.org/10.1177/1077699014550091>
- White House (2023) American Climate Corps. *Press Room* Retrieved from <https://www.whitehouse.gov/briefing-room/statements-releases/2023/09/20/fact-sheet-biden-harris-administration-launches-american-climate-corps-to-train-young-people-in-clean-energy-conservation-and-climate-resilience-skills-create-good-paying-jobs-and-ta>

**Publisher's Note** Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.