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## Fidelity to participants when researching multilingual language teachers: A systematic review

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#### Abstract

The research field of multilingualism in education has grown exponentially over the last two decades, with more and more studies published every year on the need for teachers to validate the whole linguistic repertoire of their students and help them draw on their multilingualism as a resource. What has, conversely, not been accorded sufficient attention by researchers is the multilingualism of the teachers tasked with realising this. This oversight, as it were, raises ethical issues for researchers that go beyond macro ethical considerations like the need to ensure participant anonymity, their protection from harm, and data confidentiality. Education is itself a complex, ethical enterprise, where engagement with teachers and students requires greater faithfulness, exactitude, and respect on the part of researchers. The need for such engagement, from an ethical standpoint, has been magnified as governments globally implement multilingual initiatives in schools and universities that encourage teachers to harness the growing linguistic and cultural diversity that surrounds them (and of which they are a part). Based on


a systematic review of 59 published works between 2016 and 2021, this article discusses the importance of adopting a fidelity-to-participants approach when researching multilingual language teachers. Such an approach has been missing from most studies, yet it would benefit researchers and their participants, as well as policymakers and educators in several ways.

## K E Y W ORDS

ethics, fidelity, language teaching, multilingualism, systematic review

## Context and implications

## Rationale for this study

Despite a proliferation of studies on multilingual language learning and teaching, the ethics of conducting research involving multilingual language teachers is an area that has received scant attention.

## Why the new findings matter

The review serves as a seminal resource for understanding how researchers have engaged with multilingual language teachers in studies from 2016 to 2021, the implications of this engagement, and how ethics and validity can be enhanced in future projects by adopting fidelity to one's research participants.

## Implications for educational institutions and researchers

The findings revealed three main areas where ethical issues were prevalent, including a focus on ethnicising or racialising the participants' multilingualism, providing only limited details about them as multilingual individuals, and engaging with them monolingually and as objects of study rather than as persons. The review's findings can be used by researchers to design ethically rigorous projects, from a relational standpoint, which provide more exact and faithful insights concerning multilingual language teachers. Educational institutions, meanwhile, can draw on the findings to ensure, among other things, that teacher education programmes are better attuned to language teacher multilingualism and do not result in maladaptive training.

## INTRODUCTION

The notion of the multilingual language user has evolved considerably since the middle of the twentieth century, when researchers began to move away from the fractional view of multilingualism towards a more dynamic conceptualisation of the phenomenon and its effects on the individual (Grosjean, 1989; Jessner, 2008). The fractional view of multilingualism held that speakers of multiple languages comprised several monolinguals in one person so
that each language was seen as disconnected from all the others, with proficiency in each language similarly viewed as being entirely discrete. Researchers during the first half of the twentieth century, likely well intentioned yet subscribing to this view, published findings that purported to show how being multilingual negatively affected one's intellectual development and linguistic competence. For example, in his work on child psychology, Thompson (1952, p. 367) stated that 'there can be no doubt that the child reared in a bilingual environment is handicapped in his language growth' and suffers from 'retardation in the common language of the realm'. Goodenough (1926, p. 393), some decades earlier, had reported findings that she interpreted as supporting the view that 'the use of a foreign language in the home is one of the chief factors in producing mental retardation as measured by intelligence tests'. These researchers, like others of the era, followed macro ethical (i.e., procedural) guidelines (e.g., ensuring participant anonymity, data confidentiality, etc.) when conducting their studies. Yet, as writers have since pointed out (Grosjean, 1992), they made little attempt to engage with their multilingual participants beyond the confines of these guidelines, which led to mistakes that affected how people would perceive multilingualism for decades to come. One such mistake was that they selected their participants based on ethnicity, assuming that having a certain ethnic background equalled being multilingual. This meant that at least some of their participants may not have been multilingual (Cumins, 1976). Had they incorporated the principle of fidelity to participants into their research (Noddings, 1986), they would have gained deeper (and more accurate) insights into the nature of their participants' multilingualism (or lack thereof) and how it affected them.

In the twenty-first century, the negativity surrounding multilingualism that had built up over the past two centuries has dissipated notably, both in theoretical and language policy terms. These changes are, in no small part, due to researchers like Peal and Lambert (1962), Grosjean (1989), and others who, starting in the second half of the twentieth century, began to demonstrate how the multilingual language user was a different kind of language user from monolingual speakers, one who benefitted affectively, intellectually, and linguistically from drawing on a greater pool of resources than that which was available to the latter. These researchers have been followed by others who have similarly contributed to a more holistic understanding of the multilingual language user through various theoretical frameworks (Aronin, 2019; Cook, 2016; Douglas Fir Group, 2016; Jessner, 2008). In language policy terms, too, governments around the world have increasingly come to view multilingualism as an asset and begun emphasising the need for citizens to learn multiple languages to thrive in a globalised world (Calafato, 2021a; European Council, 2019; Gao \& Zheng, 2019). As part of this push, the foreign language curriculum for schools in countries such as, for example, Norway, now stresses the importance of valorising the whole linguistic repertoire of students and helping them harness it as a resource to learn additional languages (Utdanningsdirektoratet, 2020). Compared to the twentieth century, current research on multilingual language users, likewise, exhibits greater awareness of multilingualism's cognitive, linguistic and psychological effects on the individual (Henry, 2017; Pavlenko, 2006; Wei \& Ho, 2018) and of its potential as a resource in education (García \& Sylvan, 2011). Despite these advances, remnants of the fractional approach remain (Calafato, 2019; Ziegler, 2013) and continue to raise ethical issues regarding the relationship between researchers and participants that are not covered by macro ethical guidelines, much like in the past. Alluding to this state of affairs, Cruz-Ferreira (2015) notes:

Failure to realize that multilingualism has to do with *multilinguals* explains the obsession with the languages of a multilingual that has characterized specialist and lay quests into multilingualism. We select multilinguals' vocabulary sizes, accents, grammar, pragmatic proficiency, for comparison with monolinguals', to ascertain the presumed state of health, or integrity, or wholeness, of
> multilinguals' languages, apparently expecting to find the key to multilingualism in the languages themselves. A bit like saying that the key to Maria João Pires' performance lies in her pianos. We've even started comparing trilinguals to bilinguals, those not-so-exciting-any-more language geniuses of yore, and I'm sure the day will come when we'll compare octalinguals to heptalinguals, to find out... What, exactly? I wonder, too. This way of looking at multilingualism takes it as a property of languages, which is clearly nonsensical. Languages can't be multilingual: people can.

Moreover, the growing acknowledgement of the benefits and complexities of being multilingual that has characterised studies starting in the 1980s (Otwinowska, 2015) has mostly affected how researchers and policymakers evaluate the multilingual language learner (García et al., 2017; Jessner, 2014) rather than the multilingual language teacher (MLT) (Ellis, 2004; Ziegler, 2013), who represents the other half of the language classroom. This is similarly reflected in how policy documents, published by regional blocs and governments, and school language curricula from around the world underline the importance of valorising the multilingualism of learners while mentioning little of the multilingualism of teachers. For example, the foreign language curriculum for schools published by Norway's education ministry (Utdanningsdirektoratet), while noting that students are already multilingual and have extensive language learning experiences from different contexts that they should be encouraged to use to make their learning more effective and meaningful, makes little mention of the teachers tasked with realising this or, for that matter, their language learning experiences and abilities (Utdanningsdirektoratet, 2020). The European Council, in like fashion, supports developing multilingual competence (i.e., 'the ability to use different languages appropriately and effectively for communication') in learners, although it says nothing of the multilingual competence of teachers, instead highlighting the need to train them in their role as implementers of 'innovative, inclusive and multilingual pedagogies' (European Council, 2019). This approach to MLTs, if it is found to be systematic in research and policy documents, creates ethical issues because it views them as relevant only in terms of the instructional strategies they employ and leads to research findings and policies that directly affect teachers yet which lack fidelity to them. Adopting fidelity to MLTs would require that researchers and others prioritise faithfulness, exactitude, respect, and honesty in relation to teachers when interacting with them in much the same way as they do for procedures or protocols (Noddings, 1986).

The need for researchers to find ways of implementing fidelity to their MLT participants is especially relevant seeing as, starting in the noughties, an increasing (albeit still limited) number of studies have explored their beliefs about language learning and multilingualism in education, their practices and professional identity, and their experiences working in different parts of the world (for a review, see Calafato, 2019). This is a welcome development since, as Ziegler (2013) notes, language teachers are the main actors in educational contexts for promoting and integrating multilingualism, even if they, as already mentioned, are seldom in focus when it comes to discussing its development in policy documents. Given the importance placed by governments around the world on promoting multilingualism and harnessing it as a resource in education and society, studies involving MLTs have the potential to affect policymaking in diverse ways (Conaway, 2020), depending on, among other things, the findings and recommendations they produce. Should studies make recommendations that do not draw from an accurate understanding of MLT participants, similar to what happened in the past (e.g., Thompson, 1952), it may lead to policies and views concerning MLTs that ultimately harm them in some way, for instance, through the implementation of maladaptive teacher education programmes or undesirable changes to their teaching responsibilities. In this regard, despite, as already mentioned, the growing number of MLT studies, what has not been done is an attempt to understand how researchers have engaged with their

MLT participants in these studies, particularly the extent to which they have gone beyond merely procedural ethics to also emphasise fidelity to them, and what implications the nature of their engagement might hold regarding the studies' findings and the participants.

This article, then, represents a somewhat unique attempt at analysing the ethical profile of studies involving MLTs that entailed a systematic review of 59 published works, written in diverse languages and from various contexts, between 2016 and 2021. Teaching is already a complex, ethical undertaking (Campbell, 2003) that requires teachers to effectively manage an array of emotional, ideological, social, and pedagogical responsibilities (for which they are then frequently evaluated). The presence of multilingualism adds several additional layers of complexity to these responsibilities that affect not only language learner experiences but also teacher experiences (and behaviour) (Ziegler, 2013), something that researchers might overlook or forego engaging with sufficiently. This article delves into how researchers can provide more insightful findings and implement more ethical coverage of their MLT participants by adopting relational ethics (Hopner \& Liu, 2021), specifically, fidelity to participants (Castner, 2021; Noddings, 1986), alongside macro ethical guidelines. The findings from the review provide support for such adoption, which would allow researchers (and those who read their works) to see how research projects can be more than a transactional, bureaucratic process, and lead to insightful discoveries built on deeper collaboration, engagement, and understanding between researchers and participants (Costley \& Gibbs, 2006).

## MULTILINGUALISM AS A NEW DISPENSATION AND ETHICAL CONCERNS

Individual multilingualism is a complex concept, one that everyone defines somewhat differently (Cenoz, 2013), overwhelmingly based on the number of languages an individual uses and how well they use them. For some, multilingualism starts when an individual learns a second language, whereas others feel that multilingualism only begins at three or more languages, with there being a clear difference between bilingualism and multilingualism (Kemp, 2009). In such instances, using the terms trilingualism or quadrilingualism (and so on) would be just as (if not more) apt since the term multilingualism does not semantically specify an exact number of languages (only a multiplicity, i.e., bilingualism would be considered a form of multilingualism). Other terms like 'plurilingualism' (Taylor \& Snoddon, 2013) and 'translingual' (Canagarajah, 2012) are sometimes used distinctly from multilingualism, though, as Taylor and Snoddon (2013) note, this is not always without some controversy. For example, Marshall and Moore (2013, p. 474) distinguish between multilingualism, which they define in terms of a focus on separate language proficiencies and in reference to 'broader social language context/contact(s) and the co-existence of several languages in a particular situation', and plurilingualism, which they describe as representing 'the unique aspects of individual repertoires and agency' and a rejection of languages as static systems within an individual's linguistic repertoire. Yet, as Taylor and Snoddon indicate, depending on how plurilingualism or multilingualism are defined (e.g., static versus fluid systems) and promoted, they can lead to certain languages dying out, especially endangered minority languages. Language, moreover, can mean many things, including official, regional, minority, and contested languages, as well as dialects, pidgins, creoles, slang, jargon, and even signs, gestures, and symbols. It is not within the scope of this article to argue against including or excluding one or another criterion regarding the myriad manifestations of multilingualism and language; rather, the aim is to show that definitions can vary considerably and that these variations can affect, at a minimum, how and what languages are used and supported.

Given the consequences of defining and promoting multilingualism in one form over another (for a deeper discussion, see Taylor \& Snoddon, 2013), one might reflect on whether researchers take into account the impact that their preference for a particular definition of multilingualism can have on their interactions with participants, as well as on those with whom they share their studies' findings. It could be argued that macro ethical guidelines do not generally require such reflection on the part of researchers. Other ethical concerns that may arise include the researcher's decision to forego explicitly defining multilingualism in their project and how this might be reflected in the recruitment of participants. It is worth remembering that such omissions occurred in the past, where researchers like Thompson (1952), despite implementing procedural ethics, selected participants based on their status as minorities or immigrants rather than specifically their multilingualism (Cumins, 1976). And so, one starts to wonder about the extent to which that might occur in the present, whether researchers continue to conduct studies relying purely on procedural ethics, as in the past, and if this may lead to findings that do not truly reflect the participants, their behaviour, experiences, and identity. At the same time, as already mentioned, the findings from these studies, some of which are funded by public institutions, could be used to formulate future policies concerning language education and multilingualism (Conaway, 2020), with significant implications for MLTs and others. For example, should a study report that MLTs are unwilling or unprepared to implement multilingual pedagogies based on a purely procedural approach to research ethics that lacks deeper engagement with the participants, the findings, despite being well intentioned, could be short on critical insights as to how the researchers arrived at such a conclusion. In this regard, there has been no attempt to gather the many disparate studies involving MLTs (or other multilingual language users, for that matter) and ascertain the extent to which researchers have adopted a more robust ethical framework that codifies deeper engagement with, and exactitude and faithfulness towards, study participants.

Ethical behaviour in educational research (and that exhibited in other disciplines) has normally consisted of researchers extracting data from participants with their consent (e.g., via questionnaires and interviews) and then sharing this data with the academic community and wider society (i.e., through academic publications, seminars, conferences, social media posts, etc.). Consent is obtained by promising the participants anonymity, data confidentiality, professional conduct, nonmaleficence, and transparency. Such macro ethical practices are procedural and help researchers monitor the research process, which is perceived as a transactional and legalistic scientific enterprise (Hopner \& Liu, 2021). However, these practices do not emphasise deeper relational engagement between researchers and participants (Castner, 2021), one that prioritises a mutually beneficial exchange of ideas and, more importantly, a greater awareness of, and faithfulness towards, the participants as complex individuals in their own right. In many ways, macro ethical guidelines reflect the approach to teachers and their profession that experts and decision makers have frequently adopted when formulating education policy, where the purpose of teachers is simply to adhere to the specific guidelines or protocols that others create for them. Describing this approach, Castner (2021, p. 3) notes:

Experts with external authority design and develop educational experiences, which can be named 'treatments' or 'curriculum'. Teachers and school leaders do not participate in the processes of conceptualizing and planning the normative aims and experiences. Instead, their involvement is sequestered to the precise adherence to the prescriptions they receive. Organizationally speaking, external authorities make value-laden curricular and instructional prescriptions, and practitioners are expected to dutifully defer to their expertise and follow their prescriptions.

The expectation of adhering to 'treatments' designed by others who might, moreover, not be multilingual or understand multilingualism, be these policymakers, the school administration, teacher educators, or researchers, can be quite demotivating and harmful for MLTs, as studies have shown (Calafato, 2019), not least because multilingualism is a complex phenomenon that many in the past misunderstood because they eschewed a deeper engagement with their participants beyond the merely procedural (for a discussion of some of the issues with how multilingualism was studied by researchers, see Cumins, 1976; Grosjean, 1992). Referring to the ethical concerns that arise as a result of an adherence-centric approach in relation to teachers, Noddings (1986, p. 506) states, 'To suppose that teachers are irrelevant except for the instructional strategies they employ is surely to wrong them as persons.' The potential to wrong teachers is heightened because researchers, regardless of their research methods, have to analyse their data in a way that requires some amount of reinterpretation and rewriting and, hence, authorship (Fina \& Georgakopoulou, 2012). In other words, the participants' voices are inevitably reshaped by researchers (even more so when purely procedural ethics are adopted), who must grapple with the ethical conundrum of how to present the participants in as unmediated a way as possible while also satisfying their research agendas. Relational ethics, including fidelity to participants, in contrast to macro ethics, recognise that 'how knowledge is produced and how it is acted on is complementary in importance and augments what knowledge is produced' (Hopner \& Liu, 2021, p. 182). Regarding fidelity, specifically, Noddings (1986, p. 496) describes it as connoting, 'on the one hand, a state or quality of faithfulness and, on the other, exactitude or a high degree of accuracy', which she then applies to the researcher-participant relationship. She stresses that researchers should stay committed to the principles of faithfulness and exactitude vis-à-vis their participants, which entails being honest, sensitive, respectful towards them, seeing them as they are, and refining and strengthening one's practice of these principles (see also Caine et al., 2020; Costley \& Gibbs, 2006).

It is important to note that fidelity plays an important role in our daily interactions with one another yet can be absent from the ethical guidelines that many researchers adopt in their projects. By recognising the benefits of incorporating the concept of fidelity, we eliminate the divide between researchers and participants that characterises unengaged and inexact research (Noddings, 1986). Such an understanding is essential when research concerns MLTs, who, as already mentioned, are at the forefront of encouraging their students to become more aware of multilingualism and benefit from it (Ziegler, 2013). This is no small undertaking and presents its own ethical challenges, which may be compounded by studies recommending measures that enjoy little pedagogical relevance or practicability because they are not sourced from a deeper understanding of, and engagement with, MLTs and their multilingualism. In concrete terms, fidelity to participants can take the form of diverse practices. For example, Noddings (1986) suggests that researchers can discuss their interpretation of the participants' behaviour and responses with the participants and include both versions (i.e., both theirs and the participants') in their report. Other approaches comprise critical participatory looping (Murphey \& Falout, 2010), co-constructing data instruments with the participants (Meys et al., 2021), and sharing the data with them to negotiate a version (e.g., an interim text) that is acceptable to researchers and participants (for more details about this process and the concept of hermeneutic saturation, i.e., where the researchers' and participants' interpretations ultimately overlap, see Poole, 2021). These practices, which can be classified as forms of member-checking (with perhaps the exception of co-constructing data instruments), not only address issues of validity but also enhance ethics by 'treating the researcher-participant relationship as dialogic and collaborative in nature' (Poole, 2021, p. 120). This is important because teachers are not 'inanimate objects or unreflective animals' (Noddings, 1986, p. 509); rather, they construct the data mutually with researchers, with studies indicating that participants, when given the opportunity, will use the member-checking process to challenge the researchers' interpretations (Poole, 2021).

## The multilingual language teacher

In terms of education and learning languages in formal contexts, multilingualism in the twenty-first century is quite different from its manifestations in the distant past, where it was often the purview of specific professions (e.g., scribes, merchants and diplomats) or the upper classes (e.g., learning Greek and Latin to improve one's intellect) (Aronin et al., 2013). In the present, due to the forces of globalisation and technology, learning multiple languages is accessible to most people regardless of their location, social class, or profession, and, as already pointed out, a growing number of governments, for instance, in Europe (Busch, 2011), the Middle East (Baker, 2017), and Asia (Calafato, 2021a), explicitly encourage or even require students to learn multiple languages as part of their school and university programmes. This emphasis by governments on becoming multilingual through education is something unique to the twenty-first century in terms of scope and access and represents a drastic change from the suspicions and disdain with which multilingualism was treated in the preceding two centuries (though it is debatable if governments have fully accounted for the consequences of their multilingual initiatives, ethically speaking, for learners and teachers). Referring to attitudes towards multilingualism in the Soviet Union, for example, Ter-Minasova (2005, p. 446) writes:

> In the 1930s and 1940s foreign languages were 'out of fashion' as a suspicious subject that led straight into the arms of 'potential enemies,' which actually meant the rest of the world. People who studied foreign languages were also suspicious as they were potential spies, potential emigrants and/or potential cosmopolitans. They lacked loyalty and patriotism because they did not seem to be satisfied with their own language, culture, country, world.

Amid these changes, the role of MLTs grows ever more critical (Calafato, 2019). The MLT is any language teacher who uses multiple languages in the diverse domains that comprise their life. For instance, they may teach one or more languages (Aslan, 2015), engage in translanguaging in the classroom (i.e., communicate by drawing on their whole linguistic repertoire, including shuttling between languages, however these are defined; see Lewis et al., 2012) and in their private life (Calafato, 2021c), choose to behave (and teach) monolingually despite knowing multiple languages (Zheng, 2017), or be enrolled in language courses for any number of reasons (Calafato, 2021c). Much like the learners they teach, they may have studied multiple languages at school and/or university, grown up in several countries, might come from a multiethnic background, be immigrants or a member of a minority, and hold disparate beliefs regarding multilingualism and language teaching. Moreover, depending on how languages are defined, MLTs could also be teachers who know multiple dialects, pidgins, creoles, or other forms of language. These are merely some examples of MLTs, who can be said to represent a significant population of teachers worldwide (if not the vast majority). Ethically speaking (and expanding on the discussion of multilingualism in the previous section), interacting with MLTs can pose several dilemmas for researchers that they may not have reflected on at length. For example, if researchers view multilingualism solely through the prism of official languages, they may forego exploring how their MLT participants' knowledge of dialects and pidgins (should the participants possess such knowledge) affects their beliefs and practices. Proceeding thus, they may, likewise, preclude certain MLTs from participating in the project, an omission that could affect the import of their findings. Then there is the question of how researchers choose to interact with their MLT participants, that is, the language(s) they use with them, and the impact this has on the participants and the study's findings. For instance, Pavlenko (2006) found that multilingual individuals can feel as if they are different people when using their languages, which makes it likely that at least some MLT participants may behave differently based not only
on what language(s) the researchers use with them but also how they use these (e.g., engaging in translanguaging versus using only one or another language at a time).

## METHODS: CONDUCTING THE SYSTEMATIC REVIEW

This section details the procedures that were adopted when conducting the systematic review of MLT studies from 2016 to 2021 . The next section, consisting of three subsections, presents a discussion of the findings from the review, followed by recommendations for how researchers can enhance ethics and boost their studies' validity by adopting the principle of fidelity to their MLT participants. The overarching goal of the review was to determine the extent to which MLT studies had adopted elements of fidelity to participants and what form this adoption had taken. In operationalising fidelity to participants, the review drew on Noddings (1986) and Costley and Gibbs (2006), focusing primarily on Noddings' definition of the concept as involving 'exactitude' and 'faithfulness' to participants. In discussing the importance of exactitude and faithfulness to teacher participants, Noddings (1986, pp. 506-507) notes:

> When teachers are the direct objects of our research, we run the risk of wronging them as persons. When we assign teachers randomly to instructional strategies that they will implement, for example, we suppose that the strategies themselves are somehow instrumental in producing student achievement... We also wrong teachers when we make judgments about them or their work that they could not anticipate from the original description of our research...

In concrete terms, this meant analysing how the studies, among other things, had presented their MLT participants (i.e., exactitude), for instance, whether they had simply counted the number of official languages the participants knew and provided their overall proficiency in these (or listed only those languages in which they were highly proficient), whether these details, especially concerning proficiency, were provided by the participants or had been surmised by the researchers, or, like in past studies (see Cumins, 1976), if the participants were selected mostly based on racial or ethnic criteria. Attention was also paid to how multilingualism or any of its related terms were defined, as well as to, most important of all, how the researcher(s) reported engaging with their participants (i.e., faithfulness) both during and outside of the data collection phase (i.e., outside of asking them to complete a questionnaire, interacting with them during interviews, or observing them during lessons, etc.) and the extent to which all of the participants' voices were represented in the data (e.g., if the study included 20 participants yet focused primarily on only two of them). In terms of ethics, the systematic review followed recommendations made by Suri (2020) and, in its epistemological orientation, hewed closely to teleological ethics in that it sought to ascertain how the studies had attempted to authentically and faithfully represent their MLT participants. As for the specific steps, the review was conducted according to the guidelines enumerated by Bearman et al. (2012). A search of Google Scholar, Web of Science, ERIC, and Scopus databases was carried out for studies from 2016 to 2021 using the terms multilingual teacher(s), multilingual language teacher(s), multilingual instructor(s), multilingual tutor(s), multilingual teaching, multilingual pedagogy(ies), and derivations thereof (e.g., plurilingual teacher(s), bilingual instructor(s), etc.). These terms were also used in French (e.g., enseignant(s) plurilingue(s)), Italian (e.g., insegnante(i) multilingue), Spanish (e.g., profes(or)(a) (ores) plurilingüe(s)), German (e.g., mehrsprachige(r) Lehrer), Norwegian (e.g., flerspråklig(e) lærer(e), tospråklig(e) lærer(e)), and Russian (e.g., многоязычный(ие) учитель(я), педагогполиглот) to ensure that works written in multiple languages would be included in the search and not just those written in English (i.e., to avoid language bias; see Suri, 2020).

Beyond the requirement that the works must include one or another of the search terms within the text, title, or abstract, the additional criteria that the works needed to satisfy were as follows: first, the work is published in a peer-reviewed source (i.e., unpublished dissertations were discounted); secondly, the work is an empirical study (i.e., theoretical discussions, opinion pieces, and the like were ignored); and third, the work includes MLT participants, which meant that studies that only looked at students' views regarding MLTs were not selected (e.g., Melo-Pfeifer, 2017). The database search turned up many studies concerning specifically bilingual education in the United States that were ultimately not included in the review. By default, these studies almost exclusively focused on Latin teachers and students (and not always in relation to language education), which differentiated them from the studies selected for this review. This is not to say that these studies did not satisfy many of the abovementioned criteria, only that their sheer numbers and particular focus would be best served by a separate review. Ultimately, 59 works, published between 2016 and 2021, qualified for the review. In terms of analysis, EPPI Centre guidelines (2003) served as a general framework (albeit significantly condensed) for extracting and coding the data, which was done using ATLAS.ti. Each selected work underwent multiple readings to scan for how the researchers had engaged with, and presented, their MLT participants, with each reading leading to the generation of new codes and/or the refinement of pre-existing codes, as well as the annotation of text passages. The works were also coded for types of data collection instruments used (e.g., interviews, questionnaire, etc.), the languages the researchers used with the participants (including whether they drew on or encouraged the participants to draw on their whole linguistic repertoire during interactions, e.g., through translanguaging), sample size, and context (see Appendix 1 for all the studies that were coded). This process was carried out with each work after which the codes thus generated were compared across all 59 works and refined where necessary, with some codes being subsumed under others.

## FIDELITY IN RESEARCHING MULTILINGUAL LANGUAGE TEACHERS

The coding process led to the identification of particular themes across the studies that were then folded into three categories, each represented by one of the subsections below. Table 1 provides examples of the coding process, listing some of the codes and themes that were generated. These included what aspects of the participants were presented (MLTs) in the studies, the languages the researchers used when interacting with them (Languages), the studies' ethical orientation (Ethics), and whether multilingualism was defined in the study (Multilingualism) (see also Appendix 1). Regarding MLT aspects, 'Education' encompasses data concerning the participants' qualifications and educational experiences (excluding languages learned); 'Ethnicity' covers discussions of the participants' ethnicity or minority status, either separately or in relation to their multilingualism, travels, profession, and so on. 'Family life' comprises instances where the studies elaborated on the participants' family interactions and relationships (e.g., the languages they used with their parents, siblings, or relatives, etc.); 'First language' consists of study data regarding the participants' first language (i.e., their mother tongue), whether these were simply enumerated or discussed at length (e.g., their emotions when using their first language, etc.); 'Language beliefs' represent the studies' focus on the participants' beliefs about language learning and teaching (e.g., using a target-language only approach versus multilingual pedagogies, the use of students' home languages during lessons, translanguaging, etc.); 'Language learned' is used for those instances where the studies discussed the languages their MLT participants had learned following their first language(s) (excluding their proficiency in these since not all studies mentioned proficiency when discussing the participants' language learning
TABLE 1 Examples from the coding procedure

| Extract | Work | Page(s) | Code(s) | Theme(s) | Category |
| :---: | :---: | :---: | :---: | :---: | :---: |
| While recounting narratives, the interviewees jointly interpreted and reinterpreted their experience along with the researcher... Meanwhile, as researchers, we strive to maintain our reflexive awareness of how the researcher and participants represent their positions in coconstructing meaning in the interviews | Ishihara and Menard-Warwick (2018) | 260 | Interview; qualitative method; participatory looping; researcher reflection on coconstruction of data; fidelity | Data <br> Ethics | Working with study participants; data collection and analysis |
| Using a life-history approach, I carried out formal individual semistructured interviews that lasted between 40 and 120 min eachconducted in Spanish or English or both. I also conducted a focus group interview with 11 participants. At some point, most of the participants were former students in undergraduate and graduate courses that I instructed | Garza (2019) | 38 | Interview; qualitative method; interaction in Spanish; interaction in English; translanguaging; researcherparticipant relationship | Data <br> Language <br> Relationship | Working with study participants; data collection and analysis |

experiences). 'Language use' refers to any data from the studies concerning how the MLTs used their languages (i.e., beyond just reporting on what languages they knew) while 'Macro factors' denote cases where the MLT participants talked about societal or national influences, trends, values, policies, and so on. 'Meso factors' cover data describing the MLT participants' beliefs, experiences, and interactions in relation to the environment at schools, universities or other educational institutions, including vis-à-vis their colleagues and the administration (but excluding students since all the studies mention the classroom to some extent, which is situated at the micro-level).
'Practices' encompass the studies' discussion of the participants' teaching practices (in some ways, practices can be considered as constituting the micro-level), whereas 'Proficiency' references instances where the studies mention the participants' proficiency in the languages they had learned (but did not teach) or, more seldomly, taught. 'Race' indexes the studies' use of descriptions like 'white', 'black' and 'person of color' concerning their MLT participants. Finally, 'Sociobiographical' covers mention of the participants' age and gender ('Experience' is used for when the studies discussed the participants' teaching experience in numerical terms, e.g., employed for five years as a language teacher).

## Conceptualising MLTs

Figure 1 provides a breakdown of the various MLT aspects that the reviewed studies explored (and presented) regarding their participants (see the section 'Fidelity in researching multilingual language teachers' for a description of the coding process), whereas Figure 2 gives an overview of how many aspects were reported by each of the studies. In the latter figure, statistics are provided per study both when including and excluding 'Experience' and 'Sociobiographical' since reporting age, gender, and teaching experience are standard practice in most studies where teacher participants are involved and because these were mostly mentioned in passing when discussing the methods and instruments used to collect the data (i.e., there was no exploration of these variables as part of the study's research focus). As can be seen in Figure 1, the majority of studies covered the language learning and teaching beliefs ( $64.41 \%$ ) of their MLT participants, as well as their teaching practices (57.63\%) and


FIGURE 1 Summary of the various MLT aspects covered in the reviewed studies


FIGURE 2 Number of MLT aspects covered in the reviewed studies
educational experiences and qualifications (52.54\%). Less than half of the studies reported on the participants' first language (44.01\%), their language learning experiences (44.01\%), proficiency (22.03\%), or their meso-level experiences (e.g., with colleagues, the administration, etc.) ( $27.12 \%$ ). Rarer still was coverage of themes like family life ( $11.86 \%$ ) and language use (18.64\%). The findings reveal a tendency among the studies to focus on the purely professional aspects of MLTs, particularly their beliefs about language learning and teaching and their teaching practices. As one moves away from those aspects most strongly associated with the classroom, one sees a considerable drop in coverage, where even the meso-level aspect is given comparatively little attention. These trends can serve as a basis for researchers to reflect on whether their understanding of their MLT participants, as well as the level of exactitude reflected in how they are presented, might be enhanced by considering aspects beyond those exclusively linked to their students and the classroom.

Indeed, in ethical terms, when studies involve MLTs, researchers should reflect on how they intend to present their MLT participants and the extent to which omitting certain details may influence how the participants are perceived by readers and the conclusions they draw. These omissions, if they stem from the project's research design, could also colour how researchers interact with their study participants and interpret the data. For example, when studies only report that their MLT participants know a given quantity of languages and their proficiency in each of these, how may this contribute to or detract from an ethically faithful representation of the participants and their multilingualism? Does this indicate that the researchers' ideas about MLTs relate solely to the number of languages they speak and how well they speak these? For example, the 13 studies that mentioned their MLT participants' proficiency (see Figure 1) did so in general, undefined terms and it was not always stated how the researchers obtained this information and whether they engaged with their participants in this respect (e.g., by requesting participant self-reports, having them take a test, or relying on their personal observations, etc.). Furthermore, in reporting proficiency, which was done per language in the studies, one could reflect on whether reporting proficiency in this way contributed to a faithful representation of the participants' multilingualism given that, as already mentioned, such an approach was often employed in the past when the fractional view of multilingualism (Grosjean, 1989) enjoyed wide currency and the multilingual individual was seen as merely comprising several monolinguals. A dynamic view of multilingualism
sees languages as interlinked in the multilingual mind and multilingual proficiency as a compound element (Cook, 2016; Jessner, 2008). Moreover, if proficiency is to be reported, researchers could reflect on whether accuracy could be enhanced by providing a breakdown based on its various components (e.g., language ability, language knowledge, social competence; for a detailed description of these components and others, see Lehmann, 2007) rather than providing a general rating. Such information could lead to more exact and faithful insights regarding the participants' multilingualism and how they might use the languages in their repertoire.

Similarly, it was discovered that several of the reviewed studies presented their participants' languages without stating who spoke what, and it was often not clear how they had learned these languages. In quantitative studies with large participant samples, providing some of these data might prove difficult, though most of the reviewed studies where this occurred had only a handful of participants. For example, Maseko and Mkhize (2021), in discussing their MLT and student participants, simply observe that 'all the participants, including the teacher, spoke several African languages' and that they were 'highly multilingual'. The study focuses on the teacher's use of translanguaging with students, though given how opaquely the MLT is presented, the reader might be mistaken for thinking that the teacher participant represents little more than an embodiment of instructional strategies (translanguaging in this case). Wagner (2021, p. 188), in describing the five MLTs in his study, who were 'recruited through emails and postings targeting multilingual teachers', reports that 'the participants all spoke English and one or more other languages, including Spanish, Russian, or Korean, and reported various levels of non-English language use in the classroom'. The study is insightful, like the others in the review, yet, similar to how the MLT is presented in the study by Maseko and Mkhize (2021), one learns little about the participants themselves, despite there being only five of them. In Lorenz et al. (2021), which is one of the few studies to have observed MLTs implementing multilingual teaching practices, the three participants are described as 'fluent in English and Norwegian' and having 'varying levels of proficiencies in other languages, namely Arabic, Thai, Swedish, Danish, German, French, and Spanish'. Zhunussova (2021), likewise, refers to her 25 MLT participants as '...multilinguals with high proficiency in English, Kazakh, and Russian.... Ellis (2016) reports interviewing 29 MLT participants in one of her studies yet only discusses two of them in any detail (and it is not explained why this is). These examples help us reflect on the extent to which such an approach to presenting MLT participants might be faithful and exact in relation to them as individuals and whether MLT studies have prioritised the implementation of fidelity to protocol over people (Noddings, 1986), who, as the examples cited above show, are sometimes described vaguely and interchangeably.

The review also revealed that 39 studies either mentioned or discussed (at some length) their MLT participants' ethnicity and/or race and that 16 of these contained particularly strong undercurrents of ethnicity and race in relation to the participants' multilingualism. Moreover, notable differences were identified between the studies conducted in Europe, which linked multilingualism to immigrants and minorities, and the United States, which referred to the participants' race/skin colour when touching on their multilingualism. For instance, of the 28 studies conducted in Europe, 6 (21.43\%) explicitly connected multilingualism with immigrants and minorities; whereas, of the 22 studies from the United States, 9 (40.91\%) included race as a notable component vis-à-vis their participants' multilingualism (sometimes presenting it as being in conflict or opposition to 'whites' and their monolingualism). This is exemplified in the study by Smith et al. (2016), an auto-ethnography where one of the authors mentions her multilingualism in connection with her stated identity of being an individual of colour. In contrast, she categorises 'whites' as being mostly monolingual. Since multilingualism and language are not defined in her study, the implication appears to be that multilingualism is a trait linked to people of colour and not common to 'whites'.

Escobar and Treviño (2021, p. 130), in their study of two MLTs in the United States, categorise the 'idealized linguistic practices of Whiteness' as 'monolingual' and 'native speakerism' (for a discussion of native speakerism, see Calafato, 2019), with Pacheco et al. (2019) and Maddamsetti (2020) similarly presenting a racialised view of their participants' multilingualism. For example, referencing Hollins (2015), Pacheco et al. note that teachers in the country are largely 'white and monolingual' (p. 76). In Cho (2017, p. 673), another study that follows purely procedural ethics, when the MLT participants state that they do not have problems with their 'white' teacher-educators, the researcher, perhaps condescendingly, attributes it to their 'denial about racial issues' and as 'a defensive strategy developed to cope with complex experiences that they cannot fully comprehend or control'. In Garza (2019, p. 38), the researcher refers to the MLT participants as 'minority' students, stating that 'all of the participants claimed to either be Mexican, Mexican American, or Latinx', and gives Spanish as their 'original language' (despite several of them being born in the United States and all of them being bilingual).

A comparable trend can be seen in six studies from Europe, although, here, multilingualism, as already mentioned, is more strongly linked to minorities and immigrants rather than to race and skin colour. Researchers in these studies describe their participants as minority teachers (even if the participants do not necessarily identify as such) or link the term multilingual teacher exclusively to MLTs with an immigrant/refugee background from outside of Europe (e.g., Daugaard \& Dewilde, 2017). For example, Burner and Osler (2021, p. 8), when describing their MLT participant, Elif, refer to her 'as a multilingual educator working alongside White Norwegian colleagues'. In the United Kingdom, Conteh (2018, p. 214) appears to equate multilingualism with a lack of proficiency in English in that she references how '... multilingual pupils should not be disadvantaged by their lack of knowledge of the English language' and uses the terms 'multilingual teacher' and 'ethnic minority teacher' interchangeably. Rosiers (2021, p. 74), meanwhile, explicitly states that she uses the term 'bilingual for teachers who are raised bilingual'. This tendency to link the participants' multilingualism explicitly to race or their perceived minority or immigrant status may lack the elements of exactitude or faithfulness in several ways, especially if researchers do not engage or consult with their MLT participants when deciding on, and using, such labels. For instance, the use of the term Latinx in Garza (2019) could be problematic if the researcher used it without consulting the participants. Latinx is a gender-neutral term that is used in academic literature to signify Latin Americans, though the term has been strongly rejected by the vast majority of Latin Americans themselves (only 3\% reportedly use it) because they find it to be culturally offensive and imposed (New York Times, 2020).

Moreover, MLT participants may not see themselves as a minority or may not wish to see their multilingualism 'othered' through race, ethnicity, or skin colour. For example, Elif, the MLT participant in Burner and Osler (2021, pp. 8-9), 'insists that she is a Norwegian' even if the researchers state that they 'elected to refer' to her using a hyphenated designation, that is, 'as being Turkish-Norwegian' to draw attention to 'the concept of multiple belonging'. In Melo-Pfeifer (2021), another study with a purely procedural approach to ethics, the participants are labelled as either migrants or non-migrants, although it is not clear how these categorisations were reached (e.g., whether these labels were discussed with the participants) and if the participants saw themselves in this way. Perhaps some participants were from mixed families comprising both migrants and non-migrants, or their parents had migrated to Germany but they had been born there. Also, the use of the term 'migrant' by Melo-Pfeifer is interesting because it signifies a temporary resident, whereas the term 'immigrant' means a permanent settler. Perhaps the participants planned to return to their home countries at some point and communicated this to the researcher or the researcher simply perceived them as being temporary. In addition to the ethical issues that certain labels might create in terms of exactitude and faithfulness to the participants, the linking of race, ethnicity,
nationality, and minority or immigrant status to multilingualism, in many ways, also harkens back to research conducted in the early twentieth century (see the section 'Multilingualism as a new dispensation and ethical concerns'), when multilingualism had a clear racial or ethnic component and served as grounds for 'othering' (Otwinowska, 2015). Therefore, when studies adopt purely procedural ethics that forego deeper engagement with the participants beyond the data collection stage (and sometimes even during it), as a majority of the studies reviewed here have done, researchers could reflect on whether the use of particular labels contributes to ethnicising or racialising multilingualism in a way that leads to unintended consequences for not only the participants but also MLTs in general (e.g., recruitment practices, relationship with colleagues and students, societal perceptions, etc.) and if these labels are faithful to how the participants see themselves and, just as importantly, want to be seen by others.

Finally, if researchers are to be faithful and exact regarding their participants, they could think about explicitly defining what they mean by multilingualism, bilingualism, plurilingualism, multilingual teachers, and/or language and, ideally, engaging with their MLT participants regarding these concepts before applying them. In 30 (50.85\%) of the reviewed studies (see Figure 3), none of these terms were explicitly defined even though multilingualism, as already mentioned, comes in many forms and definitions (Cenoz, 2013; Taylor \& Snoddon, 2013), and influences individuals linguistically, cognitively, and psychologically in myriad different ways (Jessner, 2008; Pavlenko, 2006). Moreover, among the 29 (49.15\%) studies where multilingualism was defined, none of them engaged with the participants regarding how they would define it. In any event, studies should strive to explicitly define what they mean by multilingualism because it has important consequences for who counts as multilingual, especially seeing as many of the reviewed studies, as already mentioned, were found to routinely allude to ethnicity and race when referencing their MLT participants' multilingualism. One example of the confusion that results from leaving multilingualism undefined can be found in the study by Smith et al. (2020) where the researchers link their participants' (people of colour) multilingualism to their knowledge of multiple English dialects and creoles while also referring to 'whites' as being monolingual. Such comparisons appear confounding because they assume that 'whites', unlike MLTs of colour, do not know any dialects or creoles (the study provides no evidence in support of this). Moreover, based on some definitions of multilingualism, knowledge of multiple dialects and creoles may not even count as multilingualism. At the same time, even when defining multilingualism, researchers could reflect on how this might impact their interactions with the participants. For instance, it might be that the participants see themselves as multilingual based on their use of dialects, yet if researchers define multilingualism as one's knowledge of exclusively official languages and forego deeper engagement with their participants, they may never learn of their views in this respect.

## Working with study participants

The review revealed that 8 (13.60\%) studies had more than 100 MLT participants, 5 (8.47\%) had 50-99 MLT participants, 6 (10.20\%) had 11-49 MLT participants, 16 (27.12\%) had 5-10 MLT participants, and $24(40.68 \%)$ had 1-4 MLT participants. Somewhat interestingly, of the 59 reviewed studies, 13 ( $22.03 \%$ ) studies had only one MLT. Working with hundreds of participants might make implementing fidelity to each participant difficult, though some forms of member-checking could be used even with large groups (Murphey \& Falout, 2010). Such a process might extend the duration of the project, but it would lead to findings that possessed greater validity and were more ethically sound in terms of fidelity to the participants. In studies with only a handful of participants, adopting the principles of faithfulness


FIGURE 3 Definitions of multilingualism adopted in the reviewed studies
and exactitude vis-à-vis participants should, in theory, be easier. As Noddings (1986, p. 507) notes, 'When we encounter our research subjects face to face, we are forced to deal with them as autonomous beings ... we often chat with our subjects, share food and coffee breaks, and generally build trusting relationships.' This is especially true when participants and researchers are already acquainted with each other or when participants are handpicked based on the researchers' personal preferences, as was the case in many of the studies included in this review. For example, Rocafort (2019) reports that the MLT participant in his study was a former student of his. Garza (2019, p. 38) notes that 'most of the participants were former students in undergraduate and graduate courses that I instructed'. Burner and Osler (2021, p. 4) selected their MLT participant because she was 'active in debates and showing reflective articulations on the topics of citizenship and belonging'. Despite these recruitment practices, more such studies implemented purely procedural ethics ( $n=35$ ) than a combination of procedural and some element of demonstrable fidelity to participants ( $n=7$ ).

In fact, of all the reviewed studies, only eight (13.56\%) were found to have mentioned implementing fidelity to participants in some identifiable way (see Appendix 1). Seven (11.86\%) of these studies did so via some form of member-checking (even if none of them provided any details as to what feedback was received from the participants and whether it was incorporated), whereas one study (Calafato, 2020a) reported collaborating with MLTs in designing a questionnaire. Meanwhile, the racial element identified in many of the MLT studies from the United States (see the section 'Conceptualising MLTs') was also present in how the participants were recruited for them. For instance, Smith et al. (2020) made a point of only accepting participants if they were 'black'. Gist (2017) similarly mentions selecting purely MLTs of colour, adding that nine were selected from a larger group of 17 MLTs because they encountered challenges in their teacher education programme (Gist, p. 934). The participants selected by Maddamsetti (2021) were all described as 'white' and 'female'. In terms
of exactitude and faithfulness towards MLTs, these practices indicate that participants were selected based more on racial, ethnic, or biological characteristics than their multilingualism, much like in the past (Cumins, 1976; Hakuta, 1991). Moreover, 14 (23.73\%) studies engaged with their MLT participants solely concerning their ability to support their students' multilingualism. For example, Dikilitaş and Mumford (2020, p. 5) state that their participants 'were asked to generate logs specifically about the children's uses of translanguaging utterances, rather than their own bilingual practices'. Lorenz et al. (2021) and Barros et al. (2021), likewise, deal almost exclusively with how their MLT participants can support students' use of their whole linguistic repertoire and encourage them to draw on their prior language learning experiences. In Matsumoto (2019, p. 183), the MLT participant is introduced as an initial (as opposed to the students who are given names): 'Teacher L, a woman from Ukraine, had resided in the United States for approximately 6 years and had taught an academic writing course for international undergraduates for approximately 2 years.' This is all the information one learns about her, with the rest of the study consisting of the researcher interpreting her actions to support her students.

In Sweden, Hedman and Magnusson (2022) reveal that 'in the teacher-interview transcripts' they attended 'to the teachers' narratives on their students' multilingualism, often in response to why they thought their students chose SSL ${ }^{1}$, how they informed their students' choices, and whether languages other than Swedish were used in the classrooms'. In Llanes and Cots (2020), which is another study that explores multilingual pedagogy in Europe, the MLT participants are instructed to teach in a certain way, and it appears they have little freedom or possibility to provide any input. Instead, the study reports that 'a panel of experts decided what should be done in class and how, and they informed the teachers before the course started'. In these studies, the research design could just as easily have involved the researchers engaging more deeply with their MLT participants by asking them about their own language learning experiences and multilingualism and encouraging them (or collaborating with them) to formulate approaches to multilingual pedagogy where they had more ownership. Such an approach would have enhanced ethics in that there would be less of a sense that the participants were seen as 'irrelevant except for the instructional strategies they employ' (Noddings, 1986, p. 506) or their purpose being to merely adhere to instructions and guidelines handed down to them by experts (Castner, 2021), whoever these may be. A greater focus on the participants as persons could also lead to more insightful findings. Indeed, Higgins and Ponte (2017, p. 20) allude to this when they, referring to one of the MLTs in their study, note that 'although the course readings did in fact persuade 5th-grade teacher Amanda to increase her use of Japanese in her classroom, it seems that her recognition of her own family's language shift to English played a central role in her engagement with the... concept of using home languages as a resource'. At the same time, the findings from the review support observations made by researchers like Safford and Kelly (2010, p. 403) concerning a tendency to discount teachers as persons in educational studies:
...the languages and language competences of children's teachers have never attracted the same attention. The significant developments in theoretical understanding of children's language learning, the resulting arguments over what constitutes best practice and provision, and policies which encourage appreciation of pupil diversity have had virtually no parallel impact on considerations of the language learning of mainstream... teachers.

## Data collection and analysis

The vast majority of the reviewed studies reported neither involving MLTs in research design nor consulting with them during the data analysis phase (or thereafter). As such, the findings can be said to mostly represent the researchers' understanding or interpretation of their participants, who, as already pointed out, are not always clearly presented to readers (see the section 'Conceptualising MLTs'). In fact, Hedman and Magnusson (2021) was the only study out of all those reviewed that explicitly mentioned any type of ethical framework other than the purely procedural (care ethics, in their case), though it is uncertain if the researchers implemented such ethics and, if they did, how they accomplished it in concrete terms. The implementation of fidelity by some of the reviewed studies is already covered in the section 'Working with study participants', which leaves this section to focus on a discussion of specific aspects of the data collection and analysis process, identified during the review, where fidelity to participants could benefit all the parties involved in MLT research. Here, four studies, all from Europe, reported collecting visual data from their participants (e.g., by asking them to draw their language histories or biographies), though none of them mentioned engaging with the participants when interpreting the data. For example, in MeloPfeifer and Chik (2020), the participants are told to simply draw their linguistic biography, and the researchers state that 'no further instructions were given, and the students freely presented their creations and the meaning attached to them'. This simple prompt lies in stark contrast to the five complex research questions that the researchers sought to explore through these drawings, something that they accomplished without engaging with the participants concerning the drawings in any way. The lack of engagement with participants when interpreting visual data can raise significant doubts concerning the validity of the findings, as well as how faithful and exact these are vis-à-vis the participants. As Noddings (1986, pp. 506-507) notes, 'We also wrong teachers when we make judgments about them or their work that they could not anticipate from the original description of our research'.

The reason to single out the need for fidelity to participants when it comes to specifically visual data, despite only four of the reviewed studies generating such data, is that visual methodologies are being increasingly researched and applied in a variety of disciplines even if their use in education research remains somewhat limited (Schreiber \& Fischman, 2017). In any event, visual data now constitutes an integral part of our daily lives and its use in studies magnifies ethical issues as these concern exactitude and faithfulness to participants since researchers must understand what the participants sought to convey through primarily images, pictures, illustrations, and symbols rather than text. As already mentioned, any type of research inevitably involves varying levels of reinterpretation and rewriting on the part of researchers (Fina \& Georgakopoulou, 2012), and so, when researchers work with MLTs, who may draw on a multiplicity of linguistic, cultural, cognitive, experiential, and affective resources, they may need to be extra cautious that their interpretation of the visual data conforms to what the participants meant when producing it. Misunderstandings between researchers and their MLT participants are not limited to visual data and may also arise depending on what language(s) the researchers use with their participants during interactions (e.g., when collecting data from them). As can be seen in Figure 4, in $34(57.63 \%)$ of the studies reviewed, the language(s) used to interact with the participants was not explicitly stated, though based on how the data was presented, it seemed likely that interactions took place in only one language, this being the official language of the country in which the study was situated (though this remains pure conjecture). It was also often unclear if the researchers were monolingual, multilingual, and/or belonged to the majority/minority/ immigrant population. Of the 23 studies that explicitly mentioned what languages were used with the participants (two studies were discounted because they relied on exclusively visual data), 11 (47.83\%\%) reported using only one language, six (26.09\%) used two languages,


FIGURE 4 The languages used to collect data in the studies
four (17.39\%) used three languages, and two (8.69\%) used four languages. What is perhaps most interesting is that virtually all of the studies involved interactions with the participants in an official or national language, rather than dialects or other varieties, regardless of how the studies defined multilingualism.

Collecting data and engaging with the participants in only one language may yield very different data than if the researchers did this multilingually. As Colombo et al. (2005) note, multilinguals seek to hide their multilingualism in front of monolinguals in order not to be othered. Should the researchers behave monolingually, especially if there are significant differences between researchers and participants in terms of status and power (e.g., interactions between researchers who are from the majority and MLTs who are immigrants or refugees), their participants may seek to distance themselves from their multilingualism or downplay its relevance. They may adopt opinions that they feel will please the researcher (something which remains a general concern in all studies but which may be magnified due to the above-mentioned differences). Burner and Osler (2021) allude to these ethical concerns when they note:

We are both people of color, with migrant parents, and are currently working in a country other than the one in which we were born. We believe our positionality played a role in contributing to a relaxed atmosphere and establishing high levels of trust, which may have been different had the researchers been White Norwegians.

This may also extend to the use of certain accents and even dialects. Maddamsetti (2020, p. 348) remarks on this when she discusses her interactions with Mei, her study's sole MLT participant, observing that:


#### Abstract

Mei introduced herself as Mandarin-speaking Chinese and chose to speak English during interviews, and then revealed her Korean heritage and fluency later. Her interview language choice reveals not only her plurilingual identity performance embedded in language hegemonies but also raises further reflexive questions that I can only speculate on. For example, if I had spoken Korean with a North Korean accent, or Mandarin Chinese, how would this have affected Mei's accounts, if at all?


Moreover, as already mentioned, research regarding multilingual language users indicates that they think and behave differently (i.e., feel like different people) when using their many languages (Pavlenko, 2006). MLTs, likewise, may exhibit different behaviour and opinions based on the language(s) they use and how they use them, something that researchers could take into account when interacting with their participants and designing their projects. In this respect, although several studies explored the use of translanguaging as their primary research focus (see Appendix 1), only six (10.17\%) involved researchers engaging in translanguaging in interactions with their MLT participants or encouraging their participants to draw on their whole linguistic repertoire in these instances. Researchers may, therefore, think about the ethics of researching multilingual individuals while collecting data monolingually, especially if their MLT participants' use of languages in their daily life is frequently punctuated by moments of translanguaging. In fact, in the six studies where the participants were encouraged to draw on their multiple languages, there are indications that the participants readily obliged. For instance, Burner and Osler (2021) state that while the 'interview was conducted in both English and Norwegian', they 'encouraged Elif to code-switch whenever she wanted', which led to her speaking 'mostly in English, some Norwegian, and occasionally a few words in Turkish to make herself understood'. Other studies where translanguaging was encouraged include Cavazos and Musanti (2021), with the study reporting that 'the interviews were conducted by the researchers in a translingual manner, utilizing the interviewers' and the participants' language repertoires'. Indeed, in none of the studies where translanguaging was used with the participants did they refuse to draw on their linguistic repertoires or express discomfort when doing so, indicating that translanguaging could be more strongly integrated into how researchers and participants interact to co-construct data rather than simply being a theme that is explored as part of MLT practices when teaching.

## IMPLICATIONS FOR MLTs AND RESEARCH STUDIES

One of the unique features of multilingualism in the twenty-first century is that it can be readily acquired by almost anyone, and a growing number of governments worldwide are encouraging or requiring not only school and university students to learn multiple languages as part of their course of study and but also teachers to draw on their and their students' multilingualism as a resource during lessons. Yet, despite these unique features, the ethics of researching multilingual individuals, particularly MLTs, as was covered here, may retain aspects of the nineteenth and early twentieth centuries, where macro ethical guidelines did little to prevent researchers from applying decidedly monolingual approaches to the study of multilingual language users, leading to findings that were not only ethically questionable and demonstrably inexact but which also negatively influenced societal views of multilingualism and multilingual individuals for decades to come. There is the risk, therefore, that by foregoing fidelity to MLT participants in the present (who remain at the forefront of the various multilingual initiatives implemented by governments globally), contemporary researchers may be similarly misinterpreting or overlooking their participants' multilingualism, with significant implications for the import of their findings, researcher participant interactions,
and even participant well-being. Indeed, such studies, if they are then used by policymakers and educational institutions to formulate education policy, could ultimately harm MLT participants in various ways, for instance, through maladaptive teacher education programmes, work assignments, and recruitment practices. What follows are several recommendations or calls for reflection concerning how MLT studies are conducted, with a view to boosting ethics regarding participants and enhancing the validity of the conclusions reached therein.

First, it is worth remembering that studies on multilingualism from the twentieth century (pre-1980s) often recruited participants based purely on ethnicity or race, and it is likely that many participants were not multilingual. Using ethnic and racial criteria as conditions for recruiting MLT participants and as a marker for multilingualism should, therefore, be done with care to avoid ethnicising or racialising multilingualism in the minds of those who serve as the studies' audience since such practices can lead to instances of certain groups of people being othered or perceived in a way that does not accurately represent them as persons. These ethical issues might be especially pronounced when participant recruitment is strongly convenience-based, with the researchers selecting only those individuals or groups that support or conform to their ideas of what an MLT is (even if they do not explicitly define their ideas in their work). The findings from these studies might also be presented in generalisable terms, raising ethical concerns in terms of faithfulness and exactitude concerning MLTs. Secondly, while studies need to explore what MLTs can do to support their students, it would help enhance ethics if the researchers began to perceive and engage with their MLTs as unique language users (see Ziegler, 2013) so that fidelity is achieved regarding both students and teachers. Put another way, it is understood that teachers should value and harness their students' multilingualism, yet who is to value and harness the multilingualism possessed by teachers? Furthermore, the approach to teachers that sees their purpose as adhering to instructions given to them by unengaged experts may simply reinforce such attitudes among wider society. One way that researchers could address this situation would be to ask the participants questions about themselves, for example, their own language learning experiences, how they relate to the languages in their repertoire, and their use of these languages outside of work, including at home with family members.

Indeed, the compounding effect that multilingualism has on a person linguistically, psychologically and cognitively, means that researchers, ethically speaking, should find ways to expand on how they present their MLT participants, so they cover other aspects than those that are exclusively related to the professional sphere and their students. Argued from even a purely utilitarian or procedural perspective, as some of the studies in the review discovered (e.g., Higgins \& Ponte, 2017), this might yield pertinent insights into teacher behaviour at school and ultimately lead to a more faithful portrayal of them. Third, a related, and perhaps even more pressing, issue is how studies can measure and describe the linguistic competence or proficiency of MLTs. Much has been written regarding the complexities of assessing multilingual language learners (e.g., Shohamy, 2011), and some of these ideas should be applied to researcher-participant interactions in MLT studies where proficiency is reported. Researchers need to be more exact about what it is that they are describing and whether their descriptions represent a fractional understanding of multilingualism or an accurate and faithful representation of the participants' multilingual competences. Studies, including some of those reviewed, continue to define language proficiency on the dichotomous basis of whether one is a native or non-native speaker, despite researchers (Cook, 2016) pointing out that such a dichotomy cannot apply to multilingual individuals. And so, one can reflect on whether it might be best to stop applying terms like native or non-native to multilinguals. Fourth, researchers should make greater efforts to engage with MLT participants outside of the data collection stage of their projects, especially when interpreting the data. In studies where children are the
participants, depending on their age, engagement might be severely restricted or even impossible. But there should be no such barriers when it comes to engaging with MLT participants. Engagement, then, could take the form of researchers working with MLTs on designing parts of, or whole, data instruments, or via some form of member-checking (at the very least).

Finally, more researchers should think about engaging with their participants using multiple languages. It is somewhat ironic when researchers engage with their multilingual participants exclusively monolingually (i.e., using only one language), a trend that bears some resemblance to the many articles on multilingualism that source their references from works written only in English. Researchers should, therefore, try to conceive of and implement their research projects multilingually and consider how the use of translanguaging during researcher-participant interactions could lead to a more exact and faithful understanding of the participants and their language use. The use of multiple languages can also extend to auto-ethnographies, where MLT researchers can reflect on whether their thought processes took place in one or multiple languages when designing and writing the ethnography, and how their choice of language(s) might have influenced their presentation and interpretation of data. In concluding, it is worth reiterating that one of the aims of this article was to get researchers to reflect on their interactions with MLT participants and how these interactions might be made more ethically sound in relational terms, specifically by adopting fidelity to participants in one's study. This does not mean that the studies discussed here have significant shortcomings or report erroneous findings. Ascertaining these things would require a much deeper engagement with both the researchers and participants of each study, which is unfeasible. In any event, the reviewed studies represent a growing and very welcome focus on MLTs and provide important insights regarding how research on multilingualism in education is developing. In future studies, by adopting fidelity to participants, it is hoped that researchers will continue to provide valuable insights in this respect, ideally with greater attention accorded to achieving greater exactitude and faithfulness regarding their MLT participants.

## CONFLICTS OF INTEREST

There are no conflicts of interest to declare.

## ETHICAL APPROVAL

An ethics statement is not applicable because this study is based exclusively on published literature.

## DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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## ENDNOTE

${ }^{1}$ Swedish as second language.

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## APPENDIX 1

The implementation of fidelity to participants in MLT studies in 2016-2021

| Study | $N$ | Ethics | Data | Language | Context | MLTs | Multilingualism |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Barros et al. (2021) | 4 | Procedural | Coursework Interview | English | US (U) | Education <br> First language <br> Language beliefs <br> Language learned <br> Meso factors <br> Proficiency <br> Race <br> Sociobiographical | More than one official or national language |
| Borra (2019) | 1 | - | Auto-ethnography | Italian | US (U) | Education <br> Ethnicity <br> Experience <br> First language <br> Language beliefs | Undefined |
| Brown (2021) | 2 | Procedural | Evaluation Questionnaire | Undefined | US (U) | Education <br> First language <br> Language learned Proficiency | More than one official or national language |
| Burner and Osler (2021) | 1 | Procedural | Interview | English <br> Norwegian | Norway (Undefined) | Ethnicity <br> Family life <br> Language learned <br> Macro factors <br> Meso factors | Undefined |
| Calafato (2020a) | 517 | Procedural Fidelity | Questionnaire | English <br> Norwegian <br> Russian | Norway, Russia (SS) | Experience <br> First language <br> Language beliefs <br> Language learned <br> Language use <br> Macro factors <br> Meso factors <br> Proficiency <br> Practices <br> Sociobiographical | More than one official or national language |
| Calafato (2020b) | 416 | Procedural | Questionnaire | English Norwegian Russian | Norway, Russia (SS) | First language <br> Language beliefs <br> Macro factors <br> Meso factors <br> Proficiency <br> Sociobiographical | More than one official or national language |
| Calafato (2021b) | 517 | Procedural | Questionnaire | English <br> Norwegian <br> Russian | Norway, Russia (SS) | Experience <br> First language <br> Language beliefs <br> Language use <br> Meso factors <br> Practices <br> Sociobiographical | More than one official or national language |
| Calafato (2021c) | 21 | Procedural | Interview | English <br> Norwegian <br> Russian | Norway, Russia (SS) | Experience <br> Language beliefs <br> Language learned <br> Language use <br> Macro factors <br> Meso factors <br> Proficiency <br> Sociobiographical <br> Practices | More than one official or national language |
| Canales (2017) | 9 | Procedural | Interview <br> Seminar <br> Focus group | Undefined | Mexico (PS) | Ethnicity <br> Experience <br> First language <br> Meso factors <br> Practices <br> Sociobiographical | Ethnicity |


| Study | $N$ | Ethics | Data | Language | Context | MLTs | Multilingualism |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cavazos and Musanti (2021) | 8 | Procedural | Coursework Interview Questionnaire | English Spanish | US (U) | Ethnicity <br> First language <br> Language beliefs <br> Practices <br> Sociobiographical | More than two official or national languages |
| Cho (2017) | 5 | Procedural | Class transcript Interview <br> Online postings | Undefined | US (U) | Ethnicity First language Race | Undefined |
| Colliander (2020) | 7 | Procedural | Interview | Swedish | Sweden (SFI) | Ethnicity <br> First language <br> Experience <br> Practices | Ethnicity |
| Conteh (2018) | 6 | Procedural | Interview | Undefined | UK (U) | Education <br> Ethnicity <br> First language <br> Language learned <br> Macro factors <br> Meso factors | Undefined |
| Daugaard and Dewilde (2017) | 5 | Procedural | Interview <br> Observation <br> Photo <br> Policy <br> documents <br> Video recording | Undefined | Denmark, Norway (PS) | Education <br> Ethnicity <br> First language <br> Language beliefs <br> Meso factors <br> Practices | Undefined |
| Dikilitaş and Mumford (2020) | 3 | Procedural Fidelity | Logs Interview Observation | Undefined | Turkey (K) | Education <br> Experience <br> Practices <br> Sociobiographical | Undefined |
| Dixon et al. (2016) | 286 | Procedural | Questionnaire | Undefined | US (U) | Education <br> Ethnicity <br> Language beliefs <br> Language learned <br> Proficiency <br> Race <br> Sociobiographical | Undefined |
| Ellis (2016) | $115^{\text {a }}$ | Procedural | Interview <br> Language biography <br> Observation <br> Questionnaire | Undefined | Australia, Japan, Indonesia, Canada, South Korea, Scotland, Ecuador, UAE (LI, PS, SS, U) | First language <br> Education <br> Experience <br> Language beliefs <br> Language learned <br> Language use <br> Proficiency <br> Sociobiographical | More than one official or national language |
| Escobar and Treviño (2021) | 2 | Procedural | Interview | Undefined | US (U) | Ethnicity <br> Language beliefs <br> Language use <br> Macro factors <br> Meso factors <br> Proficiency <br> Race <br> Sociobiographical | More than two official or national languages |
| Foster et al. (2021) | 4 | Procedural | Interview <br> Observation <br> Written feedback <br> Evaluation | French | Belgium (PS) | Family life <br> First language <br> Language beliefs <br> Language learned <br> Practices | Undefined |
| Gage (2021) | 1 | Procedural | Interview <br> Observation | Undefined | US (SS) | Education <br> Language beliefs <br> Language learned <br> Meso factors <br> Practices <br> Race <br> Sociobiographical | Undefined |


| Study | $N$ | Ethics | Data | Language | Context | MLTs | Multilingualism |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Garza (2019) | 14 | Procedural | Interview | English <br> Spanish | US | Education <br> Ethnicity <br> Family life <br> Meso factors <br> Race <br> Sociobiographical | Undefined |
| Gist (2017) | 9 | Procedural | Interview <br> Focus group | Undefined | US (U) | Education <br> Ethnicity <br> Macro factors <br> Meso factors <br> Race | Undefined |
| Gorter and Arocena (2020) | 124 | Procedural | Questionnaire | Basque <br> Spanish | $\begin{gathered} \text { Spain (LI, PS, } \\ \text { SS, U) } \end{gathered}$ | Education <br> Experience <br> First language <br> Language beliefs <br> Proficiency <br> Sociobiographical | Undefined |
| Haim et al. (2020) | 30 | Procedural | Interview Learning materials | English | Israel (PS, SS) | First language Language beliefs Meso factors | More than two official or national languages |
| Hedman and Magnusson (2022) | 3 | Procedural | Interview Observation | Swedish | Sweden (SS) | Education <br> Experience <br> Language beliefs <br> Practices | Undefined |
| Hedman and Magnusson (2021) | 1 | Procedural | Interview <br> Parenting course | Swedish | Sweden (PS) | Language beliefs Practices | Undefined |
| Higgins and Ponte (2017) | 7 | Procedural | Assignment Interview Observation Teacher conference | Undefined | US (PS) | Family life <br> First language <br> Language beliefs <br> Language learned <br> Macro factors <br> Meso factors <br> Practices | Undefined |
| Ishihara and MenardWarwick (2018) | 2 | Procedural Fidelity | Interview | Undefined | Undefined | Family life <br> Education <br> Ethnicity <br> Experience <br> Language beliefs <br> Language learned <br> Practices <br> Sociobiographical | More than one language |
| Knudsen et al. (2021) | 61 | Procedural | Questionnaire | Undefined | Denmark | Education <br> Experience <br> First language <br> Language beliefs <br> Macro factors <br> Meso factors <br> Practices <br> Proficiency <br> Sociobiographical | More than two official or national languages |
| Kramsch and Zhang (2018) | 78 | Procedural | Interview Questionnaire | Chinese <br> English <br> French <br> German | US (U) | Education <br> Ethnicity <br> Experience <br> Language beliefs <br> Language learned <br> Macro factors <br> Meso factors <br> Practices <br> Sociobiographical | More than one official or national language |
| Llanes and Cots (2020) | 2 | Procedural | Observation | Undefined | Spain (U) | Education <br> Sociobiographical | More than one official or national language |


| Study | $N$ | Ethics | Data | Language | Context | MLTs | Multilingualism |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lorenz et al. (2021) | 3 | Procedural Fidelity | Interview <br> Observation | Undefined | Norway (PS) | Education <br> Ethnicity <br> Experience <br> Language beliefs <br> Language learned <br> Meso factors <br> Practices <br> Sociobiographical | More than two official or national languages |
| Maddamsetti (2020) | 1 | Procedural Fidelity ${ }^{\text {b }}$ | Interview Observation Written feedback | English Korean | US (PS, U) | Education <br> Ethnicity <br> Language learned <br> Language use <br> Meso factors <br> Race | More than one official or national language |
| $\begin{aligned} & \text { Maddamsetti } \\ & \text { (2021) } \end{aligned}$ | 3 | Procedural Fidelity | Interview <br> Observation <br> Learning materials | Undefined | US (PS) | Race <br> Education <br> Ethnicity <br> Experience <br> First language <br> Language beliefs <br> Language learned <br> Meso factors <br> Practices | Undefined |
| Maseko and Mkhize (2021) | 1 | Procedural | Audio recordings Interview Observation | Nguni <br> Sotho <br> Tshivenda <br> Xitsonga | South Africa (PS) | First language Practices | More than one official or national language |
| Matsumoto (2019) | 1 | Procedural | Observation | Undefined | US (U) | Ethnicity <br> Experience <br> Practices <br> Sociobiographical | Undefined |
| Melo-Pfeifer (2021) | 65 | Procedural | Visual language biography | - | Germany (U) | Ethnicity <br> Language beliefs <br> Language learned | More than one official or national language |
| Melo-Pfeifer and Chik (2020) | 33 | Procedural | Visual language biography | - | Germany (U) | Ethnicity <br> Language beliefs <br> Language learned | More than one official or national language |
| Nash et al. (2018) | 1 | Procedural | - | Undefined | US (PS) | Race <br> Practices | Undefined |
| Otwinowska (2017) | 222 | Procedural | Questionnaire | Polish | Poland (PS, SS, U) | Experience <br> Language beliefs <br> Language learned <br> Practices <br> Proficiency <br> Sociobiographical | More than two official or national languages |
| Pacheco et al. (2019) | 1 | Procedural | Interview Observation | Undefined | US (PS) | Education <br> Language learned <br> Language beliefs <br> Practices <br> Race <br> Sociobiographical | Undefined |
| Panagiotopoulou and Rosen (2016) | 5 (32) | Procedural | Interview <br> Focus group <br> Portfolios Questionnaire | Undefined | Germany (U) | Ethnicity <br> First language <br> Language beliefs <br> Language use <br> Practices | Undefined |
| Panagiotopoulou et al. (2021) | 1 | Procedural | Interview Observation | Undefined | Germany (SS) | Education <br> Ethnicity <br> Language use <br> Sociobiographical | More than two official or national languages |
| Pérez-Peitx et al. (2019) | 50 | Procedural | Visual narrative Commentaries | Undefined | Spain (U) | First language Language learned Sociobiographical | More than one official or national language |


| Study | $N$ | Ethics | Data | Language | Context | MLTs | Multilingualism |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Petrón et al. (2019) | 6 | Procedural Fidelity | Interview | Undefined | US (PS) | Education <br> Ethnicity <br> Experience <br> Macro factors <br> Meso factors <br> Race <br> Sociobiographical | Undefined |
| Rocafort (2019) | 1 | Procedural | Visual narrative Commentaries | Undefined | Spain (U) | Education <br> First language <br> Language beliefs <br> Language learned <br> Language use <br> Sociobiographical | Undefined |
| Rosiers (2021) | 7 | Procedural | Audio recordings <br> Interview <br> Policy <br> documents | Undefined | Belgium (SS) | Experience <br> Language beliefs <br> Language learned <br> Meso factors <br> Practices | Ethnicity |
| Schedel and Bonvin (2017) | 78 (154) | Procedural | Interview Questionnaire | French | Switzerland (PS) | Language beliefs Practices | Undefined |
| Sierens and Ramaut (2018) | 31 | Procedural | Observation | Undefined | Belgium (K, PS) | Practices | Undefined |
| Smith et al. (2016) | 1 | - | Auto-ethnography | Undefined | US (U) | Education <br> Practices <br> Race | Undefined |
| Smith et al. (2020) | 5 | Procedural Fidelity | Interview <br> Focus group | Undefined | US (PS, SS, U) | Education <br> First language <br> Language beliefs <br> Meso factors <br> Practices <br> Race <br> Sociobiographical | Undefined |
| Tang and Calafato (2021) | 100 | Procedural | Questionnaire | Arabic <br> English | UAE (SS) | Experience <br> First language <br> Language beliefs <br> Language learned <br> Macro factors <br> Meso factors <br> Proficiency <br> Practices <br> Sociobiographical | More than one official or national language |
| Venegas-Weber (2019) | 2 | Procedural | Interview | Undefined | US (K, PS) | Education <br> Experience <br> Family life <br> First language <br> Macro factors <br> Meso factors <br> Practices <br> Race <br> Sociobiographical | Undefined |
| Vikøy and Haukås (2021) | 10 | Procedural | Focus group | Undefined | Norway (SS) | Education <br> Experience <br> Language beliefs <br> Macro factors <br> Practices | More than one official or national language |
| Wagner (2021) | 5 | Procedural | Focus group Interview Journals | Undefined | US (K, PS) | Experience <br> Language beliefs <br> Language learned <br> Practices | More than one official or national language |
| Wernicke (2018) | 1 | Procedural | Interview | Undefined | Canada (Undefined) | Education <br> Experience <br> Language learned <br> Language use <br> Macro factors <br> Proficiency | More than one official or national language |


| Study | $N$ | Ethics | Data | Language | Context | MLTs | Multilingualism |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Xerri (2018) | 6 | Procedural | Interview | Maltese | Malta (PS) | Experience <br> Language beliefs <br> Meso factors <br> Sociobiographical | Undefined |
| Yang and Jang (2020) | 6 | Procedural | Interview <br> Observation | Undefined | Korea (LI) | Education <br> Ethnicity <br> Language beliefs <br> Meso factors <br> Practices | Undefined |
| Zhunussova (2021) | 25 | Procedural | Interview | English | Kazakhstan (U) | Education <br> Family life <br> Language beliefs <br> Language use <br> Macro factors <br> Sociobiographical | Undefined |

Note: Abbreviations: K, preschool; LI, language institute; PS, primary school; SS, secondary school; U, university.
${ }^{a}$ Reports on three separate studies.
${ }^{\mathrm{b}}$ Partially.

