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### ORIGINAL ARTICLE

## BERJ BERA

# Rigour in interpretive qualitative research in education: Ideas to think with

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#### **Abstract**

There has been a proliferation of qualitative approaches to researching education. While this has resulted in the construction of a rich tapestry of knowledge about education, it has also resulted in disparate research ideas, processes and practices, and created tensions relating to what constitutes rigorous qualitative research in education. As such, the aim of this paper was to use a multidisciplinary perspective and draw on concepts and practices relating to research coherence, reflexivity, transparency, authenticity, sincerity, credibility and ethics to (1) problematise traditional approaches to rigour in qualitative education research and (2) support those who do interpretive qualitative education research to select and embed relevant concepts and practices to increase and evidence the rigour of their work. I end this paper with an attempt to galvanise interpretive qualitative researchers in education to reflexively consider and justify the ways and extent to which their research decisions, processes and practices are rigorous.

#### KEYWORDS

interpretive education research, positionality and reflexivity, qualitative research, research rigour

### INTRODUCTION

Qualitative approaches are well established in education research. There is now much research that aims to explore qualitatively the knowledge, experiences, values and assumptions of individuals and groups that constitute the education landscape to make sense of

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### **Key insights**

### What is the main issue that the paper addresses?

There has been a proliferation of qualitative approaches to researching education. This has resulted in disparate ideas, processes and practices, and created tensions relating to what constitutes rigorous qualitative research in education. As such, it has become difficult to demonstrate and judge the quality of qualitative research in education.

### What are the main insights that the paper provides?

Ideas relating to reflexivity, transparency, authenticity, sincerity, credibility and ethics may be draw upon throughout the *entire research process* to demonstrate rigour in qualitative education research. These ideas, however, should be carefully considered, selected and used in a way that demonstrates philosophical, theoretical and methodological coherence and cohesiveness.

and construct meaning about policy (e.g., Kitching et al., 2024), leadership (e.g., Lalani et al., 2021), teacher education (e.g., Luna & Selmer, 2021), curriculum construction and enactment (e.g., Fink et al., 2024), pedagogy and teacher practice (e.g., Hamilton et al., 2024), teacher and pupil relationships, interactions and identities (e.g., Messiou & Ainscow, 2020) and assessing learning and development (e.g., Maher et al., 2023), to name but a few. The proliferation of so-called traditional qualitative methodologies such as phenomenology, ethnography and grounded theory, together with the increasing use of 'newer' methodologies such as participatory, discourse analysis, narrative inquiry, autoethnography and life history, has meant that education researchers have a wider repertoire of research tools to draw upon than ever before. While the scope and diversity of methodological approaches has contributed to the crafting of a rich tapestry of knowledge (about education), it has also created tension between a need for methodological structure and flexibility (Lincoln et al., 2017; Smith & McGannon, 2018; Tracy, 2010). Central to this tension, and intellectual developments relating to it, are questions about what constitutes high-quality and rigorous qualitative research in education. Such tensions can be difficult to comprehend and navigate, for early career researchers especially. The same can be said about more experienced qualitative researchers, especially those who are committed to and have perpetuated methodological doctrine.

As such, by writing this paper I aim to support education researchers to actively engage in developments relating to qualitative methodologies to ensure that traditional and new ways of thinking about and doing qualitative research are scrutinised and, where necessary, challenged, disrupted and replaced. I do this by exploring established and developing ideas relating to methodological rigour in interpretive qualitative education research through a multidisciplinary lens by drawing on ideas, research and methodological approaches across philosophy, sociology and psychology, and the associated subdisciplines relating to education, health and sport, given that these are the intellectual spaces where my knowledge and experiences have developed and are situated. For transparency purposes, as a principle of rigour that I discuss later, knowledge and literature from the subdisciplines of organisational and management studies were added because of reviewer comments on an earlier version of this paper. Taking a multidisciplinary approach allowed me to examine in greater depth and a more nuanced way what can be learned and known about rigorous education research

from the intersections of these disciplines. This paper is structured in relation to key decisions and milestones in the research process: (1) philosophical, theoretical and methodological framing; (2) researcher positionality and reflexive engagements; (3) sampling, saturation and information power; (4) methods for generating quality qualitative data; (5) analysing qualitative data: the role of reflexive diaries, critical friends and member reflexions; and (6) the generalisability of education research. As such, I focus on research process rather than using templates based on standard protocols (Harley & Cornelissen, 2022) that offer 'criteria' to be followed because I have several concerns about criteriological approaches to (education) research. Chief among those concerns is that the establishment of universal criteria to judge all (qualitative) research is grounded in the assumption that there is a single, stable, universal reality and fixed, rigid ways of coming to know that reality (Bell et al., 2016; Lincoln et al., 2017), which is not in keeping with the interpretive qualitative approach that I centre here. Hence, criteria for judging quality and rigour in qualitative education research are not 'out there', waiting to be discovered. Instead, they are socially constructed, constituted and (re)produced. Moreover, it is important to note, as Sparkes and Smith (2009) do, that the development and propagation of universal criteria operates in an exclusionary and punitive manner to (re)produce a closed system of judgement that establishes and maintains a narrow band of what constitutes good-quality research. We see this most starkly in the globalising and colonising effects of methodology-as-technique (see Hammersley, 2011), which can constrain novel and innovative research, and indigenous and/or minority knowledges (Bell et al., 2016), if they do not conform to normative expectations about (education) research. Hence, while I do draw upon concepts and practices relating to coherence, reflexivity, transparency, authenticity, sincerity, credibility and ethics (see Pillow, 2010; Smith & McGannon, 2018; Tracy, 2010) to support others to ensure and evidence that their research is rigorous, I do so while encouraging education researchers to select concepts and practices depending on their suitability to their research. I certainly do not want to create a checklist to follow because that would not be in keeping with my (epistemological) positioning, which I briefly outline now given that it has inevitably influenced the ideas that I present in this paper.

### EPISTEMOLOGICAL POSITIONING: POSITIONING 'I' IN EDUCATION RESEARCH WITHOUT MAKING IT ABOUT 'ME'

While I turn to research philosophy and positionality later, it is noteworthy that I ascribe to and thus situate my consideration of qualitative methodological rigour in a relativist ontology and social constructivist epistemology (Bryman, 2016). That is, I consider education—and indeed, all social phenomena regardless of the material and social spaces in which they occur—to be dynamic, fluid and in flux (Haegele & Maher, 2023), rather than stable, static and rigid. Accordingly, my treatment of rigour here focuses on the ways and extent to which qualitative methodological approaches enable researchers to make sense of and construct meaning about complex social phenomena given that research participants may experience education and construct meaning about it differently given their own lived, embodied knowledge, experience, language, values and assumptions. Given that researchers' intersubjective beliefs, values and inclinations inevitably shape the interpretive process (Bryman, 2016), it seems appropriate that I explicate my own positionality here to ensure transparency and as part of the rationale for this paper. I use the personal pronouns 'I', 'me' and 'my' intentionally throughout this paper not because of an ego-centric desire to draw attention to myself, but as an acknowledgement that my 'self' knowledge, experience, language, values and assumptions are inextricably and unavoidably bound to the research that I do and the ideas that I offer here. For Tracy (2010), 'the use of the first-person voice (e.g., "I said," or "They reacted to me by...") effectively and appropriately reminds readers of the researcher's presence and influence in participating and interpreting the scene' (p. 842).

At the time of writing this paper I am a 41-year-old, White, nondisabled cisgender man and, as such, am afforded and cognisant of many of the privileges that come with being positioned and identified as such. Currently, I work as a director of research and professor of education at a university in England. It is probably this professional role, part of which requires me to develop policies, strategies and practices to increase the 'quality' of the research of my colleagues, that has contributed to my increased focus on rigour in qualitative research. Much of my own research and teaching is sociological, philosophical and psychological in nature, focusing on endeavouring to disrupt epistemic injustices (Fricker, 2009) by centring the experiences and amplifying the 'voices' of disabled children and young people across education, physical education and health landscapes. At the same time, my work endeavours to support teacher educators, teachers, senior leaders in schools, learning support assistants, educational psychologists and speech and language therapists to provide more meaningful and valuable educational experiences for disabled children and young people. It follows, then, that the experiences that I have had and the knowledge that I have developed over the 16 years that I have spent in higher education—as a doctoral student, teacher educator, researcher, publisher, editor, reviewer, doctoral research supervisor, mentor, colleague and friend-together with the academic ideas and literature that I have engaged with over that time, have shaped the ideas that I have about rigour in interpretive qualitative research. As such, I now say what rigour in interpretive qualitative education research means to me to frame this paper.

# WHAT I MEAN BY RIGOUR AND WHY IT IS IMPORTANT IN QUALITATIVE EDUCATION RESEARCH

Tracy (2010) argued that 'for qualitative research to be of high quality, it must be rigorous' (p. 841). To borrow an idea from Tracy (2010), a researcher who considers rigour from the outset of a research project and uses those ideas to plan and implement a project will be able to appreciate, make sense of and construct meaning about the complexity and nuance of the (education) phenomena that they study. Ask a quantitative researcher, especially one that ascribes to realist ontologies and positivist epistemologies, what rigour means, and most will probably ascribe to what Bell et al. (2016) refer to as 'methodologyas-technique' by mentioning validity, reliability and trustworthiness (see also Cohen et al., 2017). Ask a qualitative researcher the same question and it will probably mean something different to each mouth that speaks it. That is because, according to Smith and McGannon (2018), there has not been clear, consistent or coherent intellectual development about what constitutes rigour in qualitative research. That said, organisational and management studies are two subdisciplines that have made some headway in constructing and offering principles of rigour in qualitative research (see, e.g., Bell et al., 2016; Harley & Cornelissen, 2022). Moreover, it is noteworthy that many (education) researchers do not ascribe to methodological dichotomies by situating themselves neatly within either quantitative or qualitative approaches. Indeed, 'mixed-' and 'multi-' methodological approaches are well used in education research, and some work has been done in the subdisciplines of health (see Brown et al., 2015), nursing (see Eckhardt & DeVon, 2017) and management (see Harrison et al., 2020) to develop knowledge about what constitutes rigorous mixed- or multi-methodological research. In this respect, it is pertinent to mention that the evaluative framework developed by Harrison et al. (2020) has been used to judge the rigour of mixed- and multi-methodological research in education (see Kutscher & Parey, 2022). Moreover, the Education Endowment Foundation (EEF), an independent

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charity that supports schools, colleges and early years settings to improve teaching and learning through better use of evidence, has developed resources to support the design and analysis of EEF-funded evaluations, including mixed- and multi-methodological research (EEF, 2025).

Despite these developments, I argue that rigour in interpretative qualitative research has become a semantic chameleon. While this may be considered positively because it reflects a richness and diversity of ideas relating to 'how to do' qualitative research in education, it also engenders problems. First, it has (re)opened the door to critiques of the quality and thus value of qualitative work in education. Second, it has made it extremely difficult for doctoral and early career researchers (and, at the same time, research supervisors and mentors) to make more informed decisions about how to do qualitative research across the varying education landscapes. Third, it has resulted in inconsistent (and, at times, incomprehensible) practices among journal editors, reviewers, doctoral thesis examiners and others who judge the quality of qualitative education research. While this paper does not intend to be the panacea to these problems, I hope that it will give researchers some ideas to think (critically) with when they are planning, designing and implementing qualitative research projects. While the ideas that I present below should not be read as a hierarchy of priority, nor a checklist of things that must be considered or done, I start with philosophical, theoretical and methodological coherence and cohesiveness because, for me, it forms the bedrock and spine of all research because it is tied to fundamental questions about the (education) world in which we co-exist and co-create and the knowledge we construct about it, and thus should be central to ideas relating to rigour in qualitative research in education.

# PHILOSOPHICAL, THEORETICAL AND METHODOLOGICAL COHERENCE AND COHESIVENESS

Education research has, over time, become philosophically, theoretically and methodologically fragmented. While it is still rare for journal papers to include a statement about and justification for the philosophical undercarriage of research in education, when it is mentioned and discussed you will read—albeit briefly—about researchers claiming allegiance to ontological relativism, or realism, or idealism, or materialism, and endeavouring to make epistemic contributions through a constructivist, interpretivist or objectivist lens. In those same papers, you may read the author(s) say that they utilised critical race theory, or critical disability studies, or queer theory, or Black feminism or even the work of Foucault, Bourdieu or hooks to make sense of qualitative data generated via interviews, focus groups, reflective diaries, observations or surveys. What you will rarely read, if ever, is a clear and convincing articulation of how these philosophies, theories and methods were melded together and tensions navigated to ensure coherence and cohesion.

According to Mouly (1978), theory is both a convenience and a necessity because it allows researchers to make sense of, in a more systematic and rigorous way, the interface between what may at first seem like a body of unrelated concepts and principles that can be used to guide research design and interpretation. For Elias (1978), theory can help illuminate certain cherished myths, which are often taken for granted without being scrutinised. What may first appear to be axiomatic or common sense in education, for example, may instead be no more than the established educational ideologies of policymakers and/or the cultural practices of senior leaders and teachers in schools. It is only through painstaking empirical study that researchers can unearth unreliable impressions of common sense and, subsequently, learn more about the social world (Durkheim, 1938; Goudsblom, 1977) of those key stakeholders who are a part of the education landscape, such as teachers, parents and children. In this regard, however, a caveat must be noted: theoretical thinking is not antithetical

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to empirical enquiry; they are interdependently tied, hence the significance of theoretical and methodological coherence (Bryman, 2016; Macdonald et al., 2009).

In a similar vein, Bryman (2016) and Macdonald et al. (2009) argue that an exploration of theory cannot and should not be divorced from a discussion about research philosophy in terms of the cohesiveness of ontological (i.e., nature of existence) and epistemological (i.e., nature of knowledge and the 'rules' of knowing) ideas which inform them. Sparkes (1992), for one, considers research paradigms as contrasting perspectives with differing—sometimes compatible, other times not-sets of beliefs, values and assumptions, all of which are tied to the epistemological, ontological and methodological foundations that shape social investigation. As such, ensuring philosophical, theoretical and methodological coherence and cohesiveness is crucial so that research decisions are logical, appropriate, credible and thus rigorous (Tracy, 2010). For instance, if you say that you ascribe to relativism and constructivism, then it makes sense to draw on theories and methods that centre individuals, their relationships with others, power dynamics, agency and intersubjectivities. It makes less sense to draw on theories that centre macro social structures and systems only, and methods that aim to standardise in a realist sense the data generated to 'uncover' universal 'truths' about education. Thus, to demonstrate the rigour of qualitative research in education, it is crucial that researchers unpack their epistemological positioning and then ensure that the theoretical framing and methodological decisions align with the ontologies and epistemologies that they espouse. It is because of the significance that I attribute to such a point, which is rarely mentioned nor demonstrated in published education research, that I return to it throughout the remaining sections of this paper so that it forms a coherent thread throughout my treatment of rigour in interpretive qualitative research in education.

# RESEARCHER POSITIONALITY AND REFLEXIVE ENGAGEMENTS

For those, like me, whose work is (for now) anchored to relativism, interpretivism and constructivism, it is crucial to acknowledge that my own knowledge, experience, assumptions and values inevitably and unavoidably influence the research that I plan and do. Rather than being a detached and objective observer of education, whose aim is to uncover value-neutral understandings, I am actively involved in the construction of knowledge about education. To forget, conceal or deny that would, for me, be disingenuous, counter-productive and may compromise (rather than enhance) the rigour of the research that I do. Saying that, Enloe (2016) warns us that reflexivity should not be a narcissistic mode of self-absorption and navel gazing that centres the self at the expense of the subject and/or education phenomena being investigated. Instead, self-reflexivity's importance is tied to ideas about honesty, transparency and sincerity as hallmarks of rigour in interpretive qualitative research. For Tracy (2010), sincerity means that research is 'marked by honesty and transparency about the researcher's biases, goals, and foibles, as well as about how these played a role in the methods, joys, and mistakes of the research' (p. 841).

While this may begin with a researcher positionality statement to provide a reflexive bedrock and a degree of self-accountability (see van Maanen, 1989), it needs to move beyond a superficial and tokenistic overview of identity markers relating to race, gender, sexuality, socio-economic status, political affiliation and professional role, responsibilities, experience and motivations. Otherwise, according to Gani and Khan (2024), reflexivity is nothing more than a performative declaration of positionality. Hence, from the very outset of a project through to its completion, researchers in education should carefully and reflexively consider and record (via a reflexive diary, for instance) how their knowledge, experience, values and assumptions influenced decisions about (1) the aim and purpose of the research; (2) its

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theoretical framing; (3) the research setting and access to it; (4) participant sampling and recruitment; (5) tools to generate data; (6) data analysis; and (7) data representation and reporting. For Gani and Khan (2024), a distinction should be made between reflexivity in relation to research practice or critique, versus reflexivity performed in positionality statements. Reflexivity as research practice can increase rigour but also help us scrutinise and oppose the way research might be used to justify or advocate harmful policies (see Gani & Marshall, 2022) by drawing to the surface and disrupting the unequal ways that power may be distributed between researchers and those being researched during knowledge production. In this regard, though, it is crucial to note that researchers must operate in an ethically sensitive, appropriate and responsive manner because a heightened awareness of power differentials can result in the exploitative power of researchers increasing. As Enloe (2016) contends, self-reflexivity should 'reduce [rather than increase] the chance that we will leave damage in our wake' (p. 259). At the same time, while reflexivity may and probably will be uncomfortable, there is risk of exposing and increasing the vulnerabilities of the researcher through deep scrutiny of the self, which can result in emotional harm, either via criticism from research communities or participants, but even through emotional transfer if reflexivity has increased the bond that the researcher has developed with participants (see Pillow, 2010) who tell, for instance, stories of pain and trauma. Hence, the relationship that researchers develop with participants, the power that permeates those relationships and their development, and the contexts in which these relationships are situated, need to be carefully and reflexively considered during sampling. While this paper offers much in relation to its original contribution to extant bodies of knowledge, engaging reflexively and centring researcher positionality throughout the sampling of participants is something rarely, if ever, discussed in education literature, so that is what I turn to now.

# SAMPLING, SATURATION AND INFORMATION POWER IN QUALITATIVE RESEARCH IN EDUCATION

The education landscape is wide and vast. It encompasses nursery and other early years settings; primary and secondary schools; colleges and other further education settings; community centres; and universities and other higher education settings. Children and young people alone are educated across and within mainstream, special and alternative education, while some are home schooled. Thus, there are many education settings that need to be considered as potential research sites during the sampling of participants. To ensure philosophical coherence, as a cornerstone of rigour in interpretive qualitative education research, it is important to remember that those who ascribe to relativist ontologies and constructivist epistemologies need not sample from each of these settings because of a desire to make universal claims of truth about the education of all children, young people or adults. Instead, the research setting should be selected based on the ways and extent to which it will enable the researcher to address the research objectives or questions being posed to explore the contextually dependent phenomena under investigation (Bryman, 2016). Similarly, when sampling research participants, purposive sampling may be most appropriate (see Ritchie et al., 2014) because it can enable interpretive qualitative researchers to explore phenomena from a variety of lived, embodied perspectives to shed light on nuance and complexity, rather than using probability sampling (see Bryman, 2016) to 'uncover' universal laws about beliefs and experiences of education. Hence, like decisions about research setting, researchers should think carefully during the planning of a research project about whose perspective(s) will enable them to develop what Braun and Clarke (2013) term 'rich knowledge' relating to the research objectives. As part of sampling, it is crucial to engage reflexively to explore the ways and extent to which your knowledge, experience, assumptions and

values may influence your decisions about research participants. This, to degrees, may help to disrupt the tendency to prioritise the voices and experiences of White nondisabled populations, which is often the case in general education research, especially when convenience and purposive sampling techniques are used (Newby, 2014). Among other things, this may result in a skewed perception of education and conceal, even reinforce, deep-rooted inequalities in education and research about it.

During researcher reflexive engagements it is equally important to draw to the surface the power relationship, dynamic and potential imbalance between researcher and participants. This, by degrees, will enable researchers to carefully consider their own sampling and population biases to ensure that individuals are:

... treated fairly, sensitively, and with dignity and freedom from prejudice, in recognition of both their rights and their differences arising from age, gender, sexuality, ethnicity, class, nationality, cultural identity, partnership status, faith, disability, political belief or any other significant characteristic. (BERA, 2024)

While gender, sexuality, class, race, disability, age, geographical location, language and culture pervade power relations (Elias, 1978), personal and professional relationships and identities also need to be reflexively considered vis-à-vis power dynamics. For instance, those researchers who have dual or multi-roles, as teachers/lecturers/managers and researchers, for example, need to reflexively consider and transparently articulate the power (im)balance between, and potential impact on, themselves and their students and/or colleagues involved in their research (BERA, 2024). For me, this is not a question of whether a researcher should or should not recruit participants with whom they have a pre-existing relationship because of concerns that it may compromise rigour (see Bryman, 2016). Power will inevitably permeate the relationship between researcher and participants, and researchers and participants will unavoidably bring their own knowledge, experience, assumptions and values to the research. As such, I contend that researchers should recruit participants who are most appropriately positioned in relation to the research questions to enable the generation of rich, thick, dense and layered qualitative data (Smith & McGannon, 2018; Tracy, 2010), and I re-emphasise the significance and importance of researcher reflexivity and transparency during the recruitment process to increase the rigour of qualitative interpretative research in education (Enloe, 2016; Gani & Khan, 2024; Tracy, 2010).

Given what I have said thus far, it is perhaps unsurprising that I challenge and aim to disrupt the significance of sample size per se—that is, the number of participants that researchers generate data about and with—as a pathway to data 'saturation' via information redundancy (Morse, 2015), especially when this is determined prior to data analysis (e.g., during the research planning stage, but also during data gathering). I do this, acknowledging, as Braun and Clarke (2021) have, that data saturation is 'taken-for-granted, unquestioned, and maybe even unquestionable, as a criterion for determining sample size in qualitative research' (p. 201). In this respect, Constantinou et al. (2017) insist that data saturation is 'the flagship of validity for qualitative research' (p. 585), a criterion that 'meets with the ontological and epistemological foundations of qualitative research' (p. 583). Such taken-for-granted assumptions about sample size saturation are perhaps indicative of what Bell et al. (2016) refer to as the globalised and colonised nature of research, which leaves little room for alternative ways of thinking about and doing research. Despite strong advocacy for data saturation in qualitative research, concrete guidance relating to what this entails is scant and, according to Braun and Clarke (2021), when it is presented, it often relies on arbitrary and largely unexplained criteria, thus meaning that 'data saturation is, ironically, rather poorly operationalised' (p. 206). The fundamental concerns that I have with sample size saturation in education as a hallmark of rigour, especially that determined prior to data analysis,

is that it is anchored to the (post)positivist notion that a universal, fixed, stable 'truth' can be found in the data if you observe 'enough' behaviour in education or ask 'enough' people about the same or similar questions, which is philosophically incompatible with interpretive qualitative research in education. I would go so far as to agree with Low (2019), who argued that saturation defined as no new information 'is a logical fallacy, as there are always new theoretical insights to be made as long as data continues to be collected and analysed' (p. 131). If researchers are unable to glean new theoretical insights from additional data, then it is probably because their analysis is superficial and semantic; that is to say, they have not achieved a depth of richness that enabled them to construct knowledge relating to the latent ideas or meaningful essence running through datasets (Braun & Clarke, 2013). So, if not data saturation as a hallmark of rigour in qualitative research in education, then what? Dey (1999) used the phrase 'theoretical sufficiency' as an alternative to data saturation, arguing that data collection should cease when the research has achieved a sufficient depth of understanding of the phenomena being investigated to build theory. Similarly, Nelson (2016) offered conceptual density, determined by a judgement of the richness, depth, diversity and complexity of the data generated. Like Sim et al. (2018) and Braun and Clarke (2021), I argue that it is epistemologically difficult, arguably impossible, to determine what will lead to saturation prior to data analysis because we do not know what that analysis will bring (in relation to the construction of rich, thick, dense, layered knowledge) until we do it. In this respect, Malterud et al.'s (2016) concept of information power—the more relevant information a sample holds, the fewer participants are needed—seems to offer a useful alternative to data saturation for thinking about justifications for sample size. In short, I recommend gathering and analysing data iteratively and ceasing to gather and analyse data when you feel that the analysis has enabled you to construct that rich, thick, dense, layered and theoretically insightful tapestry of knowledge that is considered a hallmark of rigour in interpretive qualitative research (Tracy, 2010). That said, I appreciate that there are socially and historically rooted institutional expectations, often discursively communicated via funding and ethics applications, that require sample size to be stated in research proposals. Here, Braun and Clarke (2021) offer sound practical advice, encouraging researchers to reflect on the following intersecting aspects of their research in order to provisionally guestimate sample size: (1) the breadth and focus of the research question(s) and scope of project; (2) the methods and modes of data collection to be used; (3) identity-based diversity within the population or the desired diversity of the sample; (4) likely experiential or perspectival diversity in the data; (5) the demands placed on participants; (6) the depth of data likely generated from each participant or data item; (7) the expectations of the local context including discipline; (8) the pragmatic constraints of the project; and (9) the analytic goals and purpose of the analysis. While doing this, though, researchers need to be mindful that they may need to increase or decrease sample size depending on the quality of data generated.

### METHODS FOR GENERATING QUALITY QUALITATIVE DATA

While decisions about sampling are crucial to the construction of rich, thick, dense, layered knowledge about education, so too is the selection of method(s) and how they are utilised to generate data. It has now become standard practice for researchers to select method/s that will enable them to generate the data necessary to address the research questions and/or objectives (Bryman, 2016). What is less standard practice is (1) ensuring that method/s align with epistemological positioning and (2) reflexively considering the ways and extent to which our own experience, knowledge, values and assumptions influence the method/s that we utilise. For instance, if you ascribe to relativist ontologies and constructionist epistemologies then it makes sense to use semi-structured, unstructured or focus group interviews to

enable interviewee(s) and interviewer to construct meaning about an education phenomenon through dialogic means given the intersubjective and relational nature of experience and knowledge creation (Haegele & Maher, 2023) relating to education. It makes less sense to use structured interviews or structured observations where the intention is to 'control' for researcher bias to uncover or observe a phenomenon as if it is fixed or rigid, rather than liquid, dynamic and in flux. When it comes to reflexivity, it is crucial to consider why, beyond philosophical alignment, researchers choose a particular method. Is it because it is one that they have used previously and have become particularly skilled at using? Is it because others have used the method/s to research the same/a similar education phenomena and thus it is established in the field? While decisions based on such reasoning are legitimate, such an approach may close the door to other, perhaps more appropriate and/or innovative methods. What is arguably most important, from a rigour perspective, is that the choice of method/s enables education researchers to generate quality qualitative data; that is, rich, thick, diverse, dense and layered knowledge relating to the phenomena under investigation (Smith & McGannon, 2018; Tracy, 2010).

It has become standard practice in qualitative education research to use multiple methods, say qualitative surveys, interviews and observations together. While a multi-method approach can be of value to interpretive qualitative education research, researchers should clearly articulate how each method complements the others and contributes to the construction of quality qualitative data because, I argue, multiple methods are not inherently better or more rigorous than a single method. Here, I hint at a critique of using multiple methods to triangulate research results; that is, generating data via different means to validate findings (Newby, 2014). Used in this way, triangulation should not be considered a hallmark of rigour in interpretive qualitative research because it is rooted to realist ontologies and objective epistemologies that assume there is a 'reality' out there that can be universally 'known' and 'verified' through multiple means, which is not philosophically in keeping with interpretive qualitative research in education. Instead, I offer crystallisation (see Ellingson, 2009) to gather data using different methods to shed light on the multi-perspective(ness) and multi-perceptual(ness) of experience and knowledge, which is much more philosophically aligned with interpretative qualitative research in education. As Tracy (2010) argues:

Despite the arguments that triangulation does not necessarily result in improved accuracy, making use of multiple researchers, data sources, methods, and theoretical lenses is still considered valuable by a host of researchers from different paradigms. Multiple types of data, researcher viewpoints, theoretical frames, and methods of analysis allow different facets of problems to be explored, increases scope, deepens understanding, and encourages consistent (re) interpretation. (p. 843)

Adding to philosophical coherence and reflexive engagement as key facets to a rigorous selection and usage of method, I suggest that the method should be ethically appropriate and inclusive. While it is beyond the scope of this paper to explore 'inclusive methods' specifically, I draw on work relating to 'inclusive education research' to suggest that researchers should reflexively consider whether the method selected considers the needs, abilities, preferences and motivations of all participants; the power relationship between researcher and participants, and between participants; is accessible, ensures equal opportunity to be 'active' research participants, empowers participants, fosters feelings of acceptance and value; and ensures that participants are treated with dignity and respect (see Seale et al., 2014; Veck & Hall, 2018). Doing so will ensure that the research is ethically appropriate but may also enable the researcher to

generate rich, dense and thick data as a hallmark of quality in qualitative research because of participant feelings of trust and safety (Tracy, 2010).

Once data are gathered, it has become typical for education researchers to send a record of it back to participants, either in its rawest form (e.g., interview transcript) or once it has been analysed and represented (e.g., vignettes or short stories) to check its 'accuracy'. This practice is often referred to as member checking and is utilised as a means of ensuring reliability by either controlling for or correcting the intersubjective 'bias' of researchers and/or as a pathway to 'truth' (Birt et al., 2016). While this process may be of some value for checking more concrete information, such as names, dates, locations and ensuring that confidentiality is not unintentionally compromised via deductive disclosure [i.e., when biographical information and rich descriptions of people in research reports unintentionally reveal their identity (see Sparkes & Smith, 2014)], member checking from an interpretive qualitative perspective presents epistemological and ontological problems. Most obviously, member checking seeks to establish a fixed, rigid, value-neutral idea about research participants' beliefs and experiences of the education phenomena under consideration (Smith & McGannon, 2018). From a relativist and constructivist perspective, the sense that research participants make of education experience, and the way that they articulate that experience, are fluid, dynamic and in flux. In other words, they can change. Similarly, researchers (and later readers) will make sense of and construct meaning about participant experiences, knowledge, values and assumptions through their own subjectivities and embodied interpretive lenses. Thus, any attempt to 'confirm' the data generated as 'true', after the event, is futile (Denzin, 2017).

Member reflexions, on the other hand, offer a more philosophically and theoretically coherent approach to interpretive qualitative education research. Like member checking, member reflexions involve sending raw data and/or data representations back to research participants. However, rather than checking its 'accuracy', the purpose is to generate additional data and/or gain more insight (Smith & McGannon, 2018) to increase the richness, density and nuance of the data, and understandings of it, as a hallmark of rigour in interpretive qualitative research. As Sparkes and Smith (2014) argue, member reflexions offer researchers an opportunity to work with participants and facilitate the generation of complementary or contradictory results so that meticulous, robust and intellectually enriched understanding of the research might be further developed. Member reflexions can also deepen the researcher's reflexive engagements through the participants acting as critical friends and peer debriefers. Finally, member reflexions, like member checking, can form part of a researcher's ethically situated, relational and responsive approach by involving participants in dialogue relating to interpretations of beliefs and experiences. This approach, however, also engenders ethical challenges to be navigated. For instance, the sharing of research findings and interpretations with participants may result in feelings of disappointment, hurt, embarrassment or anger if the participant feels that the research has depicted them intensively, inaccurately, or they perceive that the researcher has unfairly used their power to expose vulnerabilities (Palmer, 2016). Accordingly, Erdmann and Potthoff (2023) offer the principles of beneficence, justice, scientific quality, informed consent and avoiding harm, which are widely accepted in research ethics, that can be used to guide decisions about how, if at all, to use member reflexions. What is key for me, here, is ensuring that participants are actively involved in decisions about using member reflexions so that their wants, wishes and concerns about member reflexions are considered. An open and honest dialogue from the outset of the research can deepen reflexive engagements and, as a result, help to ensure that participants are treated with dignity and respect.

# ANALYSING QUALITATIVE DATA: THE ROLE OF REFLEXIVE DIARIES, CRITICAL FRIENDS AND MEMBER REFLEXIONS

Like the research process generally, it is crucial to remember that the researcher is entangled in data analysis. Indeed, regardless of whether thematic analysis, narrative analysis, critical discourse analysis, qualitative content analysis, interpretative phenomenological analysis or any other qualitative data analysis technique is used, the researcher needs to reflexively consider the ways and extent to which their own embodied knowledge, experience, values and assumptions seep into how they make sense of and construct meaning about the education phenomena under investigation. It is for this reason that Braun and Clarke (2021) integrated a reflexive dimension into their approach to thematic analysis. The use of reflexive diaries, critical friends and peer debriefers can help support these reflexive engagements (May & Perry, 2014). To increase transparency and authenticity, as a hallmark of rigour in qualitative research, these reflexive engagements should be presented in the written representation of analytical process (see, e.g., Maher et al., 2024), rather than remaining hidden, which is often the case. It is important to note, here, that the purpose of critical friends and peer debriefers is not to confirm or validate the analytical process and findings of the person leading the analysis because such confirmation or agreement would be again tied to the notion that there is a fixed reality and universal truths that can be 'discovered' and 'confirmed' by researchers. Instead, the value of critical friends and peer debriefers lies in the ways and extent to which they can check and challenge constructions of knowledge and deepen reflexive engagements during the analytical process to increase rigour (May & Perry, 2014).

While what I say now may seem contentious to some because it clashes with (post)positivist ideas underpinning data analysis, I argue that only one person should lead the analysis of data, rather than two or multiple researchers doing it either together or independently. I say this because of the notable and increasing criticism levelled at the use of approaches that are akin to inter-rater or inter-coder reliability and investigator triangulation, whereby the purpose is to come to a 'consensus' so that process and outcome can be deemed consistent, reliable and reproducible (Campbell et al., 2013). While I do not have the space to problematise in detail this approach to data analysis, my main concerns are that (1) it is philosophically incompatible with interpretive qualitative research; (2) it muddies and further complicates reflexivity because of the multiplicity of positionalities; and (3) it may reflect and reinforce the (unequal) distribution of power between members of the research team, especially given that the purpose and standard 'expects' a high degree of consensus for the research to be deemed reliable. Moreover, as Morse (2015) warns, the need to increase analytical agreement can result in superficial and thin interpretations of data as this raises the chances of consensus among researchers because of the 'level' of interpretation offered. On the contrary, rigorous qualitative research seeks to offer complex, layered and rich interpretive insights of people's lives. As such, endeavouring to keep coding reliable in the conventional sense, or aiming always for agreement over findings, can often compromise that goal (Smith & McGannon, 2018).

### THE GENERALISABILITY OF EDUCATION RESEARCH

I have lost count of the number of research articles that I have read that have said in the 'limitations' section that 'sample size was too small to generalise to wider populations'. In fact, in my experience, journal reviewers and editors sometimes insist on its inclusion. If that statement is universally true, which I do not believe it to be, then significant time, energy and resource has been dedicated to doing research that is only relevant and beneficial to

the participants and in the settings that were part of the research. For me, the key issue here is that the way that we think about generalisability is narrow, parochial and reductive. It is anchored to realist, positivist, objectivist ideas about the world and knowledge relating to it, which needs to be 'confirmed' via statistical-probabilistic generalisability (Polit & Beck, 2010). What is needed, then, are modes and mechanisms of generalisability that are philosophically aligned with interpretive qualitative research in education. As such, I draw on the work of Smith (2017) and Tracy (2010) to offer naturalistic generalisations, empirical transfer, analytical generalisability and theoretical generalisability as part of a rigorous approach to qualitative research in education.

What we often forget when we report research findings is that, unlike probabilistic-statistical generalisability, the reader plays an active role in making sense of and constructing meaning about what they have read. This is, of course, very much in keeping with ontological relativism and constructivist epistemologies. The reader, as such, plays a crucial role in decisions about the generalisability of interpretivist qualitative research relating to education. Indeed, while we as researchers and writers might dedicate significant time and energy generating rich, thick descriptions of—let's say—teacher experiences of teaching phonics, it will be the reader who will have to make sense of them, construct meaning about them, decontextualise the findings and apply them to their own situations and experiences in order to decide whether they are relevant and meaningful to them. Hence, according to Chenail (2010, p. 6), researchers, writers and readers 'share a responsibility when it comes to assessing the value of a particular set of qualitative research findings beyond the context and particulars of the original study'. As such, we need to consider this when designing and implementing research projects, and when making claims about the generalisability of education knowledge constructed via interpretive qualitative research.

A focus on naturalistic generalisability was an 'early' attempt to move away from positivist ideas about statistically significant generalisability in qualitative research and consider the role of the reader and research knowledge users (see Stake & Trumbull, 1982). From this perspective, it is often said that research can be generalisable at the point at which the reader recognises the findings and can consider the ways and extent to which their similarities and differences can be applied to their own situations and circumstances. That is, according to Smith (2017), naturalistic generalisability happens when the research resonates with the reader's personal engagement in life's affairs or vicarious, often tacit, experiences. To facilitate naturalist generalisability, Smith (2017) argues that the research needs to provide audiences with enough detail of the participants' lives through adequate 'evidence' (e.g., interview quotations, observation field notes and/or visual material), enough contextual details and richly layered theoretical expressions of a reality to help readers reflect upon these and make connections to their own lives. Accordingly, it is crucial that researchers generate and report rich, thick qualitative data relating to the diversity and complexity of the education phenomena under investigation. As noted above, the choice of method/s is crucial to enabling this to happen.

Similarly, the notion of *empirical transferability* epistemologically aligns with the assumption that knowledge is generated, constructed, intersubjective and relative (Smith, 2017). While being similar to naturalistic generalisability, transferability is said to happen when a person or group (e.g., a teacher or teachers) in one setting (e.g., school) adopts something (e.g., a pedagogical practice) from a research setting and uses it in their own setting. More specifically, for example, a teacher may read a qualitative research article, report or blog about a programme aimed at increasing reading comprehension among 5- and 6-year-old children. At the point at which they become convinced that the programme may achieve the desired outcome in their own school, with the pupils that they teach, the research is said to be generalisable via transfer. While I do not have the space to unpack this further, it is noteworthy that empirical transfer is an important pathway to research impact. To support and

enable empirical transferability as a facet of generalisability, Tracy (2010) argues that qualitative researchers need to 'create reports that invite transferability by gathering direct testimony, providing rich description and writing accessibly and invitationally' (p. 845). Evocative storytelling can also invite empirical transferability because stories that are believable and resonate have the power to create in readers the idea that they have experienced the same or a similar thing in their own situations and circumstances (Caulley, 2008).

Unlike naturalistic generalisability and empirical transfer, where the specific contexts and populations form the basis for making wider generalisations, theoretical generalisability is about the ways and extent to which ideas, concepts and theories are generalisable (see Smith & McGannon, 2018). Indeed, whether your research claims to be inductive, deductive or abductive, the ideas, concepts or theories that are used, 'tested' (through application) or generated (through empiricism) are said to be generalisable if they are deemed relevant and significant as sense-making and meaning-making construction tools in different settings and with different populations. We see this all the time in education research and practice when theories (e.g., critical race theory, critical disability studies, queer theory, social identity theory, cognitive and social learning theories and socio-ecological theories) are used in very different contexts with very different populations. In my experience, editors, reviewers, researchers and students seem much more willing to 'accept' theoretical generalisability as an argument for the generalisability of interpretive qualitative research in education. I suspect that this is an enduring legacy and hangover from (post)positivist ways of thinking about generalisability. This is despite concepts, and thus theoretical generalisations, never being fixed, immutable or complete. As such, according to Atkinson (2017), theoretical generalisations should be understood as fluid and dynamic ideas.

### CONCLUSION

At the very outset of this paper I noted that, while the proliferation of qualitative approaches to education research has contributed to a rich tapestry of knowledge relating to it, there has been a concomitant fragmentation and incoherence of approaches that now litter the education research landscape. As such, it has become extremely difficult to navigate discussions about rigour in qualitative education research. While not attempting to reconcile the tensions that now exist in qualitative education research, this paper has used a multidisciplinary lens to problematise some traditional approaches to qualitative research and explore what may constitute high-quality, rigorous interpretive qualitative research in education. I did this by considering the ways and extent to which philosophical, theoretical and methodological coherence, reflexivity, transparency, authenticity, sincerity, credibility and ethics may be drawn upon, where appropriate, throughout the entire research process. I did so while encouraging education researchers to select concepts and practices depending on their suitability to their research, to emphasise that this is not a checklist of ideas to be used in all education research to increase or guarantee research rigour. What I suggest here is, by degrees, mostly in keeping with what Pratt et al. (2020) refer to as methodological bricolage, but I hesitate to term it that. What is crucial to me, again, is that the principles of rigour that I explore above are carefully considered, selected and used in a way that demonstrates philosophical, theoretical and methodological coherence and cohesiveness. To return to a point I made at the beginning of this paper, such coherence and congruence should form the bedrock and spine of all research because it is tied to fundamental questions about the (education) world in which we co-exist and co-create and the knowledge we construct about it, and thus should be central to ideas relating to rigour in qualitative research in education. Far from being the final word on this matter, I, like Köhler et al. (2022), hope that this paper is a catalyst for discourse among researchers that encourages them to engage with contemporary trends



and tensions to pave new pathways that embrace the diversity and plurality of qualitative approaches. As such, this paper offers ideas for interpretive qualitative researchers to think with and experiment with. Moreover, these are ideas, if necessary, to develop, problematise or even refute. What I have tried to do in this paper is to galvanise interpretive qualitative researchers in education to reflexively consider and justify the ways and extent to which their research decisions, processes and practices are rigorous. Time will tell if I have achieved that ambition.

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