A systematic review on the role of Language Anxiety for the language learners from a minority background.

Sherin Griesser
Department of Education, University of Oxford
St Anne's College
Supervisor: Professor Victoria Murphy

Dissertation submitted in partial fulfilment of the requirements for the degree of
Master of Science in Applied Linguistics and Second Language Acquisition



August 2022

19,988 Words

Abstract

Background

Research that enhances our understanding of disadvantaged students who experience learning barriers (due to their linguistic and cultural backgrounds) that their mainstream peers do not is vital given the rise in minority students around the world. As seen by the academic gap and high dropout rates among minority students, such barriers hinder access to educational opportunities or to support. As a result, their experience of alienation within the context of the mainstream environment triggers or is affected by Language Anxiety (LA). Due to the extensive attention in the phenomena, the literature and findings on LA might appear inconsistent, which reduces the literature body's accessibility and limits the potential for practical application. LA is generally portrayed in literature on language learning as having a negative impact. Even though this idea is commonly discussed, there is a lack of empirical data. Minority children already deal with a variety of challenges, and a big part of adjusting to a new environment is learning a new language. As a result, it's critical to comprehend this phenomenon and identify the pedagogical techniques minority pupils or their teachers might employ to effectively support them.

Objectives

This is why the systematic review's aim is to find out more about the nature and extent of research on the role of LA for minority students. The purpose of this study is to ascertain whether or not there is a research gap in this specific area and whether or not existent literature may be utilised by educators. To do this, the review acknowledges and subsequently increases awareness of the challenges minority students may face as a result of their precarious position within educational systems, encouraging other studies and educators to follow suit.

Methods

This review makes use of the 'best-evidence' to address the research questions. This review quality assesses each study and employs pre-established and pre-registered inclusion and exclusion criteria during the selection process to foster trustworthiness and transparency.

Results

The thorough search for the review revealed 15 studies from America, Canada, and Australia. This review presents the studies through narrative synthesis because of their heterogeneous nature, which includes a range of sample sizes, ages, and measures. These findings are succinctly laid out before being contextualised with pertinent literature to address broader implications.

Implications

The key takeaway from this review is that it informs researchers about the lack of research on LA's effects on minority students as well as how the concept's inconsistent literature, with its various interpretations and measurements, yields contradictory results. Because of this, it is challenging to assess the effectiveness of strategies and demonstrate to educators which ones are most beneficial and why. Further research using empirical data that is aware of LA related measuring methodological limitations and considers minority students' socio-emotional role in learning is required in order to equip educators for responding with LA's effects on the minority student. Findings alert educators to the detrimental effects LA has in demonstrating what can induce anxiety for student groups, such as Spanish-speaking students in America.

Acknowledgements

I want to express my sincere gratitude to everyone who supported me in completing my dissertation despite a year full of adjustments. Your encouragement and support allowed me to pursue an extraordinary academic career that I will forever cherish.

This brings me to my first acknowledgment. I thank my supervisor, Professor Victoria Murphy, for not only providing me with feedback, but also for her ongoing patience and understanding. Throughout this year, I have been inspired and empowered by her kindness and knowledge. I want to thank the course director, Dr. Hamish Chalmers, whose enthusiasm for systematic reviews was the inspiration for this dissertation. I am appreciative of his encouraging lectures which helped me get started on this project and provided the opportunity for me to develop new research skills as well as greatly enhance my existing ones. Thank you as well to the Department of Education's librarians, who were a huge help with finalising my search terms.

Finally, I want to express my thankfulness to my family and friends who helped me without fail from the start of my degree until the finish line.

Charlotte in particular deserves my gratitude. I have no words to adequately express my appreciation for her persistent support, compassionate demeanour, remarkable capacity to comprehend my thoughts and enthusiasm/stubbornness to help me when I was feeling overwhelmed. She have offered me nothing but sheer joy since day one of meeting you in Oxford.

Last but not least, I would like to thank my ALSLA buddies, Alyson and Vincent. Because of their astonishing brilliance, compassion, and friendship, they made this academic year delightful and tremendously unforgettable, from tedious library sessions to road and pub trips.

Table of Contents

Abstract ii

Acknowledgements iii

Chapter 1. Introduction 1

1.1. Background 1

1.2. Rationale 2

1.3. Outline 3

Chapter 2. Literature Review 4

2.1. Language Anxiety and the Learner from a Minority Background 4

2.1.1. Research Questions 5

2.2. Defining the Minority Student 6

2.2.1. The Role of the Minority Student in the Language Classroom 7

2.2.2. Classroom Engagement 9

2.3. A Framework for Language Anxiety 11

2.3.1. Introduction to Language Anxiety 11

2.3.2. Early Literature on Language Anxiety 13

2.3.3. Cognitive and Affective Dimension 13

2.3.4. Language Anxiety in the Classroom 15

Chapter 3. Methodology 17

3.1. Eligibility Criteria 18

3.1.1. Items Not Included as Eligibility Criteria 21

3.2. Information Sources 22

3.3. Search Strategy 23

3.4. Data Management 25

3.5. Selection Process 25

3.5.1. Initial Screening 25

3.5.2. Full-text Screening 28

3.5.3. Ensuring Screening Reliability 28

3.6. Data Extraction 29
3.7. Risk of Bias of Individual Studies 29
3.8. Data Synthesis 30
Chapter 4. Results 32
4.1. Study Characteristics 32
4.1.1. Publication Details 39
4.1.2. Contextual Characteristics 40
4.1.3. Study Design 42
4.1.4. Measurements and Outcomes 43
4.2. Study Findings 46
4.2.1. Narrative Summaries of Individual Studies 46
4.3. Risk of Bias 53
4.3.1. Studies Reporting Quantitative Data 55
4.3.2. Studies Reporting Qualitative Data 55
4.3.3. Studies With a Mixed Methods Design 56
4.3.4. Cumulative Confidence Across Studies 56
4.4. Summary of Results 57
4.4.1. RQ1: What is the extent and nature of the research that has been conducted on the impact of LA among minority students? 57
4.4.2. RQ2: Is there LA research that might be practically useful to educators? 57
Chapter 5. Discussion 59
5.1. RQ1: Nature and Extent of Research on LA among Minority Pupils 59
5.1.1. Literature by Geographic Region 60
5.1.2. Literature by Measurements 61
5.2. RQ2: Applicability of Research Findings to Education 62
5.2.1. America 62
5.2.2. Australia 63
5.3. Limitations 64

Chapter 6. Conclusion 66

References 67

Appendices 89

Appendix A. IDESR Protocol Document 89

Appendix B. Data Extraction Form 102

Appendix C: Part 1. Mixed Methods Appraisal Tool (MMAT), Version 2018 105

Appendix C: Part 2. Mixed Methods Appraisal Tool (MMAT), Version 2018, User Guide 106

Appendix D. List of References Included Studies 113

Appendix E: PRISMA Checklist 114

List of Figures

Figure 1: Flow diagram of screening process (adapted from Moher et al., 2009) 27
Figure 2: Publication Status of Included Studies 39
Figure 3: Location of the study 40
Figure 4: Linguistic diversity of population 41
Figure 5: Age of students 42
Figure 6: Sample sizes by study 43
Figure 7: Type of measurements per study 44
Figure 8: Frequency of outcomes 45

List of Tables

Table 1: Eligibility Criteria 19
Table 2: List of Databases 23
Table 3: Search Terms 24
Table 4: General Characteristics of Included Studies 35
Table 5: Risk of Bias of Individual Studies 54

List of Abbreviations

EAL	English as an Additional Language
ELL	English Language Learner
EPPI Centre	The Evidence for Policy and Practice Information & Co-ordinating Centre
ESL	English as a Second Language
FLA	Foreign Language Anxiety
FLCAS	Foreign Language Classroom Anxiety Scale
IDESR	International Database of Education Systematic Reviews
L1/L2	First/Second Language
LA	Language Anxiety
LM	Language Mindset
MA	Mathematical Anxiety
MMAT	Mixed Methods Appraisal Tool
PICO	Participants, Intervention, Control, Outcomes
PRISMA	Preferred Reporting Items of Systematic Reviews & Meta-Analyses
RoB	Risk of Bias
SLA	Second Language Acquisition
Sx	Included Study x (1-15)
UNHCR	United Nations High Commissioner for Refugees

Chapter 1. Introduction

1.1. Background

As evidenced by decades research, the phenomena of Language Anxiety (LA), also known as Foreign Language Anxiety (FLA), has been extensively studied (e.g., see Horwitz et al., 1986; MacIntyre, 1995; MacIntyre & Gregerson, 2012; Aydin, 2018; Russell, 2020; Alamer & Almulhim, 2021; Thrasher, 2022). According to MacIntyre & Gregersen (2012) it is the most studied affective variable in the context of language learning. An affective variable is a psychological factor which refers to the emotional aspects of human behaviour and that is often explored within the context of learning to offer a humanistic approach. As such, LA is studied alongside other affective variables such as motivation or self-confidence (Krashen, 1982; Yashima, 2002; Zhang & Zhong, 2012; Khodadady & Khajavy, 2013). However, several conceptualizations and interpretations have been developed over time as a result of the vast research on this field, making its literature look contradictory, complicated, and daunting. These characteristics reduces the accessibility and helpfulness of this research in practice.

The literature of LA shows that the relationship between emotions, the individual and language learning is not as straightforward as one may imagine. Therefore, this systematic review includes a literature review (see Chapter 2) that explores the phenomenon theoretically to provide an overview of its existing and relevant literature before conducting a synthesis and quality assessment of studies in accordance with the systematic review's precise methodological process (see Chapter 3) (Popay et al., 2006).

Further, a systematic review on LA was inspired by research on the mental health, specifically emotional vulnerability, of disadvantaged students from minority backgrounds (often categorised as immigrants, migrants or refugees) who are in mainstream education. The main goal of this systematic review is to present existing literature in an accessible manner for those interested not only in language teaching/learning research but also in finding answers for practical reasons and to support students' needs.

The impacts of migration on an individual are evident; usually, these problems involve adjusting to a new culture, learning a new language, and switching to a new educational system (cited in Roebers & Schneider, 1999, p.126). This event is often described as acculturation, a framework that accounts for both cultural and psychological variables during ongoing, direct contact between diverse groups

of people. Acculturation is associated with poorer mental health, lower self-esteem, and high levels of anxiety (cited in Roebers & Schneider, 1999, p.126).

For groups of people, like refugees, whose migration was forced, rather than deliberate, the experience of acculturation can be traumatic and so psychologically demanding that new contexts, like school, might feel overwhelming. Organisations such as The Bell Foundation and NALDIC (National Association for Language Development in the Curriculum) draw attention to social-emotional factors which affect the disadvantaged student during education. These bodies' mission is to encourage bilingualism and promote research, policy, and practices that will improve educational outcomes and opportunities for disadvantaged students. The goal of this review aligns to it by promoting language research, and subsequently supporting progress in language education, as a means of overcoming exclusion.

The necessity of this review is epitomised by Jim Cummins' article addressing the achievement gap of minority students (1986), in which he underlined that such students endure academic failure and alerted educators and researchers alike about the problem. Cummins (1986; 1989) stated that empirical research, which merely focuses on students' underachievement, ignores social and educational inequities. His aims were to reverse underachievement by challenging what constitutes effective education and by empowering disadvantaged students through emphasising the significance of their first language and culture in their education (Cummins, 1986).

Little progress had been made on this issue and his paper was still relevant when reprinted fifteen years later. In 2022, a number of studies are publishing data that highlight the persistent problem of underperforming minority student groups and the widening achievement gap (e.g., see Weaver, 2022; Coleman et al., 2022; Teltemann et al., 2022). According to the United Nations High Commissioner for Refugees (UNHCR; n.d.), there are approximately 89.3 million refugees worldwide, with an estimate of 41% of them under the age of 18. Before disadvantaged students' academic performance can be improved, and before the academic gap between minority and mainstream students can be closed, the role of social-emotional variables must be understood and addressed.

1.2. Rationale

Multilingualism, multicultural contexts, and acculturation are processes that are integral to educational settings due to the increasing number of students from minority backgrounds.

Joining a new school under such circumstances can be a very stressful experience, especially when the language, as well as the environment, are alien. These students may lack proficiency and may be afraid to speak because of their limited language abilities. LA impedes learning and access to the

learning opportunities available to students who can communicate effectively and fit into the mainstream classroom. When educators are insufficiently aware of these challenges, students from disadvantaged backgrounds face numerous additional difficulties.

Although there is theoretical debate in the literature (Horwitz et al., 1986; Dewaele & Alfawzan, 2018) about the exact role of LA, this systematic review gives an overview of the impact of LA on minority students' language learning and usage. It also seeks to cover the research that discusses how LA should be acknowledged and addressed in the practice of teaching.

1.3. Outline

Chapter 2 defines and characterises the minority student and demonstrates how such students may be connected to LA in order to expound on the specificity of this review. This chapter also examines the interdisciplinary nature of the phenomenon that led to these diverse definitions and, consequently, multiple measurement methods.

Chapter 3 describes the methodology and design of this systematic review and presents the results of an extensive search and literature synthesis.

Chapter 4 gives a clear list of the studies that have been identified, synthesised, and evaluated for quality before summarising all findings in relation to the research questions.

Chapter 5 presents answers to the specific research questions, contextualises them with respect to the available literature and discusses the wider implications of the review's findings before making suggestions for future research.

Chapter 2. Literature Review

2.1. Language Anxiety and the Learner from a Minority Background

Reduced academic achievement, and wider classroom disengagement, is often a result of minority students' specific psychologically dysfunctional relationships with their learning environments as difficult associations hinder their engagement and willpower to keep studying. Such factors are widespread causing these students to feel uneasy in the classroom or school atmosphere, and eventually lead to the rise in the number of students quitting school after completing their mandatory education, typically because they feel that they do not belong or fit in (Cooper, 2013). When a student experiences these emotions of 'otherness' not only are their educational outcomes negatively impacted, but so is their psychological well-being and, ultimately, their future in society beyond the educational environment (Modood & Salt, 2011; Welply, 2017).

As a result, the literature body places a significant emphasis on minority students' lack of persistence in post-mandatory education (such as university), with the aim of determining the factors, and predictors, that influence their decision to drop out (e.g., see Casanova et al., 2018; Makarova & Herzog 2013; Sheng et al., 2011; Rumberger, 2001). Such research helps raise awareness about what support minority students may need to persist with their goals.

This systematic review aims to highlight the significance of recognising the challenges of minority students' academic journey, regardless of the level of education/institution they are attending. The vulnerability associated with 'feeling different' in a multidimensional environment like school (peers, teachers, school) can cause intense emotions and, as a result, may stand in the way of developing a sense of belonging and thereby impact academic achievement (Bronfenbrenner, 1979; McClelland, 1987; Goodenow, 1993).

This 'multidimensionality' refers to the complex interactions minority students have both within and outside the mainstream classroom, with their peers, their teachers and the organisation as a whole; relationships can be difficult and anxiety-inducing in a setting where the student might not be proficient in the language that everyone uses (Blakeley et al., 2015; Tinto, 1975). When interacting with friends, peers, strangers, or anybody else in social situations, minority students may experience LA. Anxiety in educational settings appears to be most prevalent in language classrooms, which has led studies to link it to academic achievement (Jee, 2022).

The role of LA in minority students has been researched in a number of academic fields, including psychology, psychiatry and linguistics (e.g., MacIntyre & Gregersen, 2012; Roberts et al., 1990; Zhang & Zhong 2012). However, when one includes all the various definitions given to the numerous terms

representing LA, the body of literature becomes enormous, overwhelming, and difficult to navigate. This systematic review aims to provide a clearly synthesised overview of pertinent existing literature, so as to give educators, teachers, and researchers the chance to improve their understanding of this field, their familiarity with the concepts, and their ability to use existing literature.

More precisely, the following research questions are the focus of this systematic review:

2.1.1. Research Questions

1) What is the extent and nature of the research that has been conducted on the impact of Language Anxiety among minority students?
    a) What is the extent of the research that explores the role of Language Anxiety on language learning among minority students?
    b) What is the extent of the research that explores the role of Language Anxiety on language use for the minority student?
2) Is there Language Anxiety research that might be practically useful to educators?
    a) How much research on Language Anxiety has been done on the pedagogical implications of minority students' well-being?
    b) How much research on Language Anxiety has been done on the pedagogical implications of minority students' language achievement?
    c) What is the breadth of the research on the role of the minority student's home language?
    d) How does using a student's home language affect them academically and in other areas?

2.2. Defining the Minority Student

In order to specifically question the role that LA plays in a minority student's academic journey, a precise definition of a minority student must be outlined. This classification, however, is not straightforward.

The UNHCR defines minority groups as 'a national or ethnic, religious or linguistic group, fewer in number than the rest of the population, whose members share a common identity' (n.d., n.p.). However, Lippert-Rasmussen and Laegaard (2020) argue that this oversimplified numerical minority notion—which holds that minorities and majorities are solely distinguished by their numbers—means that a group is a minority, if, and only if, they collectively constitute less than the majority. Consequently, it produces a population that is dichotomously split into majorities and minorities, two exclusive categories.

Lippert-Rasmussen and Laegaard (2020, n.p.) use the example of the North African population in Lebanon to show how this numerical definition is overly simplistic and over-inclusive. Shia Muslims are the largest religious group in Lebanon, making up 27% of the country's population. Despite this, however, it is the Sunni Muslims, and not the Shia Muslims, who are referred to as the majority.

This demonstrates that applying the numerical notion to complicated demographic groups does not always correctly portray the concept of minority group. Within this example, despite being more vulnerable, Shia Muslims would theoretically be the majority group and Sunni Muslims, the minority. Therefore, to prevent such an excessively broad perspective, Lippert-Rasmussen and Laegaard (2020) advised to move from 'a numerical to a vulnerability-focused notion of minorities' which labels a group of individuals as a minority when they are vulnerable in a way that another group(/majority) is not. In this, a group's vulnerability may be linked to characteristics like race, religious affiliation, or gender; any features that expose them to prejudice and disadvantage.

The terms 'refugee', 'asylum-seeker', 'migrant', and 'immigrant' all refer to people who are either relocating, have left their countries, are in an area with a different culture or language (Amnesty International, 2022), or are children who were born into such a background and have a home environment different from the mainstream one at school. These terms share the trait of being disadvantaged as a result of their societal status as 'different' or 'other'. This 'otherness' illustrates their vulnerability in a society, or, in the case of this review, within the educational system. For that reason, this dissertation employs the vulnerability-focused concept of minorities and acknowledges that while each label is distinct in law or legal texts (Amnesty International, 2022), the interchangeable use of these terms here occurs as a result of their vulnerability in society and, consequently, in education.

Specifically, minority students encounter more challenges than mainstream students because they must learn to bridge the linguistic and cultural gaps between, and potential conflictual demands of, their home and school, whereas the mainstream student exists in an educational environment that is consistent and typically designed with them in mind (Bursztyn & Korn-Bursztyn, 2015, p.105). As a result, academics like Nibert (1996) contend that the minority group euphemism should be replaced with 'oppressed' as a fairer representation of the reality lived by minority students which are not given the same opportunities in society, politics, and education as their peers and are more likely to endure bullying and/or peer victimisation (Hong et al., 2018). Such bullying is an example of a social injustice that exacerbate psychosocial distress.

In contrast to minority students who regularly experience prejudice in nations like America, white and middle-class students exist outside of this sphere and are not subject to it. Specific to the education context, the white/middle class are well (and over) represented, which consequently causes the minority to feel secluded and underrepresented (Rowley & Moore, 2002). Similarly, Birkelund (2020) explored the minority realm within Denmark. They concentrated on immigrant children who chose to pursue higher education but encountered achievement inequalities that are observable in their high dropout rates and depressed academic performance.

Language-minority immigrants represent the fastest-growing university populations in nations like America, yet despite this, they are also the most likely to perform poorly on college entrance exams, experience higher dropout rates and mental health issues. It is undeniable that this situation is evidence of a wider problem (Saroughi & Kitsantas, 2021). Saroughi and Kitsantas (2021) call for additional research which concentrates on social-cognitive components of such students' wellbeing so as to improve understanding within educational research.

2.2.1. The Role of the Minority Student in the Language Classroom

Academic research frequently uses a variety of terms to categorise individuals from multicultural and multi-ethnic backgrounds, whether the term is based on race (e.g., Black or Latino), ethnicity (e.g., Arab), or situation (e.g., refugee, migrant, or immigrant). Educational research and governments in English-speaking countries often classify students based on linguistic backgrounds (e.g., EAL or ELL). For example, the UK government (Department of Education, UK, n.d.) records students as EAL (English as an Additional Language) when they are exposed to a language other than the mainstream language English at home. Since EAL students do not acquire and develop their linguistic skills at home (like non-EAL students do), the reduced exposure to dominant languages may be visible in their development (Murphy & Unthiah, 2015). In 2018, the Department of Education (UK) recorded 1.6 million students in the UK as EAL. With 30% of those being categorised

as white, it reiterates the argument that the term minority should not be limited to solely physical features that differentiate people from the dominant group. The term EAL encompasses a diverse and heterogenous group of students who are known to use a different language at home, but within governmental data (based on the numerical notion of minority students), a third of primary (33.9%) and secondary (32%) school pupils are considered ethnic minorities (cited in the Bell Foundation, n.d.), demonstrating that ethnicity (and similar attributes) is used to class them as disadvantaged, and therefore, a minority.

In America, EAL students are called English Language Learners (ELL), and public-school student populations are frequently divided into subgroups. According to Okhremthchouk (2014), language-minority students in California are grouped according to their level of proficiency: (1) initially fluent English proficient (I-FEP), (2) English language learners (ELL), or (3) reclassified fluent English proficient (R-FEP). Placing minority pupils in subgroups like ELLs, special education, or low-income is another method of sub-classifying them. The precise process varies between states, but the approach is consistent with the principle behind ELL categorisation. Students are usually grouped according to responses on questionnaires about their home language, or papers filled out by their parents or guardians (Okhremthchouk, 2014).

The problem with this form of classification is that errors are frequently made, and misclassification of a student hinders their academic growth and prevents them from receiving the education they require. Alternatively, if students are not classified, they may struggle academically and never receive the help they require, which consequently has an adverse effect on their academic achievement

This demonstrates how intricate language minority groups are and how, despite the homogeneity of their circumstances, classification of heterogeneous groups may not always be reliable. It also highlights the possibility of significant differences in students' learning patterns due to the complexity of each person and their linguistic/cultural background. Thus, in order to prevent the previously described negative outcomes and the consequent impact on student wellbeing and education, classification and separation of pupils must be done with care and intentionality.

Furthermore, the EAL/ELL labels are not the sole focus of this systematic review, which aims to include studies conducted both in and beyond English-speaking countries. Despite this, for the context of this dissertation, EAL/ELL pupils are included within the minority student umbrella, due to the vulnerability that comes with this misclassification.

2.2.2. Classroom Engagement

As was previously mentioned, when considering the vulnerability attached to being from a minority background, students' sense of identity and belonging in the language classroom must be considered (Boccagni & Baldassar, 2015). Due to their emotional vulnerability and alienation in a mainstream context, minority students feel less at home and at ease in a classroom (Meeuwisse et al., 2010). The degree to which minority students engage in classroom activities and the school setting reveals their integration and level of adjustment to that environment, as well as their emotions towards it (Chiu et al., 2012).

The educational institution of a country is frequently a student's first exposure to a social/cultural context different from their home, and it occurs outside of the comfort of their home (Chiu et al., 2012; Saklan, 2017). Institutions, especially primary and secondary schools, are crucial to a student's well-being because it is where they spend the majority of their time and build their social and cognitive skills for future participation in that country's society (Chiu et al., 2012). Newcomers, like refugees, overtly cope with socioemotional challenges by behaving 'overly shy, withdrawn, unconcerned and unmotivated to learn', which hinders learning and language achievement (Saklan, 2017, p.208). According to Chiu et al. (2012) educational institutions can positively influence vulnerable students' psychological well-being by promoting social/cultural values and attitudes that they recognise. This helps them identify school with positive emotions and enhances their school engagement, which then results in higher academic achievement.

Educational institutions must recognise their responsibility for ensuring the psychological well-being of these students. This responsibility should define how the school environment, particularly the classroom environment, is prepared to address any difficulties minority students encounter in this learning environment. As mainstream students become more familiar with backgrounds that differ from their own, they are more likely to become accepting of the 'other' which no longer feels so foreign. The associated negative outcomes would therefore be removed, including any anxieties that prevent the minority student from participating in the classroom (Montgomery et al., 2021).

Two characteristics that research has emphasised to ensure that students, including language minority students, thrive in a challenging environment like the classroom and increase their engagement are (1) peer work and (2) encouragement (Young, 1991; Russell, 2020). For example, presentations and group projects can be performed as interactive events, where minority students collaborate with mainstream peers to prepare and deliver group presentations (Bunch, 2009).

Minority students find these group activities less challenging, helping to reduce their anxiety, and boosting their classroom engagement instead (Bunch, 2009).

In summary, educators and teachers should encourage minority students to feel comfortable and visible in the classroom, allowing them to speak up in a setting where they otherwise feel excluded (Schultz & Coleman-King, 2012). Equally, the homes, communities, or backgrounds of these students cannot be isolated from the educational environment if one hopes to keep them engaged in the classroom and to ensure their wellbeing (Bajaj & Suresh, 2018).

In addition, the next section of the chapter examines the literature of LA to understand why and how LA may negatively affect the minority student.

2.3. A Framework for Language Anxiety

2.3.1. Introduction to Language Anxiety

Despite the fact that LA is a well-studied variable (e.g., see Horwitz et al., 1986; MacIntyre, 1995; MacIntyre & Gregerson, 2012; Aydin, 2018; Russell,2020), the phenomenon's many conceptualizations have resulted in contradictory literature. Early definitions of LA, for instance, describe LA more widely from a clinical standpoint, while more current definitions characterise it as an occurrence unique to the context of language learning. Various LA measures have developed as a result of these numerous constructs. As such, the research is vast, with many opposing results, causing it to be inaccessible to educators who wish to learn about LA (Scovel, 1978; Kleinmann, 1977; Luo, 2013). Further, this causes LA to be generalised and utilised interchangeably with other anxiety subtypes in academic literature. A better understanding of its significance and relevance to language education necessitates detailed and thorough review of literature.

The phenomenon is typically limited to its classification as one variable (of many) that impairs the language learning process (Ganschow & Sparks, 1996; MacIntyre et al., 2019). Presented within this viewpoint, LA may take the form of students freezing up in class, forgetting language, remaining silence, refusing to contribute, or receiving lower grades despite studying (Luo, 2013, p.443). Naturally, research which exclusively portrays LA through this negative lens promotes the creation of lower anxiety environments (e.g., Young, 1991). The consequent reduction of LA levels is predicted to be pedagogically useful (Horwitz, 2001).

One could argue that the literature's continued insistence on overcoming anxiety during second language learning is partially attributable to the pioneering study by Horwitz et al. (1986) that identified LA as a distinct anxiety, referred to as FLA (Foreign Language Anxiety). This study led to the development of the widely used FLCAS (Foreign Language Classroom Anxiety Scale) (e.g., Toth, 2008; Hewitt et al., 2012; Botes et al., 2020; Luo, 2013) method to identify and measure anxiety. While FLCAS is specific to the setting of language learning, Sparks and Ganschow (2007) criticise its use as it only considers affective variables.

As Scovel (1978) discusses, several studies investigating the relationship between LA and language achievement either found no relationship or a positive relationship (high anxiety correlated with improved language learning). The overemphasis on the negative components of anxiety is attributable to its clinical definition as a mental health disorder.

This is clear when LA researchers (such as Djigunović, 2004) utilise measures designed for clinical diagnosis (and not educational impact), like the Spielberger State-Trait Anxiety Inventory (STAI; 1975).

Given the field's focus on introducing anxiety reduction strategies in language classrooms, there is a dearth of data supporting the practical efficacy of these techniques (Alrabai, 2015). Research conducted before the 2000s merely make suggestions about classroom interventions (Toyama & Yamazki, 2021). These recommendations largely centre on affective strategies including (muscle) relaxation exercises, journaling, meditation, positive self-talk, and asking teachers to foster a welcoming environment (Horwitz, 2001; Young, 1990; Oxford, 1990). Another example is the 'relational model for managing LA' presented by Foss and Reitzel (1988) using emotive therapy. Students complete a questionnaire to learn what causes their anxiety. This model primarily focuses on communication anxiety, and lacks empirical evidence that the suggested exercises are beneficial for students experiencing LA.

More recent studies, however, specifically carry out interventions on participants under strict experimental guidelines in order to collect empirical data, which are then utilised to guide suggested teaching tactics. For instance, Alrabai (2015) discovered strategies that reduced anxiety levels in the classroom and also benefited students who were not identified as anxious. Students' self-confidence was increased by positive feedback, giving them greater control over their learning, and involving them in decision-making, which enabled them to form good relationships with the target language.

Similarly, Kondo and Ying-Ling (2004) identified 70 fundamental strategies for coping with LA and grouped them into categories: planning, relaxation, positive thinking, peer seeking, and resignation. These studies were conducted with specific population groups (Saudi Arabian/Japanese) and thus any extrapolations to groups outside that demographic must be carefully considered. However, they contribute invaluable knowledge to the LA literature, by guiding future researchers and teachers through reliable empirical data. It highlights a goal of this systematic review, which is to find existing literature that will be valuable to educators.

An investigation into the theoretical conceptions underpinning LA is imperative. More precisely, the background and interdisciplinary behaviour of the multifaceted phenomenon must be explored to comprehend (1) how different conceptualisations were established and (2) how these perspectives influenced the development of teaching techniques and the conclusions drawn by studies into the impact of LA on the learner. Alongside this, studies must be explicit about the type of anxiety they are measuring, in order to select the correct and appropriate scales. For instance, if LA is perceived as a psychological response, it can be defined in accordance with the prevailing concepts of trait-, state-, or situation-specific anxiety (e.g., MacIntyre & Gardner, 1989). While state anxiety happens in a definite situation at a certain time, trait anxiety describes an individual's intrinsic apprehension and perception of situations as threatening and, hence, triggering (Zhang & Zhong 2012; Young,

1991; Spielberger, 1983). Anxiety caused specifically by a situation, event, or environment is known as situation-specific anxiety (e.g., public speaking, language classroom) (MacIntyre & Gardner, 1994). All three psychological theories suggest that anxiety has only negative effects on the individual, and thus, student.

2.3.2. Early Literature on Language Anxiety

In order to properly explore the current understanding of how LA impacts minority language learners, the pervading influence of early literature must be considered - specifically, the assumption that anxiety is a purely negative variable.

Before LA was recognised as unique to the L2 learning context (Toth, 2008; MacIntyre & Gardner, 1994; Horwitz et al., 1986), anxiety was mostly explored in the field of personality, which conceptualised anxiety as a reflection of the nervous system and thus, it was described clinically (Gray, 1983). According to the general laws of behaviour that form this field of research, anxiety is a state that is related with the prospect of punishment, frustration, failure, and high degrees of uncertainty (Gray, 1983). While clinical anxiety can exist in the language learning environment, pedagogical-specific research contends that anxiety triggered by a specific subject is a distinct entity (Horwitz et al., 1986; Zhang & Zhong, 2012), and must be depicted as such for educators to understand and respond to it. Teachers are not psychologists (Rayner & Espinoza, 2016), so to offer pedagogical implications, one must consider their role as educator.

In contrast to the clinical reading of anxiety, Smalley (1985) grounds his on his familiarity with mathematics and mathematics anxiety (MA). He claims that, like mathematics, language(s) can be feared, and that, like MA, LA is distinct from general anxiety. LA and MA, according to Horwitz et al. (1986) and Dowker et al. (2016) respectively, cannot be equated with general anxiety or any other form of anxiety. General anxiety is a psychological term for a sense of impending danger that is perceived as an immediate threat, with or without stimulation from external surroundings (cited in Staver, 1979, p.8). When Smalley (1985) suggested that languages and mathematics are both fundamental parts of life but also feared, highlighting the necessity for a phenomenon like MA.

2.3.3. Cognitive and Affective Dimension

In the same way that Smalley (1985) did when he used his understanding of maths to explore anxiety in language education, the early literature on MA has had a significant impact on the humanistic perspective of language learning. Early definitions of anxiety were derived from psychology (e.g., Gray 1983; Blau, 1955; Spielberger 1966;1983), which resulted in a similarity between the literature on MA and LA, regardless of which anxiety subtype they specifically refer to. In other words, MA is discussed in this chapter because of its conceptual similarities to LA.

MA was first identified as a number anxiety (Dreger & Aiken, 1957) and has since been treated as a singular entity with multiple components (Dowker et al., 2016). These include both the cognitive and affective dimensions of MA (Wigfield & Meece, 1988) - similar to the worry and emotionality dimensions identified by test anxiety theorists Liebert and Morris (1967). When describing test anxiety and LA in the context of language learning, these theorists are often cited (e.g., Sanaei, 2016). Both the cognitive (worry) and affective (emotionality) components connect to the fear of failing and encompass factors like nervousness, elevated tension during tests, and specific autonomic reactions (e.g., sweating, increased heart rate or crying).

Anxiety can be defined as a collection of affective, cognitive and behavioural responses (Atkinson, 1988) that block learning and/or performance in academic contexts, highlighting the phenomenon's multidimensional nature. Although Atkinson's concept only applies to MA, LA is stated as having the same functions during the language learning process (see Horwitz et al. 1986; Chen, 2015).

More specifically, conscious worry (cognitive) occurs in the form of self-deprecatory thoughts (Schwarzer & Schwarzer, 1982). In the educational context, this presents as concern about academic achievement, constant worry about anxiety-inducing situations (e.g., tests, classroom environment) and causes the student to have negative expectations of anything related to maths or language (cited in Henschel & Roick, 2017, n.p.). The affective/emotionality dimension, on the other hand, encompasses feelings (e.g., nervousness) or having other negative, even physical, reactions (cited in Henschel & Roick, 2017, n.p.).

Even if MA and LA are not directly associated (Alico et al., 2017), the parallels in their literatures demonstrate how both are distinct entities that were influenced by psychological conceptions of anxiety.

Affective variables, characterised as the opposite of cognitive variables, span many notions and behaviours in SLA (Second Language Acquisition) literature (Scovel, 1978). Complicated, and poorly understood, concepts like anxiety, grow more complex as research into the phenomenon and language learning progresses. However, when LA is described as purely affective, it is limited to 'the emotional side of human behaviour in the second language process' (Zhang & Zhong, 2012, p.27), and ignores the cognitive component (as in Krashen's Affective Filter Hypothesis 1982). So, studies frequently fail to address a concept's cognitive component at all (Scovel, 1978).

The cognitive and affective dimensions of MA have low to moderate correlations ($0.25 \leq r \leq 0.38$), indicating that they are distinct (Ho et al., 2000; Wigfield & Meece, 1988), and so, both components must be included when conceptualising/evaluating anxiety in the education context. This is relevant

to LA because, like maths students, language learners are immersed in a learning environment where home, including family, and school, including teachers and classmates, play multiple roles. A student's learning environment has a significant impact on the cognitive and affective components of learning, and both components are required for learners to have a well-rounded learning experience (Gabrys-Barker, 2016). While the cognitive side of learning describes knowledge and comprehension, the affective aspect of learning refers to the feelings, emotions, and attitudes of individuals that are directly tied to engagement and class participation (Gabrys-Barker, 2016).

For example, reading in a foreign language is crucial for language learners because it provides them with access to information and rich linguistic structures while enhancing their knowledge and increasing their vocabulary (Alarcon-Zulugaga, 1994; Anderson, 1999). When learning to read, a language learner is dependent on underlying linguistic and cognitive processes such as phonological processes, syntactic awareness, and working memory (Alarcon-Zulugaga, 1994). However, these rely on the interaction of affective factors like the student's self-esteem, motivation to read, and the language learning environment (Alarcon-Zulugaga, 1994).

Thus, when one of the processes is the sole focus, it implies that there is no interaction. However, given that LA has a significant impact on reading and reading comprehension (Argaman & Abu-Rabia, 2002), it is necessary to acknowledge that anxiety therefore affects both the cognitive and affective aspects of the process. No component should be ignored when discussing how these variables occur, interact, and interfere with one another at the individual and cultural level (Brown, 1977, cited in Scovel, 1978, p.140).

2.3.4. Language Anxiety in the Classroom

Educators are better suited to address students' emotional relationship with anxiety in the classroom, than the cognitive elements like ‘negative thoughts or fear of evaluation’, and so, educational literature frequently discusses the former (e.g., Jee, 2018; Alrabai & Moskovsky, 2016; Cocca & Cocca, 2019).

Psychological research suggests that affect and cognition interact because affective emotions frequently influence or produce cognitive responses (Cooper, 2013). Likewise, emotional responses often require cognitive resources to occur (e.g., memory). According to Dvorak-Bretsch et al. (2007), anxiety impacts this interaction, and as per MacKinnon and Hoey (2021), the divide that the affect-cognition split has created in research has resulted in a fragmentation within numerous academic fields (including social sciences, psychology, and sociology).

By considering both affect and cognition, one should gain deeper understanding about the students —especially those that find education more challenging. The goal of anxiety research, like any study done for the language learning context, is to help students benefit from their education by learning and engaging in the classroom, while also feeling supported.

Students' psychological well-being depends greatly on how they feel about school, as is especially well-shown by evidence that students who feel at home in a classroom are more likely to be academically motivated and achieve more (Chiu, 2014). This is particularly important for this systematic review, as this is not the case for pupils who feel out of place and uncomfortable at school, as minority pupils often do. Their cognitive and emotional engagement (attitude towards school, and sense of belonging, respectively) may decline if their needs are not sufficiently met or supported (Chiu, 2014).

It is essential to investigate how learners' emotional and cognitive needs are related to provide them with the support they require. This systematic review aims to identify the existing literature, present it synthetically, encourage further research, and raise awareness about the role of LA for minority language students in order to assist such learners in overcoming the challenges they might experience in a classroom environment.

Although there have been systematic reviews likewise on LA or minority students in a language learning context, none have examined LA's impact on learners from minority backgrounds. The only systematic reviews that were relevant to the topic of this review either solely focused on FLA (Oteir & Al-Otaibi, 2019), FLA and classroom interventions (Toyama & Yamazaki, 2021), literacy interventions and EAL students (Oxley & de Cat, 2019), minority students in language education in China (Ma, 2022), or minority students in more specific contexts like health and social care (Spencer et al., 2022).

This systematic review contributes to the field of language learning by assessing the scope of research on the role of LA for the minority student. Critically, it also aims to raise awareness about the importance of research on students who are in a vulnerable position due to their cultural/linguistic background. According to the research questions indicated in Section 2.1.1 of this chapter, this review offers findings in a synthesised, and hence approachable, manner for researchers and educators alike.

Chapter 3. Methodology

This chapter presents the methodology of conducting a systematic review. This versatile approach enables researchers to demonstrate and develop the skills necessary for finding, analysing, and synthesising research in a particular area (Bedenlier et al., 2020).

A systematic review synthesises information and promotes efficient access to research, making research accessible for those who use it practically, keeping them up to date in their field, and providing guidance through an overview of pertinent research (Green, 2005). A systematic review with a clear methodological approach can gather a large body of research, find relevant studies, and present them in a comprehensible manner, giving an almost complete picture of a research area (Boland et al., 2014; Gough et al., 2017).

The style has its roots in healthcare and medical sectors because of its extremely valuable capacity to present research in a way that informs healthcare decisions and, by extension, healthcare practice (Gopalakrishnan & Ganeshkumar, 2013). Incorporating research into practice is essential, but, in reality, doing so is time-consuming and difficult given how busy clinical practitioners are. As a result, systematic reviews are frequently conducted to disseminate the research, highlight the differences or similarities of findings, and signpost outdated, new, or continuously updated evidence/results. These reviews also demonstrate and justify the need for additional research in a particular field (Gopalakrishnan & Ganeshkumar, 2013).

Systematic reviews have also been used in the field of social sciences, including education (e.g., Evidence for Policy and Practice Information Co-ordinating Centre; Hemsley-Brown & Sharp, 2003). Teachers, like clinical practitioners, face the challenge of identifying and incorporating research to reshape, expand, or improve their current practice and existing knowledge according to academic research (Cordingley, 2008). To ensure effective teacher professional development, educators require support in the form of easily accessible and well-organised evidence. Using systematic reviews saves them time and allows them to experiment with new knowledge, tailor their teaching techniques and identify research that meets the needs of their students. Systematic reviews filter against hundreds of studies through careful and reliable extraction analysis (Boland et al., 2014; Cordingley, 2008).

When conducting a systematic review, the application and rigorous adherence to a specific protocol is essential and provides the core methodology used to produce the final report, and, by extension, Chapter 4 of this dissertation. This protocol is outlined within this chapter. Here, the term ‘systematic review’ describes the framework for conducting a review of pre-existing primary

research using specified, in-depth research techniques (Gough et al., 2017; Newman & Gough, 2020).

Not only does the precise and rigorous application of a recognised/established protocol reduce the risks of subjective bias during the screening process, but the objectivity provided also lends the review a degree of reproducibility, which, in turn, encourages replication and future expansion and avoids research waste (Pieper et al., 2021; Petticrew & Roberts, 2006; Boland et al., 2014).

Systematic reviews must be conducted, documented, and presented clearly in a manner that enables replication. The protocol should be pre-registered to increase transparency, lessen the chance of bias, and prevent unintentional duplication of reviews (Shokraneh, 2019; Zawackj-Richter et al., 2020). Accordingly, this review was registered to the International Database of Education Systematic Reviews (IDESR; n.d.) on July 1st, 2022 (see Appendix A for protocol). Due to the significant number of modifications made to the eligibility requirements and search string during pilot search, the protocol was submitted while the dissertation was in the drafting stage. All modification to the protocol made between the dissertation's initial draft and its submission are recorded and addressed in this section.

This systematic review adheres with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses's (PRISMA; Moher et al., 2009) 2020 statement and is organised in accordance with the provided reporting checklist (see Appendix E).

3.1. Eligibility Criteria

The following criteria (Table 1) were developed to logically map out which primary research is eligible for inclusion in the synthesis.

This explicit eligibility criteria determines whether a study should be incorporated or excluded from this review. Specifically, selected studies should be relevant to the review's questions and comprehensive so as to limit the risk of bias (RoB) throughout the selection process. Eligibility criteria aim to guarantee that screening is replicable and ensure that the evaluation is impartial and fair. Eligibility criteria identified here included bibliographic information, publication date, participants, intervention, publication status, and publication language. After sending the eligibility criteria to the second reviewer, the measurement criterion—which stipulated that research pertinent to the dissertation's particular topic be included—was added as an additional inclusion requirement. As a result, following registration, the protocol was modified and updated. All inclusion and exclusion criteria, and the rationale for each, are listed in Table 1. The items which were not included in the eligibility criteria, are addressed in Section 2.1.

Table 1: Eligibility Criteria

ITEM	ELIGIBILITY CRITERION	RATIONALE
Bibliographic Information	**Include 1:** Studies with a full reference list or sufficient information. **Exclude 1:** Studies with insufficient bibliographic information.	Without sufficient bibliographic information, retrieval of work is infeasible. Researchers examined data about evidence-informed teaching in a report and discovered that instructors valued and trusted research if it was backed up by additional evidence (Coldwell et al., 2017). This implies that the study consulted extra sources of information and provided them within, typically near the end of the study, irrespective of citation style. Studies that contain crucial information that is appropriate and required when compiling a list of citations are referred to when discussing sufficient bibliographic information since this allows readers to examine further evidence.
Date of Publication	**Include 2:** Studies published on or after January 1, 1986. **Exclude 2:** Studies published before January 1, 1986.	In 1986, the term Language Anxiety (LA) was coined to describe a language/situation-specific anxiety that is separate from other types of anxiety and may also exist on its own (Horwitz et al., 1986). While it is apparent that anxiety in the context of language instruction has been researched earlier (see Scovel, 1978; Gardner et al., 1978), Horwitz' conceptualization of LA distinguished it from General Anxiety, effectively introducing and establishing its own domain within the literature of language pedagogy. As a result, any studies conducted after 1986 are considered for the study.
Participants	**Include 3:** Studies that focus on minority students (e.g., students from an underrepresented background, who have arrived in a new country and are classed as an immigrant, migrant or a refugee). Students who have just started school in English-speaking countries may be categorized as EAL (English as an Additional Language), ELL (English Language Learner), or, more broadly defined, as bi-/multilingual migrants with two communities/languages in other countries. **Exclude 3:** Studies that concentrate on different student populations.	By the end of 2021, the UNHCR estimated that there were 89.3 million 'forcibly displaced persons' worldwide, with 41% of this population being children under the age of 18. The number of minority students in schools is constantly rising, but the achievement gap does not shrink, and the academic underachievement of minority ethnic children remains an ongoing issue in education (Williams, 2011; Banks & Dohy, 2019; Bunce et al., 2021). Therefore, minority students (defined in Chapter 2) are the demographic that this systematic review concentrates on, reflecting the objective of encouraging research on minority students to ensure they can succeed in school and beyond. Thus, studies on a separate population where students belong to the wider population will be excluded.

	Include 4: Studies on learners from a minority language background who do not have a learning disability or a developmental language disorder. If learning ability is not mentioned, it is presumed that participants do not have a learning problem which would classify them as Special Education Needs (SEN) students. **Exclude 4:** Studies that are focused solely on SEN individuals who are non-typically developing learners or learners with developmental language disorder.	This review aims to investigate the impact of LA on typically developing language learners from minority backgrounds. Findings for non-typically developing individuals may contribute to the overrepresentation of minority students as part of the SEN (Special Needs) student population and therefore should be excluded. Overrepresentation of minority pupils refers to the pervasive practice of placing students from particular racial and ethnic groups in classrooms with non-typically developing students after being misidentified as having special needs (Arnold & Lassmann, 2003). Consequently, this highlights the literature's notable difference toward minority students, which frequently demonstrates that they are falsely identified as having special needs (Migliarini et al., 2018; Gallagher et al., 2009; Garcia & Ortiz, 1988) instead of considering additional elements like poverty or inadequate general school instruction. Findings for non-typically developing should be excluded since they might not generalise to a larger/more accurately characterised population. This review focuses on the impact of LA for pedagogical purposes, which is reflected by the review's research questions in Section 2.1.1. The review's purpose is to give an overview of the literature that has a direct impact on educators. Given the scarcity of research in this area and to avoid reducing the scope of this review, excluding studies based on age risks systematically disregarding a body of research that is already limited due to the small population.
	Include 5: Studies carried out in educational settings (e.g., primary and secondary schools, universities, adult education settings, etc.). This includes refugees who are newcomers to the country and are enrolled in language classes for social, occupational, or academic purposes. **Exclude 5:** Studies conducted beyond the context of education.	
	Include 6: Participants from any age group if the criterion of Include 5 is met. **Exclude 6:** Do not exclude studies based on participants' age range.	
Study Design	**Include 7:** Studies that gather empirical data, such as observation, ethnography, appraisal, and experimentation. The data can be analysed quantitatively, qualitatively, or using a combination of both. **Exclude 7:** Studies that do not gather data. for instance, intellectual, analytical, and theoretical pieces.	Reviewing research that employ the most dependable methodological approaches is the goal of this systematic review. To synthesise the research in this area, empirical data must be reported and evaluated.

Publication Status	**Include 8:** Published and unpublished works, such as dissertations, peer-reviewed and non-peer reviewed literature will be included. As a result, grey literature (e.g., dissertations, theses, conference papers/proceedings) will be included. **Exclude 8:** The following published/non-published works will be excluded: Encyclopaedias, Reference Works, Newspapers, Speeches, Presentations, Systematic Reviews and Meta-analyses.	By including a wider variety of original studies, including grey literature, this review tries to avoid publishing bias, although it does not intend to include studies that do not match the criterion for bibliographic information (See Include 1). Systematic reviews will not be included because of the high possibility of spurring further duplications.
Language of Publication	**Include 9:** Publications which have been conducted and written in English. **Exclude 9:** Publications which have been conducted and written in other languages than English.	While the imposition of language restrictions limits the scope of the review, it is necessary due to time constraints. The translation process of studies requires time and attention to detail in order to minimise translation bias. The rationale for the exclusion of non-English publication is that if this systematic review had not been a dissertation, more authors would have been recruited to avoid limiting the scope of this review and to avoid in a systematic neglect of a certain body of research (Pieper et al., 2021).
Measurements	**Include 10**: Studies that measure LA will be included. Empirical studies that measure any form of role or relationship that LA has for the minority student will be included. Objective measures of LA may be characterised according to a specific anxiety type, and/or the phenomenon may be defined differently in literature. Qualitative data that reports the experiences and perceptions of students on the effect of LA will also be included. **Exclude 10**: Studies that do not measure LA will be excluded. Non-empirical data will be excluded (e.g., comprehensive reviews and opinion pieces).	To synthesise the research in this area, empirical data on LA must be reported and evaluated. Empirical research offers insight into experience and exemplifies what does and does not work practically, whereas non-empirical studies are not data-driven and focus on theories, techniques, and their implications on future research; as a result, the latter will be excluded.

3.1.1. Items Not Included as Eligibility Criteria

Language of publication was included as an eligibility criterion, with this systematic review only looking for studies written in English, due to the time-consuming nature of the dissertation and the fact that languages outside the academic repertoire of the main reviewer require translations. Anyone wishing to update this review, should consider excluding language of publication as a criterion in order to offer a wider synthesis of studies.

When conducting eligibility criteria, PICOS (population, intervention, comparison, outcomes and study) is usually deemed as a helpful tool (MrCrae et al., 2015). It focuses on quantitative findings and therefore excludes qualitative studies (Methley et al., 2014). Since this systematic review aimed to include studies with quantitative, qualitative and mixed-methods data, PICOS guided the construction of this section, but was not fully applicable. So, despite their potential importance in

other contexts, criteria such as (a) intervention and (b) comparison (discussed below) were not considered eligible. Excluding them allowed the scope of this study to be broaden and to provide a more thorough analysis of the larger body of literature.

3.1.1.1. Interventions

Interventions refers to 'intervening', allowing research to examine the outcome of what has been affected. Empirical studies that develop and evaluate interventions for language classrooms are frequently focussed on reducing LA. However, studies that investigate interventions without characterising LA as a critical factor were also taken into consideration since they can provide additional insight.

Further, Toyama & Yamazaki (2021) conducted a systematic review that focuses primarily on classroom interventions for FLA and provided a synthesis of intervention and experimental findings. Hence, to prevent the possibility of duplication, interventions were not the explicit focus of this review and are not an eligibility criterion.

3.1.1.2. Comparison

Comparison and/or control groups are necessary to establish inequities within research and to test and assess the effectiveness of interventions.

Since minority students are the population of this systematic review, the mainstream/majority group would typically be used for comparison within research. However, to increase understanding of minority groups, such as ethnic minorities, simple comparisons between the minority and majority groups are neither sufficient nor effective, according to Whitfield et al., (2008)., When understanding of minorities is only gained by observing 'differences' between them and the control group (majority students), this automatically assumes, and adds the accompanying bias, that such differences exist. Therefore, comparison as an eligibility criterion was rejected in order to lessen prejudice and encourage expansion of methodologies utilised in the research of minority pupils.

3.2. Information Sources

When conducting a systematic review, access to and use of multiple electronic databases is required to enable efficient coverage of a broad research body (Bramer et al., 2017). The databases used here were chosen in accordance with other systematic reviews published in the fields of education, linguistics, and psychology, which are all relevant to this dissertation and presented below (Table 2). Various systematic reviews registered on IDESR were consulted to determine which databases are appropriate for reviews executed outside health/medicine sectors. Database platforms from interdisciplinary disciplines of social sciences, as well as grey literature, were explored in order to

extract information from relevant sources and to avoid the risk of overlooking an important research body. The University of Oxford's Bodleian Library provided access to all databases.

Table 2: List of Databases

DISCIPLINE	DATABASE
Linguistics	Linguistics Collection
Education	Australian Education Index; British Education Index; Education Abstracts; Education Collection; Educational Administration Abstracts; ERIC
Multidisciplinary	International Bibliography of the Social Sciences; Social Science Database
Grey Literature	ProQuest Dissertations & Theses Global; Open Dissertations

Following the initial search, citation screening was performed on all available studies to ensure all relevant studies were included in this review. Citation searching was utilised as a complementary method to identify research that might have been missed (for example, studies that used different terms in their titles and/or abstracts) (Briscoe & Rogers, 2020). When considering the interdisciplinary origins of LA, citation searching proves especially useful. The Cochrane Handbook for Systematic Reviews (n.d.) served as a guidance.

3.3. Search Strategy

One of the greatest challenges when doing a systematic review in education research lies in unpacking the complexity created by inconsistent terminology and multidimensional concepts (Zawackj-Richter et al., 2020). The initial step in designing the search strategy was the selection of search terms, a key step in assessing the appropriateness of a systematic review for the selected topic and determining the precise direction the review should take (Boland et al., 2014).

This systematic review's emphasis on the phenomena of LA and participants from minority backgrounds (as described in Chapter 2) served as the key guiding principle for the search strategy. Initially the search was centred on particular language contexts (sing terms such as EAL/ELL). However, as EAL, ELL and other similar terms refer solely to research done where English is the prevalent language, they caused searches to be too specific and not all relevant studies were identified. For example, the term EAL is often used in research conducted in England (The Bell Foundation, n.d.). As a result, the ProQuest pilot search across all databases yielded a geographically limited literature body. To accommodate for the terminology variance found during pilot searching and background research, a number of related, more general terms (such as 'dual language learners'

and ‘minority student’) were incorporated. This caused additional elements from an already limited research body to be included and allowed a broader range of relevant literature to be covered, providing a more neutral and comprehensive approach to the review.

The identification and selection of search terms is a sensitive and crucial process that demands a high level of precision. Guidance from an expert librarian from the University of Oxford’s Bodleian Education Library, was sought to determine the best initial search technique, and they were consulted regularly during the search strategy’s drafting phase. These search terms were incrementally refined, and successive, additional ProQuest pilot searches were conducted until the results were deemed manageable and pertinent. For instance, while the employment of terms based on linguistic background feasibly captured relevant studies, further pilot searches revealed that an additional category was required to guarantee that studies and their participants were within an educational setting. Specifically, many results targeted adult participants both inside and outside of the educational system. Thus, to narrow down the focus of the results, a field that details target participants and their context was later added to the search, specifically to focus on subjects who are enrolled in school.

After determining the three categories of search terms, a final pilot search was carried out to show that the search terms provided a manageable number of relevant results. Additionally, a final check was carried out during this search, by looking for a specific, pre-determinedly identified, exemplar study (see Chen, 2015) that met all the requirements for inclusion. Its presence in the final list of studies indicated that the search terms had a reasonable amount of sensitivity and specificity.

The ‘AND’ operator connected each search field, and the ‘OR’ operator separated similar phrases within each category. Piloting also revealed that in order to find more relevant studies, the second search field (phenomenon) must only be used for titles ‘ti’, while the first (participant) and third (context) search fields were only used for abstracts ‘ab’.

The final search terms (and associated complete Boolean search string) are shown on Table 3.

Table 3: Search Terms

Participant	ab("English learners" OR "dual language learners" OR "dual learners" OR ELL OR "English language learners" OR minorit* OR “minority language” OR refugee* OR "minority background learners" OR "ethnic minority learners" OR EAL OR "English as an additional language" OR ESL OR "English as a second language" OR EL)
AND	
Phenomenon	ti("classroom anxiety" OR "reading anxiety" OR "speaking anxiety" OR "pronunciation anxiety" OR "language performance anxiety" OR "test anxiety" OR "L2 anxiety" OR "communication apprehension" OR "second language anxiety"

	OR "minority language" OR "community language" OR "heritage language anxiety" OR "Foreign language anxiety" OR FLA OR "Language Anxiety" OR LA)
	AND
Context	ab("pupil" OR "student" OR "adult learner" OR "primary school" OR "elementary school" OR "secondary school" OR "middle school" OR "grade school" OR child* OR kids* OR "young learner" OR kindergarten* OR "junior school" OR "infant school" OR educat* OR "continuing education" OR "higher education" OR university* OR college* OR school* OR undergraduate* OR postgraduate* OR class*)

3.4. Data Management

The final search for this systematic review was successfully and appropriately completed on July 5, 2022. All essential information, including all bibliographic data (title, author, publication date, etc.) and abstracts, were downloaded from two research platforms (ProQuest and EBSCO) into Microsoft OneDrive and then uploaded to the systematic review management software tool, Rayyan. Rayyan, enabled all collaborators on this review to assess abstracts and other data against specific eligibility criteria (Ouzzani et al., 2016). Additionally, it enabled elimination of duplicates, allowing data management to move forward with title and abstract screening. Rayyan was only accessed through Google Chrome.

The complete texts that survived the initial screening, and the pertinent bibliographic data criteria, were then uploaded and organised on a reference manager. Zotero (free version 6 for Windows), was selected for this review. The scientific community views Zotero as an appropriate citation tool that expedites work, helps avoid plagiarism, upholds copyright, and reflects scientific integrity and honesty (Basak & Govender, 2015, p.87). The search process was systematically recorded on Microsoft OneNote and Microsoft Excel document contained thorough notes about each study that met the eligibility requirements. Microsoft OneNote and Microsoft Excel were accessed via the University of Oxford's student subscription. After the final screening, data that were extracted and selected for inclusion were also recorded in Microsoft Excel.

All research was conducted on a HP Pavilion Laptop running Windows 11.

3.5. Selection Process

Figure 1 provides an overview of the screening procedure.

3.5.1. Initial Screening

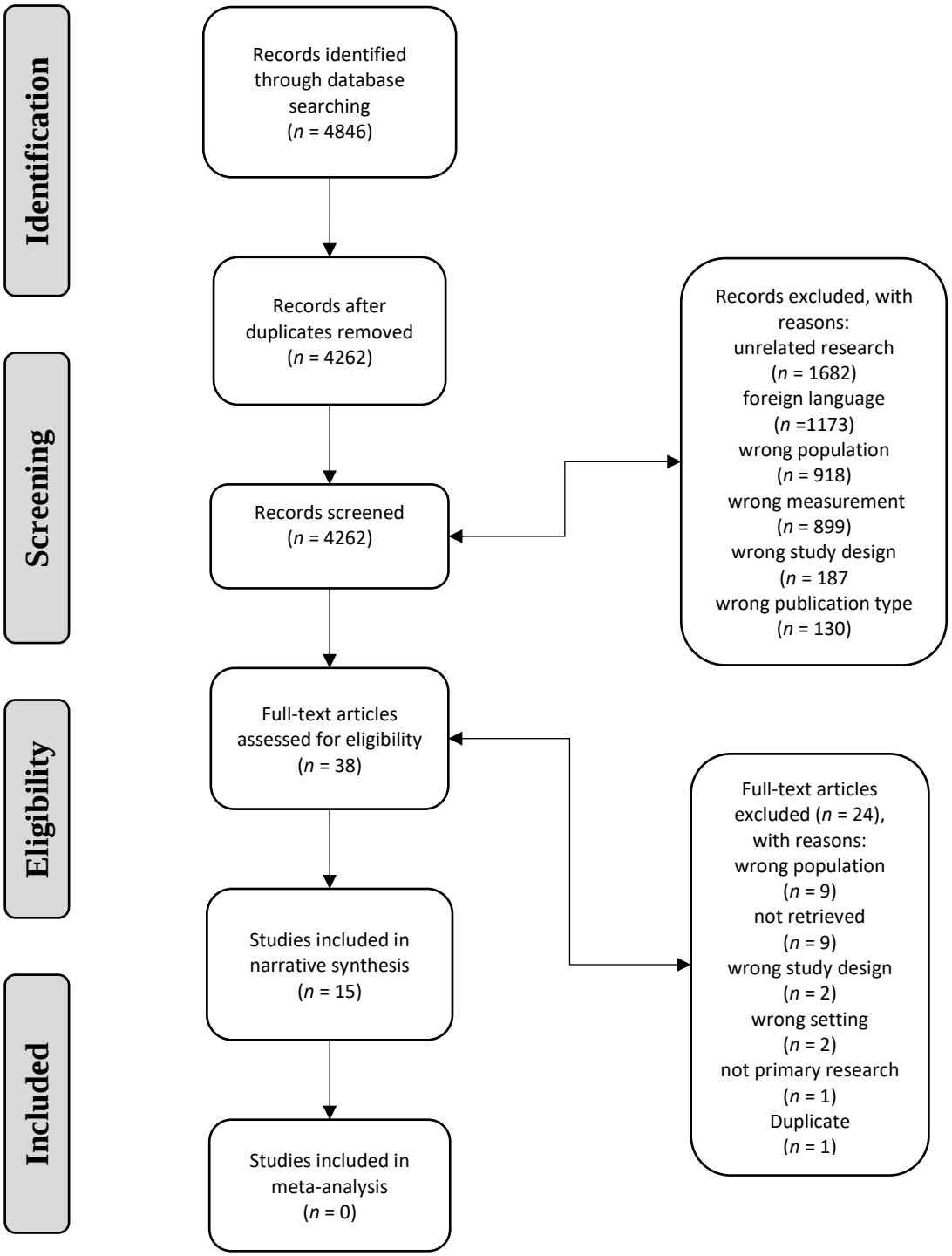
The initial search across all databases yielded a total of 4846 studies that met the eligibility requirements based on their titles and/or abstracts. Duplicates that emerged when databases overlapped were subsequently detected by Rayyan. 584 of these duplicates were thus identified and

removed. Overall, after applying the eligibility criteria to the remaining titles and abstracts, 4808 (99.2%) studies were eliminated due to the following reasons: unrelated research (1682), foreign language (1173), wrong population (918), wrong measurement (899), wrong study design (187), and wrong publication type (130).

The remaining 38 studies were found to be eligible and subsequently considered for full-text screening to ascertain whether their whole texts also adhered to the review's requirements.

When a study did not explicitly match all the eligibility requirements, it was rejected, and a note was made, outlining the reason for its exclusion.

Figure 1: Flow diagram of screening process (adapted from Moher et al., 2009)



3.5.2. Full-text Screening

Figure 1, shows how, after the preliminary screening was completed, full reports and key information of all included studies were retrieved from the electronic databases and then, in turn, uploaded onto Zotero and Microsoft Excel, respectively. When whole texts were not available or the full report did not meet all inclusion criteria, further investigation was conducted.

When required, authors were contacted for more information and studies were rejected if they failed to provide the necessary details or access to the full texts was not possible. Only studies that explicitly matched all inclusion criteria on the full text were retained for the review. In total, 24 of the remaining studies were excluded for the following reasons: wrong population (9), not retrieved (9), wrong study design (2), wrong setting (2), not primary research (1) and duplicate (1). Overall, 14 texts were identified for the final review.

Finding a duplicate study at this later stage would normally indicate a methodological issue during the initial title and abstract screening procedure. However, as the study was reprinted with a different title and different abstract, the duplicate could only be identified when examining the full text of the study.

The majority of the 9 studies rejected due to 'wrong population' were only excluded following full text screening because abstracts failed to clarify whether participants were students or failed to provide information about participants' backgrounds. Furthermore, a total of 9 texts were not obtained despite extensive electronic and physical searches because the authors either did not feel comfortable with their studies being incorporated or did not respond to being contacted.

The 15 selected studies on the final list were passed through backward and forward citation on ProQuest and EBSCO. Like those previously rejected, studies found through backward/forward citation were rejected because of their focus on mainstream.

Since the final included works used a variety of sample sizes, ages, and measurements, a narrative approach was deemed to be substantially more appropriate for an adequate systematic review than a meta-analysis.

3.5.3. Ensuring Screening Reliability

To guarantee complete reliability of the screening procedure, a second reviewer with in-depth expertise in applied linguistics was chosen and briefed on the systematic review's objectives and criteria. Due to the limited time and resources available for this dissertation, the primary and second reviewers investigated the titles and abstracts of a same subset of 10% (485) of the studies retained

initially. Ideally, a second reviewer should examine subsequent parts of the systematic review, such as the full text screening and quality assessment of included studies.

The 'blind on' option on Rayyan was used so that neither reviewer could see the other's selections or labels at the time of screening. A minor initial conflict of 1.4% was immediately resolved by the screeners. In the field of education, a Kappa value greater than 0.7 is needed, and should be utilised as a benchmark to demonstrate reliability (Frey, 2018). This review concludes an interrater reliability of $\kappa = 0.931$, and a 95% confidence interval. As the typical expected threshold is 0.7, the eligibility criteria were deemed to have been fairly applied and of the risk of systematic bias in the initial selection process was estimated to be acceptably low.

3.6. Data Extraction

Since this review was conducted as a dissertation, only one reviewer extracted the data. A data extraction form was created specifically for this study (see Appendix B). It was modelled on the Cochrane good practice data extraction form (see Cochrane Effective Practice and Organisation of Care, 2017), which was determined to be the most appropriate form for this study due to its adaptability and versatility for a variety of research topics. The specific subject of the review determined whether any extra fields were necessary. Generally, the original form (PICO; Petticrew & Roberts, 2006) ensured that data covered relevant criteria for this review.

Once it was determined that a given study met all inclusion criteria, the data was extracted, the most important information was identified and recorded in an Excel document, and notes were made on the specific type of LA and demographic investigated.

3.7. Risk of Bias of Individual Studies

Methodological inadequacies in any study can cause bias or a systematic divergence in the trustworthiness of the results (Boland et al., 2014). As a systematic review depends on the included data and its evidence is only as trustworthy as its primary data sources (Drucker et al., 2016), the methodological quality of the studies needs to be carefully assessed. Thus, each of the studies retained after full text screening were then examined to ensure a rigorous methodology had been applied.

The ability to reduce bias through systematic methods, including assessments of the internal validity of the included studies, is a strength of systematic reviews (Lundh & Gotzsche, 2008). In this review, the assessment of the RoB is referred to as methodological quality rather than internal validity.

This review adheres to Slavin's (1986) best-evidence synthesis approach, which allows for the assessment of a study's methodological rigour and prevents hasty judgments about research design

during the selection process. Additionally, it makes it possible to concentrate on the 'best evidence' related to the review's field, applied linguistics. Thus, it feasibly avoids excluding potentially significant research without compromising the review's general quality.

Moreover, this review specifically looked at multiple research designs, such as quantitative, qualitative, and mixed methods studies. In order to assess the RoB and trustworthiness, it was decided that the Mixed Methods Appraisal Tool (MMAT; Hong et al., 2018) should be utilised. The MMAT checklist and a user guide are provided in Appendix C. MMAT was created specifically to assess the quality of individual studies with various study designs (Hong et al. 2018). The tool assesses bias in five study designs: quantitative non-randomised, quantitative randomised, quantitative descriptive, qualitative, and mixed methods. Each category contains questions that are either answered 'Yes', 'No', or 'Can't tell'. However, following data extraction the nature of the included studies fit only four key sections of MMAT—quantitative non-randomized, quantitative descriptive, qualitative, and mixed methods.

The registered protocol allows for each area to be given a 'quality score' of 0-5. However, this was deemed unnecessary and inappropriate given the MMAT's developers advice against scoring (Hong et al., 2018). Instead, giving each study a global strength rating was felt to make comparison easier. Accordingly, based on the RoB in each study, a global weight of evidence scores ('strong', 'moderate', or 'weak') was given to each study. The Effective Public Health Practice Project Quality 30 Assessment Tool guided this rating system (Armijo-Olivo et al., 2012).

The judgements were made according to the following criteria:

Strong:	Majority of responses = 'Yes'
	0 responses = 'No'
Moderate:	3 responses = 'Yes'
	1 response = 'No'
Weak:	Fewer than three responses = 'Yes'
	More than 1 response = 'No'

Additionally, any study that responded 'No' or 'Can't tell' to the MMAT screening questions (see Appendix C.), was appraised as weak.

3.8. Data Synthesis

Narrative synthesis is used as the primary method for data synthesis due to the type of study findings analysed in this review. Given that meta-analysis is frequently used when results are

homogeneous (Petticrew & Roberts, 2006), it was determined that a meta-analysis was not essential when considering the various study types included in this review. The narrative synthesis influenced by Petticrew and Robert's (2006) narrative synthesis framework, describes the methods used to present the findings in Chapter 4. Specifically, it includes textual descriptions of the studies, organised evaluation and analysis of the findings, and a synthesis of all the findings.

Chapter 4. Results

The general characteristics and findings of the included studies are presented in this chapter. See Appendix D for a complete list of the research and pertinent references.

In this chapter, Section 4.1. provides an overview of the key characteristics outlined in Table 4, Section 4.2. explicitly presents the results of each specific study along with a narrative synthesis, Section 4.3. evaluates the RoB of each individual study and the cumulative confidence across the studies as a whole and Section 4.4. provides a brief overview of findings with the direct relevance to the research questions of this review.

4.1. Study Characteristics

Table 4 presents a summary of the general characteristics of the 15 papers included in this systematic review. The table, influenced by the Cochrane handbook, covers the characteristics listed in the handbook and review-specific fields such as ‘first/home language’. The sub-sections that follow go into further depth on the information presented to outline the studies’ patterns.

Table 4: General Characteristics of Included Studies

	Methods				Participants					Intervention & Outcomes	
Study	Publication Status	Study Location	Sample Size	Data Type	Group of Participants	Age	First/Home Language	Language of Institution	Type of Institution	Type of Measurement	Outcome(s)
S1. Abal (2013)	Dissertation	America	11	Mixed	ELLs	Post-secondary adults	Not reported	English	University Language Centre	English Language Learners Speaking Anxiety Scale (ELLSAS)	Significant reduction in anxiety
S2. Al Yami (2015)	Dissertation	Australia	18	Qualitative	Saudi & non-Saudi ESL	Post-secondary adults	Arabic or non-Arabic (e.g., Mandarin)	English	University Language Centre	Interviews	Identification of anxiety triggers (e.g., lack of belonging, gender)
S3. Chen (2015)	Dissertation	America	3	Qualitative	Chinese ESL students	Post-secondary adults	Mandarin	English	University Language Centre	Speaking Anxiety SCALE	Findings show that speaking anxiety affects oral presentations
S4. Cooper (2007)	Dissertation	America	60 (42 students and 18 educators)	Mixed	Hispanic ESL students (N/A to teachers)	Middle-school children (N/A to teachers)	Spanish (N/A to teachers)	English	Secondary (middle) school	English Language Anxiety Scale (ELAS) & FLCAS	Language performance/achievement (e.g., standardised exams) are affected by anxiety despite existing low-anxiety environments
S5. Freiberger (2010)	Dissertation	America	10	Quantitative	Spanish-speaking adult ESL students	Post-secondary adults	Spanish	English	University Language Centre	FLCAS	14 possible causes of L2 anxiety were identified (tests, fear of classroom communication, perception of peer proficiency)

S6. Hill (2010)	Dissertation	America	29	Mixed	ESL/ESOL students	High-school adults	Spanish (other participants were identified as Chinese Americans, but no mention of another language).	English	High School	The Personal Report of Communication Apprehension (PRCA-24), subscale of Group Discussion, meetings and Interpersonal Discussion	Identified methods to reduce communication apprehension in interpersonal discussion and meetings
S7. Jones (1993)	Dissertation	America	63	Quantitative	Non-native Hispanic students	7th grade middle school children	Spanish	English	Middle School	The Personal Report of Communication Apprehension (PRCA-24)	Findings show that Hispanic students are less comfortable with teachers when experiencing higher communication and display low level of academic achievement
S8. Kojima (2007)	Dissertation	America	40	Mixed	Spanish & Chinese speaking EL students	High school students	Spanish & Chinese	English	High School	FLCAS & FLRAS (Foreign Language Reading Anxiety Scale)	Students' anxiety levels vary depending on their cultural backgrounds
S9. Lee (2017)	Dissertation	America	6	Qualitative	Latino ELL children	Elementary children	Spanish	English	Elementary School	State-Trait Anxiety Inventory for Children, The Trait Anxiety Inventory (TAI)	Incorporation of dyadic collaborative instruction for ELL children generates opportunities for communication
S10. Liao & Liang (2021)	Journal Article	America	4	Qualitative	Chinese graduate students	Graduate students/adults	Mandarin Chinese	English	Graduate University	Background questionnaire & in-depth semi-structured interviews	Showed that limited help has a negative impact on pupils' sense of belonging, Chinese students are more prone to feel ashamed.

S11. Lou & Noels (2020)	Journal Article	Canada	581 (Study 1: 91, Study 2: 72, Study 3: 418)	Quantitative	ESL students	Post-secondary adults	Over 18 languages	English	University	Various self-reported questionnaires, personality test, Language Mindsets Inventory (LMI), Performance-avoidance and mastery measures, Future interaction avoidance scale, Language-based rejection sensitivity (RS), Positive and Negative Affect Schedule (PANAS), intergroup anxiety scale	Identified the functional value of mindsets and its effect on learning & academic success, showing that it helps lower competent learners overcome difficulties
S12. Nasiri (2019)	Dissertation	America	5	Qualitative	Adult refugee ELLs	Post-secondary	Not reported	English	Bilingual Educational Institute (BEI)	Interviews	Findings revealed that Literature Circles enhanced reading comprehension skills, decreased FL reading anxiety. LA sources were identified (e.g., public speaking, fear of negative evaluations)
S13. Pappamihiel (2001)	Journal Article	America	178	Quantitative	ESL students	Middle school children	Spanish	English	Middle School	ELAS	Findings show that moving from ESL to the mainstream classroom causes increased anxiety, more so in girls, source shifts from academic types of worry to peer interactional concerns

S14. Turnbull (2019)	Dissertation	America	3	Qualitative	Adult migrants	Post-secondary adults	Spanish	English	Community-based education centre	Interviews and self-reported survey	Social and cross-cultural factors affect students' L2 production. Students' silence also has value, enables them to manage and overcome difficulties
S15. Woodrow & Chapman (2002)	Conference Paper	Australia	275	Quantitative	International EAP students	University adults	Over 13 languages	English	University	IELTS type oral assessment, semi-structured interview	Findings revealed that anxiety has a significant negative influence on language performance, particularly speaking Study 15 identified major stressors (e.g., interacting with native speakers) and indicated ethnicity as a source of anxiety

4.1.1. Publication Details

A general overview of each text is presented in Table 4. The texts' publication status (see Figure 2), appear nearly all identical, with a large percentage (73%), consisting of master's and doctorate dissertations. Three other texts were published as peer reviewed journal articles, and the final study (S15) was published as a conference paper.

Figure 2: Publication Status of Included Studies

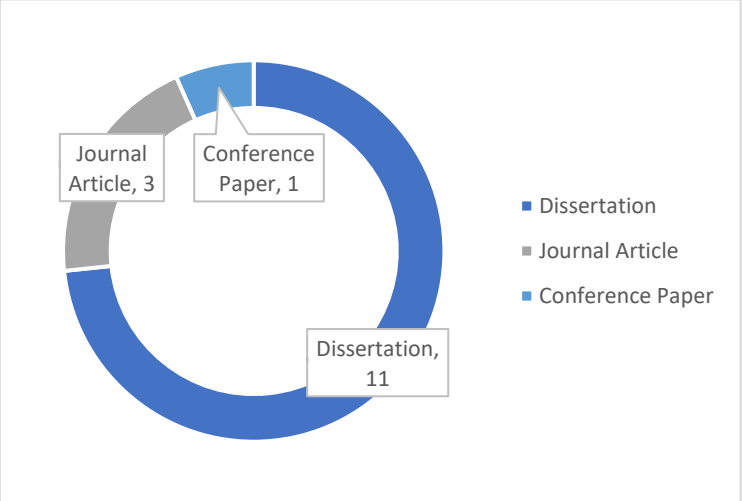


Figure 2 supports the claim that including grey literature provides this review with a crucial platform for sharing studies that might not otherwise be available (Paez, 2017), in this instance, dissertations. It is recommended that texts produced outside of traditional publishing and distribution outlets, whether unpublished or published in non-commercial form, are considered when conducting a systematic review. As can be observed in Table 4 (column 1), most of the included dissertations ($n = 10$) were published after 2000. More specifically, they were published between 2007 and 2021. The most recent dissertations, except for Jones (1993), show a small but consistent flow of work and an increasing interest in the niche research field of LA and the population of minority students. All other studies included in this review were published after 2000.

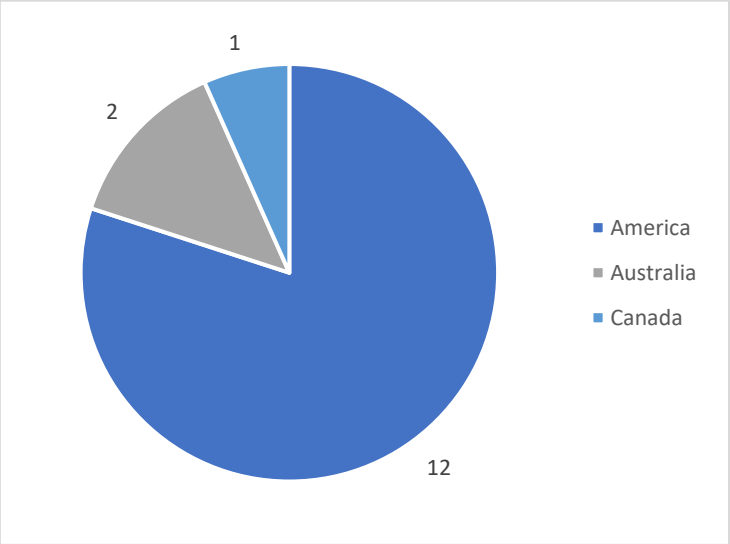
4.1.2. Contextual Characteristics

Location of Studies

Figure 3 highlights that most of the texts included in this review —12 out of the 15 studies — were conducted in America. The remaining four studies were carried out in Canada (S11) and Australia (S12,15). Consequently, all studies were published in English, making English the only considered majority language within this systematic review. This fact also reveals a pattern of scholarly interest in 'LA and the minority student' in countries where English is the predominant language.

Research on this topic beyond the English-speaking sphere must be encouraged. Chapter 5 discusses further how the absence of research outside of English-speaking regions produces limited results. When focusing exclusively on the findings of this systematic review, it is suggested that minority students whose L1 is not English are a demographic of interest when investigating LA.

Figure 3: Location of the study



Population and linguistic diversity

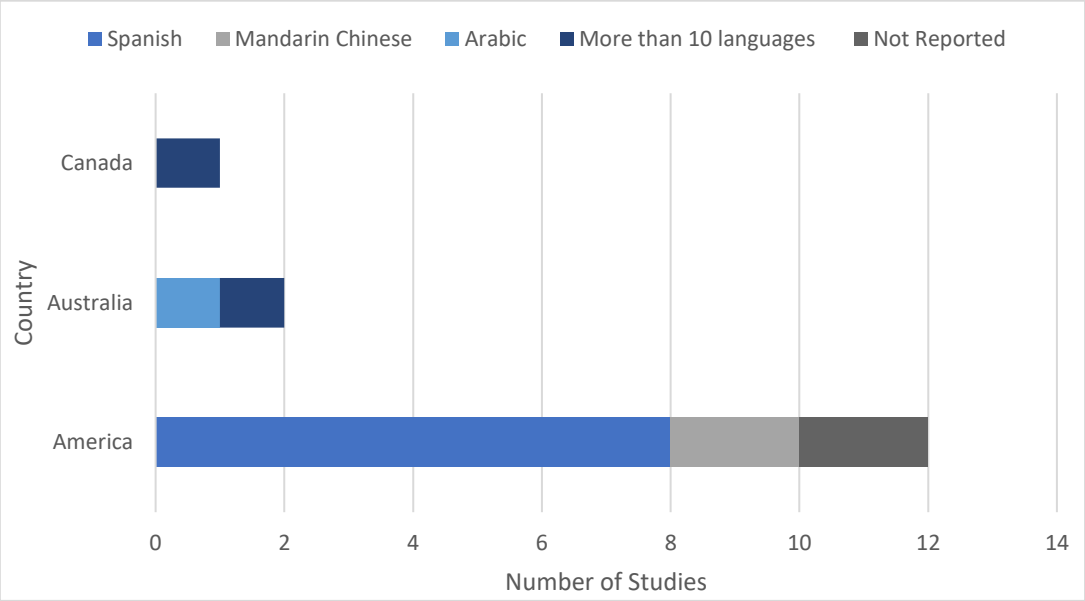
Results revealed a trend of American studies researching the Hispanic ESL student population (also referred to as Latino American ELLs). As depicted in Figure 4, 8 studies carried out in America ($n = 12$) focused on students who spoke Spanish. In two (S6,8) of those studies, students whose L1 was categorised as Mandarin Chinese were also examined.

Chinese speakers were the exclusive subject of two of the American-based studies (S3,10); the other two (S1,12) did not explicitly state the linguistic background of the population and therefore were labelled as 'not reported'.

Studies that were either carried out in Australia (S14) or Canada (S11) encompassed a variety of languages, including Chinese and Spanish as well as other languages like Korean and/or Urdu. As a result, these studies include more than 10 languages, creating heterogenous samples.

Table 4 also demonstrates how S2, published in Australia, was the only one to focus on Arabic-speaking students. Non-Arabic participants (e.g., Chinese) were also included in this study, albeit as the control group.

Figure 4: Linguistic diversity of population

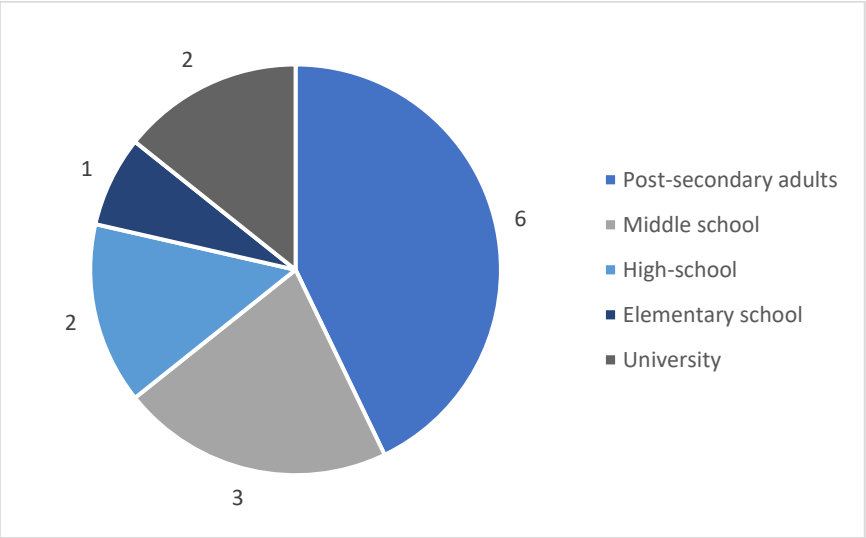


Age of Students

The age ranges covered by the included studies are displayed in Figure 5, with post-secondary adults making up the majority (40%) of the participants.

When considering that university (20%) also refers to adults and that one study (S6) conducted within a high school referred to their participants as 'high-school adults', it is suggested that the majority of the participants were adults. Study 6 also included seven participants who were teachers, underscoring the study's emphasis on adults.

Figure 5: Age of students



As demonstrated by Figure 5, the other studies mostly looked at children in middle school, elementary school, or high school rather than adult populations. As a result, the remaining 40% of the review's population are children.

Type of Institution

It should be stated that the ages of participants (Figure 5, Table 4) are classified by the type of institution the participants were attending at the time the studies were conducted. For instance, young children attend middle and elementary school, while students in high school are referred to as adolescents.

Students' ages not only reflect the sort of institution they are attending and vice versa, but also indicate and refer to various contextual backgrounds.

Within the post-secondary population, adults can be seen taking English at university language centres (S1,2,3,5), the Bilingual Educational Institute (S12), and the Community-Based Centre (S14). Although the centres go by different names, they serve the same function of helping people learn or improve their language skills, which reflects an educational mission of assimilating into the dominant society by learning the main language. For instance, S14 refers to the post-secondary adults as migrants; as a result, the general characteristics of this study provide information about the population, specifically, these students are newcomers/migrants taking language classes.

4.1.3. Study Design

The overall study designs were fairly diverse, with a range of sample sizes and data collection techniques. Generally, as investigations into this specialised topic include studies conducted

between 1986 to 2022, it highlights the different methods available to scholars with similar interests, which adds to the intricate and contradictory nature of the literature.

Sample Size and Data Type

Studies reporting qualitative conclusions obtained data from fewer participants overall than those employing quantitative metrics.

Figure 6: Sample sizes by study

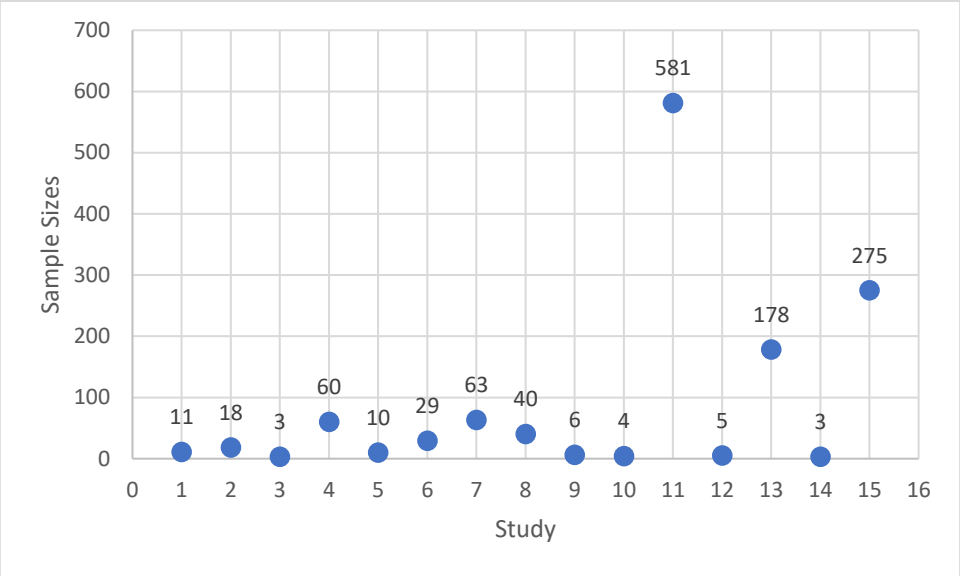


Figure 6 deconstructs this by showing the sample sizes of each study included in this evaluation. S11 had the most participants ($n = 581$), while S2, S3 and S14 had the fewest ($n = 3$).

All of the studies with the fewest participants used a qualitative approach, and other qualitative studies followed them with participant counts of $n = 4{,}5$ and 6 (S10, 12, 9, respectively).

While this suggests that a pattern exists, wherein quantitative research includes a wider range of people, (e.g., S11, $n = 581$; S15, $n = 275$; S13, $n = 178$ and S7, $n = 63$), this is not always the case. S5used quantitative methods on 10 participants.

In contrast, sample sizes of studies using mixed methods approach (S1,4,6,8), ranged from $n = 11 - 60$.

Overall, four studies used mixed data collection, five used quantitative measurements, and six used qualitative approaches.

4.1.4. Measurements and Outcomes

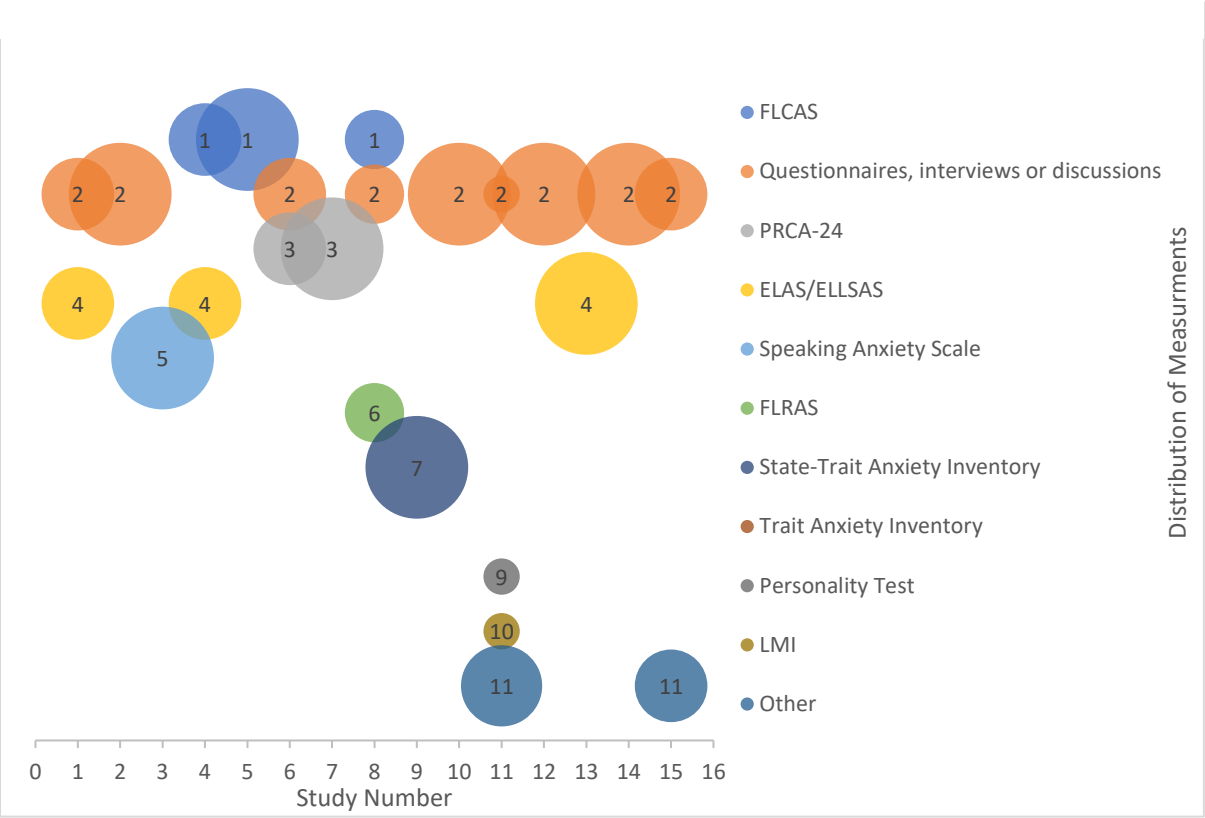
The measurement tools used are determined by the respective data collection techniques. Interviews were frequently used to collect qualitative data, self-reported surveys were primarily

used to collect quantitative data, and mixed methods often combined surveys with interviews. Below are more examples of this pattern, and studies that differed are highlighted and discussed.

Type of Measurement

While Figure 7 does not explicitly describe the type of measurement(s) that each study employed, it provides a general overview of the pattern according to the study's choice of data type.

Figure 7: Type of measurements per study



Three studies (S4,10,8) employed the FLCAS to collect quantitative data. Two studies (S4,8) used a mixed methods analysis and incorporated qualitative interviews. To quantify the particular anxiety type, namely reading anxiety, S8 additionally utilised another scale, the Foreign Language Reading Anxiety Scale (FLRAS). Another study using several measures is S9, which used both the STAI and the Trait Anxiety Inventory.

Combining scales with interviews is a common trend for mixed research, as discussed above (see Figure 7). For instance, S1 used the ELLSAS (English Language Learners Speaking Anxiety Scale) to accumulate quantitative data while follow-up interviews collected qualitative data. Comparably, S6 extracted quantitative data using the 'Personal Report of Communication Apprehension' (PRCA-24)

tool and then conducted group meetings/discussions to gather additional qualitative information. S15 did the same thing but employed IELTS (International English Language Testing System) oral assessments in place of a scale, followed by semi-structured interviews.

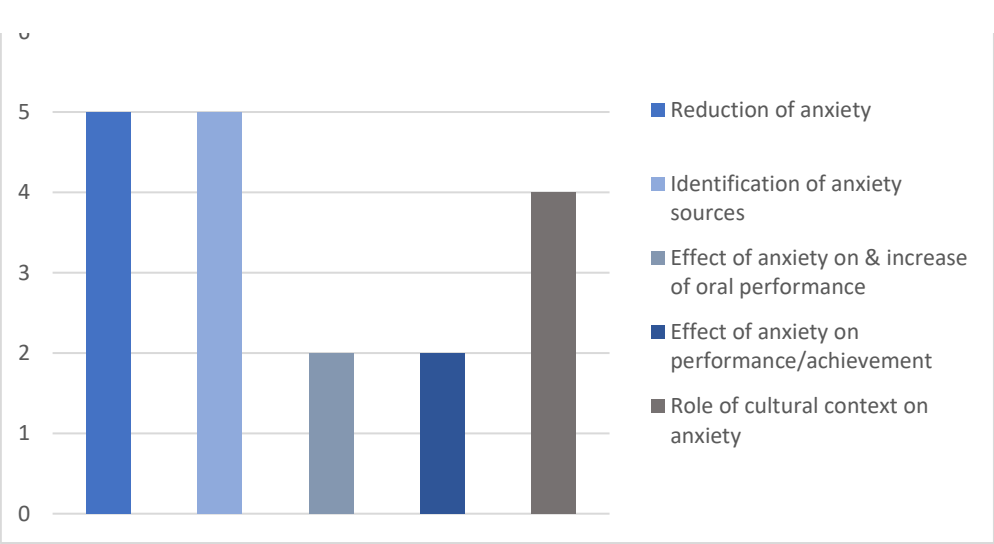
The PRCA-24 and the ELAS (English Language Anxiety Scale) were utilised, respectively, in other quantitative studies (S7,13). Furthermore, interviews were the primary measurement methods in several qualitative studies (S2,4,12,14).

Unlike other studies, S11 used more than two instruments. These instruments included surveys, personality tests and the Language Mindsets Inventory (LMI). As shown in Table 4, the additional instruments employed in this study were: the intergroup anxiety scale, language-based rejection sensitivity, future interaction avoidance scale, and performance and mastery measures. As a result, S11 ensured a thorough interpretation of the data obtained and provides insight into a number of different factors, including anxiety and performance.

Outcomes

Table 4 also displays the general findings of studies included in this systematic review. Note that several studies reached multiple conclusions.

Figure 8: Frequency of outcomes



The most frequent outcomes are identifying anxiety sources (S2,5,11,13,15) and reducing anxiety (S1,6,12,11,9). For instance, S2 listed 'gender' and a 'sense of not belonging' as anxiety sources, while S5 found 14 potential causes, including tests and apprehension about classroom interaction. As predicted, this pattern indicates that research focuses on finding the causes of anxiety and minimising its occurrence in the classroom.

As expected, given the review's focus on minority pupils, the importance of cultural context came in third (S7,8,10,14), while particular outcomes like the impact of anxiety on oral performance (S3,9)

and its improvement or language performance/achievement (S4,15) came in last. However, it should be noted that low frequency does not necessarily imply that it is an uncommon outcome; rather, it points to a slowly consistent pattern in research where the more specific effects of anxiety are explored, over general trends.

4.2. Study Findings

4.2.1. Narrative Summaries of Individual Studies

Study 1

Abal (2013) undertook their study with the goal of enhancing ELL instruction in America via efficient task-based language education, namely through simulation exercises. When speaking to native speakers, ELL students frequently experience high levels of anxiety, which impedes their learning ability. Mixed methods were used to gather data from 11 post-secondary adults taking English classes at Florida International University's language centre, in order to demonstrate to educators, the value of simulations while teaching English.

Data was gathered using a variety of Likert scales, including the 10-point ELLSAS, the FLCAS, the Second Language Speaking Anxiety Scale (SLSAS), and subsequently, a survey and some general questions. The study's findings show that using technology, especially multi-user virtual environments (CMC MUVE of Second Life), reduces these anxiety levels.

Study 2

Al Yami (2015) examined the relationship between speaking anxiety and language learning. ESL students studying at the Macquarie University English Language Centre in Australia ($n = 18$) provided data for this qualitative study through observation, semi-structured interviews, and prompted recollection sessions. Three speaking exercises in class—pair work, group work, and presentations—were monitored. In this sample, half were Saudi ESL students, and the others were from other countries (e.g., China, Pakistan and Taiwan).

The results identified five socio-contextual factors, including (1) teacher behaviour, (2) conversing with native speakers, (3) gender proximity, (4) preparation time and (5) classroom situation. Additionally, two psycho-linguistic factors— (1) fear of making mistakes and (2) lack of confidence because of one's own perception of one's language proficiency— and three overlap factors — (1) fear of negative evaluation, (2) feeling unwelcome by peers, and (3) demanding tasks— were found. To overcome these challenges and focus on non-provoking anxiety aspects, self-correction and meticulous preparation were revealed as efficient coping techniques.

Study 3

Chen (2015) conducted a case study on ESL students in West Virginia with the aim of examining the connections between presentation performance and speaking-in-class anxiety. This study Chinese ESL students ($n = 3$) enrolled in INTO, a language learning centre at Marshall University. The author qualitatively gathered data from a hearing and speaking class. Five scales post-questionnaires were used to collect the data, which was then triangulated, qualitatively analysed, and elaborated through unstructured observation, semi-structured interviews, teacher evaluations and peer evaluations.

The results of the study demonstrated that oral anxiety and mental blocks were prevalent among all students. However, none of these factors affected the pupils' overall performance. The following coping mechanisms were identified to minimize anxiety during in-class presentations: teacher encouragement, high focus on presentations, improvement of oral English proficiency, good preparation, and development of random response capabilities.

Study 4

Cooper (2007) investigated test anxiety among Hispanic ESL students in seventh and eighth grade middle schools, particularly in a high-stakes standardised achievement exam context. Data from 42 pupils and 18 teachers from the inner-city Dallas Independent School District in America were gathered using a mixed-methods research technique, specifically two anxiety scales, ELAS and FLCAS. Qualitative data was obtained through individual interviews and contrasted with the quantitative information.

Results indicated that test anxiety in high stakes testing situations is a greater concern for this population, highlighting the inadequacy of teaching strategies and testing procedures used to prepare Hispanic ESL learners. In other word, such tests have an overall negative impact on academic performance because they induce anxiety. The limited English language proficiency of ESL students means that the testing procedures raise anxiety while lowering students' confidence. This puts pressure on the teachers as well, who must push the students to succeed in order to improve the school's overall acceptance rating and test scores.

Study 5

Freiberger (2010) obtained data from 10 Spanish-speaking ESL adults taking a language centre class while studying abroad in America to identify potential reasons of L2 anxiety.

14 potential sources of anxiety were discovered through a survey based on the FLCAS and follow-up interviews. Test anxiety, apprehension of L2 classroom communication, the perception of peer proficiency, and communicating with native speakers are some of the causes. While other research

states that receiving error correction potentially makes students experience anxiety, these results supported the opposite. Participants in this study were motivated to learn and wanted correction but did not have enough opportunities to practice. Their learning was instead hindered by increased anxiety, alongside being separated from their culture and community.

Study 6

Hill (2010) examined the effects of asynchronous discussions (ASD) on 29 ESL students in three urban high schools in South Texas during a quasi-experimental study. Participants spoke Spanish, Chinese and other languages. Using a mixed-research method, data was acquired from two levels using (1) online virtual (ASD) discussions ($n = 22$, experimental group) and (2) in-person, in-class discussions with open-ended questions ($n = 7$, comparison group). The PRCA-24 was given at pre-test and post-test to obtain quantitative data, and a writing sample from before and after the 5-week intervention (using ASD) was collected and analysed based on writing skills (e.g., readability, sentence length). The PRCA-24 measured communication anxiety within the four subscales of group discussion, formal meetings, informal discussions, and public speaking Qualitative data was gathered through a focus group at the end of the experiment.

The findings showed minimal differences between the groups, but the experimental group performed better in interpersonal and discussion meetings. This study demonstrated that teachers should consider including ASD since informal communication enhances language components like writing skills and lowers the communication anxiety present in the physical classroom. Accordingly, the qualitative results demonstrated that while participants valued online communication, they perceived the absence of non-verbal signs as disadvantageous. In order to overcome communication apprehension and improve language skills like writing and speaking, hybrid sessions that combine online and in-class communication were advised.

Study 7

Jones (1993) studied the relationships between four variables (communication apprehension, academic achievement, teacher/student gender, and student perception of teacher) in seventh-grade Hispanic ESL students enrolled in ESL classes at a middle school in Texas ($n = 63$). Academic achievement was quantified through the overall first semester grade point average from academic subjects like English. This revealed a substantial gender difference in overall academic achievement, with females scoring higher grades ($M = 75.0$) than males ($M = 71.1$). PRCA-24 measured students' levels of communication apprehension and revealed that students with higher levels of anxiety were less at ease speaking with their teachers than students with lower anxiety levels.

While the study failed to indicate significant interrelationships between the variables, it did reveal an overall low level of academic achievement among these students. Therefore, Jones (1993) urged educators to consider further measures.

Study 8

Kojima (2007) investigated factors of L2 anxiety in Spanish and Chinese immigrants who were attending beginner ESL lessons in an American high school ($n = 40$). Participants were equally distributed between Spanish speakers, and Chinese students with Taiwanese as their L1. The study investigated whether cultural backgrounds impacted anxiety and explored how these students experience anxiety. A questionnaire based on the FLCAS was used to collect quantitative data, and follow-up interviews collected qualitative data on specific individuals, chosen according to their level of anxiety (e.g., highest, medium, lowest).

The findings showed that four crucial factors—cultural, psychological, educational, and linguistic—are influenced by pupils' cultural backgrounds to varying degrees. Even though the results showed considerable differences between Chinese and Spanish-speaking students, overall, the study found parallels in how cultural differences affect L2 anxiety in both groups of English learners. Therefore, it is strongly advised that instructional strategies and materials be culturally sensitive in order to promote learning among a variety of student demographics.

Study 9

Lee (2017) conducted a three-week qualitative study with six Spanish-speaking ELL students to ascertain whether utilising LEGO StoryStarter as learning resources aids young learners who experience oral anxiety in communicating. The 20-item STAI for Children was used to gather background data on the participants' anxiety levels before the primary assessments were conducted via semi-structured interviews, as the interviews were shaped in accordance with this data. Each participant, who was specifically chosen from grades 2 to 5, underwent three interviews. To facilitate a storytelling exercise during the third session, a LEGO StoryStarter set was given to the participants.

The results of this task showed that participants felt ‘at ease’ asking/answering questions and with correcting mistakes made by peers, proving that the use of LEGO manipulatives facilitated verbal communication with others and themselves, lowering anxiety and fostering a positive relationship with the target language.

Study 10

Liao & Liang (2021) produced a qualitative multi-case study on FLA among four Chinese graduate students in the US. A background questionnaire and semi-structured interviews were used to gather the data, which revealed that the participants' institution only offered a small amount of support and services for dealing with and recognising FLA, which negatively impacted students' feelings of belonging.

It was discovered that participants' willingness to use English and the intensity of their foreign language experiences were influenced by cultural factors. Students who were aware of their FLA were able to self-adjust by using a variety of strategies, such as making friends with native speakers. The need for these strategies is stressed, particularly for Chinese students, who were found to have a cultural background that makes them more prone to experience shame if they consider themselves to have (or are perceived as having) less-than-competent English skills.

Study 11

Lou & Noels (2020) combined three quantitative studies on language mindsets to determine whether they effect low-competence ESL university students in Canada or cross-cultural interaction. By examining whether (and if so, how) language mindsets (LMs), L2 competency and their interactions predict fear of rejection, avoidant behaviours, and emotional experiences in ESL students, this study aimed to broaden the framework of LMs. The authors propose that LMs impact people's perceptions of how malleable or fixed language learning abilities are.

Despite having 581 participants, this study consisted of three sub-studies, with participants being divided into study 1 ($n = 91$), study 2 ($n = 72$), and study 3 ($n = 418$). Due to the large sample size and the diversity of the participants, over 18 languages, including Korean, Chinese, Arabic, and Urdu, were represented. While attending a university where English is the dominant language, all participants were categorised as ESL speakers. Social interaction tasks, a double-blind randomised experiment, and surveys were used to collect the data; in particular, a number of self-report questionnaires, a personality test, the LMI, the Language-based rejection sensitivity scale, the intergroup anxiety scale, and other instruments were used.

Overall, the findings indicated that lower-competent ESL learners can overcome obstacles, including anxiety, provided that the functional value of LMs is acknowledged and understood, along with their impact on learning and academic performance. LMs correlated with negative perceptions of language-based rejection and avoidance of contact. The importance of LMs, particularly growth mindsets, must be addressed to encourage communication among ESL students who self-report low-competency since doing so helps language minority students build resilience.

Study 12

Nasiri (2019) investigated how five adult refugees perceived literature circles while learning the language, to determine which techniques promote efficient reading comprehension and lessen anxiety. All participants were enrolled in advanced reading comprehension courses at a bilingual centre in America. The purpose of literature circles is to foster a student-centred learning environment with opportunities for independent reading and cooperative learning.

The study's results showed that the literature circle reduced the participants' FLA while also enhancing their reading comprehension and English-speaking abilities.

Study 13

Pappamihiel (2001) performed research in both ESL and mainstream classroom settings in the US to explore how Mexican girls deal with English LA. Participants were middle school students ($n = 178$) with an intermediate level of English who were taking both ESL and regular classes. With an average stay of 2.47 years, all participants had been living in the US for at least a year. The ELAS, a 47-item Likert-type scale based on the FCLAS, was used to quantitatively collect the data.

The findings, which showed a significant difference in anxiety levels between ESL and mainstream classrooms, were considerably impacted by gender. Overall, the results demonstrated that English LA varies depending on classroom context — (ESL vs mainstream) — and that moving from ESL to mainstream classrooms considerably increased anxiety, particularly in girls. Two anxiety subtypes were detected: (1) academic anxiety and (2) anxiety about interactions with peers in the mainstream classroom.

Study 14

Turnbull (2019) conducted a descriptive multi-case study on how adult Spanish-speaking migrants interpret their own and other people's silences in an English-speaking setting ($n = 3$, 2 female). All participants were enrolled in English classes at a community centre and had lived continuously in America for 8-16 years. They also all had no more advanced English skills than intermediate. In order to better understand how learners' willingness to communicate varies as they manage their L2 identities and their non-native speaker status, the study offers naturalistic narrative data from English language-use surveys and semi-structured interviews in Spanish.

Results revealed a variety of social and intercultural elements that influence participants' opportunities to speak English and interact in real L2 contexts. They showed that extralinguistic factors, such as the criticism faced by the Spanish language, levels of social isolation, and economic demands, impacted LA.

Study 15

Woodrow & Chapman (2002) conducted a quantitative study on L2 speaking anxiety. Research demonstrating that anxiety has a significant negative influence on language abilities, particularly speaking, served as the inspiration for this study. Overseas students who were engaged in an intensive English for Academic Purposes (EAP) programme before starting university in Australia participated in the study, the majority of whom were in their early 20s ($n = 275$). The study used a questionnaire and IELTS to collect data. Of the original participants, only 47 participated in the ensuing semi-structured interviews.

Overall, results indicate no difference in how sex affects anxiety, and that publicly speaking and dealing with native speakers are the two main sources of stress for ESL learners. Additionally, there was a significant effect of ethnic group. Participants with Confucian heritage had more anxiety than those with European or Vietnamese. This group effect emphasises that students vary in their anxiety subtypes and shows the influence of cultural variables.

4.3. Risk of Bias

Table 5 provides a summary of the RoB ratings for each study across the MMAT questionnaire, with data points representing ‘Yes’ (green), ‘Can't tell’ (yellow), or ‘No’ (red) responses for each pertinent question. As previously discussed, research using quantitative, qualitative, and mixed methods are all included in this review. The MMAT checklist and its explanation (see Appendix C) were utilised for this section (Hong et al., 2018). If a study reported unclear information, the appropriate author was emailed.

Table 5: Risk of Bias of Individual Studies

Study ID	All		Quantitative (non-random)					Quantitative (descriptive)					Qualitative					Mixed					Global strength of study
	Clear research questions	Data can answer research questions	Selection bias	Intervention & outcome measures	Complete outcome data	Confounders	Intervention administration	Relevance of sampling	Sample representativeness	Appropriateness of measures	Low risk of nonresponse bias	Appropriateness of analysis	Rationale for approach	Data collection methods	Findings derived from data	Interpretation supports data	Coherence among steps	Rationale for approach	Different components integrated	Outputs of each well-interpreted	Divergences addressed	Quality of each component	
1																							moderate
2																							strong
3																							strong
4																							strong
5																							moderate
6																							moderate
7																							strong
8																							moderate
9																							strong
10																							strong
11																							strong
12																							strong
13																							weak
14																							strong
15																							strong

All studies, except for S13, presented clear research questions and supplied data that appropriately answered them. Table 6 indicates that the quantitative component of S13 was appraised, even though the MMAT checklist (see Appendix C) advises that further appraisal of studies with either the answer 'No' or 'Can't tell' to one or both screening questions may not be feasible and appropriate. Despite displaying moderate quality, the screening questions determined that overall quality of S13 was weak (as discussed in Section (methods). However, Hong et al. (2018) state that eliminating studies with low methodological quality is not recommended; hence, despite S13's poor methodological quality, it has been included within this review.

4.3.1. Studies Reporting Quantitative Data

Four studies evaluated in the quantitate section of table 5, exclusively reported quantitative results. S11 was the only study that could be evaluated for non-randomised quantitative design, whereas S7, S13 and S15 were evaluated for quantitative descriptive methodology. S13 was rated as weak, as mentioned above, but the remaining three studies (S7,11,15) were all rated as strong, with 'Yes' denoting the majority and 'Can't tell' denoting low risk of response bias (S11), intervention administration (S7) and relevance of sampling (S15) respectively.

Since sample sizes were thoroughly recorded and had a significant number of participants, all quantitative studies demonstrated a low selection bias, however S11 is particularly aware of this due to its non-randomized nature. However, S7 also demonstrates a strong quality, and thus a low RoB, with specific explanations of the minority group of Hispanic students and their significance as the selected participants.

In terms of their data collection procedures, the three descriptive quantitative studies (S7,13,15) scored highly on trustworthiness and had a low RoB. Each study displayed measurements with thorough justifications for their application, discussions of their reliability, and indications that they were validated, as well as providing and outlining straightforward data gathering techniques.

4.3.2. Studies Reporting Qualitative Data

Strong quality was produced by all six studies (S2,3,9,10,12,14) that included qualitative data, demonstrating the trustworthiness of each. This is shown by the fact that the majority of the qualitative category's fields in Table 6 are green and so denote 'Yes'.

For instance, all included studies supported their use of qualitative methodologies to address their research issues, and the details of these approaches were adequately justified and outlined. The qualitative collection of data is regarded as a highly appropriate method because studies elicited data through semi-structured interviews where the main focus was either students' experiences

(S2,3,9,10) or students' perception(S12,14), in order to contribute a learner-centred viewpoint within the research of LA.

When it comes to deriving findings from their data, four of the six studies were judged to have a strong level of trustworthiness. This excludes S3 and S14, which showed moderate quality when it came to obtaining data from findings, primarily due to a lack of elaboration on how the procedure was implemented or how the findings were extracted from the data. For instance, 'Can't tell' was assigned to S3 because it used many data gathering techniques, such as interviews, teacher and peer evaluations, which made it occasionally challenging to pinpoint the exact source of the data. The four other studies (S2,9,10,12) provided detailed explanations on how findings were obtained from the data.

Out of the six studies, four (S2,3,9,14) indicated strong reliability and demonstrated coherence across data sources, collection, analysis, and interpretation, whereas the other two (S10,12) were rated as moderate due to ambiguous reporting of methodology.

4.3.3. Studies With a Mixed Methods Design

Out of the five studies that used a mixed methods design, one (S4) was given a strong grade, while the other four (S1,5,6,8) were given a moderate grade. Even though all studies demonstrated a strong ability to integrate both quantitative and qualitative findings, S6 did not explain why it collected both qualitative and quantitative data, leaving readers with a hazy understanding of the study's methodological decisions.

S1 and S5 did not sufficiently address the divergences and inconsistencies between quantitative and qualitative data. Although S1 makes a brief mention of divergences, the methodology does not adequately address them, which results in a moderate rating. S5 was given a high RoB for divergences because, despite their acknowledgement in the studies full report, the author(s) failed to sufficiently consider how these impacted the study's methodological quality, thus resulting in a moderate overall rating.

4.3.4. Cumulative Confidence Across Studies

As demonstrated by Table 6, 10 studies were assessed with a 'strong' global strength of evidence, 4 studies were 'moderate' and only one study had a 'weak' rating. As a result, it was determined that the majority of the studies had a low RoB, and their performance on the various MMAT components shows that they both constructed and followed their methodology to a good degree.

4.4. Summary of Results

The findings presented here summarise the results of this systematic review and provide preliminary answers to RQ1 and RQ2. A deeper discussion, and consideration of how these findings relate to the wider literature, can be found in Chapter 5.

4.4.1. RQ1: What is the extent and nature of the research that has been conducted on the impact of LA among minority students?

The 15 studies included in this review, which looked for studies between 1986 and 2022, were all conducted within the last 29 years. Research on the impact of LA on minority students was primarily undertaken between 2001 and 2021; no studies conducted before 1993 were found. Consequently, less than one study (0.4%) was conducted on average per year.

Even though the notion of LA was first explicitly developed in 1986 (Horwitz et al., 1986), the distinct lack of research may have resulted from the review's concentration on minority pupils. This is because, despite the constant rise of minority groups around the world, these students remain relatively understudied and underrepresented within research (Redwood, 2013; Corrington et al., 2020; Bai et al., 2020).

It was discovered that among the several anxiety subtypes that LA has been conceptualised and described with over the years, these investigations largely focussed on the subtypes of speaking (S1,2,3,6,7,9,14,15), cultural (S8,10,11,12,13), and test-related (S4,5) anxiety.

Overall, the studies focussed on identifying the causes of anxiety, promoting anxiety reduction, and showing how anxiety negatively affects minority students' communicative competence, academic achievement, or general level of discomfort brought on by high anxiety. LA was primarily perceived to have detrimental impacts on minority students, hindering their language development. There were no studies that have explored LA from a non-negative perspective.

4.4.2. RQ2: Is there LA research that might be practically useful to educators?

Several of the included studies propose practical solutions, as they show educators potential anxiety sources and what may need to be avoided while providing strategies for doing so. This is made possible by conducting empirical research. For instance, when anxiety interferes with reading, S12 emphasises the benefits of literature circles, while S9 advocates utilising toys with younger students to foster communication while also lowering anxiety.

The findings suggest practical value in that they show educators what has been recognised as an anxiety source and what may need to be avoided while providing strategies for doing so. This is made possible by including research with empirical evidence.

However, the data are insufficient to conclude with certainty whether the anxiety reduction approaches work or whether the studies' findings have practical applicability. This is a result of the review's concentration on a broad and diverse group of 'minority students'. Techniques may only be effective if they are applied to the same demographic group in the same setting.

The sample of S5's findings, for instance, is made up entirely of Spanish-speaking adult students who are taking English language classes at a university. The results support the existence of 14 possible sources of L2 anxiety, however these causes might not apply to non-Spanish-speaking students or even Spanish-speaking students from a different university.

Despite the inability to directly address effectiveness, research on student populations like Spanish- or Chinese-speaking students offers additional insight into minority students' experiences with anxiety. Such data further highlights the importance of recognising and considering the effects that anxiety may have on students. Subsequently, more research on other minority student groups is encouraged.

Chapter 5. Discussion

5.1. RQ1: Nature and Extent of Research on LA among Minority Pupils

The review found a total of 15 studies from 1986 to 2022 that investigated the impact of LA on minority students, although the first included study in this time period was conducted in 1993. This indicates that, despite the continuous increase of minority students (e.g., NALDIC, n.d., The Bell Foundation, n.d., NCES, n.d.), and consequent increase of multicultural classrooms, little research has been conducted on the minority student, let alone on their affective or cognitive experience of language learning and use.

Even though the need for additional research on this topic was acknowledged in 1986 due to the continued increase in minority pupils, it is still a problem (Loo & Rolison). In fact, the issues raised in Loo and Rolison's (1986) study—such as unequal opportunities for academic success, lower socioeconomic or high dropout rates among minority students—remain raised and discussed to this day as alarming problems (e.g., see Van Den Berghe et al., 2022; Rodriguez et al., 2022; Berkowitz 2022), emphasising how little progress has been made. This is unsurprising given that minority students and their communities still encounter obstacles, such as a lack of cultural understanding, a lack of belonging, and communication problems. The key takeaway from the literature is that students who have difficulty getting the necessary support, such as language support or mental health services, or who simply struggle to express that they require help, will have lower academic outcomes and lower psychological well-being (Easterbrook et al., 2022; Arday, 2018; Borgonovi & Ferrara, 2020; Korpershoek et al., 2020).

Results from S2 and S10 in this review especially reflect this. According to S2, ‘loss of belonging’ is a major source of anxiety for Arabic-speaking ESL students in Australia, and in S10, Chinese-speaking students in America suffer significant levels of anxiety since their institutions offer limited support, which has a detrimental impact on the students' sense of belonging.

Although the sample of Chinese and Arabic-speaking students might imply that students whose language is further distanced from the language of instruction are likely to experience a lack of belonging because they are profoundly culturally and linguistically isolated (Borgonovi & Ferrara, 2020), the pattern persists for all studied minorities, regardless of their perceived distance from the majority culture. For instance, S7 demonstrates that Hispanic students do not express their need for assistance or attempt to access it because they do not feel comfortable talking to staff. This demonstrates that LA can be caused by a lack of belonging and/or support.

5.1.1. Literature by Geographic Region

Although this review's search strategy was designed to include a wide range of literature, a dearth of research on LA's impact on minority pupils was discovered. In fact, only research from the English-speaking countries of America ($n = 12$), Australia ($n = 2$), and Canada ($n = 1$) were found.

This implies that there is a lack of research on this topic outside of these countries. However, according to UNICEF's report (Chzhen et al., 2018), the world's richest nations are those that tolerate educational inequality the most, contending that while inequalities exist everywhere, they are more obvious in richer countries than others. This report specifically refers to the minority student population when discussing how inequality results from factors such as students' socioeconomic status and/or cultural and linguistic backgrounds. America, Australia, and Canada are among the top 1% of the richest nations, with America being the richest of the three (Anand & Segal, 2017). Therefore, it was unsurprising to find that America was the most popular geographic region within this review. However, the 12 papers published between 1986 and 2022 still demonstrate a lack of research in America, which is strongly reflected by Australia and Canada, where even fewer studies have been presented.

A trend of scholarly interest in LA's impact on minority pupils among English-speaking countries is evident when one acknowledges that all of the review's studies were from English-speaking nations. However, throughout the selection process, the search returned works from other countries as well. For instance, a study that examined foreign language pronunciation anxiety among adult learners in Turkey was found (Tekten, 2020). Because the studied population consisted of Turkish students learning English, rather than students from minority groups, this study was excluded.

No study conducted in Turkey was found on minority students' experiences with LA, despite the country's high number of minority students, as highlighted by UNCHR (n.d.), which claims that Turkey is the largest refugee hosting country in the world with around four million refugees. Yet, as can be seen from the aforementioned example and other studies on LA in Turkey (e.g., Thompson & Khawaja, 2015; Tulgar, 2018; Akar, 2021; Tekir, 2021), every Turkish study on LA focused solely on EFL students. This, along with the review's findings, demonstrates how LA in research is primarily associated with English, either as the mainstream/majority language or as a foreign language. This is to be expected given the academic trend of English serving as both the language of research and the research focus of many scholars around the world (Rao, 2018; Genc & Bada, 2010; Altbach, 2007; Hashemi, 2011; Chen & Chang, 2004).

5.1.2. Literature by Measurements

Even though the phenomenon LA itself was not conceptualised with reference to a particular language (Horwitz et al., 1986; MacIntyre & Gardner, 1989), the original scale was designed to measure LA of English-speaking participants learning Spanish as a foreign language at university level (Toyama & Yamazaki, 2018; Al-Saraj, 2014). Despite this, as shown by the results of this review (S4, 5 and 8), the scale has primarily been used to measure and identify anxiety brought on by learning or using English as a foreign language (e.g., Toth, 2008; Al-Saraj, 2014; Park, 2014).

Even though the validity and reliability of this scale were discussed and confirmed in the included studies methodologies, it cannot be denied that FLCAS's cultural restriction is a methodological limitation. According to Dewaele and Al-Saraj (2015), the scale was developed in 'Western culture for Western learners', and so, may not be the best measuring instrument for learners from different cultures, let alone those from a minority background.

The ELAS and ELLSAS, which are modified versions of FLCAS (Yim & Yu, 2011; Abal, 2012) with an emphasis on English and fewer items in the questionnaire, were the other scales used by included studies (S1, 4, 7 and 13). Even though the questions clearly show an emphasis on English, the FLCAS's methodological limitations, such as cultural constraints, persisted. No study utilised a scale designed specifically for minority students, demonstrating not just the dearth of studies on how LA affects minority students but also the absence of measurement instruments that consider language and cultural variations.

Furthermore, other noteworthy measurement scales employed to measure by the results to identify LA were the Speaking Anxiety Scale (S3), PRCA-24 (S6, 7 and 11), intergroup anxiety scale (S11), STAI for children and the TAI (S9).

Since all of these scales are derived from psychological backgrounds to measure and identify general anxiety, their application highlights the theoretical origin of LA and emphasises the need for a measurement tool tailored to both LA and the population of minority students (Spielberger, 1966; 1983; MacIntyre & Gardner, 1989; Zsido et al., 2020; McCroskey et al., 1985). For instance, the PRCA-24, which is based on personality and trait research and has a self-report structure similar to the FLCAS, measures communication traits in order to predict behaviour (Murphy & Weber, 2019).

While it, like the other scales, has a high level of predictive validity and reliability, in the selected studies, this trait anxiety scale has been used to assess anxiety specific to language contexts. MacIntyre and Gardner (1994), cited by Hill (2010) in S6, clearly recognise LA as 'a construct of anxiety which is not general but instead is specific to the language acquisition context…'

(cited in MacIntyre & Gardner 1994, p. 284). As such, the use of instruments like the PRCA-24 or STAI is directly at odds with the theoretical definitions by which LA is defined, further emphasising the need for additional empirical studies utilising more precise LA measurements (MacIntyre, 2017). Future research is encouraged to be explicit about the anxiety subtype being measured and to use an instrument that reflects that.

It is therefore not unexpected that all studies included in this review found that anxiety had a negative effect on minority students' language learning and use. Even extensively employed, language context-specific measures, like the FLCAS, are specifically built on the premise that LA has a negative influence. This is undoubtedly one of the causes that produced the patterns of outcomes shown in this review's findings, namely, to encourage anxiety reduction by presenting evidence of how anxiety adversely affects minority students' ability to communicate, perform well, or feel at ease in the classroom.

5.2. RQ2: Applicability of Research Findings to Education

The results of this review raise awareness of what anxiety can look like in the classroom, and by providing empirical data, all studies shed light on how anxiety might present itself for vulnerable minority students.

The review focused on a wide range of learners, as described in Section 2.2. whose minority background places them in disadvantageous positions within mainstream environments. Because minority students must overcome challenges related to language and culture that mainstream students do not, mainstream environments affect minority students' access to and opportunities for learning, the accessibility of resources, or the availability of support (Whitcomb et al., 2021; Benavides et al., 2012).

The minority student groups examined are primarily groups like Spanish- and Chinese-speaking students, even although one study focused on Arabic speakers and other studies looked at considered mixed groups from different backgrounds. This is because the review only found eligible studies from America, Australia, and Canada.

5.2.1. America

According to the results, most American studies primarily concentrated on students with a Spanish-speaking background. Given that Hispanics are the largest minority population in the US, a population that is consistently increasing, this is not surprising. As the studies included in this review have done, a person of Spanish culture or origin, whether from Cuba, Mexico, Puerto Rico, South or Central America, or another region, is referred to as Hispanic or Latino (US Census Bureau, n.d.).

The review's findings indicate that LA detrimentally impacts Hispanic learners, preventing them from achieving academic success. The fact that Hispanic students experience high levels of anxiety brought on by standardised exams (S4), are reluctant to speak out in class (S5) or ask their teachers for support (S7), has an effect on their language achievement in particular. Due to a lack of economic and social resources, particularly when it comes to education, Hispanic Americans are the demographic in America with the lowest level of education (Schhneider et al., 2006). They also frequently have strained relationships with their teachers which undermines their ability to succeed academically. Despite the fact that the obstacles Hispanic students face affects their psychological well-being, no study specifically examined the influence of LA on their mental health.

Since data were gathered from middle, secondary, and post-secondary institutions, studies focused on a variety of age groups. Thus, it is difficult to assess the effectiveness of the anxiety methods that were established or to determine whether educators can utilise specific techniques as it is dependent on the group of students the educator is working with and the environment.

Additionally, the lack of data from Australia and Canada also makes it impossible to detect a pattern or assess the practical effectiveness. The results include studies like S2, which focuses on Arabic speakers, but all other samples from those countries show varied samples with more than 10 different languages and no specific minority population. As a result of the heterogeneous sample, it is challenging to draw general conclusions with regard to practicability.

5.2.2. Australia

S15 focused on LA's overall detrimental impact on language performance among university students from a variety of linguistic/cultural backgrounds. Even though their findings might not be considered applicable to educators outside of Australia or outside university settings, S15 urges educators to be aware of factors like high anxiety being triggered by interacting with native speakers when it comes language tasks. S2 also sheds light on anxiety experienced by Arabic-speaking post-secondary students, demonstrating to educators how cultural backgrounds can affect students' feelings of belonging in the classroom and, in turn, affect their language proficiency achievement and psychological well-being.

Despite the fact that Australia has diverse and substantial minority communities (Munns et al., 1999), including Vietnamese and Aboriginal Australians, no additional studies on LA's effects have been identified. The review's findings show that, despite existent research focusing on minority students recognizing the psychological implications of the learning environment on students and their well-being (e.g., Murray-Harvey, 2010; Miller, 2010), these perspectives are not explored in relation to LA.

5.2.3. Canada

Only one study examined LA's impact on minority students in Canada. While this is surprising when considering that Cummins (1979; 1981) produced work on the consistent rise of minority students in Canadian schools and the issues they face in education before the conceptualisation of LA, one would expect more studies on pupil's apprehension within the language classroom. S11 solely focuses on post-secondary ESL students and while the linguistic diversity of the sample prevents educators to apply findings directly onto their classroom, the general outcome of this study shows the value that mindsets have on learning, achievement and the psychological well-being of minority pupils.

Despite attempting to address the role of the minority student's home/first language, no study in this review evaluated L1 as a strategy to decrease anxiety or increase students' sense of belonging. This reflects its undervalued role of L1 within research (Atkinson, 1987). In order to understand minority pupils and carry out research with a pedagogical impact, the linguistic background of students should not only be considered as a barrier but also as a pedagogical tool (Chalmers, 2017).

5.3. Limitations

There are two primary sources of limitations to this systematic review; the included studies and the methodology compromises made due to time constraints.

Firstly, the review is dependent on the quality of studies included, and as such, is limited to the calibre of the results provided. The impact of this limitation was minimised by the RoB analysis (Section 4.3.), however, as discussed, the measurement tools available to these studies were not ideal for this review's research questions.

A methodological shortcoming of the eligibility criteria was restricting results to English publications only. Future reviews or replications should include studies regardless of their language of publication given the limited geographic areas covered in this chapter. This would provide a wider synthesis.

This also holds true for the databases that were used; by only using Western English sites, access to studies that might have been located elsewhere was prevented. Future reviews are also recommended to be aware of database overlap, which is shown by the number of duplicates ($n = 584$), and to make the required modifications.

Due to time restrictions, a second screener was unable to conduct RoB or perform data extractions; this may have resulted in internal bias, which should be considered if the review were to be replicated. There was only one primary reviewer because the review was a dissertation, which contributed to the limitations listed above. Having more reviewers would prevent internal bias and

increase access to studies in languages other than English because, for instance, search strings and databases could have been accessed in other languages.

Chapter 6. Conclusion

The extent and nature of research on LA's impact on minority students were explored in this review. The scarcity of research in this field was highlighted by the 15 studies that were found during the search. Less than one study was produced annually on average between 1986 and 2022.

Although this study used a strict methodology, the majority of the papers came from America, with Australia and Canada providing little pertinent studies. Due to their varied nature, findings are difficult to generalise or evaluate for effectiveness.

Given the continuous and inevitable rise of minority students around the world, more research with empirical research is needed. While findings alert educators to the detrimental effects of LA, studies were conducted with specific population groups and setting and thus any cannot be judged for practical usefulness for educators in general.

Understanding LA is essential given that educators should aim to make students feel welcome and visible in the classroom, especially given that they frequently experience a sense of alienation at school when they are separated from the comforts of home. Despite Cummins (1986) having pioneered the idea of empowering disadvantaged pupils and making them feel at ease in the classroom by embracing their L1 and culture, no research has taken either into consideration as a strategy to reduce anxiety.

Prior to conducting more research exclusively on students' academic achievement, it is necessary to comprehend the role of socio-emotional variables, particularly LA, and address it with additional empirical research.

References

Abal, A. (2012). *A Comparison of the Effects of Classroom and Multi-User Virtual Environments on the Perceived Speaking Anxiety of Adult Post-Secondary English Language Learners* [Doctor of Philosophy in Curriculum and Instruction, Florida International University]. https://doi.org/10.25148/etd.FI13040102

Aida, Y. (1994). Examination of Horwitz, Horwitz, and Cope's Construct of Foreign Language Anxiety: The Case of Students of Japanese. *The Modern Language Journal, 78*(2), 155–168. https://doi.org/10.1111/j.1540-4781.1994.tb02026.x

Akar, Ç. (2021). Speaking Anxiety of Learners of English in Turkey at Different Age Groups. *Language Education and Technology*, *1*(2), 63–78.

Alamer, A., & Almulhim, F. (2021). The Interrelation Between Language Anxiety and Self-Determined Motivation; A Mixed Methods Approach. *Frontiers in Education*, *6*, 618655. https://doi.org/10.3389/feduc.2021.618655

Alarcon-Zuluaga, M. (1994). *Cognitive, linguistic and affective aspects of learning to read in Spanish by English speaking adults with and without reading disability* [Thesis]. https://tspace.library.utoronto.ca/handle/1807/111841

Alico, J., Maraorao, U., & Maraorao, R. (2017). Personal Variables and Anxiety in English and Mathematics: Correlational and Comparative Investigation among Pre-University Students. *International Journal for Innovation Education and Research*, *5*. https://doi.org/10.31686/ijier.vol5.iss11.852

Alrabai, F. (2015). The influence of teachers' anxiety-reducing strategies on learners' foreign language anxiety. *Innovation in Language Learning and Teaching*, *9*(2), 163–190. https://doi.org/10.1080/17501229.2014.890203

Alrabai, F., & Moskovsky, C. (2016). *The Relationship between Learners' Affective Variables and Second Language Achievement* (SSRN Scholarly Paper No. 2814796). https://doi.org/10.2139/ssrn.2814796

Al-Saraj, T. M. (2014). Revisiting the Foreign Language Classroom Anxiety Scale (FLCAS): The Anxiety of Female English Language Learners in Saudi Arabia. *L2 Journal*, *6*(1). https://doi.org/10.5070/L26121650

Altbach, P. G. (2007). The Imperial Tongue: English as the Dominating Academic Language. *Economic and Political Weekly*, *42*(36), 3608–3611. https://www.jstor.org/stable/40276356

Anand, S., & Segal, P. (2017). Who Are the Global Top 1%? *World Development*, *95*, 111–126. https://doi.org/10.1016/j.worlddev.2017.02.001

Anderson, N. (1999). *Exploring Second Language Reading: Issues and Strategies*.

Arday, J. (2018). Understanding Mental Health: What Are the Issues for Black and Ethnic Minority Students at University? *Social Sciences*, *7*(10), 3-25. https://doi.org/10.3390/socsci7100196

Argaman, O., & Abu-Rabia, S. (2002). The Influence of Language Anxiety on English Reading and Writing Tasks Among Native Hebrew Speakers. *Language, Culture and Curriculum*, *15*(2), 143–160. https://doi.org/10.1080/07908310208666640

Armijo-Olivo, S., Stiles, C. R., Hagen, N. A., Biondo, P. D., & Cummings, G. G. (2012). Assessment of study quality for systematic reviews: A comparison of the Cochrane Collaboration Risk of Bias Tool and the Effective Public Health Practice Project Quality Assessment Tool: methodological research. *Journal of Evaluation in Clinical Practice*, *18*(1), 12–18. https://doi.org/10.1111/j.1365-2753.2010.01516.x

Arnold, M., & Lassmann, M. E. (2003). Overrepresentation of minority students in special education. Education, 124(2), 230–237.

Atkinson, D. (1987). The mother tongue in the classroom: A neglected resource? *ELT Journal*, *41*(4), 241–247. https://doi.org/10.1093/elt/41.4.241

Atkinson, R. T. (1988). *An exploration of the factors relating to the system of mathematics anxiety* [Ph.D., Oklahoma State University]. https://www.proquest.com/docview/303640816/abstract/802697FB4E524235PQ/1

Aydın, S. (2018). Technology and foreign language anxiety: Implications for practice and future research. *Journal of Language and Linguistics Studies*, *14*(2), 193–211. https://dergipark.org.tr/en/pub/jlls/issue/43364/527966

Bai, X., Ramos, M. R., & Fiske, S. T. (2020). As diversity increases, people paradoxically perceive social groups as more similar. *Proceedings of the National Academy of Sciences*, *117*(23), 12741–12749. https://doi.org/10.1073/pnas.2000333117

Bajaj, M., & Suresh, S. (2018). The "Warm Embrace" of a Newcomer School for Immigrant & Refugee Youth. *Theory Into Practice*, *57*(2), 91–98. https://doi.org/10.1080/00405841.2018.1425815

Banks, T., & Dohy, J. (2019). Mitigating Barriers to Persistence: A Review of Efforts to Improve Retention and Graduation Rates for Students of Color in Higher Education. Higher Education Studies, 9(1), 118–131.

Basak, S. K., & Govender, D. W. (2015). Reference management software analysis: Endnote and Zotero. In *Proceedings of South Africa International Conference on Educational Technologies* (pp. 19-21).

Bedenlier, S., Bond, M., Buntins, K., Zawacki-Richter, O., & Kerres, M. (2020). Learning by Doing? Refections on Conducting a Systematic Review in the Field of Educational Technology. In O. Zawacki-Richter, M. Kerres, S. Bedenlier, M. Bond, & K. Buntins (Eds.), *Systematic Reviews in Educational Research: Methodology, Perspectives and Application* (pp. 111–127). Springer Fachmedien Wiesbaden. https://doi.org/10.1007/978-3-658-27602-7_1

Benavides, A. H., Midobuche, E., & Kostina-Ritchey, E. (2012). Challenges in Educating Immigrant Language Minority Students in the United States. *Procedia - Social and Behavioral Sciences*, *46*, 2302–2306. https://doi.org/10.1016/j.sbspro.2012.05.475

Berkowitz, R. (2022). School Matters: The Contribution of Positive School Climate to Equal Educational Opportunities among Ethnocultural Minority Students. *Youth & Society*, *54*(3), 372–396. https://doi.org/10.1177/0044118X20970235

Birkelund, J. F. (2020). Aiming High and Missing the Mark? Educational Choice, Dropout Risk, and Achievement in Upper Secondary Education among Children of Immigrants in Denmark. *European Sociological Review*, *36*(3), 395–412.

Blau, A. (1955). A Unitary Hypothesis of Emotion: I. Anxiety, Emotions of Displeasure, and Affective Disorders. *The Psychoanalytic Quarterly*, *24*(1), 75–103. https://doi.org/10.1080/21674086.1955.11925975

Boccagni, P., & Baldassar, L. (2015). Emotions on the move: Mapping the emergent field of emotion and migration. *Emotion, Space and Society*, *16*, 73–80. https://doi.org/10.1016/j.emospa.2015.06.009

Boland, A., Cherry, M., & Dickson, R. (2014). Doing a systematic review: A student's guide. SAGE Publications.

Borgonovi, F., & Ferrara, A. (2020). Academic achievement and sense of belonging among non-native-speaking immigrant students: The role of linguistic distance. *Learning and Individual Differences*, *81*. https://doi.org/10.1016/j.lindif.2020.101911

Botes, E., Dewaele, J.-M., & Greiff, S. (2020). The Foreign Language Classroom Anxiety Scale and Academic Achievement: An Overview of the Prevailing Literature and a Meta-analysis. *Journal for the Psychology of Language Learning*, *2*(1), 26–56.

Bramer, W. M., Rethlefsen, M. L., Kleijnen, J., & Franco, O. H. (2017). Optimal database combinations for literature searches in systematic reviews: A prospective exploratory study. *Systematic Reviews*, *6*(1), 245. https://doi.org/10.1186/s13643-017-0644-y

Briscoe, S., Bethel, A., & Rogers, M. (2020). Conduct and reporting of citation searching in Cochrane systematic reviews: A cross-sectional study. *Research Synthesis Methods*, *11*(2), 169–180. https://doi.org/10.1002/jrsm.1355

Bronfenbrenner, U. (1979). *The Ecology of Human Development: Experiments by Nature and Design*. Harvard University Press.

Bunce, L., King, N., Saran, S., & Talib, N. (2021). Experiences of black and minority ethnic (BME) students in higher education: Applying self-determination theory to understand the BME attainment gap. *Studies in Higher Education*, *46*(3), 534–547. https://doi.org/10.1080/03075079.2019.1643305

Bunch, G. C. (2009). 'Going up There': Challenges and Opportunities for Language Minority Students during a Mainstream Classroom Speech Event, Linguistics and Education: An International Research Journal, 2009-Ju. *Linguistics and Education: An International Research Journal*, *20*(2), 81–108. https://doi.org/10.1016/j.linged.2009.04.001

Casanova, J. R., Cervero Fernández-Castañón, A., Núñez Pérez, J. C., Almeida, L. S., & Bernardo Gutiérrez, A. B. (2018). Factors that determine the persistence and dropout of university students. *Psicothema, 30*. https://doi.org/10.7334/psicothema2018.155

Chalmers, H. (2017). What does research tell us about using the first language as a pedagogical tool?. *EAL Journal*. 55-58.

Chen, T.-Y., & Chang, G. B. Y. (2004). The Relationship between Foreign Language Anxiety and Learning Difficulties. *Foreign Language Annals*, *37*(2), 279–289. https://doi.org/10.1111/j.1944-9720.2004.tb02200.x

Chen, Y. (2015). *ESL Students' Language Anxiety in In-Class Oral Presentations [Master of Arts in English, Marshall University]*. https://mds.marshall.edu/cgi/viewcontent.cgi?referer=&httpsredir=1&article=1967&context=etd

Chiu, M. M., Pong, S., Mori, I., & Chow, B. W.-Y. (2012). Immigrant Students' Emotional and Cognitive Engagement at School: A Multilevel Analysis of Students in 41 countries. *Journal of Youth and Adolescence*, *41*(11), 1409–1425. https://doi.org/10.1007/s10964-012-9763-x

Chiu, S. I. (2014). The relationship between life stress and smartphone addiction on taiwanese university student: A mediation model of learning self-Efficacy and social self-Efficacy. *Computers in Human Behavior*, *34*, 49–57. https://doi.org/10.1016/j.chb.2014.01.024

Chzhen, Y., Rees, G., Gromada, A., Cuesta, J., & Bruckauf, Z. (2018). *An unfair start: Inequality in children's education in rich countries* (M. Drohan, Ed.). UNICEF Office of Research-Innocenti.

Cocca, M., & Cocca, A. (2019). Affective Variables and Motivation as Predictors of Proficiency in English as a Foreign Language. *Kinesiology Faculty Publications*. https://doi.org/10.7160/eriesj.2019.120302

Cochrane Effective Practice and Organisation of Care (EPOC). (2017). Data collection form. Retrieved 24 July 2022, from https://epoc.cochrane.org/resources/epoc-resources-reviewauthors#conducting

Cochrane Handbook for Systematic Reviews of Interventions. (n.d.). Retrieved 12 March 2022, from https://training.cochrane.org/handbook

Coldwell, M., Greany, T., Higgins, S., Brown, C., Maxwell, B., Stoll, L., & Willis, B. (2017). Evidence-informed teaching: An evaluation of progress in England. 75.

Coleman, D. M., Perrone, E. E., Dombrowski, J., Dossett, L. A., Sears, E. D., Sandhu, G., Telem, D. A., Waljee, J. F., Newman, E. A., & Collaborative, on behalf of the M. W. S. (2022). Overcoming COVID-19: Strategies to Mitigate the Perpetuated Gender Achievement Gap. *Annals of Surgery*, *275*(3), 435–437. https://doi.org/10.1097/SLA.0000000000005149

Cooper, K. S. (2013). Safe, Affirming, and Productive Spaces: Classroom Engagement Among Latina High School Students. *Urban Education*, *48*(4), 490–528. https://doi.org/10.1177/0042085912457164

Cordingley, P. (2008). Research and evidence-informed practice: Focusing on practice and practitioners. *Cambridge Journal of Education*, *38*(1), 37–52. https://doi.org/10.1080/03057640801889964

Corrington, A., Hebl, M., Stewart, D., Madera, J., Ng, L., & Williams, J. (2020). Diversity and inclusion of understudied populations: A call to practitioners and researchers. *Consulting Psychology Journal: Practice and Research*, *72*(4), 303–323. https://doi.org/10.1037/cpb0000188

Cummins, J. (1979). The language and culture issue in the education of minority language children. *Interchange*, *10*(4), 72–88. https://doi.org/10.1007/BF01810820

Cummins, J. (1981). Age on Arrival and Immigrant Second Language Learning in Canada: A Reassessment. *Applied Linguistics*, *2*(2), 132–149. https://doi.org/10.1093/applin/2.2.132

Cummins, J. (1986). Empowering minority students: A framework for intervention. *Harvard Educational Review*, *56*(1), 18–36. https://doi.org/10.17763/haer.56.1.b327234461607787

Cummins, J. (1989). A Theoretical Framework for Bilingual Special Education. *Exceptional Children*, *56*(2), 111–119. https://doi.org/10.1177/001440298905600203

Department of Education, UK. (n.d.). English proficiency of pupils with English as an additional language. 27. https://www.gov.uk/government/publications/english-proficiency-pupils-with-english-as-additional-language

Dewaele, J.-M., & Alfawzan, M. (2018). Does the effect of enjoyment outweigh that of anxiety in foreign language performance? *Studies in Second Language Learning and Teaching*, *8*(1), 21–45. https://doi.org/10.14746/ssllt.2018.8.1.2

Dewaele, J.-M., & Al-Saraj, T. (2015). Foreign Language Classroom Anxiety of Arab learners of English: The effect of personality, linguistic and sociobiographical variables. *Studies in Second Language Learning and Teaching*, *5*, 205–228. https://doi.org/10.14746/ssllt.2015.5.2.2

Djigunović, J. M. (2004). *Beyond Language Anxiety*. https://hrcak.srce.hr/file/26891

Dowker, A., Sarkar, A., & Looi, C. Y. (2016). Mathematics Anxiety: What Have We Learned in 60 Years? *Frontiers in Psychology*, *7*. https://doi.org/10.3389/fpsyg.2016.00508

Dreger, R. M., & Aiken Jr., L. R. (1957). The identification of number anxiety in a college population. *Journal of Educational Psychology*, *48*(6), 344–351. https://doi.org/10.1037/h0045894

Drucker, A. M., Fleming, P., & Chan, A.-W. (2016). Research Techniques Made Simple: Assessing Risk of Bias in Systematic Reviews. *Journal of Investigative Dermatology*, *136*(11), e109–e114. https://doi.org/10.1016/j.jid.2016.08.021

Dvorak-Bertsch, J. D., Curtin, J. J., Rubinstein, T. J., & Newman, J. P. (2007). Anxiety Moderates the Interplay Between Cognitive and Affective Processing. *Psychological Science*, *18*(8), 699–705. https://doi.org/10.1111/j.1467-9280.2007.01963.x

EAL | NALDIC - The national subject association for EAL. (n.d.). Retrieved 20 July 2022, from https://naldic.org.uk/

Easterbrook, M. J., Nieuwenhuis, M., Fox, K. J., Harris, P. R., & Banerjee, R. (2022). 'People like me don't do well at school': The roles of identity compatibility and school context in explaining the socioeconomic attainment gap. *British Journal of Educational Psychology*, *92*(3), 1178–1195. https://doi.org/10.1111/bjep.12494

Foss, K. A., & Reitzel, A. C. (1988). A Relational Model for Managing Second Language Anxiety. *TESOL Quarterly*, *22*(3), 437–454. https://doi.org/10.2307/3587288

Frey, B. (2018). *The SAGE encyclopaedia of educational research, measurement, and evaluation*. SAGE Publications.

Gabryś-Barker, D. (2016). Caring and Sharing in the Foreign Language Class: On a Positive Classroom Climate. In D. Gabryś-Barker & D. Gałajda (Eds.), *Positive Psychology Perspectives on Foreign Language Learning and Teaching* (pp. 155–174). Springer International Publishing. https://doi.org/10.1007/978-3-319-32954-3_9

Gallagher, P. A., Malone, D. M., & Ladner, J. R. (2009). Social-Psychological Support Personnel: Attitudes and Perceptions of Teamwork Supporting Children With Disabilities. *Journal of Social Work in Disability & Rehabilitation*, *8*(1), 1–20. https://doi.org/10.1080/15367100802665540

Ganschow, L., & Sparks, R. (1996). Anxiety about foreign language learning among high school women. *Modern Language Journal*, *80*(2), 199–212. https://doi.org/10.2307/328636

Garcia de Blakeley, M., Ford, R., & Casey, L. (2015). Second language anxiety among Latino American immigrants in Australia. *International Journal of Bilingual Education and Bilingualism*, *20*, 1–14. https://doi.org/10.1080/13670050.2015.1083533

Garcia, S. B., & Ortiz, A. A. (1988). Preventing Inappropriate Referrals of Language Minority Students to Special Education. Occasional Papers in Bilingual Education. In *NCBE New Focus*. https://eric.ed.gov/?id=ED309591

Gardner, R. C., Gliksman, L., & Smythe, P. C. (1978). Attitudes and behaviour in second language acquisition: A social psychological interpretation. *Canadian Psychological Review / Psychologie Canadienne*, *19*(3), 173–186. https://doi.org/10.1037/h0081474

Genc, B., & Bada, E. (2010). English as a World Language in Academic Writing. *Reading Matrix: An International Online Journal*, 10(2), 142–151.

Goodenow, C. (1993). Classroom Belonging among Early Adolescent Students: Relationships to Motivation and Achievement. *The Journal of Early Adolescence*, *13*(1), 21–43. https://doi.org/10.1177/0272431693013001002

Gopalakrishnan, S., & Ganeshkumar, P. (2013). Systematic Reviews and Meta-analysis: Understanding the Best Evidence in Primary Healthcare. *Journal of Family Medicine and Primary Care*, *2*(1), 9–14. https://doi.org/10.4103/2249-4863.109934

Gough, D., Oliver, S., & Thomas, J. (2017). Introducing systematic reviews. In D. Gough, S. Oliver, & J. Thomas (Eds.), An Introduction to Systematic Reviews (2nd ed., pp. 1–17). SAGE Publications.

Gray, J. A. (1983). 3—Anxiety, Personality and the Brain. In A. Gale & J. A. Edwards (Eds.), *Individual Differences and Psychopathology* (Vol. 3, pp. 31–43). Academic Press. https://doi.org/10.1016/B978-0-12-273903-3.50008-0

Green, S. (2005). Systematic reviews and meta-analysis. *Singapore Medical Journal*, 46(6), 270–273. https://pubmed.ncbi.nlm.nih.gov/15902354/

Hashemi, M. (2011). Language Stress And Anxiety Among The English Language Learners. *Procedia - Social and Behavioral Sciences*, *30*, 1811–1816. https://doi.org/10.1016/j.sbspro.2011.10.349

Hemsley-Brown, J., & Sharp, C. (2003). The Use of Research to Improve Professional Practice: A systematic review of the literature. *Oxford Review of Education*, *29*(4), 449–471. https://doi.org/10.1080/0305498032000153025

Henschel, S., & Roick, T. (2017). Relationships of mathematics performance, control and value beliefs with cognitive and affective math anxiety. *Learning and Individual Differences*, *55*, 97–107. https://doi.org/10.1016/j.lindif.2017.03.009

Hewitt, E., & Stephenson, J. (2012). Foreign Language Anxiety and Oral Exam Performance: A Replication of Phillips's MLJ Study. *The Modern Language Journal*, *96*(2), 170–189. https://doi.org/10.1111/j.1540-4781.2011.01174.x

Ho, H.-Z., Senturk, D., Lam, A. G., Zimmer, J. M., Hong, S., Okamoto, Y., Chiu, S.-Y., Nakazawa, Y., & Wang, C.-P. (2000). The Affective and Cognitive Dimensions of Math Anxiety: A Cross-National Study. *Journal for Research in Mathematics Education*, *31*(3), 362–379. https://doi.org/10.2307/749811

Hong, J. S., Peguero, A. A., & Espelage, D. L. (2018). Experiences in bullying and/or peer victimization of vulnerable, marginalized, and oppressed children and adolescents: An introduction to the special issue. *American Journal of Orthopsychiatry*, *88*(4), 399-401. https://doi.org/10.1037/ort0000330

Hong, Q. N., Gonzalez-Reyes, A., & Pluye, P. (2018). Improving the usefulness of a tool for appraising the quality of qualitative, quantitative and mixed methods studies, the Mixed Methods Appraisal Tool

(MMAT). *Journal of Evaluation in Clinical Practice*, *24*(3), 459–467. https://doi.org/10.1111/jep.12884

Horwitz, E. (2001). Language anxiety and achievement. *Annual Review of Applied Linguistics*, *21*, 112–126. https://doi.org/10.1017/S0267190501000071

Horwitz, E. K., Horwitz, M. B., & Cope, J. (1986). Foreign Language Classroom Anxiety. *The Modern Language Journal*, *70*(2), 125–132. https://doi.org/10.1111/j.1540-4781.1986.tb05256.x

IDESR - *International Database of Education Systematic Reviews*. (n.d.). Retrieved 16 February 2022, from https://idesr.org/

Jee, M. J. (2018). Foreign language anxiety in relation to affective variables: Learners of Korean as a foreign language in Australia. *Australian Review of Applied Linguistics*, *41*(3), 328–348. https://doi.org/10.1075/aral.17068.jee

Jee, M. J. (2022). Heritage language anxiety and major language anxiety experienced by Korean immigrants in Australia. *International Journal of Bilingual Education and Bilingualism*, *25*(5), 1713–1729. https://doi.org/10.1080/13670050.2020.1799321

Khodadady, E., & Khajavy, G. H. (2013). Exploring the Role of Anxiety and Motivation in Foreign Language Achievement: A Structural Equation Modeling Approach. *Porta Linguarum*. https://doi.org/10.30827/Digibug.20240

Kleinmann, H. H. (1977). Avoidance Behavior in Adult Second Language Acquisition1. *Language Learning*, *27*(1), 93–107. https://doi.org/10.1111/j.1467-1770.1977.tb00294.x

Kondo, D. S., & Ying-Ling, Y. (2004). Strategies for Coping with Language Anxiety: The Case of Students of English in Japan. *ELT Journal*, *58*(3), 258–265.

Korpershoek, H., Canrinus, E. T., Fokkens-Bruinsma, M., & de Boer, H. (2020). The relationships between school belonging and students' motivational, social-emotional, behavioural, and academic outcomes

in secondary education: A meta-analytic review. *Research Papers in Education*, *35*(6), 641–680. https://doi.org/10.1080/02671522.2019.1615116

Krashen, S. D. (1982). *Principles and Practice in Second Language Acquisition*. University of Southern California. http://www.sdkrashen.com/content/books/principles_and_practice.pdf

Liebert, R. M., & Morris, L. W. (1967). Cognitive and emotional components of test anxiety: A distinction and some initial data. *Psychological Reports*, *20*(3, PT. 1), 975–978. https://doi.org/10.2466/pr0.1967.20.3.975

Lippert-Rasmussen, K., & Lægaard, S. (2020). Refugees and minorities: Some conceptual and normative issues. *Ethics & Global Politics*, *13*(1), 79–92. https://doi.org/10.1080/16544951.2020.1735014

Loo, C. M., & Rolison, G. (1986). Alienation of Ethnic Minority Students at a Predominantly White University. *The Journal of Higher Education*, *57*(1), 58–77. https://doi.org/10.1080/00221546.1986.11778749

Lundh, A., & Gotzsche, P. C. (2008). Recommendations by Cochrane Review Groups for assessment of the risk of bias in studies. *BMC Medical Research Methodology*, *8*(1), 22. https://doi.org/10.1186/1471-2288-8-22

Luo, H. (2013). Foreign Language Anxiety: Past and Future. *Chinese Journal of Applied Linguistics*, *36*(4), 442–464. https://doi.org/10.1515/cjal-2013-0030

Ma, W. (2022). Language Education for Ethnolinguistic Minority Students in China: A Review. *Chinese Journal of Applied Linguistics*, *45*(3), 394–397. https://doi.org/10.1515/CJAL-2022-0305

MacIntyre, P. D. (1995). How does anxiety affect second language learning? A reply to Sparks and Ganschow. *Modern Language Journal*, *79*(1), 90–99. https://doi.org/10.2307/329395

MacIntyre, P. D. (2017). 2. An Overview of Language Anxiety Research and Trends in its Development. In *2. An Overview of Language Anxiety Research and Trends in its Development* (pp. 11–30). Multilingual Matters. https://doi.org/10.21832/9781783097722-003

MacIntyre, P. D., & Gardner, R. C. (1989). Anxiety and Second-Language Learning: Toward a Theoretical Clarification*. *Language Learning*, *39*(2), 251–275. https://doi.org/10.1111/j.1467-1770.1989.tb00423.x

MacIntyre, P. D., & Gardner, R. C. (1994). The Subtle Effects of Language Anxiety on Cognitive Processing in the Second Language. *Language Learning*, *44*(2), 283–305. https://doi.org/10.1111/j.1467-1770.1994.tb01103.x

MacIntyre, P. D., Ross, J., Talbot, K., Mercer, S., Gregersen, T., & Banga, C. A. (2019). Stressors, personality and wellbeing among language teachers. *System*, *82*, 26–38. https://doi.org/10.1016/j.system.2019.02.013

MacIntyre, P., & Gregersen, T. (2012). Affect: The Role of Language Anxiety and Other Emotions in Language Learning. In S. Mercer, S. Ryan, & M. Williams (Eds.), *Psychology for Language Learning: Insights from Research, Theory and Practice* (pp. 103–118). Palgrave Macmillan UK. https://doi.org/10.1057/9781137032829_8

MacKinnon, N. J., & Hoey, J. (2021). Operationalizing the Relation Between Affect and Cognition With the Somatic Transform. *Emotion Review*, *13*(3), 245–256. https://doi.org/10.1177/17540739211014946

Makarova, E., & Herzog, W. (2013). Hidden school dropout among immigrant students: A cross-sectional study. *Intercultural Education*, *24*(6), 559–572. https://doi.org/10.1080/14675986.2013.867603

McClelland, D. C. (1987). Human Motivation. CUP Archive.

McCrae, N., Blackstock, M., & Purssell, E. (2015). Eligibility criteria in systematic reviews: A methodological review. *International Journal of Nursing Studies*, *52*(7), 1269–1276. https://doi.org/10.1016/j.ijnurstu.2015.02.002

McCroskey, J. C., Beatty, M. J., Kearney, P., & Plax, T. G. (1985). The content validity of the PRCA-24 as a measure of communication apprehension across communication contexts. *Communication Quarterly*, *33*(3), 165–173. https://doi.org/10.1080/01463378509369595

Meeuwisse, M., Severiens, S. E., & Born, M. P. (2010). Learning Environment, Interaction, Sense of Belonging and Study Success in Ethnically Diverse Student Groups. *Research in Higher Education*, *51*(6), 528–545. https://doi.org/10.1007/s11162-010-9168-1

Methley, A. M., Campbell, S., Chew-Graham, C., McNally, R., & Cheraghi-Sohi, S. (2014). PICO, PICOS and SPIDER: A comparison study of specificity and sensitivity in three search tools for qualitative systematic reviews. *BMC Health Services Research*, *14*, 579. https://doi.org/10.1186/s12913-014-0579-0

Migliarini, V. (2018). 'Colour-evasiveness' and racism without race: The disablement of asylum-seeking children at the edge of fortress Europe. *Race Ethnicity and Education*, *21*(4), 438–457. https://doi.org/10.1080/13613324.2017.1417252

Miller, J. M. (2000). Language Use, Identity, and Social Interaction: Migrant Students in Australia. *Research on Language and Social Interaction*, *33*(1), 69–100. https://doi.org/10.1207/S15327973RLSI3301_3

Modood, T., & Salt, J. (2011). Migration, Minorities and the Nation. In T. Modood & J. Salt (Eds.), *Global Migration, Ethnicity and Britishness* (pp. 3–13). Palgrave Macmillan UK. https://doi.org/10.1057/9780230307155_1

Moher, D., Liberati, A., Tetzlaff, J., Altman, D. G., & The PRISMA Group. (2009). Preferred reporting items for systematic reviews and meta-analyses: The PRISMA Statement. PLoS Med, 6(7). https://doi.org/DOI:10.1371/journal.pmed1000097

Montgomery, G., Zhang, Y. B., & Imamura, M. (2021). The effects of Latino immigrants' acculturation strategy and U.S. Americans' assimilation attitudes on perceptions of accommodation satisfaction

and willingness to communicate. *International Journal of Intercultural Relations*, *82*, 157–167. https://doi.org/10.1016/j.ijintrel.2021.03.008

Munns, G., McFadden, M., Simpson, L., & Faulkner, K. (1999). *'Do I Beat 'Em or Join 'Em?' Individual and Collective Adaptations Leading to School Success among Minority Group Students in Australia*. https://eric.ed.gov/?id=ED441643

Murphy, M., & Weber, K. (2019). Confirmation of the Ability of the Personal Report of Communication Apprehension-24 (PRCA-24) to Predict Behavioral Indicators of Social Interaction. *Communication Research Reports*, *36*(5), 393–403. https://doi.org/10.1080/08824096.2019.1683527

Murphy, V. A., & Unthiah, A. (2015). *A systematic review of intervention research examining English language and literacy development in children with English as an Additional Language (EAL)*. University of Oxford. https://www.bell-foundation.org.uk/app/uploads/2017/05/EALachievementMurphy.pdf

Murray-Harvey, R. (2010). *Relationship influences on students' academic achievement, psychological health and well-being at school. 27*(1), 12.

NCES. (n.d.). *National Center for Education Statistics (NCES) Home Page, a part of the U.S. Department of Education*. Retrieved 1 September 2022, from https://nces.ed.gov/

Newman, M., & Gough, D. (2020). Systematic Reviews in Educational Research: Methodology, Perspectives and Application. In O. Zawacki-Richter, M. Kerres, S. Bedenlier, M. Bond, & K. Buntins (Eds.), *Systematic Reviews in Educational Research: Methodology, Perspectives and Application* (pp. 3–22). Springer Fachmedien Wiesbaden. https://doi.org/10.1007/978-3-658-27602-7_1

Nibert, D. (1996). Minority Group as Sociological Euphemism. *Race, Gender & Class*, *3*(3), 129–136. https://www.jstor.org/stable/41675339

Okhremtchouk, I. S. (2014). Classifying Language-Minority Students: A Closer Look at Individual Student Data. *Bilingual Research Journal*, *37*(3), 327–348. https://doi.org/10.1080/15235882.2014.965359

Oteir, I. N., & Al-Otaibi, A. N. (2019). Foreign Language Anxiety: A Systematic Review. *Arab World English Journal*, *10*(3), 309–317. https://doi.org/10.24093/awej/vol10no3.21

Ouzzani, M., Hammady, H., Fedorowicz, Z., & Elmagarmid, A. (2016). Rayyan—A web and mobile app for systematic reviews. *Systematic Reviews*, *5*(1), 210. https://doi.org/10.1186/s13643-016-0384-4

Oxford, R. L. (1990). *Language learning strategies: What every teacher should know*. (10th ed.). Heinle & Heinle.

Oxley, E., & de Cat, C. (2021). A systematic review of language and literacy interventions in children and adolescents with English as an additional language (EAL). *The Language Learning Journal*, *49*(3), 265–287. https://doi.org/10.1080/09571736.2019.1597146

Paez, A. (2017). Gray literature: An important resource in systematic reviews. *Journal of Evidence-Based Medicine*, *10*(3), 233–240. https://doi.org/10.1111/jebm.12266

Park, G.-P. (2014). Factor Analysis of the Foreign Language Classroom Anxiety Scale in Korean Learners of English as a Foreign Language. Psychological Reports, 115(1), 261–275. https://doi.org/10.2466/28.11.PR0.115c10z2

Petticrew, M., & Roberts, H. (2006). Systematic reviews in the social sciences: A practical guide. Blackwell Publishing.

Pieper, D., Heß, S., & Faggion, C. M. (2021). A new method for testing reproducibility in systematic reviews was developed, but needs more testing. *BMC Medical Research Methodology*, *21*(1), 157. https://doi.org/10.1186/s12874-021-01342-6

Popay, J., Roberts, H., Sowden, A., Petticrew, M., Arai, L., Rodgers, M., Britten, N., Roen, K., & Duffy, S. (2006). *Guidance on the conduct of narrative synthesis in systematic reviews: A product from the ESRC Methods Programme*. https://doi.org/10.13140/2.1.1018.4643

Rao, V. C. (2018). The Use of English Language in Research. *Journal for Research Scholars and Professionals of English Language Teaching*, *2*(8). https://www.researchgate.net/profile/V-Chandra-Rao/publication/329655421_The_Use_of_English_Language_in_Research/links/5c13b32e4585157ac1c1a111/The-Use-of-English-Language-in-Research.pdf

Rayner, J., & Espinoza, D. E. (2016). Emotional labour under public management reform: An exploratory study of school teachers in England. *The International Journal of Human Resource Management*, *27*(19), 2254–2274. https://doi.org/10.1080/09585192.2015.1093014

Redwood, S., & Gill, P. S. (2013). Under-representation of minority ethnic groups in research—Call for action. *The British Journal of General Practice*, *63*(612), 342–343. https://doi.org/10.3399/bjgp13X668456

Refugees, Asylum-Seekers and Migrants. (2022). Amnesty International. https://www.amnesty.org/en/what-we-do/refugees-asylum-seekers-and-migrants/

Roberts, R. E., Rhoades, H. M., & Vernon, S. W. (1990). Using the CES-D scale to screen for depression and anxiety: Effects of language and ethnic status. *Psychiatry Research*, *31*(1), 69–83. https://doi.org/10.1016/0165-1781(90)90110-Q

Rodriguez, D., Carrasquillo, A., Garcia, E., & Howitt, D. (2022). Factors that challenge English learners and increase their dropout rates: Recommendations from the field. *International Journal of Bilingual Education and Bilingualism*, *25*(3), 878–894. https://doi.org/10.1080/13670050.2020.1722059

Roebers, C. M., & Schneider, W. (1999). Self-concept and Anxiety in Immigrant Children. *International Journal of Behavioral Development*, *23*(1), 125–147. https://doi.org/10.1080/016502599384035

Rowley, S., & Moore, J. (2002). Racial identity in context for the gifted African American student. *Roeper Review*, *24*, 63–67. https://doi.org/10.1080/02783190209554131

Rumberger, R. W. (2001). *Why Students Drop Out of School and What Can Be Done*. https://escholarship.org/uc/item/58p2c3wp

Russell, V. (2020). Language anxiety and the online learner. *Foreign Language Annals*, *53*(2), 338–352. https://doi.org/10.1111/flan.12461

Saklan, E. (2017). Classroom Management Experiences with Syrian Refugee Students. *Education Journal*, *6*, 207. https://doi.org/10.11648/j.edu.20170606.17

Sanaei, O. (2016). Investigating Anxiety Symptoms and Reactions within EFL Learners' Oral Narratives: The Case of Intermediate Level Students. *Journal of Language Teaching and Research*, *7*, 902. https://doi.org/10.17507/jltr.0705.10

Saroughi, M., & Kitsantas, A. (2021). Examining Relationships among Contextual, Motivational and Wellbeing Variables of Immigrant Language-Minority College Students. *Innovative Higher Education*, *46*. https://doi.org/10.1007/s10755-020-09520-y

Schhneider, B., Martinez, S., & Ownes, A. (2006). Barriers to Educational Opportunities for Hispanics in the United States. In *Hispanics and the Future of America*. National Academies Press (US). https://www.ncbi.nlm.nih.gov/books/NBK19909/

Schultz, K., & Coleman-King, C. (2012). Becoming Visible: Shifting Teacher Practice to Actively Engage New Immigrant Students in Urban Classrooms. *The Urban Review*, *44*(4), 487–509. https://doi.org/10.1007/s11256-012-0204-7

Schwarzer, R., & Schwarzer, C. (1982). Achievement Anxiety with Respect to Reference Groups in School. *The Journal of Educational Research*, *75*(5), 305–308. https://doi.org/10.1080/00220671.1982.10885399

Scovel, T. (1978). The Effect of Affect on Foreign Language Learning: A Review of the Anxiety Research. *Language Learning*, *28*(1), 129–142. https://doi.org/10.1111/j.1467-1770.1978.tb00309.x

Sheng, Z., Sheng, Y., & Anderson, C. J. (2011). Dropping out of School among ELL Students: Implications to Schools and Teacher Education. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas*, *84*(3), 98–103. https://doi.org/10.1080/00098655.2010.538755

Shokraneh, F. (2019). Reducing waste and increasing value through embedded replicability and reproducibility in systematic review process and automation. *Journal of Clinical Epidemiology*, *112*, 98–99. https://doi.org/10.1016/j.jclinepi.2019.04.008

Slavin, R. E. (1986). Best-Evidence Synthesis: An Alternative to Meta-Analytic and Traditional Reviews. *Educational Researcher*, 15(9), 5–11.

Smalley, W. A. (1985). Learning About Language. *Pro Rege*, *14*(1), 2–8.

Sparks, R. L., & Ganschow, L. (2007). Is the Foreign Language Classroom Anxiety Scale Measuring Anxiety or Language Skills? *Foreign Language Annals*, *40*(2), 260–287. https://doi.org/10.1111/j.1944-9720.2007.tb03201.x

Spencer, L., Cooledge, M., & Hoare, D. (2022). *A systematic review of the experiences of minority language users in health and social care research*. https://doi.org/10.1101/2022.04.27.22273307

Spielberger, C. D. (1966). *Anxiety and behavior*. Academic Press.

Spielberger, C. D. (1975). Anxiety: State-trait-process. In C. D. Spielberger & I. G. Sarason (Eds.), *Stress and Anxiety* (pp. 115–143). Wiley.

Spielberger, C. D. (1983). *State-Trait Anxiety Inventory for Adults—PsycNET*. APA PsycTests. https://psycnet.apa.org/doiLanding?doi=10.1037%2Ft06496-000

Staver, P. L. (1979). *State Anxiety in Foreign Language Study.* [Educat.D., Indiana University]. Retrieved 04 May 2022, from https://www.proquest.com/docview/302923277/citation/5DF6EBD416CD47EAPQ/1

Tekir, S. (2021). Dealing with Turkish EFL learners' speaking anxiety: Turkish EFL learners' speaking anxiety. *International Journal of Curriculum and Instruction*, *13*(3), 3424–3442.

Tekten, B. (2020). *An investigation of adult EFL learners' foreign language pronunciation anxiety and reconceptualized L2 motivational self-system regarding English pronunciation in the context of a*

higher education institution in Turkey [Thesis, Bilkent University]. http://repository.bilkent.edu.tr/handle/11693/53652

Teltemann, J., Brinkmann, M., Huth-Stöckle, N., & Schunck, R. (2022). Immigrant achievement and language use across countries: The role of family background and education systems. In *Understanding Variability in Second Language Acquisition, Bilingualism, and Cognition.* Routledge.

The Bell Foundation—Changing lives and overcoming exclusion through language education. (n.d.). The Bell Foundation. Retrieved 20 July 2022, from https://www.bell-foundation.org.uk/

Thrasher, T. (2022). The Impact of Virtual Reality on L2 French Learners' Language Anxiety and Oral Comprehensibility: An Exploratory Study. *CALICO Journal*, *39*(2), 219–238. https://doi.org/10.1558/cj.42198

Tinto, V. (1975). Dropout from Higher Education: A Theoretical Synthesis of Recent Research. *Review of Educational Research*, *45*(1), 89–125. https://doi.org/10.3102/00346543045001089

Toth, Z. (2008). A Foreign Language Anxiety Scale For Hungarian Learners of English. *WoPaLP*, 2, 55–78. http://langped.elte.hu/WoPaLParticles/W2TothZs.pdf

Toyama, M., & Yamazaki, Y. (2018). Exploring the components of the foreign language classroom anxiety scale in the context of Japanese undergraduates. *Asian-Pacific Journal of Second and Foreign Language Education*, *3*(1), 4. https://doi.org/10.1186/s40862-018-0045-3

Toyama, M., & Yamazaki, Y. (2021). Classroom Interventions and Foreign Language Anxiety: A Systematic Review with Narrative Approach. *Frontiers*, *12*, 1–15.

UNHCR - The UN Refugee Agency. (n.d.). Retrieved 23 May 2022, from https://www.unhcr.org/

US Census Bureau. (n.d.). *About the Hispanic Population and its Origin*. Census.Gov. Retrieved 1 September 2022, from https://www.census.gov/topics/population/hispanic-origin/about.html

Van Den Berghe, L., Pouille, A., Vandevelde, S., & De Pauw, S. S. W. (2022). Looking beyond primary barriers: Support workers' perspectives on school dropout among students with a migration background. *Journal of Ethnic & Cultural Diversity in Social Work*, *0*(0), 1–13. https://doi.org/10.1080/15313204.2022.2094519

Weaver, K. J. (2022). *Narrowing the Achievement Gap in a Southwest United States High School* [Ed.D., City University of Seattle]. https://www.proquest.com/docview/2642293145/abstract/3223AA216E23499BPQ/1

Welply, O. (2017). 'My language … I don't know how to talk about it': Children's views on language diversity in primary schools in France and England. *Language and Intercultural Communication*, *17*(4), 437–454. https://doi.org/10.1080/14708477.2017.1368145

Whitcomb, K. M., Cwik, S., & Singh, C. (2021). Not All Disadvantages Are Equal: Racial/Ethnic Minority Students Have Largest Disadvantage Among Demographic Groups in Both STEM and Non-STEM GPA. *AERA Open*, *7*. https://doi.org/10.1177/23328584211059823

Whitfield, K. E., Allaire, J. C., Belue, R., & Edwards, C. L. (2008). Are Comparisons the Answer to Understanding Behavioral Aspects of Aging in Racial and Ethnic Groups? *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, *63*(5), P301–P308. https://doi.org/10.1093/geronb/63.5.P301

Wigfield, A., & Meece, J. L. (1988). Math anxiety in elementary and secondary school students. *Journal of Educational Psychology*, *80*(2), 210–216. https://doi.org/10.1037/0022-0663.80.2.210

Williams, A. (2011). A Call for Change: Narrowing the Achievement Gap between White and Minority Students. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas*, *84*(2), 65–71. https://doi.org/10.1080/00098655.2010.511308

Yashima, T. (2002). Willingness to Communicate in a Second Language: The Japanese EFL Context. *The Modern Language Journal*, *86*(1), 54–66. https://doi.org/10.1111/1540-4781.00136

Yim, S. Y., & Yu, Y.-L. (2011). Validating the English Learning Anxiety Scale for Primary School Students in Korea. *English Teaching*, *66*(2), 101–121. https://doi.org/10.15858/engtea.66.2.201106.101

Young, D. J. (1990). An Investigation of Students' Perspectives on Anxiety and Speaking. *Foreign Language Annals*, *23*(6), 539–553. https://doi.org/10.1111/j.1944-9720.1990.tb00424.x

Young, D. J. (1991). Creating a Low-Anxiety Classroom Environment: What Does Language Anxiety Research Suggest? *The Modern Language Journal*, *75*(4), 426–437. https://doi.org/10.1111/j.1540-4781.1991.tb05378.x

Zawacki-Richter, O., Kerres, M., Bedenlier, S., Bond, M., & Buntins, K. (Eds.). (2020). *Systematic Reviews in Educational Research: Methodology, Perspectives and Application*. Springer Fachmedien Wiesbaden. https://doi.org/10.1007/978-3-658-27602-7_1

Zhang, R., & Zhong, J. (2012). The Hindrance of Doubt: Causes of Language Anxiety. *International Journal of English Linguistics*, *2*(3), p27. https://doi.org/10.5539/ijel.v2n3p27

Zsido, A. N., Teleki, S. A., Csokasi, K., Rozsa, S., & Bandi, S. A. (2020). Development of the short version of the spielberger state—Trait anxiety inventory. *Psychiatry Research*, *291*, 113223. https://doi.org/10.1016/j.psychres.2020.113223

Appendices

Appendix A. IDESR Protocol Document

Title

A systematic review on the role of Language Anxiety for the language learners from a minority background.

Review Question

1. What is the extent and nature of the research that has been conducted on the impact of Language Anxiety among minority students?

a. What is the extent of research that explores the role of Language Anxiety on language learning among minority students?

b. What is the extent of research that explores the role of Language Anxiety on language use for minority students?

2. Is there Language Anxiety research that might be practically useful to educators? a) How much research on language anxiety has been done on the pedagogical implications of minority students' well-being?

b) How much research on language anxiety has been done on the pedagogical implications of minority students' language achievement?

c) What is the breadth of the research on the role of the minority student's home language?

d) How does using a student's home language affect them academically and in other areas?

Rationale

As evidenced by decades of empirical and theoretical research, the phenomena of Language Anxiety (LA), also known as Foreign Language Anxiety (FLA), is a critical variable in the context of language learning (e.g., see Horwitz et al., 1986; MacIntyre & Gregerson, 2012; Russell, 2020). In fact, it is one of the most extensively studied affective variables in language learning research (MacIntyre & Gregersen, 2012). However, several conceptualizations and interpretations have developed over time as a result of this extensive research, making its literature look contradictory, complicated, and potentially daunting for those who could most benefit from the insights contained within it. These characteristics prevent research from seeming accessible and helpful for those who use and need it in practise. The literature of Language Anxiety shows that the relationship between emotions, individuals and language learning is not as straightforward as one may imagine. Therefore, this systematic review will first present a literature review that explores Language Anxiety theoretically

to give an overview of the existing theoretical framework, then a narrative synthesis to find and evaluate studies in accordance with the precise methodological process of systematic reviews (Popay et al 2006). A systematic review on Language Anxiety was inspired by an investigation into research on mental health, specifically emotional vulnerability, of disadvantaged students who (1) are from a minority background, (2) are often categorised as immigrants, migrants, or refugees and (3) are in mainstream education. The main goal of this systematic review is to present existing literature in a useful manner for those interested in language teaching/learning research and for those who require practical answers in order to support students' needs. Organisations such as the Bell Foundation and NALDIC (National Association for Language Development in the Curriculum) draw attention to social-emotional factors which may impact the disadvantaged student during education. The mission of these organisations is to encourage bilingualism and promote research, policy, and practises that improve educational outcomes and opportunities for disadvantages students. The goal of this review is to systematically promote language research, and subsequently language education, as a means of overcoming exclusion.

EAL | NALDIC - The national subject association for EAL. (n.d.). Retrieved 12 February 2022, from https://naldic.org.uk/

Horwitz, E. K., Horwitz, M. B., & Cope, J. (1986). Foreign Language Classroom Anxiety. The Modern Language Journal, 70(2), 125–132. https://doi.org/10.1111/j.1540-4781.1986.tb05256.x

Macintyre, P., & Gregersen, T. (2012). Affect: The Role of Language Anxiety and Other Emotions in Language Learning. In Psychology for Language Learning: Insights from Research, Theory and Practice (pp. 103–118). https://doi.org/10.1057/9781137032829_8

Popay, J., Roberts, H., Sowden, A., Petticrew, M., Arai, L., Rodgers, M., Britten, N., Roen, K., & Duffy, S. (2006). Guidance on the conduct of narrative synthesis in systematic reviews: A product from the ESRC Methods Programme. https://doi.org/10.13140/2.1.1018.4643

Russell, V. (2020). Language anxiety and the online learner. Foreign Language Annals, 53(2), 338–352. https://doi.org/10.1111/flan.12461 The Bell Foundation—Changing lives and overcoming exclusion through language education. (n.d.). The Bell Foundation. Retrieved 18 July 2022, from https://www.bell-foundation.org.uk/

Inclusion Criteria

Bibliographic Information

INCLUDE 1: Studies with a full reference list or sufficient information.

EXCLUDE 1: Studies with insufficient bibliographic information.

RATIONALE 1: Without sufficient bibliographic information, retrieval of work is infeasible. For instance, researchers examined data about evidence-informed teaching in a research report produced on behalf of the Department of Education and discovered that instructors valued and trusted research if it was backed up by additional evidence (Coldwell et al., 2017). This may imply that the study utilised or consulted extra sources of information and provided them within, typically near the end of the study, irrespective of the citation style. Studies that contain crucial information that is appropriate and required when compiling a list of citations are referred to when discussing sufficient bibliographic information since this allows readers to examine further evidence.

Date of Publication

INCLUDE 2: Studies published on or after January 1, 1986.

EXCLUDE 2: Studies published before January 1, 1986.

RATIONALE 2: In 1986, the term Language Anxiety (LA) was coined to describe a language/situation-specific anxiety that is not only separate from other types of anxiety but may also exist on its own (Horwitz et al., 1986). While it is apparent that anxiety in the context of language instruction has been researched earlier (see Scovel 1978; Gardner et al., 1976), Horwitz' conceptualization of Language Anxiety distinguished it from General Anxiety, effectively introducing and establishing its own domain within the literature of language pedagogy. As a result, any studies conducted after 1986 will be considered for the study.

Participants

INCLUDE 3: Studies that focus on minority students (e.g., students who come from an underrepresented background, students who have arrived in a new country and are classed as an immigrant, migrant or a refugee). Students who have just started school in English-speaking

countries may be categorized as EAL (English as an Additional Language), ELL (English Language Learner), or, more broadly defined, as bi-/multilingual migrants with two communities/languages in other countries.

EXCLUDE 3: Studies that concentrate on a different student population.

RATIONALE 3: By the end of 2021, the UNHCR estimated that there were 89.3 million "forcibly displaced persons" worldwide, with children under the age of 18 making up 41% of this population. The number of minority students in schools is constantly rising, but the achievement gap does not shrink, and the academic underachievement of minority ethnic children remains an ongoing issue in education (Williams 2011; Karem 2018; Banks & Jennifer 2019; Bunce et al 2019; Hanushek et al 2019). Therefore, minority students (defined in Chapter 2, Section 2.1) are the demographic that this systematic review is concentrated on, reflecting the objective of encouraging more research on minority students to ensure they can succeed in school and beyond. Thus, studies on a separate population where students belong to the wider population will be excluded.

INCLUDE 4: Studies on learners from a minority language background who do not have a learning disability or a developmental language disorder. If learning ability is not specifically mentioned, it is presumed that study participants do not have a learning problem which would classify them as Special Education Needs (SEN) students.

EXLCUDE 4: Studies that are focused solely on SEN individuals who are non-typically developing learners or learners with developmental language disorder.
RATIONALE 4: This systematic review aims to systematically investigate the impact of Language Anxiety on typically developing language learners from minority backgrounds. As findings for non-typically developing individuals may contribute to the overrepresentation of minority students as part of the SEN (Special Needs) student population and therefore should be excluded. Overrepresentation of minority pupils refers to the pervasive practise of placing students from particular racial and ethnic groups in classrooms with non-typically developing students after being misidentified as having special needs (Arnold & Lassmann 2003). Consequently, highlighting the literature's notable difference toward minority students, which frequently demonstrates that they are falsely identified as having special needs (Migliarini et al 2018; Ladner 2009; Garcia & Ortiz 1988) instead of considering additional elements like poverty or inadequate general school instruction.

Findings for non-typically developing should be excluded since they might not generalise to a larger or more accurately characterised population.

INCLUDE 5: Studies carried out in educational settings (e.g., primary, and secondary schools, universities, adult education settings, and so on). This also includes refugees who are newcomers to the country who are enrolled in language classes for social, occupational, or academic purposes.

EXCLUDE 5: Studies conducted beyond the context of education.

RATIONALE 5: This systematic review focuses on the impact of Language Anxiety for pedagogical purposes, which is reflected by the review's research question 2. and its sub questions 2a and 2b. The review's purpose is to give an overview of the literature that has a direct impact on educators.

INCLUDE 6: Participants from any age group if the criteria of Include 5 is met.

EXCLUDE 6: Do not exclude studies based on participants' age range.

RATIONALE 6: Given the scarcity of research in this area and to avoid reducing the scope of this review, excluding studies based on age risks systematically disregarding a body of research that is already limited due to the small population.

Study Design

INCLUDE 7: Studies of any type that gather empirical data, such as observation, ethnography, appraisal, and experimentation. The data can be analysed quantitatively, qualitatively, or using a combination of both.

EXCLUDE 7: Studies that do not gather any empirical data. For instance, intellectual, analytical, and theoretical pieces.

RATIONALE 7: Reviewing research that employ the most dependable methodological approaches is the goal of this systematic review. To synthesise the research in this area, empirical data must be reported and evaluated.

Publication Status

INCLUDE 8: Published and unpublished works, such as dissertations, as well as peer-reviewed and non-peer reviewed literature will be included. As a result, literature such as grey literature (e.g., dissertations, theses, conference papers/proceedings) will be included.

EXCLUDE 8: The following published/non-published works will be excluded: encyclopaedias, reference works, newspapers, speeches, presentations, systematic reviews and meta-analyses.

RATIONALE 8: By including a wider variety of original studies, including grey literature, this review tries to avoid any publishing bias, although it does not intend to include studies that do not match the criterion for bibliographic information (See inclusion 1). Studies such as systematic reviews, on the other hand, will not be included because of the high possibility of spurring further duplications.

Language of Publication

INCLUDE 9: Publications which have been conducted and written in English.

EXCLUDE 9: Publications which have been conducted and written in other languages than English

RATIONALE 9: While the imposition of language restrictions limits the scope of the review, it is necessary due to the review's time constraint. The translation process of studies requires a lot of time and attention to detail in order to minimise translation bias. The rationale for the inclusion of solely English publication is that if this systematic review had not been a dissertation, more authors would have been recruited to avoid limiting the scope of this review and to avoid in a systematic neglect of a certain body of research (Pieper et al. 2020).

Measurements:

INCLUDE 10: Studies that measure Language Anxiety will be included. Empirical studies that measure any form of role or relationship that Language Anxiety has for the minority student will be included. Objective measures of Language Anxiety may be characterised according to a specific anxiety type, and/or the phenomenon may be defined differently in literature. Qualitative data that reports the experiences and perceptions of students on the effect of Language Anxiety will also be included.

EXLUDE 10: Studies that do not measure Language Anxiety will be excluded. Non-empirical data will be excluded (e.g., comprehensive reviews and opinion pieces).

RATIONALE 10: To effectively synthesise the research in this area, empirical data on Language Anxiety must be reported and evaluated. Empirical research offers insight into experience and exemplifies what works and what does not practically, whereas non-empirical studies are not data-driven and generally focus on theories, techniques, and their implications on future research; as a result, the latter will be excluded.

Information Sources

The databases were chosen in accordance with other systematic reviews published in the fields of education, linguistics, and psychology.

- Australian Education Index
- British Education Index
- Ebook Central
- Education Abstracts
- Education Collection
- Educational Administration abstracts
- ERIC
- International Bibliography of the Social Sciences (IBSS)
- Linguistics Collection
- Open dissertations
- ProQuest Dissertations & Theses Global
- Social Science Database

Search Strategy

The initial search centred on particular linguistic contexts (EAL/ELL), which were deemed too specific because of how limiting they were in the literature and hence would not display all relevant studies. Terms like EAL/ELL refer to solely English, therefore they only reflect research done in areas where English is the prevalent language. To include studies beyond that, more general terms such as “dual language learners” were included. An expert librarian from the University of Oxford's Bodleian Education Library was consulted to create and determine the best technique to carry out the initial

search, and they have been contacted regularly during the search strategy's drafting phase. It was believed that by employing terms based on the linguistic background, it would be feasible to adequately capture the relevant studies. The focus of this review is on the phenomenon of "Language Anxiety", but it was discovered after the pilot scoping searches in the ProQuest Education Collection and EBSCO that another category should be added, specifically to guarantee that studies and their participants are from an educational setting.

A field that details target participants and their context was added to the search to focus it on people who are enrolled in school after the scoping search revealed that many of the results targeted university or adult participants both inside and outside of the educational system. A number of labels with similar meanings were added to each field in order to capture the variety of terminology used in different educational environments. Each search field was connected by the operator "AND", and different phrases within each category that captured the same meaning were separated by the operator "OR". While the first and third search fields will only be used for abstracts, piloting revealed that the second search field should only be used for titles in order to discover relevant studies. Below is the whole and final Boolean search string:

ab("English learners" OR "dual language learners" OR "dual learners" OR ELL OR "English language learners" OR minorit* OR "minority language" OR refugee* OR "minority background learners" OR "ethnic minority learners" OR EAL OR "English as an additional language" OR ESL OR "English as a second language" OR EL) AND ti("classroom anxiety" OR "reading anxiety" OR "speaking anxiety" OR "pronunciation anxiety" OR "language performance anxiety" OR "test anxiety" OR "L2 anxiety" OR "communication apprehension" OR "second language anxiety" OR "minority language" OR "community language" OR "heritage language anxiety" OR "Foreign language anxiety" OR FLA OR "Language Anxiety" OR LA) AND ab("pupil" OR "student" OR "adult learner" OR "primary school" OR "elementary school" OR "secondary school" OR "middle school" OR "grade school" OR child* OR kids* OR "young learner" OR kindergarten* OR "junior school" OR "infant school" OR educat* OR "continuing education" OR "higher education" OR university* OR college* OR school* OR undergraduate* OR postgraduate* OR class*)

Data Management

All bibliographic information (such as title, author, publication date, etc.) and abstracts will be uploaded to the utilised management software after the final database searches have been successfully and appropriately completed. The software that has been selected is Rayyan, a systematic review management tool that enables collaborators to assess abstracts and other data against rigorous eligibility criteria (Ouzzani et al, 2016). The only way this software has been and will continue to be accessed is through Google Chrome. This software enables the elimination of

duplicates, permitting data management to proceed with the initial title and abstract screening procedures while actively comparing them to the eligibility criteria listed above.

The complete texts of those who survived the initial screening as well as pertinent bibliographic data will then be uploaded and organised on a reference manager; for this review, the free reference manager is Zotero Version 6 for Windows. The scientific community views Zotero as an appropriate citation tool that not only expedites work but also ensures the avoidance of plagiarism, upholds copyright, and reflects scientific integrity and honesty (Basak & Govender 2015, p. 87). The journey of the search has been recorded on Microsoft OneNote, and all actual conducted notes have been routinely put to the folder to track the process. Each study that meets the eligibility requirements will have its origins thoroughly documented in a Microsoft Excel document. Both Microsoft OneNote and Microsoft Excel have been accessed through the University of Oxford's student subscription.

All research will be conducted on a HP Pavilion Laptop running Windows 11.

Basak, S. K., & Govender, D. W. (2015). Reference management software analysis: Endnote and zotero. In S. Simelane-Mnisi (Ed.), South Africa International Conference on Educational Technologies, 19-21 April 2015: Proceedings: Held at Manhattan Hotel Pretoria, South Africa (pp. 87–95). African Aacdemic Research Forum. http://cees.mak.ac.ug/sites/default/files/SAICET-2015-Proceedings.pdf#page=96

Ouzzani, M., Hammady, H., Fedorowicz, Z., & Elmagarmid, A. (2016). Rayyan—A web and mobile app for systematic reviews. Systematic Reviews, 5(1), 210. https://doi.org/10.1186/s13643-016-0384-4

Rayyan – Intelligent Systematic Review—Rayyan. (n.d.). Retrieved 12 February 2022, from https://www.rayyan.ai/

Selection Process

With the use of the Rayyan software, duplicates will be removed following the initial search, leaving the other titles and abstracts for eligibility assessment. Then, those that are qualified and have not been ruled out will be taken into account for full-text screening. The study's abstract must explicitly comply with the criterion in order to be considered for full-text screening; if it fails to do so, further inquiry will be done. A study's compliance with each criterion will be determined after a more thorough review; if a criterion is not met, the screening process for that study will be stopped, and

the violation will be noted along with a comprehensive explanation. Full reports will then be derived from the respective databases following that.

The librarian will be consulted before contacting the author(s) for more information if whole texts are not accessible through the University of Oxford's Bodleian library subscription or the full report fails to clearly satisfy all the criteria. Evidently, only studies that satisfy all of the inclusion criteria will be considered for the review. Up until no other studies are found, studies will be subject to citation chaining, which includes both backward and forward citation. To guarantee complete reliability of the screening procedure, a second reviewer with in-depth expertise of applied linguistics will be chosen and informed of the objectives and criterion of the systematic review. Given the limited time and resources available for this dissertation, it was decided to have a second reviewer go over 10% of the study abstracts while the primary reviewer looks over the same 10%. If there are any discrepancies, the inclusion/exclusion criteria shall be further clarified until an agreement is reached. The Kappa value can be used to determine when there is disagreement. According to Frey (2018), a Kappa value of at least 0.7 is required to be regarded acceptable in the field of education and should be obtained to show reliability. The reviewers will come to a consensus to settle any disagreements if this is not met.

Frey, B. B. (2018). The SAGE Encyclopedia of Educational Research, Measurement, and Evaluation. SAGE Publications, Inc. https://doi.org/10.4135/9781506326139

Data Collection Process

A single reviewer will extract the data for this systematic review. A data extraction form will be specifically created to meet the requirements of this evaluation before beginning any searches. The data extraction form will be based on the Cochrane good practice form (see Cochrane Effective Practice and Organisation of Care, 2017). It was deemed to be the most appropriate form for this study due to its flexibility and adaptability for a wide range of study types.
The focus of the review will determine how any additional fields need to be modified or added. For instance, fields will be added to reflect the participants' first/minority language and the demographics of the community or school. The primary researcher will extract data and record it in a Microsoft Excel document if it is confirmed that a given study satisfies all eligibility requirements. If a report contains any missing data, the main author will be notified by email. Cochrane Effective Practice and Organisation of Care (EPOC). (2017). Data collection form. EPOC Resources for review authors. epoc.cochrane.org/resources/epoc-specific-resources-review-authors

Data Items

The following data items will be extracted. The Cochrane Data Collection Form had an influence on the selection of items. General Information: Date form completed, reference details, study author contact details, publication type, study funding source (if relevant), possible conflicts of interest (if relevant), document source Participants: Individual and demographic data items such as language background, majority language, school setting (social and educational context), population description, age, sex, race/ethnicity and any other relevant sociodemographic information Study overview: Research questions, research aim, study design, data type, location and language of publication Outcomes: impact on students' provision and wellbeing, including social and emotional results in addition to academic achievement (such as grades), classroom engagement and overall adjustment to culture and school system Cochrane Effective Practice and Organisation of Care (EPOC). (2017). Data collection form. EPOC Resources for review authors. epoc.cochrane.org/resources/epoc-specific-resources-review-authors

Risk of bias/trustworthiness of individual studies

Whereas systematic reviews are often accompanied by a meta-analytic method (Slavin 1986), this systematic review will use the alternative "best-evidence synthesis" technique, which, as the name implies, permits concentrate on the "best evidence" in the field of applied linguistics. According to Slavin (1995), a meta-analysis is so focused on demonstrating reliability and replicability that it may allow bias to creep in and may neglects to add understanding of phenomena of interest. The goal of this systematic review is still to demonstrate reliability and replicability, but it was decided to use the suggested alternative method instead because it combines the critical elements of a traditional narrative review with the strengths of a meta-analysis, producing and justifying conclusions based on the best available evidence while using that evidence to address crucial and pertinent questions. In order to make the review's procedure transparent and provide the reader with sufficient information, justifications, and detail regarding the review's process and the primary studies, best-evidence syntheses will be used. Although complete transparency should be the aim of every systematic review, no study can guarantee that errors are impossible just as a reviewer cannot guarantee that their bias will not influence the conclusions. To do this, a section titled “studies not selected” will be present some excluded studies together with the transparent justification for their exclusion.

Furthermore, it was determined that the Mixed Methods Appraisal Tool (MMAT; Pluye & Hong, 2014) should be used to assess the risks of bias and trustworthiness. The MMAT seems to be the most appropriate for ensuring high quality content, especially when taking into account that

literature may contain quantitative, qualitative, or mixed data. By assessing the quality of the evidence in each study with the MMAT tool, it is possible to draw conclusions with confidence and ensure the validity of each study in the systematic review. The critical appraisal tool provides five categories to evaluate methodology in order to assess the studies: (1) qualitative, (2) quantitative randomised trials (RCTs), (3) quantitative non-randomised, (4) quantitative descriptive, and (5) mixed methods. Each category contains questions that can be answered "yes", "no", or "can't tell", allowing the primary reviewer to assign each study a quality score between 0 and 5 based on how well it meets the requirements.

Pluye, P. & Hong, Q.N. (2014). Combining the power of stories and the power of numbers: Mixed Methods Research and Mixed Studies Reviews. Annual Review of Public Health, 35, 29-45.

Slavin, R. E. (1995). Best evidence synthesis: An intelligent alternative to meta-analysis. Journal of Clinical Epidemiology, 48(1), 9–18. https://doi.org/10.1016/0895-4356(94)00097-A

Slavin, R. E. (1986). Best-Evidence Synthesis: An Alternative to Meta-Analytic and Traditional Reviews. Educational Researcher, 15(9), 5–11. https://doi.org/10.3102/0013189X015009005

Data Synthesis

To incorporate the findings from the included studies, narrative synthesis will be used as the primary approach of data synthesis. The tools and techniques that will be utilised to conduct a narrative synthesis will be modelled after the guideline document Popay et al. (2006) for performing a narrative synthesis in systematic reviews. One of those techniques will be textual descriptions of studies, which entail the deliberate creation of a descriptive paragraph on each included study. Depending on the number of studies to be included, groups and clusters will be used to group the studies according to the context or setting of the study, the age range of the participants, and/or the individuals' backgrounds. These methods and tools are represented in the Petticrew, and Roberts (2006) proposed narrative synthesis framework, which arranges the included studies into logical categories, evaluates and analyses the findings and quality of each category, and summarises all of the findings.

Petticrew, M., & Roberts, H. (2006). Systematic reviews in the social sciences: A practical guide (pp. xv, 336). Blackwell Publishing. https://doi.org/10.1002/9780470754887

Popay, J., Roberts, H., Sowden, A., Petticrew, M., Arai, L., Rodgers, M., Britten, N., Roen, K., & Duffy, S. (2006). Guidance on the conduct of narrative synthesis in systematic reviews: A product from the ESRC Methods Programme. https://doi.org/10.13140/2.1.1018.4643

Slavin, R. E. (1986). Best-evidence synthesis: An alternative to meta-analytic and traditional reviews. Educational Researcher, 15(9), 5-11.

Meta-biases

Confidence in cumulative evidence

The GRADE approach, which stands for Grading of Recommendations Assessment, Develop and Evaluation (GRADE), will be used to evaluate the cumulative evidence's degree of confidence. This method allows for a grading of each study's credibility. The goal of using this method is to create and deliver study summaries within a transparent framework. Due to the complexity of GRADE, a handbook will be utilised to evaluate research in order to prevent the production of inconsistent ratings that could affect decision-making (Xie & Machado 2020). The GRADE handbook has been derived from Cochrane Training (Grade approach, n.d.). (1) methodological rigour (2) coherence (3) adequacy of data (4) relevance.
The outcome will be one of the following four grades: (1) very low, (2) low, (3) moderate or (4) high.

GRADE approach. (n.d.). Retrieved 18 July 2022, from https://training.cochrane.org/grade-approach
Xie, C., & Machado, G. (2020). Clinimetrics: Grading of Recommendations, Assessment, Development and Evaluation (GRADE). Journal of Physiotherapy, 67. https://doi.org/10.1016/j.jphys.2020.07.003

Appendix B. Data Extraction Form

ITEM	DATA
GENERAL INFORMATION	
Date form completed *(dd/mm/yyyy)*	
Title of study *(Title of study/abstract/report that data are extracted from)*	
Reference details *(List the full reference)*	
Study author(s) contact details	
Publication type *(e.g., full report, abstract, letter)*	
Document source *(Source database and/or website)*	
STUDY OVERVIEW	
Research questions *(and/or aim of the study)*	
Date of publication *(dd/mm/yyyy)*	
Study design *(e.g., observational study)*	
Data type *(Quantitative, qualitative or mixed)*	
Location and language of publication	
PARTICIPANTS	
Population description *(Include any relevant information, e.g., socioeconomic status, religion)*	
Setting (Social and educational context, e.g., primary, secondary, university)	
Language(s) of participants *(List all languages spoken, indicating L1, L2, L3, minority, foreign language, and any other pertinent data, such as proficiency level)*	

Majority language/language of setting/language of instruction	
Age of participants	
Sex of participants	
Race/ethnicity	
Other relevant sociodemographic information	
Measurement (Intervention)	
Type of Measurement *(e.g., self-report, diaries, surveys, interviews)*	
Type of Anxiety *(e.g., test anxiety, reading anxiety)*	
Notes on Measurement *(e.g., include information on the measurement, its origin and intention)*	
Control Group *(e.g., majority/minority, white vs "the other", describe relevant differences between groups)*	
Number of participants *(Include data showing the overall number, the intervention group, and the control group)*	
Baseline imbalances/change from baseline *(Record any significant changes at the beginning of the study)*	
Attrition *(If applicable, note the number of absent participants and their reasons as well as the number of participants who switched groups and respective reasons.)*	
Outcomes	
Outcome name *(e.g., wellbeing, academic achievement, class engagement, adjustment to culture/educational system, language proficiency,*	

language attitudes toward home/majority language)	
Descriptive outcomes	
Time points measured *(e.g., how often were data taken in studies like longitudinal ones)*	
Applicability	
Have important populations been excluded from the study? *(Consider other disadvantaged populations, and possible differences in the intervention effect)*	… *Yes/No/Unclear*
Does the study directly address the review question? *(Any issues of partial or indirect applicability)*	… *Yes/No/Unclear*

Appendix C: Part 1. Mixed Methods Appraisal Tool (MMAT), Version 2018

Category of study designs	Methodological quality criteria	Responses			
		Yes	No	Can't tell	Comments
Screening questions (for all types)	S1. Are there clear research questions?				
	S2. Do the collected data allow to address the research questions?				
	Further appraisal may not be feasible or appropriate when the answer is 'No' or 'Can't tell' to one or both screening questions.				
1. Qualitative	1.1. Is the qualitative approach appropriate to answer the research question?				
	1.2. Are the qualitative data collection methods adequate to address the research question?				
	1.3. Are the findings adequately derived from the data?				
	1.4. Is the interpretation of results sufficiently substantiated by data?				
	1.5. Is there coherence between qualitative data sources, collection, analysis and interpretation?				
2. Quantitative randomized controlled trials	2.1. Is randomization appropriately performed?				
	2.2. Are the groups comparable at baseline?				
	2.3. Are there complete outcome data?				
	2.4. Are outcome assessors blinded to the intervention provided?				
	2.5 Did the participants adhere to the assigned intervention?				
3. Quantitative non-randomized	3.1. Are the participants representative of the target population?				
	3.2. Are measurements appropriate regarding both the outcome and intervention (or exposure)?				
	3.3. Are there complete outcome data?				
	3.4. Are the confounders accounted for in the design and analysis?				
	3.5. During the study period, is the intervention administered (or exposure occurred) as intended?				
4. Quantitative descriptive	4.1. Is the sampling strategy relevant to address the research question?				
	4.2. Is the sample representative of the target population?				
	4.3. Are the measurements appropriate?				
	4.4. Is the risk of nonresponse bias low?				
	4.5. Is the statistical analysis appropriate to answer the research question?				
5. Mixed methods	5.1. Is there an adequate rationale for using a mixed methods design to address the research question?				
	5.2. Are the different components of the study effectively integrated to answer the research question?				
	5.3. Are the outputs of the integration of qualitative and quantitative components adequately interpreted?				
	5.4. Are divergences and inconsistencies between quantitative and qualitative results adequately addressed?				
	5.5. Do the different components of the study adhere to the quality criteria of each tradition of the methods involved?				

Appendix C: Part 2. Mixed Methods Appraisal Tool (MMAT), Version 2018, User Guide

Explanation: Methodological quality criteria

1. Qualitative studies

1.1. Is the qualitative approach appropriate to answer the research question?

Explanations

The qualitative approach used in a study (see non-exhaustive list on the left side of this table) should be appropriate for the research question and problem. For example, the use of a grounded theory approach should address the development of a theory and ethnography should study human cultures and societies.

This criterion was considered important to add in the MMAT since there is only one category of criteria for qualitative studies (compared to three for quantitative studies).

1.2. Are the qualitative data collection methods adequate to address the research question?

Explanations

This criterion is related to data collection method, including data sources (e.g., archives, documents), used to address the research question. To judge this criterion, consider whether the method of data collection (e.g., in depth interviews and/or group interviews, and/or observations) and the form of the data (e.g., tape recording, video material, diary, photo, and/or field notes) are adequate. Also, clear justifications are needed when data collection methods are modified during the study.

1.3. Are the findings adequately derived from the data?

Explanations

This criterion is related to the data analysis used. Several data analysis methods have been developed and their use depends on the research question and qualitative approach. For example, open, axial and selective coding is often associated with grounded theory, and within- and cross-case analysis is often seen in case study.

1.4. Is the interpretation of results sufficiently substantiated by data?

Explanations

The interpretation of results should be supported by the data collected. For example, the quotes provided to justify the themes should be adequate.

1.5. Is there coherence between qualitative data sources, collection, analysis and interpretation?

Explanations

There should be clear links between data sources, collection, analysis and interpretation.

2. Quantitative randomized controlled trials

2.1. Is randomization appropriately performed?

Explanations

In a randomized controlled trial, the allocation of a participant (or a data collection unit, e.g., a school) into the intervention or control group is based solely on chance. Researchers should describe how the randomization schedule was generated. A simple statement such as 'we randomly allocated' or 'using a randomized design' is insufficient to judge if randomization was appropriately performed. Also, assignment that is predictable such as using odd and even record numbers or dates is not appropriate. At minimum, a simple allocation (or unrestricted allocation) should be performed by following a predetermined plan/sequence. It is usually achieved by referring to a published list of random numbers, or to a list of random assignments generated by a computer. Also, restricted allocation can be performed such as blocked randomization (to ensure particular allocation ratios to the intervention groups), stratified randomization (randomization performed separately within strata), or minimization (to make small groups closely similar with respect to several characteristics). Another important characteristic to judge if randomization was appropriately performed is allocation concealment that protects assignment sequence until allocation. Researchers and participants should be unaware of the assignment sequence up to the point of allocation. Several strategies can be used to ensure allocation concealment such relying on a central randomization by a third party, or the use of sequentially numbered, opaque, sealed envelopes (Higgins et al., 2016).

2.2. Are the groups comparable at baseline?

Explanations

Baseline imbalance between groups suggests that there are problems with the randomization. Indicators from baseline imbalance include: “(1) unusually large differences between intervention group sizes; (2) a substantial excess in statistically significant differences in baseline characteristics than would be expected by chance alone; (3) imbalance in key prognostic factors (or baseline measures of outcome variables) that are unlikely to be due to chance; (4) excessive similarity in baseline characteristics that is not compatible with chance; (5) surprising absence of one or more key characteristics that would be expected to be reported” (Higgins et al., 2016, p. 10).

2.3. Are there complete outcome data?

Explanations

Almost all the participants contributed to almost all measures. There is no absolute and standard cut-off value for acceptable complete outcome data. Agree among your team what is considered complete outcome data in your field and apply this uniformly across all the included studies. For instance, in the literature, acceptable complete data value ranged from 80% (Thomas et al., 2004; Zaza et al., 2000) to 95% (Higgins et al., 2016). Similarly, different acceptable withdrawal/dropouts rates have been suggested: 5% (de Vet et al., 1997; MacLehose et al., 2000), 20% (Sindhu et al., 1997; Van Tulder et al., 2003) and 30% for a follow-up of more than one year (Viswanathan and Berkman, 2012).

2.4. Are outcome assessors blinded to the intervention provided?

Explanations

Outcome assessors should be unaware of who is receiving which interventions. The assessors can be the participants if using participant reported outcome (e.g., pain), the intervention provider (e.g., clinical exam), or other persons not involved in the intervention (Higgins et al., 2016).

2.5. Did the participants adhere to the assigned intervention?

Explanations

To judge this criterion, consider the proportion of participants who continued with their assigned intervention throughout follow-up. “Lack of adherence includes imperfect compliance, cessation of intervention, crossovers to the comparator intervention and switches to another active intervention.” (Higgins et al., 2016, p. 25).

3. Quantitative non-randomized studies

3.1. Are the participants representative of the target population?

Explanations

Indicators of representativeness include: clear description of the target population and of the sample (inclusion and exclusion criteria), reasons why certain eligible individuals chose not to participate, and any attempts to achieve a sample of participants that represents the target population.

3.2. Are measurements appropriate regarding both the outcome and intervention (or exposure)?

Explanations

Indicators of appropriate measurements include: the variables are clearly defined and accurately measured; the measurements are justified and appropriate for answering the research question; the measurements reflect what they are supposed to measure; validated and reliability tested measures of the intervention/exposure and outcome of interest are used, or variables are measured using 'gold standard'.

3.3. Are there complete outcome data?

Explanations

Almost all the participants contributed to almost all measures. There is no absolute and standard cut-off value for acceptable complete outcome data. Agree among your team what is considered complete outcome data in your field (and based on the targeted journal) and apply this uniformly across all the included studies. For example, in the literature, acceptable complete data value ranged from 80% (Thomas et al., 2004; Zaza et al., 2000) to 95% (Higgins et al., 2016). Similarly, different acceptable withdrawal/dropouts rates have been suggested: 5% (de Vet et al., 1997; MacLehose et al., 2000), 20% (Sindhu et al., 1997; Van Tulder et al., 2003) and 30% for follow-up of more than one year (Viswanathan and Berkman, 2012).

3.4. Are the confounders accounted for in the design and analysis?

Explanations

Confounders are factors that predict both the outcome of interest and the intervention received/exposure at baseline. They can distort the interpretation of findings and need to be considered in the design and analysis of a non-randomized study. Confounding bias is low if there is no confounding expected, or appropriate methods to control for confounders are used (such as stratification,

regression, matching, standardization, and inverse probability weighting). 3.5 During the study period, is the intervention administered (or exposure occurred) as intended? Explanations For intervention studies, consider whether the participants were treated in a way that is consistent with the planned intervention. Since the intervention is assigned by researchers, consider whether there was a presence of contamination (e.g., the control group may be indirectly exposed to the intervention) or whether unplanned co-interventions were present in one group (Sterne et al., 2016). For observational studies, consider whether changes occurred in the exposure status among the participants. If yes, check if these changes are likely to influence the outcome of interest, were adjusted for, or whether unplanned co-exposures were present in one group (Morgan et al., 2017).

4. Quantitative descriptive studies

4.1. Is the sampling strategy relevant to address the research question?

Explanations

Sampling strategy refers to the way the sample was selected. There are two main categories of sampling strategies: probability sampling (involve random selection) and non-probability sampling. Depending on the research question, probability sampling might be preferable. Nonprobability sampling does not provide equal chance of being selected. To judge this criterion, consider whether the source of sample is relevant to the target population; a clear justification of the sample frame used is provided; or the sampling procedure is adequate.

4.2. Is the sample representative of the target population?

Explanations

There should be a match between respondents and the target population. Indicators of representativeness include: clear description of the target population and of the sample (such as respective sizes and inclusion and exclusion criteria), reasons why certain eligible individuals chose not to participate, and any attempts to achieve a sample of participants that represents the target population.

4.3. Are the measurements appropriate?

Explanations

Indicators of appropriate measurements include: the variables are clearly defined and accurately measured, the measurements are justified and appropriate for answering the research question; the measurements reflect what they are supposed to measure;

validated and reliability tested measures of the outcome of interest are used, variables are measured using 'gold standard', or questionnaires are pre-tested prior to data collection.

4.4. Is the risk of nonresponse bias low?

Explanations

Nonresponse bias consists of "an error of nonobservation reflecting an unsuccessful attempt to obtain the desired information from an eligible unit." (Federal Committee on Statistical Methodology, 2001, p. 6). To judge this criterion, consider whether the respondents and nonrespondents are different on the variable of interest. This information might not always be reported in a paper. Some indicators of low nonresponse bias can be considered such as a low nonresponse rate, reasons for nonresponse (e.g., noncontacts vs. refusals), and statistical compensation for nonresponse (e.g., imputation). The nonresponse bias is might not be pertinent for case series and case report. This criterion could be adapted. For instance, complete data on the cases might be important to consider in these designs.

4.5. Is the statistical analysis appropriate to answer the research question?

Explanations

The statistical analyses used should be clearly stated and justified in order to judge if they are appropriate for the design and research question, and if any problems with data analysis limited the interpretation of the results.

5. Mixed methods studies

5.1. Is there an adequate rationale for using a mixed methods design to address the research question?

Explanations

The reasons for conducting a mixed methods study should be clearly explained. Several reasons can be invoked such as to enhance or build upon qualitative findings with quantitative results and vice versa; to provide a comprehensive and complete understanding of a phenomenon or to develop and test instruments (Bryman, 2006).

5.2. Are the different components of the study effectively integrated to answer the research question?

Explanations

Integration is a core component of mixed methods research and is defined as the “explicit interrelating of the quantitative and qualitative component in a mixed methods study” (Plano Clark and Ivankova, 2015, p. 40). Look for information on how qualitative and quantitative phases, results, and data were integrated (Pluye et al., 2018). For instance, how data gathered by both research methods was brought together to form a complete picture (e.g., joint displays) and when integration occurred (e.g., during the data collection-analysis or/and during the interpretation of qualitative and quantitative results).

5.3. Are the outputs of the integration of qualitative and quantitative components adequately interpreted?

Explanations

This criterion is related to meta-inference, which is defined as the overall interpretations derived from integrating qualitative and quantitative findings (Teddlie and Tashakkori, 2009). Meta-inference occurs during the interpretation of the findings from the integration of the qualitative and quantitative components and shows the added value of conducting a mixed methods study rather than having two separate studies.

5.4. Are divergences and inconsistencies between quantitative and qualitative results adequately addressed?

Explanations

When integrating the findings from the qualitative and quantitative components, divergences and inconsistencies (also called conflicts, contradictions, discordances, discrepancies, and dissonances) can be found. It is not sufficient to only report the divergences; they need to be explained. Different strategies to address the divergences have been suggested such as reconciliation, initiation, bracketing and exclusion (Pluye et al., 2009b). Rate this criterion ‘Yes’ if there is no divergence.

5.5. Do the different components of the study adhere to the quality criteria of each tradition of the methods involved?

Explanations

The quality of the qualitative and quantitative components should be individually appraised to ensure that no important threats to trustworthiness are present. To appraise 5.5, use criteria for the qualitative component (1.1 to 1.5), and the appropriate criteria for the quantitative component (2.1 to 2.5, or 3.1 to 3.5, or 4.1 to 4.5). The quality of both components should be high for the mixed methods study to be considered of good quality. The premise is that the overall quality of a mixed methods study cannot exceed the quality of its weakest component. For example, if the quantitative component is rated high quality and the qualitative component is rated low quality, the overall rating for this criterion will be of low quality

Appendix D. List of References Included Studies

1. Abal, A. (2012). *A Comparison of the Effects of Classroom and Multi-User Virtual Environments on the Perceived Speaking Anxiety of Adult Post-Secondary English Language Learners* [Doctor of Philosophy in Curriculum and Instruction, Florida International University]. https://doi.org/10.25148/etd.FI13040102
2. Al Yami, A. (2015). Speaking anxiety among Saudi ESL learners studying in Australia [Macquarie University]. In *Speaking anxiety among Saudi ESL learners studying in Australia*. http://hdl.handle.net/1959.14/1048844
3. Chen, Y. (2015). *ESL Students' Language Anxiety in In-Class Oral Presentations [Master of Arts in English, Marshall University]*. https://mds.marshall.edu/cgi/viewcontent.cgi?referer=&httpsredir=1&article=1967&context=etd
4. Cooper, S. G. (2007). *Taming high-stakes anxiety among English language learners: The test anxiety of middle school Hispanic ESL students and understanding the consequences [Doctor of Philosophy, Capella University]* [Ph.D., Capella University]. https://www.proquest.com/docview/304721199/abstract/6CCF326571834BD5PQ/1
5. Freiberger, S. (2010). *L2 Anxiety in Spanish-speaking Adult ESL Populations: Possible Causes And Cultural Influences* [Master of Arts, University of Central Florida]. https://stars.library.ucf.edu/etd/4336
6. Hill, L. A. (2010). Finding a Voice in the Digital Classroom: The Effects of Asynchronous Discussion on Language Acquisition and Communication Apprehension among Secondary ESOL Students in South Texas [Doctor of Education, Texas A&M University]. In *ProQuest LLC*. https://www.proquest.com/docview/759495653
7. Jones, M. H. (1993). *The interrelationships between communication apprehension, academic achievement, teacher gender, student gender, and student perception of teacher immediacy among seventh-grade nonnative Hispanic ESL students in a selected urban middle school setting* [Master of Education, Stephen F. Austin State University]. https://www.proquest.com/docview/230739963/abstract/4B452D3234C94B7DPQ/1
8. Kojima, E. (2007). Factors associated with second language anxiety in adolescents from different cultural backgrounds [Doctor of Education, University of Southern California]. In *Dissertation Abstracts International, A: The Humanities and Social Sciences* (rayyan-844243692). https://www.proquest.com/dissertations-theses/factors-associated-with-second-language-anxiety/docview/85677422/se-2?accountid=13042
9. Lee, C. H.-Y. (2017). *English Language Learners and Oral Language Anxiety: An Approach Using a Constructive Play Set* (rayyan-844238531) [Master of Arts in Education, University of California]. https://escholarship.org/uc/item/4qb9g57r
10. Liao, Y., & Liang, J. (2021). Foreign Language Anxiety among Chinese Graduate Students in the United States: A Qualitative Multi-Case Study. *Journal of Research in Education*, *30*(2), 35–68.
11. Lou, N. M., & Noels, K. A. (2020). Breaking the vicious cycle of language anxiety: Growth language mindsets improve lower-competence ESL students' intercultural interactions. *Contemporary Educational Psychology*, *61*, 1–17.
12. Nasiri, S. (2019). Adult Refugee Language Learners' Perceptions of Literature Circles to Support Reading Comprehension and Reduce Foreign Language Anxiety [Doctor of Education, Sam Houston State University]. In *ProQuest Dissertations and Theses* (rayyan-844243526; Issue 27603068). https://www.proquest.com/docview/2326023437?pq-origsite=gscholar&fromopenview=true
13. Pappamihiel, N. E. (2001). Moving From the ESL Classroom into the Mainstream: An Investigation of English Language Anxiety in Mexican Girls. *Bilingual Research Journal*, *25*(1–2), 31–38. https://doi.org/10.1080/15235882.2001.10162783
14. Turnbull, J. (2019). *Beyond a Language Boundary: Encounters with Silence and L1 Spanish-Speakers' Willingness to Communicate in English* [M.A., Northern Illinois University]. Retrieved 14 August 2022, from https://www.proquest.com/docview/2309528950/abstract/9AC53BBB1E244AF4PQ/1
15. Woodrow, L., & Chapman, E. (2003). Second language speaking anxiety of learners of English for academic purposes in Australia. *Proceedings of the Australian Association for Research in Education*. AARE Annual Conference, Brisbane. https://www.aare.edu.au/publications/aare-conference-papers/show/3687/second-language-speaking-anxiety-of-learners-of-english-for-academic-purposes-in-australia

Appendix E: PRISMA Checklist

Section and Topic	Item #	Checklist item	Location where item is reported
TITLE			
Title	1	Identify the report as a systematic review.	
ABSTRACT			
Abstract	2	See the PRISMA 2020 for Abstracts checklist.	
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of existing knowledge.	
Objectives	4	Provide an explicit statement of the objective(s) or question(s) the review addresses.	
METHODS			
Eligibility criteria	5	Specify the inclusion and exclusion criteria for the review and how studies were grouped for the syntheses.	
Information sources	6	Specify all databases, registers, websites, organisations, reference lists and other sources searched or consulted to identify studies. Specify the date when each source was last searched or consulted.	
Search strategy	7	Present the full search strategies for all databases, registers and websites, including any filters and limits used.	
Selection process	8	Specify the methods used to decide whether a study met the inclusion criteria of the review, including how many reviewers screened each record and each report retrieved, whether they worked independently, and if applicable, details of automation tools used in the process.	
Data collection process	9	Specify the methods used to collect data from reports, including how many reviewers collected data from each report, whether they worked independently, any processes for obtaining or confirming data from study investigators, and if applicable, details of automation tools used in the process.	
Data items	10a	List and define all outcomes for which data were sought. Specify whether all results that were compatible with each outcome domain in each study were sought (e.g. for all measures, time points, analyses), and if not, the methods used to decide which results to collect.	
	10b	List and define all other variables for which data were sought (e.g. participant and intervention characteristics, funding sources). Describe any assumptions made about any missing or unclear information.	
Study risk of bias assessment	11	Specify the methods used to assess risk of bias in the included studies, including details of the tool(s) used, how many reviewers assessed each study and whether they worked independently, and if applicable, details of automation tools used in the process.	
Effect measures	12	Specify for each outcome the effect measure(s) (e.g. risk ratio, mean difference) used in the synthesis or presentation of results.	
Synthesis methods	13a	Describe the processes used to decide which studies were eligible for each synthesis (e.g. tabulating the study intervention characteristics and comparing against the planned groups for each synthesis (item #5)).	
	13b	Describe any methods required to prepare the data for presentation or synthesis, such as handling of missing summary statistics, or data conversions.	
	13c	Describe any methods used to tabulate or visually display results of individual studies and syntheses.	
	13d	Describe any methods used to synthesize results and provide a rationale for the choice(s). If meta-analysis was performed, describe the model(s), method(s) to identify the presence and extent of statistical heterogeneity, and software package(s) used.	
	13e	Describe any methods used to explore possible causes of heterogeneity among study results (e.g. subgroup analysis, meta-regression).	
	13f	Describe any sensitivity analyses conducted to assess robustness of the synthesized results.	
Reporting bias assessment	14	Describe any methods used to assess risk of bias due to missing results in a synthesis (arising from reporting biases).	
Certainty assessment	15	Describe any methods used to assess certainty (or confidence) in the body of evidence for an outcome.	

Section and Topic	Item #	Checklist item	Location where item is reported
RESULTS			
Study selection	16a	Describe the results of the search and selection process, from the number of records identified in the search to the number of studies included in the review, ideally using a flow diagram.	
	16b	Cite studies that might appear to meet the inclusion criteria, but which were excluded, and explain why they were excluded.	
Study characteristics	17	Cite each included study and present its characteristics.	
Risk of bias in studies	18	Present assessments of risk of bias for each included study.	
Results of individual studies	19	For all outcomes, present, for each study: (a) summary statistics for each group (where appropriate) and (b) an effect estimate and its precision (e.g. confidence/credible interval), ideally using structured tables or plots.	
Results of syntheses	20a	For each synthesis, briefly summarise the characteristics and risk of bias among contributing studies.	
	20b	Present results of all statistical syntheses conducted. If meta-analysis was done, present for each the summary estimate and its precision (e.g. confidence/credible interval) and measures of statistical heterogeneity. If comparing groups, describe the direction of the effect.	
	20c	Present results of all investigations of possible causes of heterogeneity among study results.	
	20d	Present results of all sensitivity analyses conducted to assess the robustness of the synthesized results.	
Reporting biases	21	Present assessments of risk of bias due to missing results (arising from reporting biases) for each synthesis assessed.	
Certainty of evidence	22	Present assessments of certainty (or confidence) in the body of evidence for each outcome assessed.	
DISCUSSION			
Discussion	23a	Provide a general interpretation of the results in the context of other evidence.	
	23b	Discuss any limitations of the evidence included in the review.	
	23c	Discuss any limitations of the review processes used.	
	23d	Discuss implications of the results for practice, policy, and future research.	
OTHER INFORMATION			
Registration and protocol	24a	Provide registration information for the review, including register name and registration number, or state that the review was not registered.	
	24b	Indicate where the review protocol can be accessed, or state that a protocol was not prepared.	
	24c	Describe and explain any amendments to information provided at registration or in the protocol.	
Support	25	Describe sources of financial or non-financial support for the review, and the role of the funders or sponsors in the review.	
Competing interests	26	Declare any competing interests of review authors.	
Availability of data, code and other materials	27	Report which of the following are publicly available and where they can be found: template data collection forms; data extracted from included studies; data used for all analyses; analytic code; any other materials used in the review.	