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Perspective paper

Mathematics education research at the margins and the "right to care"

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Abstract: Who has the right to research marginalised learners and communities, and what makes this research ethically defensible? This conceptual paper argues that the answer to the above cannot rest on researcher identity, good intentions, or advocacy claims alone. In mathematics education, assumptions of neutrality can obscure how classrooms, curricula, assessments, and notions of ability reproduce exclusion. Care must therefore be understood as a relational and political practice. Drawing on care ethics, positionality scholarship, participatory and decolonial traditions, and equity focused mathematics education research, I shift the debate from identity-based permission, meaning who may research whom, to relational responsibility, meaning how researchers use authority, represent others, distribute benefits, and remain accountable for the knowledge they produce. I distinguish among caring about, caring for, and caring with marginalised communities, and propose seven commitments for accountable care: reflexive positionality, intersectional attentiveness, epistemic humility, non-extractive benefit, participatory accountability, antideficit representation, and institutional responsibility. The paper concludes that the right to care is neither an entitlement conferred by identity nor a virtue guaranteed by good intentions. It is an ethical standing continually earned through humility, reciprocity, and answerability.

Keywords: care ethics; mathematics education; marginalisation; positionality

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1 Introduction

Since the 2000s, equity, social justice, marginalisation, and inclusion have become increasingly prominent in mathematics education research (Gutiérrez, 2013). This prominence builds on earlier sociopolitical work in the field (e.g., Frankenstein, 1983; Skovsmose, 1994) and is reflected in dedicated conferences, such as *Mathematics Education and Society*[1], held since 1990; edited volumes (e.g., Bartell, 2018; Xenofontos, 2019); and journal special issues (e.g., Abtahi & Planas, 2024; D'Ambrosio et al., 2013; Gates & Jorgensen, 2009; Martin et al., 2024; Xenofontos & Nolan, 2023). This attention reflects mathematics education's expansion beyond cognitive and sociocultural accounts of learning, achievement, curriculum, and instruction to include the sociopolitical conditions

[1] https://mescommunity.info

through which learners are recognised, supported, excluded, or made vulnerable. Research on marginalisation in mathematics education is therefore a theoretical, methodological, and ethical concern (Chen & Horn, 2022; Dubbs, 2020; Gutiérrez, 2022).

This paper begins with a difficult question: which researchers are perceived as having the right to care about marginalised groups in mathematics education? The question arose during a conversation with a PhD candidate at a conference. The candidate recounted an earlier discussion with an academic who identified as a member of a particular marginalised group. The candidate, who did not belong to that group, had expressed interest in conducting a self-study examining how to challenge their own perceptions of it. They wanted to investigate how their assumptions and practices as a mathematics teacher and researcher might contribute to marginalisation in the classroom and how they might begin to unlearn those practices. The academic had told the candidate that they had no right to pursue such a topic. Reporting the encounter, the candidate described it as "a denial of [their] right to care", a phrase that inspired the title of this article. This incident points to a genuine ethical tension. Serious concerns arise when researchers study marginalised communities from outside, especially when claiming to help, represent, or create space for the voices of those communities to be heard (Agyeman, 2008; Parson, 2019; Yip, 2024). Such research can reproduce deficit narratives, speak over already vulnerable communities, or turn others' struggles into academic capital. Yet arguing that researchers should not engage in research concerning marginalisation merely because they do not belong to the group concerned, or do not occupy a similarly marginalised position, may discourage researchers in comparatively privileged positions from examining and changing the assumptions and practices through which they contribute to marginalisation. Ethical caution can then become a means of avoiding responsibility for scrutinising one's own exercise of power and for changing the institutional and pedagogical conditions that sustain exclusion. This tension is especially consequential in mathematics education, where claims of neutrality, objectivity, and ability can obscure relations of power.

I frame the problem in terms of what ethical care requires, rather than who has the right to research, when 'who' entails identity politics. This distinction matters because research involving marginalised learners is often justified through concern, inclusion, or equity, while care itself remains unscrutinised. A researcher may genuinely care about marginalised learners yet reproduce harm when care remains a moral intention rather than an accountable relation. Care becomes extractive when claimed as benevolence while responsibility, reciprocity, and sustained attention to who benefits remain underdeveloped (Jorgensen & Graven, 2022; Parson, 2019). To examine this tension, I draw on care ethics, positionality scholarship, participatory and decolonial research traditions, and equity focused mathematics education research. Together, these bodies of work resist unnuanced answers based on identity politics about who may research marginalised groups and instead direct attention to the conditions under which such engagement can be made ethical.

The paper treats researcher identity as significant while recognising its limits. Shared identity with participants can support ethical research but does not guarantee it. Outsider status can take ethical risks but does not make research inherently unethical. Positionality is fluid, relational, and shaped by institutional power (Yip, 2024), while researchers exercise authority through their control over research questions, methods, analysis, representation, and publication (Parson, 2019). Marginalised researchers studying their own communities may also be viewed as biased or overly invested, even when their lived experience provides genuine epistemic insight (Thai & Grand'Pierre, 2026; Veldhuis, 2022). Rather than deciding who has the right to care, I ask what such a right requires. More specifically, I ask how researchers can engage with marginalisation without paternalism or extraction, and how mathematics education research can become accountable to the communities it concerns. This paper shifts attention from identity-based entitlement, meaning who has the right to research whom, to relational responsibility, meaning how researchers practise care through humility, reciprocity, and accountability. As a conceptual essay, it sets forth the ethical problem of care, distinguishes among caring about, caring for, and caring with marginalised communities, and proposes seven commitments through which researchers and institutions can examine whether equity focused work is accountable rather than extractive.

2 Mathematics education, marginalisation, and the myth of neutrality

Before addressing care, positionality, and researcher responsibility, it is necessary to situate the problem within mathematics education. The ethical question of who has the right to care arises in a field where mathematics is often imagined as neutral, universal, and detached from cultural, social, and political life (Barton, 1996; Jaworski & Phillips, 1999). This myth of neutrality not only misrepresents mathematics as socially detached but also makes apparent ways in which inequality is perpetuated. When mathematical success is understood mainly as a matter of individual ability, effort, or access to appropriate instruction, structural questions are consequently obscured from recognition. Variation in participation, achievement, or recognition is then attributed to learners, families, languages, or cultures rather than to the institutional and pedagogical arrangements through which mathematics is taught and valued.

Marginalisation enters mathematics classrooms through ordinary practices, including curriculum, tracking, teacher expectations, classroom discourse, assessment, language norms, and dominant ideas about mathematical ability. These practices help determine whose knowledge is recognised, whose reasoning is valued, and who is positioned as mathematically capable or deficient (Battey & Leyva, 2016; Chen & Horn, 2022; Martin, 2012; Xenofontos & Hizli Alkan, 2022). Being marginalised leads therefore not only to being excluded from mathematics but also becomes a matter of how mathematics education defines legitimate participation, competence, and success. Such processes are

rarely experienced through a single axis of difference. They are produced through overlapping classroom expectations, research framings, and broader social narratives about who belongs in mathematics. For instance, girls may still be positioned as less "naturally" mathematical or become less visible in classroom participation (Foyn et al., 2018; Hafeez & Xenofontos, 2024). Pupils' experiences may also be shaped by heteronormative assumptions in mathematical tasks and interactions (Moore, 2021; Leyva, 2017), racialised or cultural deficit narratives that portray ethnically minoritised learners' participation as a problem requiring correction (Khilji & Xenofontos, 2024; Martin, 2019; Stathopoulou & Kalabasis, 2007), and narrow language expectations that overlook the mathematical experiences multilingual learners bring to the classroom (Chronaki & Planas, 2018; Moschkovich, 2018; Ryan & Källberg, 2026). Similar patterns arise when disabled pupils are understood primarily through deficit rather than through access, participation, and recognition (Cascales-Martínez et al., 2017; Watson & Gable, 2013), and when pupils from low socioeconomic backgrounds are seen as lacking the dispositions or cultural familiarity associated with mathematical success (Gates, 2019; Xenofontos & Hizli Alkan, 2022). Exclusion is thus produced through the norms by which mathematics classrooms define ability, normality, language, participation, and success, rather than residing naturally in particular learners or social groups. These forms of marginalisation are distinct, and the examples offered here are selective rather than exhaustive. Nevertheless, they reveal a recurring logic: dominant norms appear neutral, while learners are judged according to how closely they approximate them.

Marginalisation is also rarely produced through one variable alone. Learners' experiences are shaped by intersecting structures of race, language, gender, sexuality, class, disability, and coloniality. Analyses of exclusion must therefore attend to how these categories interact. Gender and socioeconomic status, for example, may combine to shape girls' self-perception, participation, and sense of belonging in mathematics (Paulsen et al., 2025). Language in mathematics education is similarly entangled with racism, coloniality, and linguicism in ways that require more than a single axis analysis (Leyva & Joseph, 2023), while curricula may reproduce heteronormative assumptions through binary constructions of gender, sex, and relationships (Parise, 2021). The central point is that marginalisation is produced through the norms, categories, and assumptions by which mathematics education decides who is capable, legitimate, and belonging. These examples show how marginalisation can become embedded in mathematics education when dominant norms remain intact, unquestioned. This returns the discussion in this paper to care. Asking who has the right to care in mathematics education research also means asking who is responsible for exposing the forms of power that mathematics education routinely conceals and perpetuates, especially when researchers claim to act in the interests of marginalised communities.

3 Care as political, relational, and intersectional: from intention to accountable practice

In this paper, care is understood as extending beyond empathy, kindness, or personal concern. This point requires emphasis because caring is easily assumed to be inherently good. A researcher may sincerely care about marginalised learners while reproducing unequal power relations, extractive practices, deficit representations, or epistemic authority over the communities they claim to support. Care is therefore politically charged. It can express an ethical orientation, but it can also legitimise research that speaks for, controls, or benefits from marginalised others. Care ethics scholars conceptualise care as a relational and situated practice involving attentiveness, responsibility, competence, responsiveness, and the ongoing work of maintaining and repairing the conditions that make life possible (Fisher & Tronto, 1990; Held, 2006; Tronto, 1993). The question is therefore not simply whether researchers care, but how their care is positioned, authorised, and made accountable within unequal research relations.

Care ethics shifts attention from abstract principles and detached impartiality toward interdependence, responsibility, and situated judgement (Koggel & Orme, 2010). When care is understood mainly as a matter of individual morality, the ethical researcher is rendered as someone with good intentions, and scrutiny of power relations may end too quickly. When care is understood relationally, ethical responsibility depends not only on intention but also on how researchers' decisions and actions affect marginalised participants and communities, particularly within relations in which researchers possess greater institutional, interpretive, or professional power. Researchers decide what is recognised as a problem, whose experiences merit documentation, which evidence is treated as legitimate, and how communities are represented (Parson, 2019). These decisions can reproduce harm by silencing participants, reinforcing deficit accounts, or concentrating authority and benefit in the hands of researchers; alternatively, they can create conditions for recognition, accountability, and transformation. Leget et al. (2019) argue that care ethics are valuable because they bring ethical reflection into concrete research practices, including framing, recruitment, data collection, analysis, writing, citation, authorship, dissemination, and accountability, rather than treating care as an abstract rule imposed from above.

This relational account reveals how ordinary academic practices can make research extractive. Many researchers with good intentions, myself included, must confront discomfort and move beyond it to learn how to share power/authority, access and academic opportunity equally. A researcher may care about marginalised learners while working within systems that benefit the researcher more than those whose experiences enable the research. Selecting a marginalised group, collecting its members' experiences, interpreting them through academic theories, and gaining recognition from published findings can convert those experiences into academic value while offering participants little authority, benefit, or recognition, disabling participants' potential as active agents.

Parson (2019) exposes the extent of researchers' control over how problems are framed, who participates, which questions are asked, how responses are interpreted, and how findings are written and circulated. Research motivated by practices of social justice can limit participants' agency when their experiences are organised primarily around the researcher's agenda. A researcher may claim to "give voice" to marginalised learners while still deciding when, where, and how that voice becomes meaningful (Lundy, 2007; Spyrou, 2011).

In mathematics education, this risk is intensified because deficit narratives can appear to be neutral descriptions of achievement, participation, or ability (Adiredja & Louie, 2020; Louie, 2017). Drawing on Bourdieu, Jorgensen and Graven (2022), they describe educational research as a field with its own rules, rewards, and forms of capital. Researchers learn which theories, methods, publications, and grants are valued, but these academic expectations may remain distant from the needs and rhythms of the communities studied. Research may be rewarded within universities while remaining weakly accountable to the learners, teachers, and communities it concerns. Care becomes extractive when research turns marginalised learners into evidence of a problem while neglecting the institutional, historical, and pedagogical conditions that produced it (Jorgensen & Graven, 2022). Formal ethical approval is also insufficient. A study may use consent forms, anonymised data, and secure storage while remaining extractive in orientation. University ethics procedures therefore require supplementation when research occurs in marginalised communities, as local norms, histories, relationships, and expectations carry equal weight (Guillemin & Gillam, 2004; Kelley et al., 2013). Participatory language demands similar caution. Atkins (2013) describes research designed as work with, rather than on, marginalised learners while acknowledging that ultimate control remained with the researcher. Participation does little to redistribute power when authority remains in familiar places. Naming participation without examining where authority lies can itself become extractive.

Care ethics also requires an intersectional account of power, a demand I take seriously here. Although care ethics claims to be relational and sensitive to context, it may reproduce exclusion when intersecting systems of power remain insufficiently theorised. Hankivsky (2014) argues that care ethics requires explicit intersectional attention, particularly when gender remains its dominant analytic lens and race, class, sexuality, disability, coloniality, or indigeneity are treated as secondary. This is a serious limitation for mathematics education research, where marginalised learners are heterogeneous. Treating marginalisation as a single condition risks assuming that one form of support suits everyone. Raghuram (2016) extends this critique by arguing that care ethics must be considered beyond the Global North because its meanings and practices are shaped by migration, colonial histories, global inequalities, kinship, and institutional arrangements. Mathematics education is similarly organised through global hierarchies of knowledge. Theories, methods, and publication norms travel from dominant academic centres to other contexts and may be applied with little attention to local histories, languages, epistemologies, or educational traditions (Darragh et al., 2024; Valero, 2008).

Paternalism can therefore persist despite good intentions, and recognising this possibility is among the more uncomfortable demands of this paper.

These concerns clarify the distinction between caring *about*, caring *for*, and caring *with*, which guides the argument that follows. Caring *about* injustice means recognising and being troubled by it, although such concern may remain distant, abstract, or aligned with the researcher's professional interests. Caring *for* suggests active support, representation, or intervention, but also carries risks. It can become paternalistic when researchers assume authority over what participants need, how their experiences should be interpreted, or what changes would be meaningful. This risk is especially pressing when research crosses unequal institutional and geopolitical contexts. Caring *with*, by contrast, understands care as relational, situated, and accountable. It asks how knowledge is produced, whose voices shape the research, who benefits, and whether the work challenges or reproduces the conditions of marginalisation it identifies (Parson, 2019; Jorgensen & Graven, 2022). The right to care is therefore something researchers practise rather than possess through good intentions. It is negotiated through relations of responsibility and requires accountability within the systems of power and knowledge that make research possible.

4 Positionality, insider/outsider status, and the burden of representation

Positionality scholarship begins from the premise that researchers are situated knowers rather than neutral observers. Their identities, histories, theoretical commitments, institutional locations, and social power shape how research is imagined, conducted, interpreted, and circulated (Secules et al., 2021). Researchers help define problems, select participants, choose methods, interpret data, represent experiences, and determine where and how findings are shared (Parson, 2019). Positionality therefore is not limited to who researchers might be. It also involves what they can do within research relations, how their location (e.g., geographical, institutional) shapes what they notice, ask, know, and communicate, and how participants respond to their presence and authority (Yip, 2024).

If care can become extractive, a reasonable question is whether some researchers are better positioned than others to study marginalised groups. This question is often framed through insider and outsider status. An insider researcher broadly shares an identity, experience, community, or social location with participants, while an outsider enters the research relation from a different position. This distinction matters because shared experience can support trust, rapport, and interpretive depth, while distance can increase the risk of misrepresentation, paternalism, or unequal power relations (Parson, 2019). Yet ethical positioning requires more than a simple distinction between proximity and distance. Identity proximity does not dissolve power, and identity distance does not make ethical research impossible (Snidman et al., 2025). Insider and outsider positions are relational, partial, and shifting. Researchers must therefore examine how their identities,

assumptions, and institutional authority shape what they can know, how they interpret participants' experiences, and how they represent them (Yip, 2024).

Insider and outsider positions are better understood as fluid, situated, and negotiated rather than fixed. Researchers may be marginalised in one context and privileged in another. They may share one aspect of identity or experience with participants while differing in relation to class, race or ethnicity, language, sexuality, (dis)ability, religion, academic status, or institutional authority. Such partial proximity may enable researchers to recognise particular cultural references, experiences of exclusion, or community-specific ways of interpreting mathematics education, while still leaving them liable to misunderstand experiences shaped by identities, histories, or power relations they do not share. Positionality is produced through relationships, interactions, and power dynamics, and may shift within the same study (Yip, 2024). This is particularly important in mathematics education research because mathematics is often treated as culturally neutral even as educational practices reproduce dominant assumptions about ability, language, gender, sexuality, race, class, and belonging. Research on linguistic justice and heteronormativity shows that power often operates through practices presented as ordinary, objective, or natural, including language expectations, binary constructions of gender and sexuality, curricular examples, recognition practices, and assumptions about who is valued as an authorised knower (Leyva & Joseph, 2023; Parise, 2021). Intersectional research in science education similarly shows how gender, religion, ethnicity, social class, and recognition shape whether minoritised students are positioned as legitimate participants in scientific fields (Avraamidou, 2020).

Researchers studying marginalisation in mathematics education must therefore examine their own identities in relation to those of the participants, as well as the assumptions they bring to the study about mathematics, standards of normality, ability, and justice. Positionality should extend beyond a brief autobiographical reflection at the beginning of a paper. It should shape study design, problem framing, theoretical choices, participant relationships, data interpretation, and dissemination (Parson, 2019; Secules et al., 2021). Reflexivity is a continuing practice of examining how assumptions, cultural standards, institutional authority, and methodological choices affect what becomes knowledge (Yip, 2024). A positionality statement that leaves research practice unchanged risks becoming performative because it signals awareness while leaving authority, interpretation, benefit, and accountability distributed in familiar ways (Parson, 2019; Secules et al., 2021).

The counter-assumption also requires scrutiny, namely that identity proximity should determine who is expected to undertake legitimate research concerning marginalised communities. Privileged researchers speaking for less privileged groups can cause real harm, but placing disproportionate responsibility on marginalised scholars to research, explain, or represent their own communities also creates ethical and intellectual problems (Snidman et al., 2025; Veldhuis, 2022). This pressure may operate through assumptions that lived experience confers automatic expertise, repeated expectations to undertake identity-related research or service, or the treatment of individual scholars as

representatives of an entire group. It can restrict intellectual freedom by narrowing the range of topics marginalised researchers are perceived as entitled to pursue, while also adding representational, emotional, and professional labour for those already navigating marginalisation. It may also leave some forms of marginalisation underexamined when responsibility for addressing them is concentrated among a comparatively small group of scholars rather than shared across the wider field. Credibility politics compounds this burden. Researchers studying their own marginalisation may be recognised as having particular standing and commitment while simultaneously being treated as biased or overly personally invested (Thai & Grand'Pierre, 2026; Veldhuis, 2022). Research on stigmatised groups or topics can also create professional, relational, and emotional costs that are unevenly distributed among researchers (Shor, 2026; Veldhuis, 2022).

The question, then, is how researchers practise care responsibly across insider and outsider positions. Shared identity may provide experiential and epistemic insight, but it does not by itself guarantee ethical care; similarly, outsider status may create particular risks without making responsible research impossible. What matters is how researchers acknowledge, negotiate, and make their positions accountable in practice. They must ask what power they hold, whose knowledge they treat as authoritative, how their interpretations may silence or distort participants' meanings, what risks the research creates, who benefits, and who remains accountable after publication (Parson, 2019; Secules et al., 2021; Snidman et al., 2025; Yip, 2024). These questions move the discussion beyond treating identity as a sufficient basis for either permission or prohibition and toward examining how ethical responsibility is enacted within unequal and shifting research relations. Positionality is therefore not a solution to the problem of care, but the beginning of a responsibility to care differently.

5 Seven commitments for accountable care in mathematics education research (and beyond)

Caring *with* is the ethical orientation proposed in this paper. The next task is to consider how such care can be recognised in research practice. The purpose of this section is not to decide, once and for all, who is allowed to research whom. That would reduce a relational ethical problem to a rule of permission. Instead, I propose seven commitments for accountable care in mathematics education research: reflexive positionality, intersectional attentiveness, epistemic humility, non-extractive benefit, participatory accountability, anti-deficit representation, and institutional responsibility. These commitments are not a checklist that guarantees ethical research. Rather, they are guiding orientating principles that can help researchers evaluate whether their work moves from caring about or caring for marginalised groups toward caring with them. The commitments emerged from a conceptual synthesis of the literature discussed in Sections 2–4. I traced recurring ethical questions across these works: how researchers exercise authority; how intersecting relations of power shape research; whose knowledge is recognised; who participates and

benefits; how communities are represented; and how institutions enable or constrain accountable practice. I organised these questions into seven commitments to guide reflection across the research process. Readers should note that this is an interpretive synthesis, not a systematic review. In a way, my approach shares features of both critical review (Al Naabi et al., 2026) and narrative review (Pautasso, 2019). That said, I want to emphasise that the commitments are neither exhaustive nor mutually exclusive, and they have not been empirically validated. They are offered as prompts for reflection and practice, not as prescriptions that guarantee ethical research.

Table 1 summarises the seven commitments, their central concerns, and examples of how they might inform research practice. These examples are illustrative; their application will depend on the relationships and institutional context of each study.

Table 1. Seven commitments for accountable care in mathematics education research

Commitment	Central concern	Possible research practice
Reflexive positionality	How the researcher's position shapes the study	Revisit assumptions during design, analysis, and writing
Intersectional attentiveness	How systems of power interact	Check which differences the questions include or leave out
Epistemic humility	The limits of the researcher's knowledge	Invite challenge to interpretations and qualify claims
Non-extractive benefit	Who benefits from the research	State likely benefits and how findings will be returned
Participatory accountability	Who shapes the knowledge produced	Involve participants in framing or reviewing interpretations
Anti-deficit representation	Where explanations locate difficulty	Examine structural and classroom conditions alongside outcomes
Institutional responsibility	How institutions shape research	Consider funding, review, supervision, and recognition practices

Note. The table summarises the seven commitments proposed in this paper. Each row gives a commitment, its central concern, and an illustrative research practice; the examples are not exhaustive and their application depends on the context of each study.

5.1 Commitment 1: Reflexive positionality

Researchers need to examine how their identities, experiences, assumptions, institutional locations, and academic interests shape the research process and, furthermore, they need to let that assessment impact what they actually do. Parson (2019) argues that researchers hold considerable power because they decide what is studied, who is included, how participants are represented, and where findings are published. Yip (2024) also reminds us that insider and outsider positions are not fixed categories; they are fluid, relational, and dependent on context. Reflexive positionality, then, requires researchers to move beyond simply naming who they are. It asks them to consider how their position operates in a particular research context, and how that position matters at each stage of the work.

In practice, this involves three related commitments. First, before data collection begins, researchers should undertake an explicit identity-mapping exercise: a structured written reflection that considers not only demographic identities, but also the assumptions about mathematics, ability, language, and belonging that the researcher brings into the study. What theories of mathematical competence does the researcher take for granted? Which learners are implicitly imagined when tasks or interview questions are designed? These questions are not merely reflective prompts. Their answers should be recorded and revisited because they help shape what will later be observed, interpreted, and valued as a finding. Second, during data collection and analysis, reflexivity should be practised as an ongoing process rather than treated as a one-time declaration. This might involve keeping a reflexive journal throughout fieldwork, where the researcher records moments of surprise, discomfort, hesitation, or interpretive uncertainty, especially moments when the data resist the researcher's initial expectations (Folkes, 2023). Such records are analytically useful because they point to places where the researcher's assumptions may be most active, and where interpretation therefore needs closer examination. Folkes (2023) describes this as "kitchen table reflexivity": the candid, unsettled thinking that often happens between formal research encounters and reveals how positionality shifts as relationships with participants develop. Third, at the writing and dissemination stage, reflexive positionality means asking how the researcher's choices of theory, language, and framing represent participants. Whose concepts organise the analysis? Whose voice shapes the account? Which interpretations are made more visible, and which are pushed to the margins? A positionality statement that leaves these questions unasked risks becoming performative: a gesture of transparency that does little to change the research relationship itself (Parson, 2019; Secules et al., 2021). In mathematics education research specifically, this also means examining whether the researcher's own assumptions about mathematical capability have shaped judgements about which learners appear as capable, curious, disengaged, or in need of support. Reflexive positionality is therefore not a task completed at the beginning of a project. It is an ongoing practice through which researchers critically examine, document, and revise how their assumptions, relationships, and institutional position shape the design, conduct, interpretation, and representation of the research.

5.2 Commitment 2: Intersectional attentiveness

Marginalised groups should not be treated as homogeneous. Learners and communities may be positioned through multiple intersecting facets of identity: race, ethnicity, class, gender expression, sexuality, disability, language, migration, religion, indigeneity, and coloniality. Research that focuses on only one axis of difference risks making other forms of power invisible. Hankivsky (2014) argues that care ethics must be strengthened through intersectionality because care theory can otherwise fail to account adequately for diversity and power. This is especially important in mathematics education, where learners' experiences cannot be understood through single categories alone.

In practice, intersectional attentiveness requires researchers to ask, at the design stage, which dimensions of power their framing makes visible and which it renders silent. One concrete way to do this is through an explicit mapping exercise before research questions are finalised. In this exercise, the researcher identifies which axes of difference are built into the study's scope, which are treated as background context, and which are absent altogether. Shaw et al. (2020), working through participatory action research across five countries, found that mapping intersecting inequalities with communities before finalising research questions changed both what was asked and who was included in the study. This kind of participatory framing work helps move intersectional attentiveness from a theoretical commitment to a methodological decision. During analysis, intersectional attentiveness asks researchers to resist the pull toward monodimensional categories. When a finding appears to describe "girls in mathematics" or "multilingual learners", the researcher should ask what other structures of power are shaping that experience and whether the framing flattens important variation within the group. This does not mean that every study must address every possible axis of difference. Rather, it means that researchers should be able to explain which forms of power their framing foregrounds and why, while also acknowledging what that framing leaves unattended (Hankivsky, 2014; Leyva & Joseph, 2023; Parise, 2021). At the writing stage, intersectional attentiveness shapes how groups are named and described. Language that presents a marginalised group as unified, stable, or uniform can reproduce the very flattening this commitment is meant to resist. Researchers should read their own writing with the following question in mind: does this sentence imply that all members of this group share the same relationship to mathematics, exclusion, or the conditions being studied? If so, what qualification or complication is necessary? Intersectional attentiveness is not a demand that every study solve problems of power at once. It is a request that researchers express honesty about what their framing does and does not see.

5.3 Commitment 3: Epistemic humility

Researchers must recognise that academic knowledge is not the only valid form of knowledge. Participants, families, teachers, communities, and indigenous or local traditions may hold forms of mathematical, pedagogical, cultural, and ethical knowledge that are not easily recognised within dominant research frameworks (Garcia-Olp et al., 2022). Epistemic humility asks researchers to resist the assumption that their theories, methods, or interpretations are automatically more valuable than participants' own understandings. This commitment is especially important in mathematics education because school mathematics often privileges formal, abstract, and institutionally recognised knowledge. As a result, it can be easy to overlook the mathematical thinking that learners and communities practise outside the classroom. Civil's (2011) work with Latinx communities shows what this recognition can look like in practice. It involves listening carefully to students, parents, and families, and treating the mathematical resources they bring from everyday life, language, and culture as starting points for inquiry rather than as deficits to be

corrected. Smith's (1999) decolonising critique extends this concern further by showing that research has historically been used to classify, speak for, and govern indigenous peoples. For that reason, epistemic humility carries a political dimension as well as a methodological one.

In practice, epistemic humility asks researchers to make two kinds of decisions explicit. At the design stage, it means asking whose knowledge the study is built to see. What matters as mathematical reasoning in the research questions and instruments? Would the forms of mathematical thinking that participants' communities value, appear as competence in this study, or would they remain invisible? If the answer is unclear, that uncertainty is itself a sign that the study's framing needs attention before data collection begins. At the analysis and writing stage, epistemic humility means asking how participants' understandings are treated in the account. Are they presented as interpretations in their own right, or are they reorganised mainly through the researcher's theoretical categories? There is a difference between using academic theory to illuminate what participants say and using academic theory to replace what participants say. The former treats participants as knowers. The latter treats them primarily as data. Researchers should be able to identify which of these is happening in their work, and they should be prepared to explain that choice. Epistemic humility does not require researchers to abandon theory or to treat each participant's claim as beyond analysis. It requires them to hold their own frameworks flexibly enough to be changed by what they encounter.

5.4 Commitment 4: Non-extractive benefit

Research on marginalised groups should not primarily benefit the researcher. Publications, grants, citations, professional recognition, and career advancement are real academic benefits. When these benefits are built from participants' stories of marginalisation, researchers have a responsibility to consider what participants, communities, schools, or practitioners gain from the study. Jorgensen and Graven (2022) warn that research in marginalised settings can become part of a research game in which deficit stories generate status for researchers while the communities involved receive little in return. Parson (2019) makes a related point: researchers control the framing, the questions, the interpretation, and the publication. Because of that control, the benefits of research can flow almost entirely upward into academic careers and institutions, with little meaningful return to the people whose experiences made the work possible.

In practice, non-extractive benefit asks researchers to do something concrete before a study begins. They should articulate, in writing, what participants, schools, or communities will gain from the research, in what form, and by when. This is not the same as completing an ethics form. A study can satisfy all formal ethical requirements and still be extractive in orientation, because university ethics procedures are usually designed to prevent harm and not to ensure benefit (Guillemin & Gillam, 2004; Kelley et al., 2013). The benefit statement this commitment calls for is addressed to participants and communities, not only to an ethics committee. It should also be specific enough that

participants could hold the researcher accountable to it. This does not mean that every project must produce immediate practical change. Some forms of benefit are longer term, indirect, or relational. A teacher might gain a framework for thinking about classroom participation. A community might see its mathematical practices represented in academic writing. A school might receive a summary of findings that can be used in professional development. What matters is that researchers can explain how benefit flows, and that communities have some say in what is regarded useful. In mathematics education research, this might involve producing accessible outputs for teachers, returning findings to participants, supporting local pedagogical conversations, developing resources with communities, or contributing to institutional change. The key point is not that all research must look the same, but that benefit should not flow only upward (Jorgensen & Graven, 2022; Parson, 2019). Non-extractive benefit also asks researchers to revisit the benefit statement at the end of the project with honesty. Did the work deliver what was promised? If not, what changed, and why? That moment of retrospective accountability is itself part of what this commitment requires.

5.5 Commitment 5: Participatory accountability

Where possible, research should be shaped with, and not only about, the people and communities it concerns. This may involve participatory action research, co-design, collaborative analysis, member reflection, community consultation, shared authorship, or dissemination practices that reach participants and practitioners. The appropriate form will depend on the study, but the principle is that those affected by the research should not be treated only as sources of data. Atkins (2013) shows both the value and the limits of participatory research with marginalised learners. Participation can demonstrate respect and generate insights that would not emerge through research conducted only on participants. However, Atkins also acknowledges that ultimate control may remain with the researcher, and this caution is important. Participatory language can itself become a form of extraction if it names inclusion without examining where authority actually sits. A study that involves participants in data collection but reserves all decisions about framing, interpretation, and publication for the researcher is less participatory than the label suggests. Fahlberg et al. (2026) make this point directly through the principle “Don’t research about us without us”, arguing that marginalised communities should play a central role in knowledge production about their own lives, rather than simply contributing to a process the researcher controls.

In practice, participatory accountability requires researchers to identify, at the design stage, the earliest point at which community members or participants can meaningfully enter the research. Can they help shape the research questions? Can they review the analytical categories before data collection begins? Can they contest interpretations before findings are written up? The earlier that entry point, the more fully this commitment is honoured. A study where participants are consulted only after conclusions are drafted has not democratically distributed authority, even if it claims participant involvement. During

the analysis, participatory accountability might involve bringing preliminary interpretations back to participants, not primarily to check factual accuracy, but to ask whether the researcher's framing captures what participants themselves consider true to their experience and meaningful. This is a more difficult and generative process than standard member checking because it opens the analysis to challenge, rather than to "correction". At the dissemination stage, participatory accountability means asking whether findings can be returned to the communities they concern, in forms the communities can use. Participatory accountability is not a guarantee of ethical research. It is a commitment to keep asking, throughout the project, who is shaping the knowledge and to whose ends.

5.6 Commitment 6: Anti-deficit representation

Researchers must be careful not to represent marginalised learners, families, teachers, or communities primarily through lack, failure, risk, disengagement, or underachievement. Deficit representations can appear neutral, especially when they are supported by achievement data or policy language, but they often reproduce dominant assumptions about who is mathematically capable and why. In mathematics education, this risk is heightened because achievement is routinely treated as an objective measure of ability, while the social and institutional conditions that shape achievement are left underexamined. In mathematics education research, racial(ised) categories have often been used to describe achievement gaps without sufficient attention to racism and racialisation as structural forces (Martin, 2009). As a result, the gap can appear as a property of the group rather than as a product of conditions. Marginalisation in mathematics education therefore needs to be studied through the relationship between structures and individual lives, not through descriptions of what learners lack (Chen & Horn, 2022). Deficit framings can also enter research through apparently neutral language, shaping what researchers notice, how they interpret what they see, and how they write about participants (Adiredja & Louie, 2020; Louie, 2017).

In practice, anti-deficit representation requires researchers to apply a consistent framing question during writing and revision: does this sentence locate difficulty in the learner, the family, or the community, or does it locate difficulty in the structural and pedagogical conditions through which mathematics is taught and valued? This is not a demand that researchers deny inequality or pretend that learners are not confronted with real obstacles. It is a demand that those obstacles be located accurately. A learner who struggles in a mathematics classroom is navigating a specific set of institutional arrangements, expectations, and norms. The research question is not what is wrong with the learner, but what those arrangements make possible or impossible. Anti-deficit representation also extends to how communities are described. Families are not barriers to mathematical participation. They are holders of knowledge, practices, and values that mathematics education has often failed to recognise. Communities are not sites of deficiency. They are sites of mathematical and cultural resources that dominant curricula

have largely neglected. Writing that represents them otherwise, even in the service of a justice-oriented argument, risks reproducing the very harm the research claims to address. Anti-deficit representation is not a style of writing. It is a consequence of where the researcher locates the problem, and that choice is made long before the writing begins. It is made in how the research questions are framed, in what the instruments are designed to see, and which aspects of participants' lives the analysis treats as meaningful.

5.7 Commitment 7: Institutional responsibility

Care should not be understood only as an individual researcher's ethical attitude. Research is shaped by institutions: universities, journals, funders, ethics committees, supervisors, conferences, and promotion systems. Institutions influence what topics are valued, whose research is published, what is considered rigour, and which forms of knowledge are recognised. Because care is political, institutions must also be part of the ethical analysis. Researchers who belong to marginalised communities and conduct research regarding those communities may face professional and emotional burdens that are not distributed equally across the field (Veldhuis, 2022). Their work may be dismissed as niche, overly political, or insufficiently generalisable, even when it meets the same standards of rigour applied to research on non-marginalised topics. Researchers studying their own intersectional marginalisation may also be perceived as having both greater expertise and greater vested interest, creating a double bind in which insider knowledge is treated as simultaneously credible and suspect (Thai & Grand'Pierre, 2026). These dynamics make clear that academic institutions do not evaluate research from a neutral position. The structures through which research is commissioned, reviewed, published, and rewarded carry assumptions about whose knowledge matters and whose concerns are worth investigating.

Institutional responsibility therefore requires more than individual researchers making better choices. Journals must examine whether their review criteria reward extractive research while devaluing accountable, community-connected, or identity-relevant scholarship. Supervisors must consider whether they prepare researchers not only in methods, but also to recognise and navigate the professional, emotional, and political costs of equity-oriented work. Funders must ask whether their categories, timelines, and measures of impact make slower, relational, and community-accountable research feasible or effectively impossible. Ethics committees must move beyond procedural compliance and consider whether the communities involved in a study are likely to benefit from it. For individual researchers, institutional responsibility means recognising the conditions under which their work is produced and asking which forms of care their institutions enable, reward, marginalise, or make professionally costly. A researcher committed to accountable care but working within an institution that rewards extractive practices faces a structural problem, not merely a personal one. Naming that problem is necessary, but insufficient. Institutional responsibility also requires collective efforts to challenge the policies, review practices, funding priorities, workload arrangements, and professional norms through which extractive research is sustained.

Such efforts may involve working with colleagues, supervisors, editorial boards, professional associations, unions, funders, and community partners to press for changes in how research is commissioned, evaluated, resourced, and rewarded. This work is rarely straightforward. Institutions and professional bodies may resist change, particularly when existing arrangements protect established interests, reputations, and distributions of authority. Researchers who challenge these arrangements may therefore encounter dismissal, reputational risk, workload pressures, or limited institutional support. Institutional responsibility does not absolve individual researchers of their obligations under the other six commitments. Rather, it situates those obligations within systems of power that make some forms of care visible, publishable, and professionally sustainable while making others difficult or costly to maintain. Changing such systems is slower and more contested work than revising a positionality statement, but it is work for the field as a whole rather than for individual researchers alone.

6 Concluding thoughts

I began this paper with an intentionally uncomfortable question: who has the right to care in mathematics education research? This question cannot be answered by deciding which identities grant or withhold permission to conduct particular kinds of research. A more useful answer begins with relational responsibility. Researcher identity matters because it shapes access, interpretation, authority, credibility, and the distribution of academic opportunity (Parson, 2019; Secules et al., 2021; Yip, 2024). Yet identity alone cannot determine whether a researcher acts responsibly. I have used the right to care to describe an ethical standing that is situated, provisional, and continually tested through how researchers enter relationships, use authority, respond to criticism, and remain answerable for the knowledge they produce. Such standing cannot simply be claimed. It must be built through humility, reciprocity, competence, responsiveness, and sustained accountability. Accountable care may lead to different decisions in different contexts. In one, it may be appropriate to lead a study. In another, the responsible choice may be to work in partnership, redistribute resources and recognition, support inquiry led by communities, or step back so others can lead. Care is demonstrated not only by choosing a worthy topic but also through decisions about power, participation, benefit, and control.

The distinction among caring *about*, *for*, and *with* has been central to this argument. Caring about begins with concern for practices of injustice. Caring for adds a desire to support, advocate, or intervene, but may still leave researchers in control of deciding what people need and what their experiences mean. Caring with requires a different relationship. It recognises participants and communities as knowledge holders, interpreters, critics, and, where appropriate, decision makers (Atkins, 2013; Fahlberg et al., 2026; Jorgensen & Graven, 2022). This relationship will not always be harmonious. Caring with must allow disagreement, conflicting priorities, and competing interpretations. Participants may disagree with one another, community accounts may sit

uneasily beside structural analysis, and institutional requirements may conflict with local expectations. Researchers also have responsibility toward people not directly represented in a study but potentially affected by its findings. Accountability does not remove these tensions. It requires researchers to identify where they arose, explain whose perspectives and interests shaped their decisions, justify how competing claims were negotiated, and acknowledge what remained unresolved.

The seven commitments proposed above, bring together concerns often discussed separately. They ask researchers to examine their location, the intersecting structures shaping marginalisation, and the authority given to different forms of knowledge. They also raise practical questions about who decides, who benefits, how participants and communities are represented, and which institutional conditions make responsible research possible, difficult, or professionally costly. No single procedure can satisfy these commitments because their meaning depends on context. Community protocols, indigenous sovereignty, legal and safeguarding obligations, and local histories of research and exploitation all shape what accountable care requires (Kelley et al., 2013; Smith, 1999). Participatory approaches may be especially important in studies conducted directly with learners and communities, while historical, theoretical, policy based, and secondary data research may require other forms of accountability, including careful citation, scrutiny of interpretive claims, engagement with community scholarship, and openness about evidential limits. Similar care is needed when discussing benefit. Benefits may be direct, relational, epistemic, pedagogical, institutional, or public. Researchers should avoid inflated claims about impact and state clearly what their work can and cannot contribute, which participants, communities, institutions, or academic audiences are most likely to benefit, and in what ways.

I have drawn on mathematics education because it is my field and because its recurring claims to neutrality, universality, objectivity, and measurable ability make it a revealing site for examining marginalisation (Barton, 1996; Jaworski & Phillips, 1999; Xenofontos, 2025). Classrooms, curricula, assessments, and research practices do more than describe mathematical ability. They help determine whose reasoning is recognised, whose knowledge is valued, and who is positioned as capable or deficient (Battey & Leyva, 2016; Chen & Horn, 2022; Martin, 2012). Specifically, the commitments may help mathematics education researchers examine how assumptions about mathematical ability and neutrality, together with curricular, assessment, language, and participation norms, shape whose knowledge is recognised and who is positioned as mathematically capable. They connect these field-specific dynamics to researchers' choices in study design, interpretation, and representation. The ethical questions raised here, however, extend beyond mathematics education. Similar questions arise wherever researchers produce knowledge about people and communities living under unequal conditions, including education, health, social work, psychology, social anthropology, and development studies. The seven commitments may therefore have value beyond this field, provided they are interpreted through the methods, histories, epistemologies, and relations of authority

specific to each discipline. Their broader usefulness depends on careful translation rather than uniform application.

Care also has an institutional dimension. Researchers work within systems that shape both what they can do and what they are encouraged to do. Journals, universities, funders, supervisors, ethics committees, conferences, citation practices, and promotion systems influence which questions receive support, whose knowledge is recognised as legitimate, and which forms of research remain professionally sustainable (Jorgensen & Graven, 2022; Thai & Grand'Pierre, 2026; Veldhuis, 2022). Institutional responsibility therefore requires more than relying on the ethical judgement and conduct of individual researchers. It demands examination of how research systems distribute decision-making power, recognition, labour, resources, risks, and benefits, and how those systems might be reorganised to support more accountable forms of knowledge production. The central contribution of this paper is a vocabulary and orienting framework for examining whether claims of care become accountable practices. The right to care is not a permanent entitlement conferred by identity, expertise, or good intentions. It is an ongoing responsibility to examine how knowledge about marginalisation is initiated, funded, produced, interpreted, represented, circulated, and rewarded. It is practised through humility, reciprocity, and answerability, and must remain open to challenge and revision, including the redistribution of decision-making power, resources, recognition, and opportunities to shape the purposes and outcomes of research.

Research ethics

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