

Article

Youth Mobilization to Stop Global Climate Change: Narratives and Impact

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Abstract: Galvanized by Greta Thunberg’s idea for Friday school strikes, “climate strikes” emerged in 2018 and 2019 as a form of youth social movement demanding far-reaching action on climate change. Youths have taken various actions to combat climate change, but academics have not paid sufficient attention to youth climate mobilization. This study thus examines the questions of what has motivated youth to mobilize and how they have shaped global climate politics and governance. This study focuses particularly on the narrative of youth activists to address their understanding of climate change and their ideas regarding how to respond to it. Youth collective action has succeeded in problematizing global climate inaction and inertia and in framing climate change from a justice perspective, but activists have faced limitations in converting their moral legitimacy into the power required for sweeping changes. Overall, this study demonstrates the emergence of young people as agents of change in the global climate change arena and the urgency of engaging them in climate change governance and policymaking.

Keywords: youth; climate change; social movement; justice; narrative

1. Introduction

Climate change is one of the most urgent issues confronting the international community. To address global climate change and its far-reaching impacts, governmental, intergovernmental, and nonstate actors have targeted multiple fronts on different scales. In particular, over the years, various nonstate actors, including nongovernmental organizations (NGOs), citizens, and the private sector, have complemented governmental and intergovernmental efforts, combining their unique strengths and resources in combatting climate change both locally and transnationally [1,2].

The international community recognized the importance of engaging various societal groups in environmental policymaking early on. During the U.N. Conference on Environment and Development (known as the Earth Summit) in 1992 and in the subsequent Agenda 21, nine major groups were designated as channels for achieving the world’s sustainable development goals. Those groups included women, children and youth, indigenous peoples, farmers, business and industry, labor and trade unions, science and technology, local authorities, and NGOs. Existing studies have discussed their engagement with and participation in climate activism [3–9]. However, few academic analyses have addressed the mobilization of youth in global climate politics (the definition of youth differs, but this paper uses ages 15–24 to mean youth, a definition based on the U.N.’s World Youth Report published by the Department of Economic and Social Affairs [10], according to which there are 1.2 billion young people, accounting for 16% of the global population).

Young people are related to climate change in multiple ways. On the one hand, their experiences with climate change are negative and pessimistic. Young people will live much of their lives on an earth

whose conditions are increasingly altered by climate change. Various dimensions of their lives, including their security, well-being, and even mental health, will be negatively affected by climate change [11]. Recent studies have shown how climate change and extreme weather events have negatively affected the physical and mental health conditions of young people, including children [12–14]. Climate change also affects the socioeconomic conditions in which youth live. For instance, in developing regions such as Africa, young people, which constitute the largest demographic group and the largest labor force in terms of the agricultural sector, are exposed to growing existential threats, as climate change has altered environmental conditions such as water availability. Moreover, a changing environment often engenders conflict between various youth groups over the use of scarce resources [15].

On the other hand, on a more positive note, youth can be seen as environmental stewards for the future. For instance, teenagers have fought against climate change through various forms of activism, including lawsuits against fossil fuel companies and governments [16]. In a case called *Juliana v. U.S.*, 21 teenagers from Oregon filed a constitutional lawsuit against the federal government and the fossil fuel industry in August 2015, arguing that their government had failed to address climate change, violating their rights to life, liberty, and property, and had failed to protect essential resources in the public trust [17]. Similar lawsuits have been litigated in developing countries, including Colombia and Pakistan [16]. Moreover, young people in some developing countries have spearheaded efforts to confront climate change and its adverse consequences [15], prompting international institutions such as the U.N. Development Program [18] to finance various youth-led environmental projects around the world.

Despite such actions, young people are still portrayed as disengaged from civic action [19]. One study [20] argued that GenX'ers (born 1962–1981) and Millennials (born after 1982) prioritize extrinsic values such as money and fame over intrinsic values such as community and affiliation. The study found declining patterns in these generations in terms of civic orientation, e.g., political participation and interest in social problems, with the largest decline being observed in the “environmental action” category.

This depiction, however, has been shattered by the youth climate movement that swept the world in the years 2018 and 2019, which became one of the most widespread environmental social movements in history. School strikes for climate have been associated with Greta Thunberg (hereafter, Thunberg), whose Friday school boycotts grabbed international attention. This Swedish teenager used strikes to demand the adoption of more aggressive climate policies on the part of older generations, governments, and international organizations. She has since inspired other teenagers, leading millions of them to join her by taking to the streets. Although they are scattered all over the world, the movement participants have demanded drastic actions such as an immediate reduction in greenhouse gas emissions and a fossil fuel phase-out.

Youth participation in politics is not new, as they have played various roles in domestic and international politics, triggering political and socioeconomic transformations such as democratization. Young people have played significant roles in various movements, e.g., the U.S. civil rights, feminism, environmentalism, antiwar, labor, and immigrant rights movements [19,21]. Examples vary, from the May 68, 1989 Tiananmen Square Protests to the Arab Spring. What is relatively new, however, is that young people have emerged as agents of change in a social movement aimed at stopping the global climate crisis at an unprecedented scale. They have adopted the language of justice to make climate change a salient issue and to reveal the failure and inaction of the existing establishment, including political leaders and fossil fuel companies. While one cannot measure the direct causal impact that these climate strikes have had on state and intergovernmental climate change policies, this worldwide youth mobilization has aroused a sense of urgency, provided an alternative discourse, and cultivated youth leadership and commitment to civic action [22].

2. Materials and Methods

Against this backdrop, this study examines global youth climate movements, using a narrative analysis method. Climate change is not merely a physical event that is external to the actors confronting it: it is experienced, interpreted, and socially constructed through discursive activities in social settings [23]. As *Homo narrans*, people make sense of climate change via narratives, and their perceptions vary depending on narrative communication structures [24,25]. Actors not only engage in linguistic interpretation but also discuss solutions using verbal acts. Using narratives, people assign blame and stigmatize those who refuse to acknowledge the problem or fail to seek solutions. In Wittgenstein's view, people use specific words and expressions while participating in actual social situations: people learn to speak of good, bad, fair, morally disgusting, and so on, while engaging in events that give these words substance [26,27].

The literature on narratives is vast, extending to multiple disciplines such as philosophy, linguistics, sociology, and communication studies to name a few. Therefore, instead of engaging such vast literature on narratives in depth, this study has adopted a selective approach to its literature review by focusing on narrative analyses that relate to social movements and climate change. Moreover, given that the main goal of this research is not to deepen one's knowledge on narratives per se but to address youth climate movements and their activists by employing a narrative method as a tool to guide our understanding and interpretation, this study concentrates on discussing the narratives in the contexts of social movements and climate change.

Studies of social movements have benefited from the examination of narratives. Social movements are defined as networks of informal interactions between a plurality of individuals, groups, and/or organizations engaged in political or cultural conflicts, on the basis of shared collective identities [28]. The literature on social movements remains vast, from some emphasizing structural factors affecting the political opportunities available for activists to those highlighting identities, interests, and resource mobilization as critical aspects [29–36]. Among these, studies particularly emphasizing identities pay attention to the power of language in shaping collective identities. Activists use stories to make sense of the reality surrounding them, motivate collective action by forging collective identity, recruit participants, rebound from strategic setbacks and obstacles, and affect institutional policymaking [37–42]. Narratives unite participants in social movements and are utilized as tools. To be effective, climate change social movements should not just mobilize financial and human resources, utilize political opportunities, and present solid transition plans but should also adopt effective frames [43]. Narratives provide actors with tools to turn themselves into heroes with a powerfully mobilizing identity when they lack established organizations or coherent ideologies [38]. Narratives translate feelings of shame and individual responsibility into feelings of empowerment, efficacy, and entitlement.

Narratives have also gained increasing attention in studies of climate change. Studies of climate change politics and policymaking have noted the importance of discourse and narratives [23,44–50]. Multiple narratives regarding climate change compete for constituents today. Different narratives communicated shape public opinion, policy preferences, and the risk perception associated with climate change, affecting behavior such as adaptation and mitigation actions. Narratives define problems, identify their causes and present potential solutions as well as moral responsibilities. Narratives can, therefore, tell us a great deal about actors' preferences, ideas, and behavior.

For these reasons, this study examines the narratives in 2018–2019 global youth climate movements. During this period, young people largely relied on framing—in essence, narratives—as they lacked resources and political opportunities. Narratives served not only as the source of solidarity and moral legitimacy but also as a tool for delegitimizing the antagonists and for urging their action on climate change. This study analyzes the narratives of youth climate activists to obtain an understanding of how they made sense of the current state of climate change and its causes, how they saw themselves in relation to other actors and how they reacted to resolve the existing problems.

For the sake of a theory-guided analysis of youth narratives, this study used the narrative policy framework (NPF) [51–53]. The NPF approach adopted in political and policy studies differs from the more linguistically oriented and postpositivist study of narratives that tend to consider all narratives and their contents unique [54]. The comparative merit of the NPF is that it identifies general components of narratives for both quantitative and qualitative research and can be applied at different levels of analysis (micro, meso, and macro).

According to the NPF, narratives consist of settings, characters, a plot, and a moral [51–53]. These components are identified in other studies although they are named differently. For instance, one study [23] introduces such narrative elements as initial situation, complication, reactions, resolution and final situation and identifies different actors or narrative characters as heroes, villains, and victims. One can identify the equivalents of these elements in the NPF. For example, the initial situation corresponds to setting, while complication, reactions, and resolution together can be seen as a plot. The final situation can be seen as a moral in that it is the end goal that heroes aim to achieve through the resolution of the problem situation.

This study applies the NPF at the micro (individual activists) and meso (activist groups) levels and uses the framework's four constituting components as guiding tools for analysis and interpretation. Figure 1 illustrates the narrative components in youth climate mobilization and the relationships among the components.

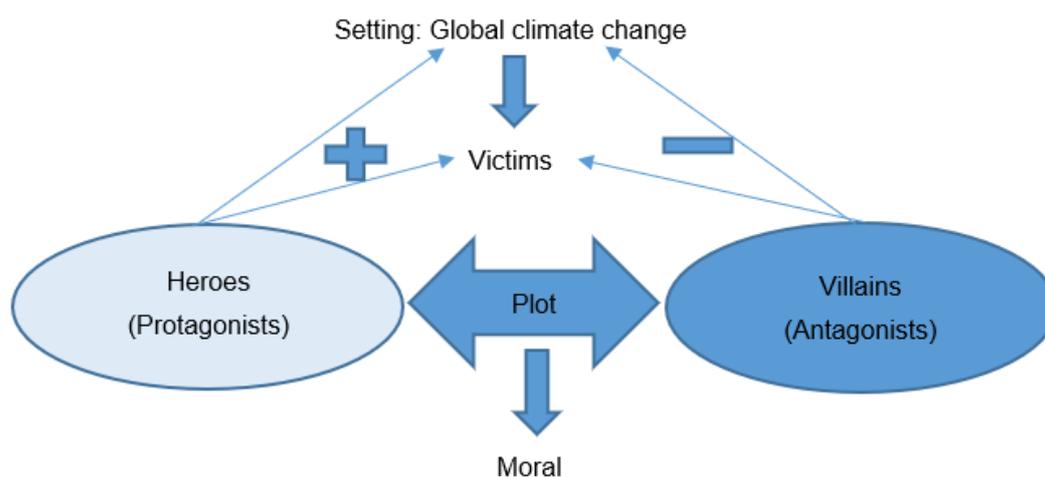


Figure 1. Narrative components in youth climate mobilization.

In addition to analyzing the 2018–2019 youth climate mobilization based on such an NPF-informed framework, this study describes the responses that the youth climate mobilization generated. The vast amount of literature in the field of social movements informs us about their outcomes and measurements [55–61]. These studies examine the short- and long-term effects that social movements generate in at least three domains: political, cultural, and biographical. Changes in the political domain can be observed, for instance, in the changes in government policies, legislation, political institutions, and actions taken by political parties. The effects of social movements in the biographical domain are measured by examining the impact of mobilization on the lives of movement participants and their sympathizers. The cultural impacts of social movements can be examined by tracing the changes in cultural norms and practices and by seeing the formation of collective identity and subculture.

The NPF literature also offers various hypotheses regarding the impact that narratives generate at three different levels: individual, group, and institutional. At an individual level, a higher level of narrative transportation, congruence with existing beliefs, narrator trust, and the effective portrayal of characters such as heroes and victims seem to increase the persuasiveness of narratives [24,25,48]. At a meso level, coalitions of shared narratives employ various narrative strategies to challenge their

competing coalitions and to shape policy preferences to achieve favorable policy outputs [53,62]. Moreover, actors intend to prompt other actors' adoption of new narratives through learning or to influence public opinion (both endogenous and exogenous) to bring about the policy change they desire. At a meso level of analysis, one should identify competing narrative coalitions to examine how their interactions lead to policy change. This means that one should identify any countermobilization against the youth movement and examine their interactions to reach a comprehensive answer to the question of how effective the youth mobilization is in defeating its competing groups and shaping policy outcomes. However, given that this study does not deal with countermobilization against youth climate movements, discussing the impact at the meso level is beyond the scope of this paper.

Drawing from these two bodies of literature (social movement and NPF), one can come up with various hypotheses regarding the outcomes of the youth climate mobilization and test them. However, a comprehensive evaluation of the outcomes through hypothesis testing requires a longer time frame and more in-depth research due to the complexities intrinsic to the youth climate movements. First, the movement participants' targets for change varied as will be discussed in the main body. Reflecting the informal and spontaneous nature of social movements and the multiscale nature of the climate change problem that they tackle, some participants in this youth mobilization aimed to influence the existing global governance system while others placed direct pressure on their governments or corporate entities. Thus, to measure the impact of the youth movements, one should examine the changes that the movements brought about via different target audiences. Moreover, it could take some time for the youth mobilization to induce actual changes in political and cultural realms. Even if some dramatic policy changes took place after the youth climate mobilization, one cannot claim causality between the two, in that the former could have been caused by factors other than youth mobilization; one cannot rule out the possibility of a spurious relationship between youth mobilization and policy change. In addition, it usually takes time for changes in cultural norms to become visibly identifiable. These factors render an attempt to measure the outcomes of the youth climate movements a daunting task.

Bearing these constraints in mind, this study discusses the tentative outcomes and limitations of the 2018–2019 youth climate mobilization in a rather unsystematic and cursory manner. That is, this study gauges the impact of the youth climate movements by describing how they seem to have shaped the responses of some of the target groups, such as international institutions, state entities, and other groups in society.

As for methods, this study examined narratives of various forms such as speeches, interviews, declarations, and online communications. We collected the narratives of individuals (mostly Thunberg's, given her iconic role) and on websites such as <https://globalclimatestrike.net>, where activists exchange information with each other and with an external audience. This study also examined relevant documents such as the Global Youth Climate Action Declaration, created on 23 September 2019. The declaration was drafted by youth climate activists and was endorsed by approximately 3000 individuals from 80 countries (according to YOUNGO, the children and youth constituency of the U.N. Framework Convention on Climate Change). Rather than analyzing the narrative quantitatively, for example by using computer software programs to count the numbers of certain narrative components in a rather mechanical manner, this study conducted a qualitative content analysis [63,64] to draw meanings from the interpretation of text data (narratives) produced and shared by youth activists. This study applied a directed approach to content analysis in that the analysis started from the NPF as a theoretical framework and used its narrative components as guidance for initial codes. Again, the purpose of this study is not to treat youth narratives as quantifiable units but to examine them to answer the overarching questions of what drove youths to participate in collective action, how they interpreted the current state of the problems, and how they aimed to fix them. Lastly, this study treated youth narratives as a single phenomenon (as a metanarrative) for the sake of simplicity, while acknowledging the existence of numerous sub-narratives across different youth groups in different settings.

The rest of the paper proceeds as follows. The following section provides a brief timeline of the youth climate movements from 2018 to 2019. The section after that examines the narrative components of the youth climate movement. Next, the paper covers the impact and limitations of youth mobilization. The conclusion summarizes the findings and discusses the implications and limitations of this research.

3. Youth Climate Movement

In 1992, a 12-year-old Canadian girl named Severn Cullis-Suzuki, the founder of the Environmental Children's Organization, spoke at the Earth Summit. In her six-minute speech, Cullis-Suzuki [65] explained what drove her to speak up about the environment:

We felt it was important to go. We figured it was going to be mostly old men, sitting around, making decisions that are going to affect our future and the future generation. So we wanted to go as the conscience, as a reminder to those decision-makers, who their decisions would truly affect.

A similar message was delivered by a Swedish teenager in 2018, but with far greater impact. In her "School Strike for Climate", which was launched in late August 2015 in front of the Swedish parliament, Greta Thunberg vowed to continue her protest until her government met the carbon emissions target set out in the Paris Agreement [66]. Utilizing social media outlets such as Instagram, Twitter, Facebook, and YouTube—tools not available to Cullis-Suzuki and her peers—Thunberg and her social-media-savvy peers began sharing hashtags, such as #FridaysForFuture (FFF) and #Climatestrike, with people across the world. Attracting media attention, Thunberg was soon invited to talk at high-profile events: in November 2018, she delivered a TED talk, and in December, she delivered a speech at the U.N. climate change conference, COP24, in Poland. In the meantime, Thunberg's actions snowballed into a larger youth mobilization. In December, about 20,000 students from 270 European cities and towns held school strikes [66].

Youth activism continued throughout 2019 (Table 1). By the end of 2018, tens of thousands of students across Europe had joined school strikes. In January, the number reached 35,000 in Belgium alone. When a Belgian environmental minister insulted the strikers, a public outcry forced her to resign [67]. On 15 March 2019, 1.4 million people in over 1700 cities [68] worldwide participated in strikes to raise public awareness regarding governments' inaction on climate change and to call for policies that would comply with the Paris Agreement. Another estimate was that about 1.6 million students in over 120 countries participated in the strikes [69]. According to FFF's website, 359 events had registered a week before the strike, but by the day of the global strike, about 2700 events had registered. Although the number of participants and events cannot be exactly calculated given the amorphous nature of the movement, these numbers suggest that the scope of youth climate mobilization accelerated at an unprecedented scale.

Responding to this surge, U.N. Headquarters hosted its first Youth Climate Summit on 21 September 2019. More than 500 climate champions aged between 18 and 30 from more than 140 countries and territories were invited. Among them, one hundred were chosen as Green Ticket winners, receiving support to participate in the summit via carbon-neutral travel to New York. At the summit, the young climate champions explored ways to meet the commitments in the Paris Agreement and demanded that world leaders tackle the climate crisis with far swifter action [70]. The youth summit offered a platform for young climate activists to discuss their ideas with their peers and world leaders.

Thunberg herself arrived in the U.S. in late August to attend the summit on a solar-powered sailboat. She protested in front of the U.N. together with members of FFF and marched in front of the White House. She also testified in a joint congressional hearing on climate crisis and made a speech at the U.N. Climate Action Summit on 23 September. On 20 September, before the scheduled summits for both youth and world leaders, Thunberg and millions of young people around the world (at least 117 countries) took to the streets again, criticizing the inaction of world leaders and demanding an

immediate reduction in carbon emissions. According to one study [67], four million people of all ages showed up to protest around the world that day.

In addition to protests, youth activists have launched campaigns to push policymakers through more formal channels. While participating in the U.N. Youth Climate Summit, Thunberg and 14 children (from Argentina, the Marshall Islands, France, Germany, and the U.S.) lodged a formal complaint under the U.N. Convention on the Rights of the Child. They claimed that countries' failures to address the climate crisis violated the convention [71]. In Europe, youth activists utilized the European Citizens' Initiative (ECI) as an outlet to pressure the E.U. Parliament. The ECI enables E.U. citizens to call on the European Commission (EC) to enact concrete demands or to propose a legal act. FFF aimed to collect one million signatures, enough to pressure the E.U. Parliament into prioritizing the climate crisis and introducing drastic measures. FFF formed an ECI team in April 2019, which soon grew to around 150 activists. They composed drafts and sent them to national FFF teams for feedback. The final draft was submitted in July to the EC, which opened for signature collection on 23 September [72]. This campaign was intended to pressure the EC into responding to the climate emergency. More specifically, the activists demanded the following: (1) that the E.U. adjust its goals under the Paris Agreement to an 80% reduction of greenhouse gas emissions by 2030 (to reach net zero by 2035), and that European climate legislation be adjusted accordingly; (2) that an E.U. Border Carbon Adjustment be implemented; (3) that no free trade treaty be signed with partner countries that did not follow a 1.5 °C compatible pathway (according to Climate Action Tracker); and (4) that the EU create free educational materials for all members about the effects of climate change.

The above was just a brief description of the climate movements that unfolded from 2018 and throughout 2019. While such youth environment movements were not entirely new, such global-scale youth mobilization on environmental issues was unprecedented.

Table 1. Global #Fridays for Future (FFF) Movements.

Country/Date	30 November	15 February	15 March	3 May	24 May	21 June	Week for Future	29 November	6 December	13 December	10 January	17 January	24 January	31 January	7 February	14 February
# of Countries	42	48	137	88	137	103	183	164	151	150	149	149	149	149	149	150
# of Cities	354	304	2419	685	2044	760	3857	2625	1805	1706	1677	1689	1677	1679	1679	1690
# of Events	373	362	2708	861	2516	1004	9034	3731	2737	2559	2504	2515	2494	2501	2495	2510
# of People	26,493	10,505	2,289,650	40,101	751,549	60,208	7,335,572	1,158,971	522,341	51,123	1231	907	242	336	462	747

Source: #Fridays for Future [73].

4. The Narrative of Youth Climate Activism

Youth climate activists have produced and disseminated a shared narrative in collective action settings, including on social media and in street protests. As explained in the method section, narratives generally have four components: settings, characters, a plot, and a moral. Settings are specific contexts in which problems occur and include, for instance, institutional parameters, geography, scientific evidence, economic conditions, agreed-upon norms, and so on. Characters include those who are harmed (victims), villains (who do the harm), and heroes (who provide or promise relief from the harm and a solution). A plot describes the relationships between characters and situates characters within the settings. A plot has a beginning, middle, and end. A moral is the solution that the narrative promotes. Youth activists produced and exchanged a relatively simple, but strong narrative. This section identifies the four elements of their narrative.

4.1. Settings

In the case of youth climate activism, institutional parameters, geography, and economic conditions are not as relevant as scientific evidence and agreed-upon norms. The settings in which youth activism have unfolded have been highlighted by the growing incongruence between climate change and global action to mitigate it. Young participants in climate movements have grown up in a world whose physical and socioeconomic conditions have been altered by global warming and climate change. They have been directly or indirectly exposed to climate-induced and -related disasters every day of their lives. Moreover, the movement's participants, particularly those from advanced economies, have been educated about climate change through school curricular and extracurricular activities, however varied such education may be in different countries.

The youth activists studied here learned about recent climate science findings. For instance, a special report of the Intergovernmental Panel on Climate Change [74], which was released in October 2018, prompted young people to act. This report stated that global climate targets could become impossible to reach in just 12 years, and that emissions need to be cut in half by 2030 to avoid negative consequences. It addressed the wide-ranging implications of failing to limit warming to 1.5 °C. The IPCC warned that the planet is only 12 years away from catastrophe unless “far-reaching and unprecedented changes” are made, which weighed heavily on the minds of the young activists, who were quick to realize that they were the ones who would have to live in that world [69].

Thus, the increasing availability of scientific information on climate change has influenced the narrative settings of the youth climate movement. Thunberg [75] referred to such science in a speech delivered to the French National Assembly in July 2019:

A lot of people, a lot of politicians, business leaders, journalists say they don't agree with what we are saying. They say we children are exaggerating, that we are alarmists. To answer this, I would like to refer to page 108, chapter 2 in the latest IPCC report. There you will find all our opinions summarized, because there you find a remaining carbon dioxide budget. Right there it says that if we are to have a 16% chance of limiting the global temperature rise to below 1.5°, we had on 1 January 2018, 420 gigatons of carbon dioxide left in our CO₂ budget. And of course that number is much lower today. We emit about 42 gigatons of CO₂ every year. At current emissions levels, that remaining budget is gone within roughly eight-and-a-half years.

At the Davos Forum [76], Thunberg reiterated:

And why is it so important to stay below 1.5° Celsius? Because even at 1° people are dying from climate change because that is what the united science calls for, to avoid destabilizing the climate so that we have the best possible chance to avoid setting off irreversible chain reactions.

Despite such growing scientific knowledge about climate change and despite the scientific community urging the introduction of radical measures to stop it, the international community has failed to act on its commitments to reduce emissions. This incongruence between what the international

community had promised to deliver through the Paris Agreement and what it has done in reality has served as another element of the narrative setting.

4.2. Characters

Villains and Victims

Several villains have appeared in the activists' narrative. For instance, in a speech delivered at COP24, Thunberg said that civilization had been sacrificed for a small number of people in rich countries who make enormous profits and live in luxury. She also blamed the delegates at the conference for speaking only of green economic growth due to their concerns about popularity. She said that the failure to "pull the emergency brake" left the burden on children and our biosphere [77].

A year later, in September 2019, at the U.N. Climate Action Summit, Thunberg echoed the same message. She said that the summit participants (world leaders) had "stolen her dreams and childhood with empty words", and that the entire ecosystem and even human beings themselves were near mass extinction because of them. She called the state representatives at the summit an "evil", as they kept failing to act, even knowing the situation [78].

The media and politicians were also identified as villains due to their lack of attention to climate science. At Davos 2020, Thunberg [79] said:

Since last summer, I've been repeating these numbers over and over again in almost every speech. But honestly, I don't think I have once seen any media outlets or person in power communicate this and what it means. I know you don't want to report about this. I know you don't want to talk about this, but I assure you I will continue to repeat these numbers until you do.

Other youth climate activists echoed Thunberg. At the U.N. Climate Youth Summit, a Fijian climate change action advocate, Komal Kumar, described people from her generation as the victims of the current climate crisis, "living in constant fear and climate anxiety" [80]. Anna Taylor, the 17-year-old cofounder of the U.K. Student Climate Network, was cited as saying [81] the following:

Those in power are not only betraying us, and taking away our future, but are responsible for the climate crisis that's unfolding in horrendous ways around the world.

In summary, the youth narrative assigned blame and responsibility to past generations, states and their leaders, and the media, while depicting future generations and the earth as the victims of the climate catastrophe.

4.3. Heroes

Regarding the question of who should fix problems, youth activists have identified themselves as the protagonists in the narrative. They see themselves as agents of change who can improve the status quo in multiple ways. Thunberg discussed the importance of attracting global attention through school strikes at COP24. She said [77]:

And if a few children can get headlines all over the world just by not going to school, then imagine what we could all do together if we really wanted to.

At the 2019 Climate Action Summit, Thunberg [78] also sent a warning message to older generations, saying that future generations like herself will hold present-day adults and politicians accountable:

You are failing us. But the young people are starting to understand your betrayal. The eyes of all future generations are upon you ... (omitted) ... We will not let you get away with this. Right here, right now is where we draw the line. The world is waking up. And change is coming, whether you like it or not.

A Fijian climate activist, Komal Kumar, said at the U.N. Youth Climate Summit [80] that the younger generation should be engaged in the design of adaptation plans; moreover, this generation will hold politicians accountable by voting them out of office.

Thunberg continued to depict children as agents of change that represent the bottom-up mobilization of people power. In her speech at the Global Climate Strike in Montreal, which was held on 27 September 2019, she said [82]:

Because this is an emergency, and we will not be bystanders. Some would say we are wasting lesson time. We say we are changing the world. So that when we are older, we will be able to look our children in the eyes and say that we did everything we could back then. Because that is our moral duty, and we will never stop doing that ... (omitted) ... We will do everything in our power to stop this crisis from getting worse, even if that means skipping school or work ... (omitted) ... Through history, the most important changes in society have come from the bottom up, from grassroots. And the numbers are still coming in. But it looks like 6.6 million people have joined the Week for Future, the strikes for this [Friday] and last Friday [when demonstrations took place in the U.S. and elsewhere]. That is one of the biggest demonstrations in history. The people have spoken, and we will continue to speak until our leaders listen and act. We are the change, and change is coming.

While portraying themselves as agents of change and moral entrepreneurs who speak on behalf of the earth and its future, youth activists also recognized that what they can achieve is limited given their lack of political power and resources. At a speech delivered to the E.U. Parliament in April 2019, Thunberg said [83]:

The EU elections are coming up soon, and many of us who will be affected the most by this crisis, people like me, are not allowed to vote. Nor are we in a position to shape the decisions of business, politics, engineering, media, education, or science. Because the time it takes for us to educate ourselves to do that simply does no longer exists, and that is why millions of children are taking it to the streets, school striking for the climate to create attention for the climate crisis. You need to listen to us, we who cannot vote.

In another speech, Thunberg acknowledged that, given the urgency of the climate crisis and the need for immediate action, there is not enough time for young people to grow up and become agents of change [84]. She therefore urged politicians to listen to scientists, if not the youth strikers themselves, in enacting drastic climate change policies. Here, youth activists recognized the practical limitations of their roles as immediate game changers and urged the antagonists to become better informed about recent climate science and take action. The Global Youth Climate Action Declaration [85] also stated that today's youth mobilization should respond to the deadlock, ignorance, and inaction of past generations, but that youth need to work with state leaders, as they hold the actual power to enable transformation on a global scale.

4.4. Plot

The narrative of the youth climate movement had a simple plot. The villains—adults, politicians, the media, extractive industries—failed to act in response to a deepening climate crisis and passed the burden of addressing the problem to future generations, who are the victims. Faced with the gross inaction and negligence of the villains, the victims will not remain mere victims. The heroes will mobilize themselves in a collective action to obtain justice for the damaged earth, its biosphere, and the people who have suffered under the gross inaction and negligence of the villains. Young people will hold the villains accountable by monitoring what they do and pressuring them for systemic transformation. The movement participants also warned that they would penalize state leaders by voting them out in years to come. Thus, the narrative suggested that world leaders should recognize their responsibility and act in response to climate change. Thunberg [86] tried to invoke such a sense of responsibility at her TED speech in Stockholm:

If I live to be 100, I will be alive in the year 2103. When you think about the future today, you don't think beyond the year 2050. By then, I will in the best case, not even have lived half of my life. What happens next? The year 2078 I will celebrate my 75th birthday. If I have children or grandchildren, maybe they will spend that day with me. Maybe they will ask me about you, the people who were around back in 2018. Maybe they will ask why you didn't do anything while there still was time to act? What we do or don't do right now will affect my entire life and the lives of my children and grandchildren. What we do or don't do right now, me and my generation can't undo in the future.

4.5. Moral

The key messages of the narrative were as straightforward as the plot. First, the international community cannot address climate change without treating it as a crisis. In an interview with Democracy Now! [87], Thunberg said:

My message to the young people of the world is that right now we are facing an existential crisis, I mean, the climate and ecological crisis, and it will have a massive impact on our lives in the future, but also now, especially in vulnerable communities. And I think that we should wake up, and we should also try to wake the adults up, because they are the ones who—their generation is the ones who are mostly responsible for this crisis, and we need to hold them accountable. We need to hold the people in power accountable for what they have been doing to us and future generations and other living species on earth. And we need to get angry and understand what is at stake. And then we need to transform that anger into action and to stand together united and just never give up.

At Davos in January 2019, Thunberg discussed the necessity to act to address the global climate crisis [88]:

We are now at a time in history where everyone with any insight on the climate crisis that threatens our civilization and the entire biosphere must speak out in clear language, no matter how uncomfortable and unprofitable that may be. We must change almost everything in our current societies . . . omitted . . . Adults keep saying we owe it to the young people to give them hope. But I don't want your hope, I don't want you to be hopeful. I want you to panic, I want you to feel the fear I feel every day. And then I want you to act, I want you to act as if you would in a crisis. I want you to act as if the house was on fire, because it is.

At the U.N. Youth Climate Summit, a young Argentine climate activist, Bruno Rodriguez, declared that climate change was “the political crisis, cultural crisis of our time. Enough is enough. We don't want fossil fuels anymore.” [80].

So the activists' moral was clear: we are facing an unprecedented climate crisis in human history, and there is science supporting the urgency of the issue. During a speech at the French National Assembly in July 2019, Thunberg [75] said:

The science is clear, and all we children are doing is communicating and acting on that united science. Now political leaders in some countries are starting to talk. They are starting to declare climate emergencies and announcing dates for so-called climate neutrality.

You don't have to listen to us, but you do have to listen to the united science, the scientists. And that is all we ask, just unite behind the science!

The second moral of the story, which was derived from the first, was that the business-as-usual approach of national governments and international organizations was no longer adequate given the severity of the climate crisis. Thunberg questioned the conventional technological approach to climate change at the U.N. Climate Summit:

How dare you pretend that this can be solved with just “business as usual” and some technical solutions? With today's emissions levels, that remaining CO₂ budget will be entirely gone within

less than eight-and-a-half years. There will not be any solutions or plans presented in line with these figures here today, because these numbers are too uncomfortable.

The message was that given the inadequacy of existing approaches, systemic transformation is the only solution for the current climate crisis. At a speech delivered to the French National Assembly, Thunberg said [75]:

I will also tell you this: you cannot solve the crisis without treating it as a crisis, without seeing the full picture. You cannot leave the responsibility to individuals, politicians, the market, or other parts of the world to take. This has to include everything and everyone.

The youth activists demanded a drastic reduction in fossil fuels as a way to solve the problem. At COP24, Thunberg asserted the need to keep fossil fuels in the ground and change the system entirely [77]. In an article co-written by Thunberg and 20 other youth activists for the World Economic Forum [89], they repeated the same point:

We demand at this year's World Economic Forum, participants from all companies, banks, institutions and governments immediately hold all investments in fossil fuel exploration and extraction, immediately end all fossil fuel subsidies and immediately and completely divest from fossil fuels. We don't want these things done by 2050 or 2030 or even 2021. We want this done now.

Moreover, the youth activists framed the climate crisis as a justice issue. They argued that human rights and the climate crisis go hand in hand, as they both involve justice. At an award ceremony where she received the Amnesty International Award [90], Thunberg said:

Human rights and the climate crisis go hand in hand. We can't solve one without solving the other. Climate change means people won't be able to grow food, their homes will come under threat and their health will be compromised. Governments have a duty to protect us, so why are they doing nothing to stop climate change from devastating our lives?

The moral was that climate change should be understood from an interstate and intergenerational justice perspective. The activists maintained that richer countries need to get to zero emissions much faster and help poorer countries do the same so that people in less fortunate parts of the world can raise their standard of living [79]. The lesson was that climate change should be addressed in terms of justice for and the rights of disadvantaged social groups and states that are less powerful and resourceful and thus more vulnerable. Table 2 summarizes the narrative elements.

Table 2. Narrative of Youth Climate Activists.

Narrative Elements	Summary
Setting	Growing youth awareness of the climate change issue through the acquisition of scientific information Greater youth exposure to the negative consequences of climate change Incongruence between deepening climate crisis and global inaction
Characters	Victims The earth, the ecosystem, younger generations, marginalized groups, and weak states
	Villains Older generations, the fossil fuel industry, states and their leaders, the media
	Heroes Younger generations, climate science, and states (if they reform)
Plot	Overarching transformation to stop climate change via the activism of heroes and changes on the part of the villains under pressure from the heroes
Moral	Climate change as the greatest existential threat to the earth and to human beings Urgency of action and systemic change on a global scale The need to understand the global climate emergency from a rights and justice perspective

5. Achievements and Limitations

Discussing, and even trying to measure the impact of, social movements is an elusive task, as acknowledged in the earlier section. The efficacy of various social movements, including protests to

leverage change and force climate change action onto the mainstream agenda, remains to be seen [91,92]. Therefore, this section examines the short-term responses that the youth climate mobilization seems to have elicited in the biographical, social, and political domains and discusses its limitations.

First, in the biographical domain, the 2018–2019 youth climate movements succeeded in enlisting the support of young people around the world by using powerful and persuasive narratives that unite them. Not just youth but people around the world began to pay closer attention to climate change issues as the mobilization of young people in school strikes, street protests, and online activism reached an unprecedented level in 2018 and 2019. According to Meltwater, a media monitoring firm [93], there were more than 7.5 million social media mentions of Thunberg as an icon of the youth movement from 20 September 2019 to 26 September 2019, while news outlets around the world mentioned her 93,800 times. Meltwater also estimated that more than 3.58 million social mentions were made regarding the global climate strike before the U.N. Climate Action Summit on 20 September. The majority of these mentions were aimed at generating climate awareness and urging people to join movements to pressure policymakers.

Mainly due to youth activism, the term “climate strike” was named the Collins Dictionary’s 2019 word of the year, due to a 100-fold increase in the use of the word. The dictionary defined it as a “form of protest in which people absent themselves from education or work in order to join demonstrations demanding action to counter climate change” [94]. The term first arose in 2015 during the U.N. climate change conference in Paris, but then was not widely used until late 2018, when the climate school strikes gained momentum and millions of people joined global climate strikes (during the “Global Week for Future”) [94]. Likewise, the Oxford Dictionary declared “climate emergency” the word of the year for 2019, defining the concept as “a situation in which urgent action is required to reduce or halt climate change and avoid potentially irreversible environmental damage resulting from it” [95]. These climate-related expressions gained global recognition in 2019 mainly due to global youth mobilization.

Secondly in the social domain, the youth climate movements enlisted broader constituent groups, including labor workers, teachers, and existing environmental groups, as collaborating partners, forming networks to stop climate change. For instance, in the United States, where thousands of students launched school strikes to participate in the Global Week for Future, the American Federation of Teachers joined them in navigating policies regarding student absences and in organizing logistical support. The federation also endorsed climate strikes [96]. Demonstrations in Washington, D.C., indicated the wide array of organizations supporting the movement. Led by D.C. public school students, the Washington Teachers’ Union, the Sunrise Movement, Zero Hour, OneMillionOfUs, 350.org, D.C. Youth Climate Strike, the National Children’s Campaign, Our Children’s Trust, and others marched to the Capitol with a message for legislators: Act now to save the planet [96].

Education International [97], which is composed of 30 million members from 401 organizations from 172 countries, also announced its endorsement of the students’ actions as follows:

The action of students on climate change has not only forced discussions in many countries about the issue, but has also revealed the weak response of many democracies to the most compelling needs of the population and the planet. This mobilization can contribute to and help inspire a process of reinvigoration of the democratic process.

Education unions stand with the students. We urge governments to make the necessary structural changes for a just transition towards a climate-resilient and low-carbon economy. Climate change is not combatted through the “good behavior” of consumers. Coordinated and sustained participation of students and workers and their representatives may be the first step towards climate justice. We stand by students in the demand for urgent climate action, and a just economic transition.

Numerous existing environmental organizations that engage in climate-related activism, e.g., divestment movements, have acknowledged the significance of this youth mobilization. For instance, Sini Harkki, the program manager of Greenpeace Nordic, stated that it really has “changed the

discourse” [69]. These suggest that the youth mobilization has triggered some positive change in the social domain.

The youth strikes also succeeded in enlisting the support of labor unions. Trade unions across the world showed interest in organizing strikes in conjunction with the youth climate strikes. For instance, in Germany, the second largest labor union asked its two million members to join the #climatestrike in September 2019. In the U.S., 900 Amazon workers based in Seattle participated in the strike on 21 September. The support that young people elicited from the labor groups demonstrated successful green–blue alliances.

Third, in the political realm, the 2018–2019 youth-led climate movements seem to have influenced climate change policies in some countries or elicited a commitment to do more. After Thunberg spoke to Parliament and demonstrated with Extinction Rebellion, a British environmental group, the U.K. government passed a law requiring the country to eliminate its carbon footprint [67]. Moreover, although the U.N. Climate Action Summit was marked by the absence of several big players, such as the U.S. and Brazil, some state leaders promised a fossil fuel phase-out. Angela Merkel, the German chancellor, declared that coal mining would end in Germany by 2038. Emmanuel Macron, the French President, called for the E.U. to accelerate its emissions reductions, promising that France would not make trade deals with countries who had not endorsed the Paris Agreement. In discussing his government’s plan, Macron was quoted as saying, “We cannot allow our youth to strike every Friday without action,” in reference to the climate school strikes [71].

Moreover, several governments (10 countries, including Sweden, Chile, and Spain) signed the Declaration on Children, Youth, and Climate Action [98] on 9 December 2019 during COP25 in Madrid. The declaration acknowledged the critical roles of children and youth as agents of change and contained a commitment to taking action on several youth-related climate goals: the promotion of youth rights, including a right to a healthy environment; investment in youth capacity, including mitigation and adaptation actions; and the promotion of youth participation in climate governance. Given the timing of this declaration, one can infer the influence that the preceding global youth mobilization had on it.

At the global governance level, the youth climate movements demonstrated the significance of young people as agents of change and shattered existing stereotypes about young people being mere victims of climate change or lacking an interest in the issues affecting them. The 2018–2019 movement demonstrated that young people actively process scientific information regarding climate change, condense this information by generating narratives, communicate the narratives, and use them as tools in collective action settings, such as climate strikes. The sheer scale and size of the movement reminded world leaders of the necessity to bring youth to the table. This led to the U.N.’s first ever youth climate summit, which took place prior to the U.N. Climate Action Summit. More than 500 young people from 60 countries were invited to talk at this event. The summit was a gesture granting young people space and visibility in a formal international setting.

At the U.N. Youth Climate Summit, U.N. Secretary General António Guterres stated he saw a change in momentum in movements such as those spearheaded by Thunberg and other grassroots initiatives. He encouraged young participants to continue fixing his generation’s failures and to make the latter accountable for preserving justice in the world and for the planet [81]. The deputy secretary general also said that never before in history had the U.N. offered such a visible platform to young people at a political summit, stressing that this was a testament to the fact that they were a leading force for climate action and were drawing worldwide attention to the climate emergency in a way that had been impossible to imagine previously [80].

While the global youth mobilization to stop climate change generated the aforementioned responses, there were several limitations as well. The youth activists successfully problematized the unequal distribution of power and resources underlying the current climate crisis. However, the movement was limited in its ability to alter such a system in favor of those who support more progressive climate policies. Those supporting the status quo continue to consolidate their power and interests by mobilizing resources and by controlling money, political power, and public discourse.

Those groups have not simply surrendered to good morals and scientific arguments [27]. Youth climate activists do not have much leverage against governments and fossil fuel companies that resist change.

For instance, Dolsak and Prakash [99] agreed that climate strikes raise the policy profile of climate change and give agency and hope to younger generations. Moreover, climate strikes provide an excellent opportunity to inculcate a climate ethic among strikers, so that they begin to embody the change they are demanding from others. However, they argued that youth climate movements are unlikely to impose huge costs on firms or policymakers and will accomplish more by focusing on persuading constituencies to enact climate change policies and by demanding climate leadership from universities.

Second, while the climate strikes have succeeded in gaining global attention (for instance, the U.N. setting up an official space for youth participants), this space remains very limited [100]. Powerful international organizations and member states are the ones with the power and authority to grant such space. About 1024 young people showed up to the Youth Climate Summit, but only a handful of these activists were given the opportunity to address the Climate Action Summit that followed. The youth summit allocated only several hours for youth participants from all over the world to discuss climate change issues and share ideas. The activists themselves felt there was nothing productive and tangible that came out of this symbolic event [101]. This means that international institutions such as UNEP [102] and UNFCCC and the institutional context can affect the activists' ability to shape climate change policy [103,104].

Third, while the youth activists generated powerful narratives calling for immediate action, they fell short of offering concrete solutions. Rather, the youth activists urged older generations, whom they identified as villains in their narratives, to come up with drastic action plans. Moreover, many of the ideas proposed by the youth participants at the Youth Climate Summit were local suggestions that were limited in terms of their relevancy to a global problem such as climate change. Therefore, though Thunberg and the youth activists received credit, they were also dismissed as climate alarmists, causing people to fear the apocalypse [105]. The world leaders of the countries with the highest levels of emissions, for instance, simply dismissed the youth climate activists, including Thunberg. Vladimir Putin disparaged Thunberg and youth climate activism by saying "I don't share the common excitement" on a panel in October. Donald Trump sarcastically described Thunberg as "a very happy young girl looking forward to a bright and wonderful future" on Twitter in the week preceding the U.N. Climate Action Summit. After Thunberg tweeted about the murder of indigenous people in Brazil, the country's president, Jair Bolsonaro, called her a "little brat" [67]. Although Thunberg was nominated for the Nobel Peace Prize in 2019, and Thunberg and the FFF movement were honored with Amnesty International's Ambassador of Conscience Award in 2019, these youth activist groups have also been simply brushed aside as immature.

6. Conclusions

This study discussed the emergence of young people as agents of change leading a global climate movement, examining their achievements and limitations. The 2018–2019 youth movement around climate change was unprecedented in terms of its scale, although young people have led various forms of social movements throughout history (e.g., teenagers mobilizing against gun violence in the United States and students fighting for democratic representation in Hong Kong) [67].

Galvanized by Greta Thunberg's Friday school strikes, the climate movement soon reached a global scale among young people, enlisting millions around the world. This study examined the significance of this youth climate activism by focusing on the narratives generated and shared by the movement's participants. This research identified the settings, characters, plot, and moral that constituted the overarching narrative. The narrative served as a tool that united the participants and as a weapon for the weak in challenging much more powerful antagonists. Young people used this narrative to assign blame to corporate entities and states that do not support more aggressive forms of climate change policies.

This youth movement succeeded in raising the profile of climate change as a pressing global issue of the highest priority, enlisting broad societal endorsement and prompting incremental policy changes on the parts of some states. This youth activism also reminded the world and international organizations such as the U.N. of the need to incorporate the voices of youth into global climate governance. Moreover, youth climate mobilization created a global attitude shift, elevating the importance of climate change in the global agenda and calling for urgent social transformation [67]. However, the youth climate movement and its participants lacked the power to bring about immediate policy changes. While they portrayed themselves as heroes in their narrative, they were limited in translating their moral authority and legitimacy into power and in offering powerful policy alternatives to the status quo.

Despite this mixed impact, the youth climate movement demonstrated that young people support their peers and other social groups to promote common goals and values and to bring about the social change they desire [68,106]. This youth mobilization demonstrated the possibilities for leadership and agency among young people at a time when powerful and resourceful governments have backed away from climate change commitments [68]. This story of activism contrasts sharply with some existing descriptions of young people, which depict them as fragile and helpless victims of climate-induced disaster and physical and psychological distress. Some studies have also portrayed them as a passive and self-centric political group that is not interested in forming networks with others or in resolving environmental issues such as climate change. These youth-led climate movements defied these stereotypes.

This new image of young people as agents of change and as active architects of future climate policymaking suggests the urgency of recognizing them as competent citizens and meaningfully engaging them in deliberative processes [68,107–109]. Currently, young people and youth organizations are formally represented by YOUNGO as an official constituency of the UNFCCC. However, a recent study shows how youth participants from YOUNGO are hindered by the exercise of power by other stakeholders, which prevents the former from articulating their preferred claims [100]. Moreover, such an outlet is limited to authorized youth organizations and their members. Given the rising global youth activism and its impact as demonstrated in this study, it is necessary to create multiple formal and informal venues for dialogues with young people so that their interests and ideas are incorporated into global climate governance. This research can serve as an excellent reference material for gaining a deeper understanding of youth narratives regarding climate change as a step toward forging a meaningful partnership with them to tackle this global challenge. For governments and corporate entities whom the youth narratives identified as villains, this study provides insights into how to engage young people by understanding their narratives and perspectives. Such an understanding would enhance climate communication among various actors. For those who intend to resolve the gaps and conflicts between youth and other parties in climate politics, this study can help them design a unifying narrative [110] by understanding the stories told by young people. This study also implies that it is crucial to cultivate young people's climate-related knowledge and their resilience and capacity to address climate change in various mitigation and adaptation arenas: this will help lead to a sustainable future and more equitable climate governance [22].

While aiming to provide a broad understanding of youth climate movements, this study has several limitations, and therefore, future studies are required. First, this study's evaluation of the 2018–2019 youth climate mobilization remains tentative, mainly drawing from descriptive evidence. It would be feasible to study the movements' outcomes more systematically as their goals are translated into actual policies at state and international levels and as cultural norms associated with climate change diffuse. Drawing from the social movement and narrative studies, one can build hypotheses and test them to measure the effectiveness of movement narratives in generating changes in biographical, political, and cultural domains.

Second, while this study treated the global youth climate movement as a single movement for the sake of addressing the significance of youth activism and mobilization as a whole, youth climate

movements have exhibited diverse forms and strategies in reality. Likewise, youth narratives have taken multiple forms specific to different cultures around the world [68]. Future studies could examine the various local sub-narratives that have underpinned such global-scale climate movements and metanarratives. A cross-country comparison of youth climate movements could help to clarify the interactions between the overarching meta-narratives underlying the global youth climate movements and more nuanced, country-specific narratives. This will shed light on diverse motivating factors behind such mobilization, reflecting country-specific concerns raised by youth groups and different solutions. Research on different types of youth dissent [111] and the various strategies and tactics employed by youths in different contexts could provide a deeper understanding of youth engagement in climate governance. One can also compare and contrast youth movements across various arenas to see if movement themes and issue types affect various dimensions of youth mobilization such as narratives and the strategies and tactics adopted.

Moreover, this study examined the stories as narrated by youth activists, so future research could explore the counter-narratives generated in response to the youth narratives to see how the interplay between competing narratives shape global climate politics and policymaking. Finally, this study adopted a qualitative method in examining youth narratives. Future studies could conduct a quantitative analysis by using, for instance, corpus analysis [112–114], to validate and enrich the findings of this research.

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