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Article

"If not even the school listens to us…": Echos of climate justice on the ground

Juliana Diógenes-Lima, Sara Pinheiro, Joana P. Cruz, Carla Malafaia

University of Porto, Porto, Portugal

Keywords: climate justice; young people; political participation; local communities; climate imaginaries

Highlights:

- Youth and other vulnerable groups have limited opportunities to participate in decision-making processes on climate politics.
- Distributive and intergenerational dimensions of climate injustice are particularly present in youth discourses.
- Recognitional and distributional climate injustice is mainly perceived by inland-rural young people.
- More knowledge about climate change at the local level needs to be disseminated.
- Climate justice concept needs further empirical and nuanced exploration with diverse social and political actors.

Purpose: This article brings into debate young people's meaning-making of climate justice in different geographic regions, and explores the roles of political, social, economic, and education actors in supporting youth's climate agency in their communities.

Design/methodology/approach: After selecting two schools located in Northern Portugal – in countryside/rural and in coastal/urban contexts – we conducted two focus group discussions with young students (aged between 16 and 18) and sixteen interviews with local stakeholders (policy-makers, economic agents, activists, and scientists). We performed content analysis, using climate justice's dimensions as analytical axes.

Findings: The data analysis reveals that young people do not feel heard in schools or in policy-making processes on climate. In contrast, adults unanimously recognize the importance of having more youth voices but fail to identify opportunities for youth participation in local climate policymaking. In addition to procedural and intergenerational dimensions, issues of recognitional and distributional climate injustice are identified by youngsters in their regions.

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Corresponding author:
Carla Malafaia, Faculdade de Psicologia e de Ciências da Educação da Universidade do Porto, Rua Alfredo Allen 4200-135 Porto, Portugal, carlamalafaia@fpce.up.pt

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1 INTRODUCTION

A growing body of research shows that public participation in climate change adaptation planning is often limited (Helliesen, 2022; Hügel & Davies, 2020; Ursin, Lorgen, Alvarado, Smalsundmo, Nordgård, Bern, & Bjørnevik, 2021), as it fails in promoting real inclusion and political participation of the most vulnerable groups (Adger, Barnett, Chapin III, & Ellemor, 2011). Social, cultural, and politically marginalized groups, including young people, are widely recognized as experiencing disproportionate impacts from climate change (Davies, Tabucanon, & Box, 2016; Lam & Trott, 2022; Brand & Wissen, 2017), and are therefore expected to play a central role in climate policymaking. The shortcomings of the effective inclusion of marginalised voices in decision-making processes in climate policy have been one of the most widely discussed dimensions of climate injustice (Newell, Srivastava, Naess, Contreras, & Price, 2021).

In recent years, the strength and visibility of climate activist movements have significantly contributed to a reinvigoration of the concept of climate justice and, thus, to its further scholarly problematization. Newell and colleagues (2021) argue for a systemic transformation of social institutions that address social inequalities. They argue that the concept of climate justice is an integrated combination of four pillars – distributive, recognition, procedural, and intergenerational – and, based on that, they propose a research agenda toward transformative climate justice.

Notwithstanding the important conceptual work of refinement of climate justice, an adjacent academic problem needs to be addressed: 'climate justice' is mainly approached at a theoretical level and falls short in terms of empirical exploration and operationalization (Hughes & Hoffman, 2020; Newell et al., 2021; Schlosberg & Collins, 2014). A comprehensive understanding of how climate justice echoes on people's experiences and perceptions is currently lacking, as well as the extent to which the dimensions that constitute climate justice are holistically integrated into climate policymaking (Diezmartínez & Short Gianotti, 2022). This paper aims at addressing this gap in the literature by exploring whether and how climate justice echo on the ground. Specifically, we draw on the four main pillars of climate justice and examine i) whether climate justice dimensions transpire into the experiences of young people's participation and ii) how diverse local actors and stakeholders assess the conditions for climate justice and youth political inclusion. For this, we conducted individual interviews with relevant local stakeholders (representatives of diverse political and civic spheres of communities: politicians, activists, economic agents, teachers, and scientists) and focus group discussions with young students. This methodological design was carried out in two diverse regions: an inland-rural community and a coastal-urban community. The purpose is to provide an ampler account of different positionings and meaning-making in relation to climate justice and explore how climate imaginaries play out at the local level (Paterson, 2016; Riesto, Egberts, Lund, & Jørgensen, 2022).

2 THEORETICAL FRAMEWORK

In the literature on political participation in the climate-change field, there are studies that either depict young people as agents of change (Almeida, 2000; Percy-Smith & Burns, 2013) or portray them as passive victims (Gibbons, 2014) who lack the ability to articulate their perspectives (Davies et al., 2016). This dual, contradictory role of young people has resulted in their exclusion from climate politics. Indeed, studies show that young people's perspectives are marginalized from legal and political debates about climate change (Davies et al., 2016; Mort, Walker, Williams, & Bingley, 2018), due to the lack of recognition of their political agency (Ursin et al., 2021) and authority (Yona, Dixon, Howarth, Kapuscinski, & Virginia, 2020) in climate policies. Conversely, research also points out the young people's willingness to be recognized as significant "actors rather than passive victims" (Mort et al., 2018, p. 439).

While young people are concerned with climate change (European Commission, 2022) and are engaged in efforts to address it (Pickard, 2019; Zummo, Gargroetzi, & Garcia, 2020), they often face barriers to meaningful participation in policy-making processes. These barriers include lack of access to decision-makers (Knappe & Renn, 2022), adult antagonisms towards young people's everyday practices of activism (Malafaia, 2022), limited opportunities for civic and political participation (Menezes & Ferreira, 2014; Ursin et al., 2021), absence of resources and support for youth-led initiatives (Samuel, 2014; Gasparri et al., 2022; Kuyper, Linnér, & Schroeder, 2018) and power-imbalanced dynamics in institutional settings (Eide & Kunelius, 2021; Zummo et al., 2020), such as schools.

The relationship between political participation and formal education is a classic one. Not only school education is one of the more relevant predictors of civic and political participation, but also because schools are key contexts of political socialization (Nie, Junn, & Stehlik-Barry, 1996; Quintelier, 2015; Verba, Schlozman, & Brady, 1995) – with open and plural learning environments playing a crucial role (Campbell, 2006). However, there is a tendency for adult-centric perspectives that responsiblise young people for their lack of civic and political participation (Malafaia, Neves, & Menezes 2021; Andolina, Jenkins, Keeter, & Zukin, 2002). Furthermore, the contemporary processes of transition to adulthood, characterized by great uncertainty (Pais, Lacerda, & Oliveira, 2017), are now worsened by a sense of precarious collective future in the face of climate crisis that is often not addressed by the school context (Malafaia, 2022).

It is argued that social and institutional negotiations practiced in public settings (e.g., formal politics, community spaces, schools) are often permeated by asymmetrical power relations that, in turn, are reproduced in local climate decision-making (Newell et al., 2021). Studies consider, however, that political participation spaces only make sense if they include vulnerable groups and the voices of those who will potentially be more affected by detrimental political effects (Adger et al., 2011). This idea aligns with

perspectives that point out that climate adaptation requires a bottom-up approach (Green, Taddeo, Price, & Spears, 2022; Robinson, 2017; Schlosberg, 2012). Some initiatives that encourage the participation of children and young people in policy agendas are emerging at the global (Thew, 2018; Vromen & Collin, 2010; Yona et al., 2020), and European levels (Ursin et al., 2021), including Portugal (Delicado, Rowland, Ribeiro, Almeida, & Schmidt, 2017). Yet, there is still a lack of academic endeavors to include young people as co-creators of solutions (Gibbons, 2014; Sanders & Stappers, 2008) in designing local-level climate policies. In fact, studies show that public participation in climate change adaptation planning is often constrained (Hügel & Davies, 2020) by an underrepresentation of youth on climate policy issues (Helliesen, 2022). The recognition of young people as agents of change with the right to contribute to the definition of local climate adaptation politics is a matter of climate justice. This concept – fundamental to grasping how climate politics is lived and unravelled in the local context – is not only related to young people nor limited to formal political decision-making arenas.

There has been a growing interest within the scientific community regarding the climate justice concept. Since the term was coined in 1989 (Newell et al., 2021; Schlosberg & Collins, 2014), its definition came to encompass several optics ranging from philosophical viewpoints (Caney, 2014), to 'capabilities approach' perspectives (Alves & Mariano, 2018; Schlosberg, 2012), political-activist approaches (Bond, 2010), and developmental and human rights' angles (Robinson, 2017). Aiming at grappling with tensions and disconnections between activist and academic-oriented approaches to climate justice, Newell and colleagues (2021) propose a transformative frame to climate justice, based on three key strands: inclusive climate justice, deepening climate justice, and governance for climate justice. The authors make a compelling argument that climate justice must resonate on the ground by shedding light on "the social and institutional relations and inequalities which produce climate change and profoundly shape responses to it" (Newell et al., 2021, p. 2). It means that in order to promote "more diverse understandings of 'climate justice' including those grounded in praxis", valuing diverse cultures and representations, power dynamics have to be defied and reshaped (Newell et al., 2021, p. 2). Aligned with Newell et al.'s (2021) transformative climate justice approach, we highlight the climate imaginaries' (Paterson, 2016) potential to mobilize collective meaning-making, and lived experiences (Riesto et al., 2022). Climate imaginaries refer to collective discourses that reflect aspirations for future visions and operate between action and imagination in response to climate risks (ibid.). However, Patterson (2016) argues that this transformative potential could only be reached if imaginaries "enable people to situate their current lives in their historical contexts in order to facilitate them imagining how those lives may be transformed" (p. 18).

Drawing on a social justice perspective that interconnects economic inequalities, lack of recognition, cultural and political exclusions, and distributional injustices

(Schlosberg, 2012), climate justice is a four-pillar concept (Newell et al., 2021): i) procedural, ii) distributional, iii) recognitional, and iv) intergenerational. In a nutshell, these four main dimensions of climate justice encompass: the *processes* of decision-making concerning climate change, the degree of equitable *distribution* of climate costs/burdens and solutions/resources, the *recognition* of different socio-cultural heritages, communities, and identities, and the assumption of responsibility towards future *generations*. These are not fixed categories, but rather heuristic and potentially overlapping dimensions – for instance, the inclusion and representation of viewpoints of immigrant-origin youth groups in climate adaptation politics may come as procedural, recognitional, and intergenerational forms of climate justice, with potential distributional outcomes. Still, and aiming at addressing the overtheorizing of climate justice and the lack of empirical accounts of it, this article contributes to a nuanced understanding of climate justice. Thus, we draw on the four pillars as analytical axes to explore the perceptions of young people and local significant actors in climate change politics.

Despite the wide body of literature that explores how young people relate to climate change (Bergmann & Ossewaarde, 2020; Zummo et al., 2020), and how climate activists work toward climate justice (Biswas & Mattheis, 2022; Thew, Middlemiss, & Paavola, 2020), little empirical research has analyzed whether and how the dimensions of climate justice echo on the ground (Diezmartínez & Short Gianotti, 2022) with non-activists young people. Based on climate justice and climate imaginaries conceptions, we aim to address this gap, focusing on youth participation opportunities in decision-making processes at a local level.

3 METHODS

3.1. Context

This article is part of a larger national research project [information omitted for anonymity]. The Project was developed in Northern Portugal between 2022 and 2023. The project grounds on partnerships with diverse Northern schools and one of its main phases, which is the development of 'Collaborative Climate Labs' that engage young students (from 7th to 12th grade), scientists, economic agents, policymakers, activists and NGO representatives into collective dialogues and practices towards local climate adaptation.

This article mobilizes data collected in two geographically different schools of the Norther of Portugal: one school in an inland-rural community (a village located in an agricultural region of the Northern region) and another school coastal-urban community (a city that is the third most populous municipality in the country). Additionally, the selection of these two schools rested on the fact that they have both

participated in all the sessions (three) foreseen within the 'Collaborative Climate Labs' development.

3.2. Research Aims and Design

This article's research design is grounded on a qualitative methodology aiming at understanding how the four pillars of climate justice resonate on the ground. For this, we explored whether and how aspects linked to this concept emerged in the youth and adult perspectives about climate adaptation in their local contexts. We conducted focus group discussions with young people and semi-structured interviews with adult stakeholders; that is, all participants in the Collaborative Climate Labs. For each method, scripts were previously developed as instruments for data collection. After selecting the two schools, and when the Collaborative Climate Labs ended, we carried out 16 interviews with the participating adult actors and 2 Focus Groups with the participating young students. .

The individual interviews with the local and regional actors who participated in the Collaborative Climate Labs), encompassed a guiding script covering two main themes: 1) Local climate adaptation policies; and 2) Climate imaginaries. Both were focused on understanding adults' perceptions of the role of young people in building present and future climate policies in their contexts, in articulation with the dimensions of climate justice. Similarly, the individual interviews conducted with teachers focused on 1) Climate-related present and future in the territory/community where the school is located; and 2) Young people's roles in building sustainable climate futures in the region (e.g., involvement in decision-making processes). Finally, the script supporting the focus group discussion focused on the young people's 1) Opportunities for participation, in articulation with the dimensions of climate justice; and 2) Perceptions of climate-related present and future in their contexts. Focus group discussions were used with the young students since similar studies show that this is the most suitable method to promote the young people's expression on their own terms (Malafaia et al., 2021), valuing the plurality breed from interactions between participants sharing common characteristics and experiences (Amado, 2014; Gatti, 2005). This method aimed at enhancing collective discourses about climate change within their territories.

3.3. Participants

In total, we conducted two Focus Group Discussions with 16 young students (16 to 18 years) from the selected schools; 12 online interviews with actors representing the local community and the academia (policymakers, economic agents, activists/NGO members, and scientists); and another 4 online interviews with teachers who accompanied the process of participation of young students. Table 1 includes information about the adult participants, while Table 2 characterizes the young students who participated in the focus group discussions.

Table 1. Characterization of the adult participants in the interviews

Participants' Role	Age	Gender	Social Context
Teacher	48	Female	Inland-Rural
Teacher	65	Female	Coastal-Urban
Teacher	45	Female	Inland-Rural
Teacher	55	Female	Coastal-Urban
Economic agent	66	Male	Inland-Rural
Economic agent	43	Female	Inland-Rural
Political agent	65	Female	Coastal-Urban
Political agent	58	Male	Coastal-Urban
Political agent	55	Male	Inland-Rural
Scientist	65	Female	Coastal-Urban
Scientist	62	Female	Inland-Rural
NGO member	54	Male	Coastal-Urban
Climate activist	27	Female	Coastal-Urban
Climate activist	24	Female	Inland-Rural
Representative of the regional political power	51	Female	Coastal-Urban
Representative of the regional political power	37	Female	Inland-Rural

Table 2. Characterization of the young participants in the focus group discussions

	Number of young students	Age	Context	Place of activities
Group A	All boys (10 young students)	16 to 18 years	Coastal-Urban	Library provided by the school
Group B	4 girls and 2 boys (6 young students)	16 to 18 years	Inland-Rural	Learning Lab provided by the school

3.4. Limitations

Acknowledging the well-known gender differences in youth political and civic engagement, including regarding climate-change topics, the gender imbalance in the focus groups' composition comes as a limitation. Even though efforts were made throughout the recruitment process to overcome the gender imbalance, different constraints prevailed: not only the original composition of the school classes previously involved in the Collaborative Climate Labs (the context of the study's recruitment) included few girls, but also the practical setbacks emerged at the time of scheduling the focus groups (with some participants not being able to attend, including the few female students). Future research should take the

gender balance in consideration when recruiting young participants. Moreover, the number of participants involved in this research should be taken into account, as it is not our goal to make generalisations, but rather to contribute to an empirical exploration of the climate justice concept, paving the way to further in-depth and locally grounded analyses of the meanings and experiences of young and adult actors in different territories.

3.5. Content analysis

The participation of both young people and adult stakeholders in this research was voluntary and all information about the procedure was duly presented beforehand. Furthermore, informed consents were signed by all participants, and, in the case of the minor-aged participants, their parents/legal tutors also signed the informed consents.
Both focus group discussions and interviews were audio-recorded and subject to verbatim transcriptions and, afterwards, to content analysis. For content analysis, we first carried out a floating reading. Even though initial categories were pre-defined based on the scripts, throughout the coding procedure – developed using the NVivo software – new categories emerged, combining both deductive and inductive analytical approaches. The categorization tree, initially created by the authors involved in the data collection, was subsequently object of inter-coding and revisions by the other authors, benefiting from collective discussions. Considering that similar topics were explored in both the interviews and the focus group discussions – e.g., how the conceptual pillars of climate justice locally resonate among youths and adults – it become clear throughout the analytical procedure that both the empirical corpuses converged towards the same categories. In the case of the categorisation of the focus group discussions, the interactive nature of the data was always preserved and coded in a way that the dialogues among participants were captured. As a result of the content analysis, which entailed the coding of the whole data, a category tree was constructed, comprising main categories and their respective subcategories (see Appendix for an overview of the analysis). While, for instance, the four pillars of climate justice constituted deductive categories, the sub-categories of the 'climate imaginaries' category were not anticipated and were defined and labeled after several rounds of inter-coders' discussions. In sum, a combination of deductive and inductive categories was created, following the phases of "1) pre-analysis; 2) exploration of the material; 3) processing of results, inference and interpretation" (Bardin, 2011, p. 121). It is, thus, understood that content analysis promotes more than description, producing inferences and interpretations and, eventually, "the explanation of phenomena both evident and latent in communication" (Esteves, 2006, p. 108). We aimed at a content analysis that could shed light on the linkage between concepts, meanings, and voices for the construction of new knowledge.

Notwithstanding our acknowledgment and discussion (see the theoretical framework section) of the holistic nature of the concept of climate justice (Newell et al., 2021) as composed of four interdependent pillars, for a more nuanced understanding of the empirical resonance of the concept, we sought to code the units of analysis in mutually exclusive content categories (Bardin, 2011). This article focuses on the findings of the two main analytical categories: i) Climate justice at the local level; and ii) Climate imaginaries. In the first category, we analyzed how the four pillars of climate justice empirically resonate with the perceptions and experiences of young people and adults; the second category entails how young people and adults envisioning climate futures and the connection to their present and past local realities.

4 FINDINGS AND DISCUSSION

We organize the findings' presentation according to the main analytical categories mentioned above and in a dialogic manner - articulating both young people's and adults' discourses.

4.1 Climate justice at the local policy level

Overall, the interviews with adults revealed some ambiguity: on the one hand, a recognition of the importance to incorporate the youth voices in the political decision-making process and, on the other hand, some vagueness and abstraction on how this is being done. Some of the adult participants have referred to the youth involvement in climate policy planning but failed to elaborate on the specific ways in which young people are included. In practice, the opportunities for young people to express their opinions seem to be scarce, with local political officials lacking clarity on whether and how young people are engaged in the decision-making processes. This is exemplified by the following two excerpts:

> The perception I have is that young people are being heard. I am not certain if this has been intentional for this area [of climate change]. (...) we are talking about seventeen municipalities, so I cannot have a perception beyond what I have already mentioned, that there is mobilization for action. They [young people] are called to position themselves, to say what is right, what is wrong. Specifically in terms of climate change, I do not know for sure. (Regional political agent)

> Regarding climate issues, I am not sure what the municipality is specifically doing. If a group of young people goes to the municipality with a proposal, they are certainly heard. Then, if the proposed measure is viable, I believe they will include it because they also like to involve youth. If it is not viable, they will explain why they cannot develop the project. But our municipality is very open.

> Through an appointment, a proposal can be brought to the education councilor without any problem, even through the school director. It is not a closed City Hall, it is an open City Hall. (Economic agent)

In contrast to the idea presented in the previous excerpts, which suggested that young people are "certainly heard," the young participants have a different perception. The young students associate the lack of participation in decision-making processes in local institutions, such as the City Council, as a reflection of the exclusion from other institutions, such as the school itself, where they consider that their perspectives and experiences are disregarded. There is a strong sense of mistrust regarding the opportunities available for effective participation in the school system, which extends to the formal political institutions:[i]

> **Moderator:** Do you feel heard by local politicians regarding these environmental issues?
> **Luisa:** No, nobody listens to us.
> **Bruno:** No.
> **Gustavo:** No.
> **All the girls:** If not even the school listens to us…
> **Gustavo:** We presented a proposal to our school board, and they don't listen to us. So, it's not the City Council of our town that going to listen to us.
> **Bruno:** Because it works like a ladder: students, teachers, management, then it goes up.
> **Beatriz:** Now imagine this with politicians. Do you think that a politician will want to hear our opinion or the opinion of another politician who is sitting next to him with an opposing opinion to ours? Do you think he will listen to us more or to the other politician?
> (Focus Group – Coastal-urban school)

> **Moderator:** You are bringing up various opinions, and I would like to know whether you think that your voices are heard in the political decisions that affect your city.
> **All:** No.
> **Jorge:** No, because many people think that we are young and not...
> **Duarte:** We are kids.
> **César:** We are not old enough.
> **Afonso:** "What do you know? What do you know?" That's it.
> **Jorge:** Exactly! That's it. We don't have...
> **César:** We don't have age, basically.
> **Jorge:** We don't have a say in the matter. (…)
> **Afonso:** Because we are too young. We don't have experience.

> **Jorge:** Because we are too young and don't have the ability to see these types of situations or because we still have a lot to learn to reach the level of those who have already learned a lot.
> (Focus Group – Inland-rural school)

Previous research studies point out the tendency of adult perspectives that responsibilise young people for their lack of civic and political participation (Malafaia et al., 2021; Andolina, Jenkins, Keeter, & Zukin, 2002). Our findings show that this is happening also concerning local climate change. Condemning youth for their passivity towards formal politics is not new (Henn, Weinstein, & Wring, 2002) as the normative vision of citizenship assigns an under-development condition to youth (Beane, 1990), which contrasts to their engagement, particularly with the socio-political dimensions of environmental problems, when true participatory opportunities are created (Marques, Malafaia, Faria & Menezes, 2020). Our analysis highlights a fundamental *lack of procedural climate justice* (Newell et al., 2021), as it demonstrates the lack of meaningful opportunities for young people's participation in decision-making processes, enabling them to actively convey their views. Our data indicate that adults do not even link the absence of young people in political decision-making processes to the lack of opportunities and spaces for effective political participation:

> There is no young voice in climate-related political decision-making. (…) Indeed, there is none. Young people are passive. (Representative of local NGO)

> If you ask me if I would like young people to intervene in a more active way, I would like it. However, nowadays, gathering young people, getting them to fight for causes and having them to share ideas with us is not easy. (Local economic agent and politician)

> They [young people] shouldn't be so afraid to actively participate in public life. (…) I may be mistaken about this, and there may actually be much more participation than I think exists. The idea I have, the feeling I have, is that they are being heard, yes. (...) [But] I think it's still on a limited basis. (Local political agent)

When we ask about other social groups' participation, not just youth, we notice that adults recognize a mismatch between public participation and climate-related political decision-making processes:

> The public is not the one who discusses things [in climate policies]. They are not even called. It is always restricted groups who discuss things. (Scientist)

> I believe that everyone is heard. There is a listening process, perhaps not very extensive, because we know that we will never get anywhere if we start listening to everyone... But there is a concern to discuss things locally. I think the municipality has that concern. (Local political agent)

Although young people may distrust local institutions, they appear to acknowledge the duty and power of the local government to put in place a just policy regarding the *distribution of community resources* in local climate adaptation measures. From the young students' perspectives, the government bears the responsibility of allocating resources to socially disadvantaged groups who may be less capable of defending themselves against the impacts of climate change at the local level. Not only do the young students identify these vulnerable groups in their communities, but they also reveal a perception that the allocation of resources by the government is unjust and, upholds other structures of inequality:

> **Moderator:** From these governmental decisions aiming at helping people adapt to climate change, who benefits the most?
> **Duarte:** People with fewer possibilities.
> **Jorge:** They [the Government] try to help those who have less. Or it seems like they try to help, but it ends up not leading to anything.
> **Moderator:** Who do you think benefits the most, then?
> **Francisco:** Larger companies.
> **Duarte:** No one is benefits.
> **Afonso:** The rich get richer, and the poor get poorer.
> (Focus Group – Inland-Rural school)

However, this identification of distributional inequalities is less conveyed by the young participants from the coastal-urban school, who seem more oblivious to the effects of climate change in their region. They fail to recognize whether particular social groups are disproportionately vulnerable to the hazards presented by climate change:

> **Bruno:** Our city doesn't have as much of a climate problem as in other countries, for example, in more northern countries. There, the temperatures are bad. It's sad.
> **Moderator:** So, you don't see this today? Do you not think that there are social groups that are already really affected by climate change in [your city]?
> **Bruno:** For now, I don't think so. The day will come, but for now...
> (Focus Group – Coastal-urban school)

As opposed to young students from the coast-urban school, we found that some adults from the same region are aware that the effects of climate change affect those with fewer resources more and that this phenomenon is already evident, for example,

among "people who live in the most poorly built projects" as an interviewed scientist said. But it is worth stressing that this relationship between the distributive dimension of climate justice and to housing problem's dimensions (namely, the energy poverty) was mainly articulated by activist actors - one from the Student Climate Strike and another from the Climate Rebellion movement.

> Energy poverty is another issue that is absurd here in Portugal. How is it possible that there is still so much energy poverty in Portugal nowadays, particularly regarding heating houses? Especially here in the North, where it is very cold in winter, and people suffer from harsh conditions inside their own houses... People without houses. (Climate Rebellion activist)

This activist discussed the housing issues in terms of distributive injustice, whereas the activist from the School Strike for Climate perceived the problem as a matter of discrimination, specifically in terms of lack of *recognition of different voices* of marginalized groups in local political decision-making processes:

> The issue of housing is indeed discriminatory. (...) Climate adaptation has not yet arrived for people [who live further away from the city center]. [The problem] is not just for people who do not have housing. Sometimes, [people] have it, but [the houses] are not suitable. It may be the condition of the housing itself, or the location of the housing. Sometimes it is necessary to make some transformations, adaptations, so that people [who live further away] have the same quality of life as people who are in the city center. (Student Climate Strike activist)

Deeply intertwined with both procedural and distributional justice, the young students highlight the subalternation of the Romani groups in local decision-making processes and thus, a lack of recognitional justice of their voices:

> **Moderator:** Do you feel that there is discrimination towards certain social groups in climate policy decisions in your city?
>
> **Jorge:** Oh, yes.
>
> **César:** Yes, definitely.
>
> **Jorge:** Sometimes the shack is the only thing that [roman] people have. (...) They just haven't had many opportunities. It's the famous golden cradle. Those who are born in a golden cradle don't have...
>
> **Silva:** So much concern.
>
> (Focus Group – Inland-Rural school)

At the same time, most of adult participants do not acknowledge any social or cultural discrimination in local climate policy decision-making processes:

> I don't see any differences. (...) I don't think there's a problem here, at least I do not feel that. (Local political agent)

The *intergenerational climate injustice* was also directly addressed by young people during the focus group discussions. Considering that this climate-justice dimension entails the idea that sustainable development can only be rooted in "the ability of current generations to meet their needs without compromising the ability of future generations to meet their own needs" (Newell et al., 2021, p. 7), the youth participants' discourses strikingly expose the older generations' indifference:

> **Moderator:** Do you think the way problems related to climate change are managed in the community is fair or unfair?
> **Tomás:** It's unfair. Because we, I assume, still have a lot of time to live and we're going to have to deal with a lot of things that older people don't care so much about. It's a bit unfair.
> **Afonso:** There's a lot of talk... There's a lot of people saying, "oh, when that happens, I won't even be here anymore." But there will always be the next person who will be here. So, they will have to deal with it.
> **Moderator:** Jorge, do you think it's fair or unfair the way...
> **Jorge:** Unfair. I have heard people say, "oh, the world has gone through worse things and yet it didn't end."
> **Duarte:** Oh, it's not like that. We are suffering the consequences.
> **Sousa:** Nobody cares about it.
> **Duarte:** We are suffering the consequences of other people's actions. (Focus Group – Inland-Rural school)

One of the students even asserts that compared to adults, young people are better prepared for how to deal with the impacts of climate change. The young participants say that their mindset is already adaptive-oriented toward climate change compared to current adults, which reveals optimism toward intergenerational justice in the future:

> **Gabriel:** Perhaps our generation is the one that is most educated towards this mindset that we have to do better and that we have to fix things when that are wrong. I think this mindset will pass on, and I believe that over the years, we will teach future generations.
> (Focus Group – Coastal-urban school)

In fact, Almeida (2000) stresses the negative correlation between age and environmental knowledge. To find solutions, one must conceive plural and creative answers that can contribute to sustainable civic practices that articulate knowledge and experience. Youth unpredictability and transience (Pais, Lacerda, & Oliveira, 2017) may well pave innovative ways of participating (Samuel, 2004) and inspire policies "that are not just tied to what is projected to be done and is not done" (Pais et al., 2017, p. 312). This opens up possibilities for social change if space and means are given to youth. However, as our data show, the perspectives of young people on climate policies do not

seem to be valued by some adults, who tend to portray youth as predominantly demotivated and discouraged in the face of the negative circumstances of our time.

While many young participants feel that older generations do not care about their views, adults often assume that young people are undriven or uninterested. This resonates with the literature on youth participation that shows that youth groups are often delegitimized on the assumption they are "apathetic" and "disengaged" towards civic and political issues (e.g., Delli Carpini, 2000; Zukin, Keeter, Andolina, Jenkins, & Delli Carpini, 2006). A Climate Rebellion activist argues that adults do not give youth and children the credit they deserve and fail to understand that it is the young people who will remain here when the older generations are gone. Despite these challenges, some young people keep a sense of hope and optimism about future political pathways:

> **Moderator:** Do you think you will be more affected in the future, by climate change?
> [All respond affirmatively]
> **Moderator:** And how do you feel about not being heard about it then?
> **Bruno:** I think it will have to be our turn to govern the country, right? It won't be the same politicians forever. So, someone from the next generation will have to come and put this on the right track, I hope.
> **Beatriz:** And maybe when our generation arrives, things will improve.
> (Focus Group – Coastal-urban school)

4.2 Climate imaginaries

Our analysis shows that as young people and adults attribute meaning to current and past experiences in their communities, they also envision more sustainable and just climate futures. Data showed that both generations express willingness to construct a more equitable future at the local level, even though their discourses oscillate between hopeful and pessimistic undertones. There seems to be a shared understanding on the need to promote transformations at different levels: i) individual, ii) local politics, iii) social paradigm and iv) formal, informal and non-formal education.

Regarding municipal politics, whilst young people seem to believe that shifts will only occur when the new generations hold institutional political power, adults believe that changes are not easy but must be made immediately. Diverse proposals for local political transformation were suggested by adults, including the creation of specialized political boards to tackle climate change at the local level able to bring about integrated strategic planning, and put forward effective measures regarding major economic actors. Neither adults nor youth referred to the promotion of greater involvement of socially, culturally, or politically marginalized communities.

Our analysis indicates that transformations regarding individual responsibility was more frequently emphasized by the participating adults than by young students. Still, adults acknowledged that individual behavioural changes need to be coupled with

significant community involvement. Non-governmental organization representatives further suggested that strengthening local community associations can facilitate collective transformations.

Although the participating students mentioned individual transformations less frequently, it is noteworthy that such discussions occurred:

> **Beatriz:** What I notice is that some [young people] still try, they pick up the garbage, put it in the trash can, but others don't care. Conclusion: I think it's something that still needs to be talked about more. Even though many of us still have this thought of "let's pick this up and put it in the trash that's right there" And I think we should try to get it into their heads more.
> (Focus Group – Coastal-urban school)

> **Moderator:** When you think about your city, what kind of future do you envision? (…)
> **Jorge:** People would have greater awareness, as mentioned, of climate change and how they could avoid doing many things that contribute to it, such as littering. They would make every effort to avoid such behaviors and understand that they are incorrect and that there are alternatives.
> (Focus Group – Inland-rural school)

A local political agent aligns with this idea, stating that "we have to educate ourselves to understand what we have to do in order to minimize the harmful effects on the environment". Other adults also believe that a change in lifestyle will be necessary and that young people will adapt more easily. In this sense, everyone agrees that innovative communication and education strategies are necessary. Our analysis showed that individual changes were strongly linked to broader transformations – shifts in social paradigms and changes in formal, informal, and non-formal education – as shown by the following excerpts:

> **Miguel:** Humans are like that, [they crave profit]...
> **Moderator:** If you had a company, wouldn't you have that concern?
> **Miguel:** I would. I would, but...
> **Duarte**: It depends on each person's character.
> **Moderator:** Does it only depend on character?
> **Miguel:** No. Of course, I would have it. But... I don't know.
> **Tomás:** No, you wouldn't.
> [silence]
> **César:** It's the mentality...
> **Moderator:** Yes, and that mentality... How can we change it?
> **César:** We can't. Completely.

> **Duarte:** Through situations like this [focus group discussion].
> **Tomás:** Knowledge.
> **Jorge:** Knowledge.
> **Francisco:** With knowledge. Studying, researching.
> (Focus Group – Inland-rural school)

Such 'mentality' of 'craving for profit', pointed out in the discussion's excerpt above, suggests the weight of the current imperative of capitalist accumulation that, as discussed by Brand and Wissen (2017), sustains 'the imperial mode of living', which feeds many overlapping crises and unjust social relationships, rendering the climate change as an ontological threat. Even through the participants in this study did not explicitly engage with anti-capitalist frames of the climate crisis globally, the very identification of the shortcomings regarding recognitional and distributional climate justice at their local communities point to the room available to deconstruct the existing narratives about the individualisation of the climate crisis. In this regard, changes in the social paradigms and the education systems – referred by the participants – are key. As shown in the next excerpt, in the young participants' viewpoints, the expectations are low concerning the role of current adult generations to perform significant transformations, once it is considered that they do not yet grapple the seriousness of the problem. On a more global level, this should make us reflect on the Western lifestyle, and how such normality is produced (Brand & Wissen, 2017) in the context of the climate crisis[ii].

> **Moderator:** What do you think it needs to change in your city for you to achieve the future you desire?
> **Gabriel:** Our parents and grandparents, in their fifties and sixties, are just beginning to understand this issue [climate change]. They no longer have time to do anything. They can do something, but I don't believe it will be as important as what we can do. (…) If we already have this thinking [concern about climate change], and we pass it on to our children, we are creating a society that is already thinking about preventing this. So that's already a way to improve.
> (Focus Group – Inland-rural school)

Both adults and young people participating in our study are aware that fair climate futures require structural changes that involve modifications in formal, informal, and non-formal education. It was significantly emphasized in the discourses of both groups that knowledge is key to changing individual habits and social paradigms, as well as creating community perception and potentially involving school activities. The school was frequently mentioned as a powerful arena for social transformation, as it engages young people in debates. In fact, education seems to have a key role in enabling access

to information that can enlarge citizens'/youth's involvement in the defense of ecological and global issues (Almeida, 2000). Moreover, and going beyond a rationalist-cognitive approach to climate issues, the young students emphasize the importance of in- and out-of-classroom experiences, connected to real-life issues and meaningful learning processes in their communities:

> **Bruno:** If we expose the young people more to the problems of the world, and really show them what is going on… Nowadays I understand that it is easy not to believe in something, because there is always a lot of information going around.
> **Luísa:** School field trips would help young people see a real part of it, not just through the internet.
> (Focus Group – Coastal-urban school)

Recognizing the gap between knowledge and action, one of the students pointed the insufficient individual knowledge to act on the problem:

> **Jorge:** Having more knowledge about things, people may or may not adapt to it. That's a reality. Because there are people who want to know and other people who don't want to know, whether they have knowledge or not. And that's it. By providing knowledge to more people, our city could improve, or it could stay the same.
> (Focus Group – Inland-rural school)

Adults have different views on the role of young people in building fairer futures. On the one hand, they are unanimous in considering that hope lies with young people. On the other hand, some adults discredit young people by asserting that (i) some of them do not care about climate change, and many do not even notice it; (ii) or even when they are aware, they contradict themselves by not being willing, for instance, to reduce their consumption patterns.

While some discourses underline the need to "involve students in these issues" (Teacher), as they "must have a seat, they must be called in, they must be recognized, and they must fight " (Scientist), others highlight that the role of young people in building more sustainable futures need to encompass the responsibility of policymakers and educators in "attracting youth" (Economic Agent), and secure them "a seat in the decisions that are made at the local, regional, national and international levels" (Scientist). Finally, there is also the reference to the "strategic potential" that lies in the ability of young people to believe that they can change the world: "If I start to provide space for youth to truly believe they can change the world, then there is a potential for action, an extraordinary force that has not been properly mobilized" (Regional political agent).

In their turn, the young people's envisioning of climate futures includes the need to support the older generations in accessing ampler information, such as the farmers and grandparents, as discussed by the students at the countryside school:

> **Moderator:** So, you're saying you could help your grandparents [who are farmers], is that it?
> **Afonso and César:** Yes.
> **Tomás:** Yes. With information.
> **Jorge:** Because nowadays (...) there are many things that have changed in terms of agriculture and they [grandparents] may not know. We have this information and we can show them what has changed, what has not changed, what is right, what is wrong, because sometimes even years of experience...
> **Afonso:** ...Do not determine what is right or wrong.
> **Jorge**: ...Do not determine whether a person knows or not. Because nowadays, especially nowadays, without studies a person ends up not knowing a lot of things.
> (Focus Group – Inland-rural school)

Similarly, the coastal-urban school youth participating in this study also talk about the lack of information, rooted in what they consider to be a failure from traditional media in communicating climate crisis, without any problematization of the phenomenon:

> **Luisa:** (…) for example, when very hot temperatures come. You often see in the news that we should put on sunscreen and wear a hat and whatever. But they do not really talk about climate change, and what we should do about it. Which is something that would reach the elderly, because TV is pretty much what they see.
> **Gabriel:** One thing I notice sometimes, when I'm having dinner with my family, and the news are broadcasted, is that, (...) the title is "increasingly hotter temperatures" or something like that. I only hear the journalist saying that the temperatures will be warmer. And there is no one explaining explain why this is happening. They just say it's warmer. But why is it warmer? And maybe that's why there are also people who can't understand what's going on.
> (Focus Group – Coastal-urban school)

Issues related to urban planning and energy transition were also topics of discussion on imagining aspects that need to change in the future of their regions:

> **Moderator:** How do you envision [your city] ten years from now?
> (...)
> **Bruno:** From a geographic point of view, our city will be well planned. (...) The big problem is that… Without energy there's nothing, whether it's food for humans, or electricity, without energy you can't do anything. (...) Portugal has a

bad time dealing with energy. Portugal produces clean energy, but it's not enough for the whole country. We buy a lot from other countries. And then [our city] obviously ends up suffering from this too, because it is one of the biggest and most popular cities in the country. But it's a city that, if all goes well, in 2032, is easy to optimize. So, I see [our city] in a good place.
(…)
Gabriel: I believe it will evolve a lot in the sense that other people will be running this, who are closer in age to us, and, given that, at least I notice, maybe our generation is the most educated to have this thought, that we have to do better.
(Focus group – Coastal-urban school)

5 CONCLUDING DISCUSSION

Academic literature on climate justice is predominantly focused on the theorization and conceptual discussion of the term, lacking empirical exploration, namely in relation to local and mundane contexts and people, which undermines the practical value of the concept and its adherence to climate policymaking levels (Hughes & Hoffman, 2020; Newell et al., 2021; Schlosberg & Collings, 2014). Our aim was to address this gap by investigating whether and how the dimensions of climate justice echo in practical contexts. We started by analysing how the dimensions of climate justice resonate (and acquire meaning) on the ground, based on both adult local representatives' and young students' views, focusing on their assessment of youth participation opportunities in decision-making processes at a local level. Then, we explored how climate futures are envisioned by the diverse participants and how imaginaries are built, necessarily rooted in the objective and subjective life conditions in their regional and local contexts. Our analysis showed that despite relevant community stakeholders (e.g., scientists, activists, economic agents, and policy makers) recognizing the importance of incorporating youth voices in climate policymaking, there is a mismatch between the rhetorical and practical levels. The perceptions and experiences of young students indicate that unequal access to participation in decision-making processes begins in school and is reflected in institutional policies, which can be framed as a matter of procedural climate injustice (Newell et al., 2021). This is consistent with prior research in the young participation field (Davies et al., 2016; Thew, 2018) that indicates that young people do not feel heard and considered about processes affecting their lives, including (and primarily) in the school arena (Malafaia, 2022). The procedural dimension is linked to intergenerational climate justice (Newell et al., 2021), which has diverse meanings for adults and youth. Adults do not seem to acknowledge their responsibility for climate change's future impacts, blaming young people for their passivity and lack of drive. In contrast, young students recognize intergenerational

injustice and view themselves as having a more aware attitude towards climate issues, believing that significant and structural changes will only occur when new generations assume positions of institutional political power.

When it comes to the recognitional dimension of climate justice - which encompass the representation of voices from socially, culturally, or politically marginalized groups in decision-making - our findings reveal that few adults recognize the discrimination faced by social and culturally marginalized groups in their communities. However, among the adults and youth who do recognize these differences, the Romani population is cited as a primary example, which is indeed a markedly marginalized group in Portugal (Mendes, Magano, Mourão, & Pinheiro, 2023). It is interesting to note that this perception of the under-representation of culturally and socially diverse voices in political spheres is particularly striking in the young people’s discourses, namely in the rural setting.

Although some adults acknowledge that individuals with fewer financial resources in their communities are disproportionately affected by climate change, they do not perceive the need for political participation opportunities that guarantee the central role of these groups in climate policymaking. Some young students recognize that certain social groups are already experiencing uneven impacts of climate change, while others, particularly coastal school students, have not yet identified these disparities in their communities. In contrast, inland school students not only perceive this distributive inequality but also believe that it is the government’s responsibility to promote the availability of resources to assist people in protecting themselves from climate risks at the local level, particularly the poorest and the farmers, who represent some of the young interviewees’ family members. Similar to the dimension of procedural justice, regarding which the adults expressed a lack of clarity regarding opportunities for participation in decision-making processes, there is no explicit recognition that institutional settings for the involvement of diverse and marginalized groups in climate policymaking even exist. If they do exist, as few local representative actors argue, there is also no clear indication that they indeed guarantee the inclusion of marginalized groups, whether they are discriminated against or financially disadvantaged.

Activists have shown the greatest awareness that both housing and energy poverty are issues associated with both recognition and distributive dimensions of climate justice in Northern Portugal. This is an acknowledgment that not only do poorer people already lack resources to protect themselves from the effects of climate change but also culturally marginalized groups are already affected. This relationship between the two dimensions demonstrates the intersectionality of the conceptual pillars of climate justice (Newell et al., 2021). These findings align with recent literature that highlights the restricted public involvement in adaptation planning (Hügel & Davies, 2020), the importance of vulnerable populations in political participation settings (Adger et al.,

2011), and the insufficient representation of youth in climate policy discussions (Helliesen, 2022). Additionally, our results align with Newell and colleagues' (2021) argument for the necessity of transforming power dynamics towards an empirical approach to climate justice (Newell et al., 2021). More broadly, the data allows us to reflect on the ways of life within the current political system, which often lead individuals to associate the origin and solution of the climate crisis more with the individual sphere and less with the political and collective levels (Brand & Wissen, 2017).

The fact that locally relevant adults from different sectors of society emphasize the need for structural, paradigmatic, and individual changes, encompassing educational contexts, in order to build a fair climate future, shows that they identify the need for a systemic political transformation, as argued by Newell and colleagues (2021). However, structural inequality also encompasses symbolic adultism practices that, in our data, are mirrored in the ambivalent ways in which young people talk about themselves: while they recognize their role in building a more just future in their communities (claiming to have a mentality driven towards climate adaptation in comparison to older generations), they hold back when called to imagine themselves as holding institutional political power (referring immaturity, and postponing the responsibility of the future). This is in line with previous research pointing to the young people's internalization of adult-centric narratives on youth political immaturity (e.g., Ribeiro, Malafaia, & Ferreira, 2022; Malafaia et al., 2021).

Vromen and Collin (2010) note that limited agency and persistent structural barriers highly restrict participation. Therefore, we emphasize the importance of supporting youth agency, as both a right and a necessity (Gibbons, 2014), and highlight the role of schools in this endeavour (Marques et al., 2020). Gasparri et al. (2022) argue that effective and just local climate policies require integration and a holistic approach, achieved through the active involvement of the most vulnerable, including youth. To address climate injustices, it is necessary a combination of strategies (Newell et al., 2021), and an understanding of citizenship as a practice that encompass an intentional engagement with the political character of structural social problems (Malafaia, Luhtakallio, Menezes, & Neves). Thus, we suggest that local institutions, such as municipalities and schools, create participatory spaces for the voices of the most vulnerable groups to be heard in policymaking, focusing on securing their active positions regarding climate change. To achieve this, youth-friendly spaces and opportunities should be created to foster actionable climate solutions (Gibbons, 2014), and legal instruments may be necessary to ensure this (Davies et al., 2016). To promote climate justice, we recommend contextual changes that involve the participation of institutions like schools and municipalities, adopting a transformative, bottom-up approach to policy implementation. This approach is consistent with prior works by Newell et al. (2021), Delicado et al. (2017), and Green et al. (2022), which highlight the

transformative potential of diverse participation in local policymaking. We assert that this potential can be strengthened by a climate imaginaries' approach, which values lived experiences and collective meaning-making (Riesto et al., 2022).

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ENDNOTES

[i] All participants' names are fictional, to ensure anonymity.

[ii] The post-colonial perspectives and the discussion of the intricate sociopolitical and economic injustices and disparities of the Global North/South that feeds the current climate crisis are of utter importance. Yet, it is important to stress that this study is part of a nationwide funded project focused on exploring local perspectives on climate change and climate adaptation. Therefore, our data collection instruments aimed at mainly exploring the community-based experiences and how climate justice is considered and can be enhanced in local territories. Likewise, how the participants perceived and elaborated climate justice dimensions - e.g., at more individual/personalised and/or more collective/structural - were object of analysis.

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Authors' Biographies

Juliana Diógenes-Lima is a Master Student in Education Sciences at the Faculty of Psychology and Educational Sciences of the University of Porto (FPCEUP) and Research Fellow at the ClimActiC Project "Connecting Citizenship and Science for Climate Adaptation" developed within the Centre for Research and Intervention in Education (CIIE-FPCEUP) at the University of Porto. Her research interests relate to climate justice, education and communication.

Sara Pinheiro is a Postdoctoral Researcher at the ClimActiC Project "Connecting Citizenship and Science for Climate Adaptation" developed within the Centre for Research and Intervention in Education (CIIE-FPCEUP) at the University of Porto. Her research interests relate to European citizenship, formal and non-formal education, vulnerable and non-dominant ethnic groups. She is full member of the Centre for Research and Intervention in Education (CIIE).

Joana P. Cruz is Postdoctoral Researcher at the Centre for Research and Intervention in Education (CIIE-FPCEUP), at the University of Porto, hired under the CIIE's multi-annual programme (project no. UIDP/00167/2020), funded by the Portuguese funding agency for science and technology (FCT). Her research interests relate to active

citizenship, arts-based research and critical pedagogy. She is full member of the Centre for Research and Intervention in Education (CIIE).

Carla Malafaia is Principal Researcher at the Centre for Research and Intervention in Education (CIIE-FPCEUP) at the University of Porto, funded by the Portuguese funding agency for science and technology (FCT - CEECINST/00134/2021). She is member of the Center for Sociology of Democracy (CSD), at the University of Helsinki, and her research interests include youth citizenship, social movements, visual politics, political education and community intervention.