AN EXPLORATION OF QUANTITATIVE MEASUREMENT AND QUALITATIVE EXPERIENCES AND UNDERSTANDING OF LONELINESS IN CHILDHOOD AND ADOLESCENCE

A thesis submitted to the University of Manchester for the degree of Doctor of Educational and Child Psychology in the Faculty of Humanities

2021

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SCHOOL OF ENVIRONMENT EDUCATION AND DEVELOPMENT
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<th>Full Form</th>
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<td>ADHD</td>
<td>Attention Deficit Hyperactivity Disorder</td>
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<tr>
<td>CLS</td>
<td>Children’s Loneliness and Social Dissatisfaction Scale</td>
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<tr>
<td>CPD</td>
<td>Continued Professional Development</td>
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<tr>
<td>CR</td>
<td>Critical Realism</td>
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<tr>
<td>DCMS</td>
<td>Digital, Culture, Media and Sport</td>
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<tr>
<td>EAL</td>
<td>English as an Additional Language</td>
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<tr>
<td>EBP</td>
<td>Evidence-Based Practice</td>
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<tr>
<td>EP</td>
<td>Educational Psychologist</td>
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<tr>
<td>EPS</td>
<td>Educational Psychology Service</td>
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<tr>
<td>JBI</td>
<td>Joanna Briggs Institute</td>
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<tr>
<td>LA</td>
<td>Local Authority</td>
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<tr>
<td>LACA</td>
<td>Loneliness and Aloneness Scale for Children and Adolescents</td>
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<tr>
<td>LLCA</td>
<td>Louvain Loneliness Scale for Children and Adolescents</td>
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<tr>
<td>L-NEG</td>
<td>Aversion to Aloneness Subscale of the Loneliness and Aloneness Scale for Children and Adolescents</td>
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<tr>
<td>L-PART</td>
<td>Parental Loneliness Subscale of the Loneliness and Aloneness Scale for Children and Adolescents</td>
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<tr>
<td>L-PEER</td>
<td>Loneliness in Peer Relations Subscale of the Loneliness and Aloneness Scale for Children and Adolescents</td>
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<tr>
<td>L-POS</td>
<td>Affinity for Aloneness Subscale of the Loneliness and Aloneness Scale for Children and Adolescents</td>
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<tr>
<td>Abbreviation</td>
<td>Full Form</td>
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<td>ONS</td>
<td>Office of National Statistics</td>
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<td>PBE</td>
<td>Practice-Based Evidence</td>
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<td>SD</td>
<td>Standard Deviation</td>
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<tr>
<td>SEN</td>
<td>Special Educational Needs</td>
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<tr>
<td>SENCo</td>
<td>Special Educational Needs Coordinator</td>
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<tr>
<td>SEND</td>
<td>Special Educational Needs and Disabilities</td>
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<td>SLR</td>
<td>Systematic Literature Review</td>
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<td>WER</td>
<td>Wellbeing Education Return</td>
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Thesis Abstract

Loneliness in childhood is particularly relevant in light of the Covid-19 pandemic, and subsequent school closures, reductions in social contact, and increased social isolation. Increased understanding in the conceptualisation of loneliness and the experience across the lifespan, indicate a need for a review of the reliability and validity of loneliness scales, and greater understanding of childhood loneliness directly.

A systematic literature review (SLR) sought to investigate the robustness of development procedures in the three most used loneliness measures with youth. Subsequent studies exploring psychometric properties of these scales, published between 1978 and 2019, were identified using a PRISMA framework and an additional bespoke framework was used to explore subsequent reliability and validity with youth. With the absence of child view in development procedures of each measure, interviews with primary aged children were carried out to explore their experiences and understanding of loneliness first-hand.

The SLR identified key stages of measure development absent in the generation of each loneliness measure. Subsequent papers demonstrating psychometric properties with youth, highlighted inconsistent item and response categories, reliability and validity. The qualitative exploration of child views highlighted that childhood experiences align somewhat with the existing literature, whilst key themes relating to solutions and play are absent.
Implications for future practice are discussed, including the need for further review of loneliness measurement in youth, and exploration of child views. Implications for practitioners, intervention, and researchers are discussed. A dissemination strategy to increase the impact of this research is outlined, considering central stakeholders.
Declaration

I declare that no portion of the work referred to in this thesis has been submitted in support of any application for another degree or qualification of this or any other university or other institute of learning.
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Acknowledgments

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Secondly, the wonderful group of trainees that I feel so lucky to have been a part of, providing a wealth of knowledge, experience, and humour.

Thanks to my placement supervisor, Rona Taylor. Your skill and support have bolstered my confidence, and encouraged my growth towards the practitioner I aspire to be.

Thank you to my parents and my brother, for your unwavering support and pride in everything I do.

Finally, Tunmise, for your quiet confidence and reassurance I could do this, and for knowing when to encourage me to carry on, and when to remind me to stop.

The Author

The author holds a previous degree in BSc Psychology (University of Liverpool).
Introduction

Loneliness

A universal experience, every individual encounters loneliness at some point, but this is often fleeting (Margalit, 2012). It is defined as a discrepancy between actual and desired social relationships (Perlman & Peplau, 1984) and has been demonstrated to increase in young adulthood and old age, compared with lower rates in early and mid-adulthood (Qualter et al., 2018), impacted by the importance we place on social relationships across development (Qualter et al., 2015).

Family and peer relationships, self-perception, school experiences and bullying (Asher & Paquette, 2003; Berguno et al., 2004; Sletta et al., 1996) play a role in childhood and adolescence, along with culture and gender across the life span (Barreto et al., 2020; Dykstra, 2009). Children and adolescents with learning difficulties also reportedly experience higher than average levels of loneliness (Margalit & Al-Yagon, 2002).

Research has demonstrated wide ranging negative impacts of loneliness upon children and adolescents, defined as anyone below the age of eighteen (UNCRC, 2009), including aggression, withdrawal, disruptive behaviour and reduced academic progress (Boivin et al., 1995; Renshaw & Brown, 1993; Zarei et al., 2013). Though the current research was commissioned prior to the Covid-19 pandemic, recent reported increases in loneliness, highlight the phenomenon as increasingly pertinent (Youngminds, 2020).
Rationale for engagement

Within the loneliness literature, exploration of subjective experiences of loneliness children and adolescents (Asher & Paquette, 2003), including specific subgroups (Qualter et al., 2013), such as those with Special EducationalNeeds and Disabilities (SEND), is required. Loneliness is most often measured quantitatively in childhood and adolescence. A review of the MASLO database (Maes et al., 2019), and literature searches using key terms, highlights the Loneliness and Aloneness Scale for Children and Adolescents (LACA; Marcoen et al., 1987) and Children’s Loneliness and Social Dissatisfaction Scale (CLS; Asher et al., 1984) are most commonly used with children, and UCLA loneliness scale (UCLA; Russell et al., 1978) and LACA, with adolescents, both by researchers and mental health practitioners. However, to date there has been no review of the development procedures and their subsequent reliability and validity.

The present study takes steps towards addressing the suitability of measure development procedures, subsequent psychometric properties, and gaps within qualitative understanding, to support further research across childhood and adolescents, as well as specific subgroups. Therefore, professionals working with these groups, including school staff and Educational Psychologists (EPs), can better understand the concept of loneliness within the literature and how this translates across cultures, development and SEND. It is also important for such groups to understand the risk factors, how loneliness presents in children, how it can be measured and effective interventions. Such awareness of these factors could be supportive of the implementation of pre-emptive whole school policies and practices to support children and young people with feelings of loneliness.
**Research Aims**

The aim of the research was to explore the way in which loneliness is currently measured in childhood and adolescence, and the reliability and validity of these measures. Furthermore, to explore children’s views and experiences of loneliness first-hand, to inform our understanding of the concept in childhood and how it differs from adult’s experiences. The systematic literature review (SLR) reported in Paper 1, examined the development of the three most widely used loneliness measures with children and adolescents to assess the inclusion of key points required for robust measures. Following this, examination of subsequent psychometric properties of each of the measures with youth, were assessed. The empirical research in Paper 2 explored primary-aged children’s qualitative experiences and understanding of loneliness, to begin to increase our understanding of childhood loneliness and how these are reflected in quantitative measures.

The research papers aimed to:

1. explore the development of loneliness measures used with children and adolescents, including whether they followed the steps for successful measurement development
2. explore the reliability and validity estimates of each measure in papers subsequently exploring their psychometric properties
3. qualitatively investigate primary school-aged children’s understanding and experiences of loneliness

**Overall Research Strategy**

Paper 1, a Systematic Literature Review (SLR), demonstrated that the three most often used quantitative loneliness measures with children and adolescents, the Loneliness and Aloneness Scale
for Children and Adolescents (LACA), Children’s Loneliness and Social Dissatisfaction Scale (CLS) and the UCLA loneliness scale (UCLA), omitted key processes during their development (Carpenter, 2018; Morgado et al., 2017). This included a lack of child voice or population variance, and comparison with appropriately related constructs. Examination of subsequent psychometric properties in papers using each of the measures, also demonstrated varied use of response categories and items, reduced reliability with adapted scales and incomplete research outlines.

Thus, a review of current measures, consulting measure development literature and including child views, is required. As such, Paper 2 explored qualitative views of loneliness in middle childhood, offering suggestions about children’s understanding of loneliness, and how this differs from adult perceptions, to inform the way in which loneliness is measured. The results suggested that though children broadly perceive social and emotional loneliness similarly to existing literature, they can offer suggestions about solutions for loneliness, and what to look out for when attempting to identify lonely children. Also highlighted, was the importance of universal interventions around group inclusion, togetherness, and play, for reducing feelings of loneliness in childhood. Paper 3 emphasizes the importance of dissemination of research to key audiences, including researchers, EPs, school practitioners and policy makers, along with the direct relationship between evidence and practice, evident in the links between Paper 1 and 2, for informing practice.

**Researcher’s professional background and relevant experiences**

The researcher’s interests in loneliness stems from previous job roles in education and care. These include a role supporting adults with autism, and in secondary schools with pupils with additional needs prior to starting the Doctorate in Educational and Child Psychology at the
University of Manchester. The researcher’s listening volunteer role at a charity offering emotional support for individuals in distress and experiencing suicidal feelings, was also a key factor. During these roles, the researcher became aware of the prevalence of loneliness, the associated feelings, the desire for human contact, and the importance of talking and feeling heard. When working in diverse secondary schools, in low-socioeconomic areas of large UK cities, with substantial English as an Additional Language (EAL) populations, the researcher took an interest in group identity and perceived similarities for promoting a sense of identity and group inclusion. In observing young people who struggled with friendships, support tended to focus upon improving social skills and relationships, but rarely acknowledged possible feelings of loneliness that could arise in the absence of such skills.

A combination of interest in social contact, group identity and individual behaviour, along with the desire to understand differences between adult and child experiences, supported the researcher’s interest in loneliness research.

**Position for data access**

The empirical research was undertaken with within two primary schools in the local authority (LA) in which the researcher was on placement as part of her doctoral training. One of these schools was recruited as part of opportunity sampling, through an email sent to prospective research schools, during the University of Manchester’s (UoM) research commissioning process. The other primary school was recruited via email following ongoing work within the school and a pre-existing relationship with the Special Educational Needs Coordinator (SENCo). The researcher made visits to research site one to introduce the project to Year 4 pupils, and discuss it with staff,
and then introduce the project to the Year group, whereby individuals were selected randomly following return of the consent form. Participants from the second research site were offered the opportunity to take part in the research by school staff during the Covid-19 pandemic, after attending during wider school closures. The interviews were conducted virtually, using a secure video platform, supported by an adult in school.

Regarding maintaining independence of the research in the context of research commissioning, the research was conducted in the same LA where the TEP was on placement, and the EPS had an awareness and interest in supporting children’s social and emotional wellbeing at an individual, group and school level. Research site one was recruited prior to commissioning and was not in the TEP’s cluster of schools, and the other research site was in the cluster, but not aware of the research prior to participant recruitment.

**Evaluations of ontological, epistemological, and axiological stances**

Ontology concerns the “nature and structure of being” (Rawnsley, 1998; p. 2) and epistemology encompasses the basis of knowledge, how it is formed, and subsequently gained and shared by humans (Cohen et al., 2007). Axiology contributes to decisions made in research based on the values and morals which underpin research (Walsh & Evans, 2014).

The theoretical stance of this research is Critical Realism (CR), which is said to represent a balance between positivism and constructivism (Archer et al., 2016). CR suggests that reality exists independent of us (Sayer, 2000), and is composed of various levels, empirical (what can be observed), actual (what is known but is not always seen) and real (underpinning the actual and
contributes to our understanding but is not always explanatory) (Walsh & Evans, 2014). These levels combine to create a ‘truth’ (Wikgren, 2005). Our individual experiences and understanding differ, and as such, in the search for reality, underlying causal mechanisms are shaped by social, political, cultural and economic factors (Deforge & Shaw, 2012). CR suggests science should aim to move toward explanation of social phenomena by revealing the causal mechanisms which produce generalising claims (Danermark, 2002).

CR suggests that there is “an intransitive world that is real and a transitive take on that world through the perceptions and theories we develop about it” (Houston, 2010, p. 75). Furthermore, the development of theories and our understanding, support us to move closer to the “intransitive”, becoming more in tune with reality (Houston, 2010). Critical Realists view the world as “theory-laden, but not theory determined” (Fletcher, 2017; p. 182) and in the present research, knowledge and ‘truth’ regarding loneliness, is constructed using positivist associated methods (questionnaires and measures) to understand the construct drawn from interpretivist notions of loneliness by adults. The current papers attempt to understand the many layers of loneliness, to support the development of an evaluation of methods for conceptualising social experiences. Bhaskar (2008) argued that models should be subject to empirical testing to determine their reality, and that by identifying the structures at play, we can begin to understand changes in the social world. This notion feels most pertinent to the current study, as the literature review considers and empirically rates existing quantitative measures, and the empirical paper attempts to explore the gaps in our knowledge in order that we might move closer to the “intransitive” by viewing established ideas through a “transitive” lens.
Conclusion

The overall aim of this research is to explore current loneliness measures with children and adolescents to investigate the development processes and their subsequent reliability and validity. Furthermore, to explore the qualitative views of loneliness in middle childhood and inform our understanding of how loneliness should be viewed in childhood. Though the research findings will demonstrate initial exploration of child views, it is hoped that the findings will demonstrate a need for further study and review of current quantitative measures.
References


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http://www.tandfonline.com/doi/abs/10.1207/s15327752jpa4203_11


https://pdfs.semanticscholar.org/1fde/0e48782b133dff99560ca3a56cf3c31d7838.pdf
A Systematic Review of the Development and Psychometric Properties of Loneliness Measures for Children and Adolescents

Prepared for in accordance with author guidelines for submission to the International Journal of Environment Research and Public Health (Appendix 26)
Abstract

This paper reviews the three most commonly used measures of loneliness for children and adolescents, (children: Loneliness and Aloneness Scale for Children and Adolescents [LACA] and Children’s Loneliness and Social Dissatisfaction Scale [CLS]; adolescents: UCLA loneliness scale [UCLA] and LACA). Loneliness is a pertinent issue across populations and affects the mental health and academic achievement of children and adolescents. To date, there has been no thorough examination of the loneliness measures for this age group. We examine how each of the three measures was developed, and assess the psychometric properties of those measures, gaining insight into whether they are valid and reliable assessments of loneliness. Results suggest that the UCLA Loneliness Scale (Russell et al., 1978) is the most popular measure of loneliness for use with adolescents, but it does not have robust psychometric properties for that group. For children, the CLS appears most suitable. Results of the review identify gaps in aspects of measure development, with no measure having been developed with children or adolescents. Implications for future loneliness measurement research are considered.

Keywords: loneliness; measurement; childhood; adolescence; psychometrics
Introduction

Loneliness is a painful experience, associated with feeling unhappy, unloved, restless, and generally despondent across different age groups, including school-aged children (Yang et al., 2020). Aligned with the most popular conceptualization (Perlman & Peplau, 1984), loneliness is experienced when one perceives a discrepancy between actual and desired social relationships, and this discrepancy can be experienced in relation to either or both the quantity and quality of one's relationships. It is often conceptualised in terms of social loneliness, a lack of close relationships, and emotional loneliness, lacking an attachment or feeling understood (Mellor & Edelmann, 1988; Weiss, 1973). Loneliness has been associated with the absence of play partners and negative relationships in childhood, and a lack of close friends and peer rejection during adolescence (Qualter et al., 2015). In addition, school-based victimization has been found to be associated with loneliness during adolescence (Yang et al., 2020) and young adulthood (Matthews et al., 2020), suggesting that loneliness can also ensue from negative social relationships.

Loneliness has been related to a host of negative outcomes, including worse academic attainment, emotional health difficulties and sleep quality in youth (Hawkley & Capitanio, 2015; Hymel et al., 1990; Qualter et al., 2010, 2015). Whilst our understanding about the negative effects of loneliness is increasing, to date there has been no review of the assessment of loneliness for children and adolescents. Though it is acknowledged that loneliness in children with SEND is a gap in the research, the researcher was keen to examine the measures used with children and adolescents more broadly, viewing such measures as the foundation for the assessment and intervention for loneliness in childhood, at present, and therefore a suitable starting point for the
current research. Such a review is particularly important given the current COVID-19 pandemic and national and regional lockdowns that children are experiencing. The closing of schools associated with the COVID-19 pandemic has raised concerns about increasing loneliness among youth, given their absence from friends and a peer social structure; there is a need to use appropriate measurement to identify whether that is the case. Loneliness in children and adolescents is commonly measured using specific assessments, that is, UCLA Loneliness Scale (UCLA) (Russell et al., 1978) Children’s Loneliness and Social Dissatisfaction Scale (CLS) (Asher et al., 1984), and Loneliness and Aloneness Scale for Children and Adolescents (LACA) (Marcoen et al., 1987). However, a systematic overview of development procedures and psychometric properties of those measures with youth is not yet available.

Currently, loneliness among youth is not screened in the way that depression or internalising problems are, whereby individuals complete self-report measures with pre-determined cut-offs indicating difficulties (Roseman et al., 2016). However, there are benefits of screening, including identifying those in need of extra support, and prevention of the concurrent and prolonged mental health problems in youth that are linked to loneliness. To do this effectively, there must be robust measurements available. While not initially developed primarily for screening, there are three measures of loneliness that are commonly used to assess loneliness among children and adolescents. However, there has been no systematic review examining their reliability and validity, nor any discussion about their development, including whether they followed guidelines to create robust and useful measures.
Developing Measures

Measure development literature recommends inductive and deductive methods during item creation, to limit contamination and support valid depiction of relations to other constructs (Mackenzie et al., 2011; Morgado et al., 2017). The three main steps of measure development are (1) specifying observable characteristics, (2) determining the extent they measure the same thing using empirical research and statistical analysis, and (3) performing experiments to determine the extent measures are consistent with established views of the construct (Nunnally & Bernstein, 1994). Qualitative data from target populations that outline opinions and experiences of the construct are also required to inform understanding of the subjective experience of the concept (S. Carpenter, 2018; Hinkin, 1995). Valid and reliable measurement is scientifically fundamental and essential for robust research (Clark & Watson, 2019; DeVellis, 2016) and replicability. Thus, in the current study, we (1) explore how the loneliness measures used to collect data from children and adolescents were developed, and, indeed, whether they followed the steps for successful measurement development, and (2) explore the reliability and validity estimates of each measure as they are presented in papers that have subsequently explored their psychometric properties.

Materials and Methods

Literature Search Strategy and Review Process

The MASLO database was initially consulted. This is a large collection of all research studies that used a standardised measure of loneliness, published between 1978 and 2013 (Maes et al.,
Literature searches were conducted in 2013, yielding 3658 results, of which 1585 were excluded due to them not including one of the seven loneliness measures, written in languages other than Dutch, English, French or German, or were irretrievable. Subsequently, papers were read in detail, with further exclusions made in the absence of detail regarding methodology, or the absence of numerical information. For the current study, the MASLO database (Maes et al., 2019) was screened for papers focused on reliability and validity testing of those measures among youth, with the Loneliness and Aloneness Scale for Children and Adolescents (LACA) (Marcoen et al., 1987), UCLA Loneliness Scale (UCLA) (Russell et al., 1978) and Children’s Loneliness and Social Dissatisfaction Scale (CLS) (Asher et al., 1984), being drawn from the database, including 1821 papers in total. Between September 2019 and March 2020, additional searches for articles published between 2014 and 2020 in Scopus, PubMed, and PsychInfo were conducted. Key search terms combined included “loneliness scale for children and adolescents”, “loneliness measure”, “reliability”, and “validity”. Additional searches, using the titles of each of the measures, were also conducted, yielding an additional 2345 results. Figure 1 outlines the review process.

After removing duplicates and screening for papers not measuring reliability and validity of one of the three loneliness measures, 64 papers, drawn both from the MASLO database and new database searches, were screened against the inclusion criteria: (1) the study explicitly tests the reliability and validity of the loneliness measure, (2) sample participants under 18 years of age (3) a Cronbach’s alpha for the loneliness (sub)scale was presented, and (4) paper was written in English. Five papers for the LACA, nine for the UCLA, and six papers for the CLS, were included in the final review. Development papers for each measure, with the addition of a pre-development paper for
the LACA (see Table 1), were included in the review database, subsequent searches for such were conducted using the combined search terms “development”, “UCLA”, “LACA”, “CLS”, “loneliness”, and “scale”. An additional five studies, known to the researchers, were examined against the inclusion criteria, with two being included, following review. Two of these five studies had been identified through literature searches and were excluded due to not having a clear focus on reliability and validity of any of the three measures. Following discussion between the first and third researcher, who was experienced in loneliness research, these two papers were subsequently included. An additional study not identified through search terms, was also unsuitable.

Through screening procedures, reference to “pure” loneliness measure adaptation, resulted in further searches (using the terms “pure”, “loneliness”, “CLS” and “measure”) and the inclusion of four papers, Additionally, upon reading the LACA development paper, Marcoen and Brumagne’s (1985) paper was cited as the research paper from which items were drawn, leading to its inclusion in the current review.
Records identified through MASLO database following exclusion of studies not using CLS, LACA or UCLA measures (n=1821)

Database searching post 2014 (Scopus, PubMed, PsycInfo) (n=2345)


Records after duplicates removed (n=4046)

Records screened (n=4051)

Full-text assessed for eligibility (n=64)

Studies included in qualitative synthesis (Articles with psychometric focus) (n=20)

Development papers (n=4) and ‘Pure’ loneliness papers (n=4)

Records excluded (not measuring reliability or validity in LACA, UCLA or CLS) (n=3987)

Full-text articles excluded (participants aged over 18 years, paper not written in English Not include Cronbach’s Alpha) (n=44)

Studies included in qualitative synthesis (n=28)

Papers added from other sources (n=5)

Figure 1

PRISMA diagram (Moher et al., 2009)
Data Classification

Data classification is discussed first in relation to the development papers, where we used the critical appraisal tool. Then, we review the psychometric properties of each of the loneliness measures, exploring the inclusion of children and adolescent voices in the development of the measures and the reliability and validity as documented in subsequent studies.

Development of a Critical Appraisal Checklist

The quality and suitability of development processes for each of the measures was determined using a critical appraisal tool, created by the researchers from existing well-established checklists (Appendices 1-2). No pre-existing frameworks captured the aims of the current research, so measure development research was consulted to support the inclusion criteria. The tool was informed by four quantitative evaluation frameworks including COSMIN (Mokkink, 2018), JBI Appraisal Checklist for Studies Reporting Prevalence Data (Joanna Briggs Institute, 2016), Evidence Based Medicine and Practice checklist (Roever, 2015), and the University of Manchester quantitative evaluation research checklist (Woods et al., 2011). Checklist drafts were trialled to refine each element and establish clear wording and weighting of statements (Appendices 3-6).

Each development paper, plus the Marcoen and Brumagne (1985) paper, was read in full by the first and third author, assessing 13 “core” expectations of measure development, and two “supplementary” statements for the inclusion of a factor analysis or structural equation modelling, and invariance testing in subsequent papers. The papers selected were the first papers for each measure, outlining development procedures. During this process, researchers looked at quality appraisal literature to support the use of qualitative quality decisions, using overall inter-rater
agreements of “high”, “medium”, or “low” (Oluka et al., 2014; Roever, 2015). Reviewers awarded two stars when the quality statement was met “to a great degree”, one star where it was “partially met”, and a hyphen where the information was “incomplete or omitted”. Moderation discussions ensured consistent interpretation and application of the checklist. Papers with between one and four two-star ratings were deemed “low quality”. Those with between five and eight two-star ratings were noted as “medium quality”; nine or more two-star ratings were deemed “high” quality papers (see Table 1).

Psychometrics

Following quality appraisal of development procedures, we examined the psychometric properties, focusing on the reliability and validity of each of the measures, in subsequent papers (see Tables 2-4). Papers employing an increasingly used brief version of the CLS to represent ‘pure’ loneliness items were also included. To further understand how the measures have been used since development we also examined measurement adaptations and sample characteristics in subsequent papers.

Reliability and Validity

In the quality framework, reliability and validity are relevant and representative of the loneliness construct. Cronbach’s alpha values of 0.8 and above were considered acceptable levels of internal consistency both in development papers and subsequent research (Taber, 2018).

Content validity was examined through evidence of the inclusion of interviews with children and

---

1 Items from CLS adapted by Ladd et al., (1996) to represent loneliness separate from social isolation
adolescents in the development papers (Haynes et al., 1995). Furthermore, construct validity was considered in the quality framework through explanation of theory underpinning the measures, and concept definitions (Ebel & Frisbie, 1991) and reference to existing constructs of loneliness.

**Results**

*Scale Overview*

The LACA extends the Louvain Loneliness Scale for Children and Adolescents (LLCA) (Marcoen & Brumagne, 1985) subscales (peer and parental loneliness), through the incorporation of two new subscales measuring positive and negative attitudes to aloneness and social isolation. The original development paper describes a 48-item measure, with four integrated sub-scales, which was tested on a sample of 444 children and adolescents from grades 5-11, the widest age range across the development papers of the three measures. Subscales relate to loneliness in parental relations (L-PART), loneliness in peer relations (L-PEER), affinity for aloneness (A-POS), and aversion to aloneness (A-NEG). Sub-scales were not revised following testing.

The UCLA, based on Sisenwein's (1965) scale, was developed and tested with young adults, (Russell et al., 1978) using a 5-point scale. Researchers drew 25 items from a 75-item pool, excluding “very extreme statements”. The scale was revised following analysis, leaving a final 20-item measure, such that a revised scale correlation of items with the total loneliness scores and internal consistency, was assessed. Additionally, concurrent validity was explored through correlation with self-reports about current loneliness, comparison between scale scores across the

---

2 Aged 10-16 years
clinic and comparison sample and self-ratings of feelings associated with loneliness with scale scores. The UCLA is often used with older adolescents, and less often children, though some items are suggested for use with children by the Office of National Statistics (ONS) to measure childhood loneliness (ONS, 2018).

The CLS (Asher et al., 1984) was developed to explore loneliness and social dissatisfaction. The 24-item scale comprises 16 target and eight “filler” items, not included in the final loneliness score. Its original psychometric study included a sample of 522 children between grade three and six\(^3\). After two-weeks, a sociometric measurement was administered to explore whether classroom peer group status was directly related to loneliness. The scale did not undergo post-test alterations.

\(^3\) Aged 8-12 years
<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Core development procedure</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construct Definition</td>
<td>-</td>
<td>**</td>
<td>**</td>
<td>-</td>
</tr>
<tr>
<td>Research questions outlined</td>
<td>✬</td>
<td>✬</td>
<td>✬</td>
<td>-</td>
</tr>
<tr>
<td>Clear description of target population</td>
<td>-</td>
<td>✬</td>
<td>✬</td>
<td>**</td>
</tr>
<tr>
<td>Theory outlined and described</td>
<td>-</td>
<td>✬</td>
<td></td>
<td>**</td>
</tr>
<tr>
<td>Interviews conducted with children and/or adolescents</td>
<td>-</td>
<td>-</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>Appropriate qualitative data collection method for item identification</td>
<td>-</td>
<td>-</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>Replication details included</td>
<td>✬</td>
<td>-</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>Appropriate data analysis</td>
<td>**</td>
<td>**</td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td><strong>Content validity/Internal structure</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interviews with experts regarding concept definition</td>
<td>-</td>
<td>-</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>FA/structural equations model at development stage</td>
<td>-</td>
<td>**</td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td>Internal consistency</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cronbach’s alpha above 0.8</td>
<td>**</td>
<td>**</td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td>Invariance testing</td>
<td>-</td>
<td>-</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>Cross-cultural validity\measurement invariance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consideration of variance across different groups</td>
<td>✬</td>
<td>-</td>
<td></td>
<td>✬</td>
</tr>
<tr>
<td>Responsiveness (comparison to gold standard)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scores compared with related variables</td>
<td>✬</td>
<td>✬</td>
<td></td>
<td>✬</td>
</tr>
<tr>
<td>Suitable comparisons made</td>
<td>✬</td>
<td>✬</td>
<td></td>
<td>✬</td>
</tr>
<tr>
<td><strong>Overall quality decision</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of ** ratings</td>
<td>2</td>
<td>6</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Qualitative descriptor of overall quality</td>
<td>Low</td>
<td>Medium</td>
<td>Mean: 5</td>
<td>Medium</td>
</tr>
</tbody>
</table>
Notes: Core expectation; Supplementary expectation; 2 stars (**) indicates this was done well or in detail, 1 star (*) indicates this was done partially, hyphen (-) indicates unclear or incomplete processes; Overall quality: 1-4 ** ratings = low quality paper; 5-8 ** ratings = medium quality paper; 10-13 ** ratings = high quality paper
Quality Appraisal

The CLS provided the clearest definition of loneliness and research questions, referring to feelings of loneliness and social dissatisfaction research with children, and aimed to develop a reliable measure of loneliness. The UCLA development outline provided little information regarding overarching constructs, or justification for measure development, referring only to the “lack of a simple and reliable method of assessment” (Russell et al., 1978, p. 290). The LACA developers highlighted “age-linked feelings of loneliness” (Marcoen et al., 1987, p. 1025) in youth, and made distinctions regarding emotional and social loneliness. Target populations were largely well defined, although varied between children (CLS; Asher et al., 1984) undergraduate psychology students (UCLA; Russell et al., 1978), and late childhood and adolescence (LACA; Marcoen et al., 1987). Furthermore, development sample ages ranged between third grade (CLS) and “young adults” (UCLA), suggesting development samples were not representative of subsequent populations in which the measures are distributed. Theoretical underpinnings of the measures varied: the LACA was rated most highly, describing the need to “cover related constructs of positively and negatively experienced aloneness” (Marcoen et al., 1987; p. 562).

Drawing on measure development best practice guidance, no development paper was awarded a score for core expectations related to content validity and none interviewed children and adolescents when developing their conceptualization of loneliness. UCLA items were drawn from “20 psychologists describing the experience of loneliness” (Russell et al., 1978, p. 291), and statements from Eddy’s (1961) measure, and omitted replication details. LACA items were drawn
from Marcoen & Brumagne's (1985) “original scale”, but did not describe items; and the CLS paper did not outline any item inclusion strategies.

Appropriate data analysis processes (see Appendix 2 for details) were defined, including correlations between loneliness scale scores and relevant related constructs, and a Cronbach’s alpha calculated with only the UCLA omitting factor analyses. All measures presented Cronbach’s alphas above 0.8.

Regarding cross-cultural validity, the UCLA development paper examined the effects of region and sex. Each measure, to some extent, compared scores with suitable and related variables. The LACA examined how age, sex, parental occupation, social integration, home environment, ecological situation (hometown size and home conditions), and psychological factors affected understanding and response to items. The CLS compared scores to sociometric status, examining links with friendship nomination, a relation deemed modest by researchers, due to the suggestion loneliness most closely links with perceptions of friendship rather than individual experience. Despite this, none of the measures explicitly explored cross-cultural validity.

Quantitative Synthesis Psychometrics

Subsequent studies implementing the LACA, UCLA, and CLS with children and adolescents, were reviewed with a specific focus on exploring the reliability and validity of each measure (see Tables 2, 3, and 4).
## Subsequent research papers investigating the psychometric properties of the LACA

<table>
<thead>
<tr>
<th>Authors</th>
<th>Year</th>
<th>Title</th>
<th>Participant Age</th>
<th>Number of Participants</th>
<th>Number of Items</th>
<th>Language</th>
<th>Cronbach’s Alpha</th>
<th>Mean (Standard Deviation)</th>
<th>Correlations between subscale scores across waves of data collection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Development Paper: Marcoen &amp; Brumagne</td>
<td>1985</td>
<td>Loneliness among children and young adolescents</td>
<td>Fifth and ninth grade, 9-14 years</td>
<td>251</td>
<td>28</td>
<td>η</td>
<td>Dutch</td>
<td></td>
<td>.88 .68</td>
</tr>
<tr>
<td>Marcoen, Goossens &amp; Caes</td>
<td>1987</td>
<td>Loneliness in pre- through late adolescence: exploring the contributions of a multidimensional approach</td>
<td>Grade 5-11, 11-17 years</td>
<td>444</td>
<td>48</td>
<td>η</td>
<td>Dutch</td>
<td></td>
<td>1.88 .87 .80 .81 18.80 21.08 29.70 30.94 (5.58) (6.73) (5.96) (6.38)</td>
</tr>
<tr>
<td>Goossens &amp; Beyers</td>
<td>2002</td>
<td>Comparing measures of childhood loneliness: internal</td>
<td>Grade 5-6, 9-11 years</td>
<td>292</td>
<td>48</td>
<td>η</td>
<td>Dutch</td>
<td></td>
<td>1.81 .86 .79 .74 17.87 23.32 30.50 33.53 (5.04) (6.83) (6.13) (5.79)</td>
</tr>
<tr>
<td>Year</td>
<td>Authors</td>
<td>Study Title</td>
<td>Sample 1</td>
<td>Sample 2</td>
<td></td>
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<tr>
<td>2015</td>
<td>Maes, Van Den Noortgate &amp; Goossens</td>
<td>A reliability generalization study for a multidimensional loneliness scale: the loneliness and aloneness scale for children and adolescents</td>
<td>Grade 5 mean age 10.5</td>
<td>Grade 6 mean age 11.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Consistency and confirmatory factor analysis</td>
<td></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>Maes, Wang, Van den Noortgate, &amp; Goossens</td>
<td>Loneliness and attitudes toward being alone in belgian and chinese adolescents: examining measurement invariance</td>
<td>Sample 1</td>
<td>Sample 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Dutch, Arabic, Chinese, English, Greek, Hebrew, Italian, Spanish, Portuguese</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>Danneel, Maes, Vanhalst, Bijttebier &amp; Goossens</td>
<td>Developmental changes in loneliness and attitudes toward aloneness in adolescence.</td>
<td></td>
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</tr>
</tbody>
</table>
Loneliness and attitudes toward aloneness in Belgian adolescents: measurement invariance across language, age, and gender groups

<table>
<thead>
<tr>
<th>Sample 1</th>
<th>Sample 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean age 14.84</td>
<td>Mean age 14.82</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Grade 7-12</th>
<th>Mean age 11.95 years, 17.16</th>
<th>Dutch speaking: 641</th>
</tr>
</thead>
<tbody>
<tr>
<td>11-18 years</td>
<td>Mean age 14.35</td>
<td>French speaking: 641</td>
</tr>
<tr>
<td>Dutch speaking</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: δ: no data present in paper; θ: across waves of data collection; η: response categories often (4) sometimes, seldom, never (1); ¥: ranges of 1-year stability correlations across three and four measurement waves in sample 1 and sample 2, respectively
### Table 3

*Subsequent research papers investigating the psychometric properties of the UCLA Loneliness Scale*

<table>
<thead>
<tr>
<th>Authors</th>
<th>Year</th>
<th>Title</th>
<th>Participant Age</th>
<th>Number of Participants</th>
<th>Number of items</th>
<th>Response Categories</th>
<th>Language of Sample</th>
<th>Cronbach’s Alpha</th>
<th>Mean (Standard Deviation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Development Paper: Russell, Peplau, &amp; Ferguson</td>
<td>1978</td>
<td>Developing a measure of Loneliness</td>
<td>Young adults</td>
<td>239</td>
<td>20</td>
<td>4 6</td>
<td>English</td>
<td>.96</td>
<td>UCLA sample: Males= 38.7 (11.0) Females= 40.2 (12.4) Tulsa sample: Males= 38.6 (9.4) Females= 37.8 (9.7)</td>
</tr>
<tr>
<td>Author(s)</td>
<td>Year</td>
<td>Description</td>
<td>Sample 1</td>
<td>Sample 2</td>
<td>Gender</td>
<td>Scale Language</td>
<td>Mean ± SD</td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>Russell, Peplau &amp; Cutrona</td>
<td>1980</td>
<td>The revised UCLA loneliness scale: concurrent and discriminant validity evidence</td>
<td>Sample 1= University students in first year</td>
<td>Sample 2= College students</td>
<td>20+ 19</td>
<td>English</td>
<td>Sample 1=.94</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>162</td>
<td>237</td>
<td>4</td>
<td></td>
<td>Sample 2=.94</td>
<td></td>
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</tr>
<tr>
<td>Mahon &amp; Yarcheski</td>
<td>1990</td>
<td>The dimensionality of the UCLA loneliness scale in early adolescents</td>
<td>12-14 years</td>
<td>326</td>
<td>20</td>
<td>English</td>
<td>.84</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neto</td>
<td>1992</td>
<td>Loneliness among Portuguese adolescents</td>
<td>14-17 years</td>
<td>217</td>
<td>6</td>
<td>Portuguese</td>
<td>.82</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wilson, Cutts, Lees, Mapungwana, &amp; Maunganidze [41]</td>
<td>1992</td>
<td>Psychometric properties of the Revised UCLA Loneliness Scale and two short form measures of</td>
<td>Mean age = 17.53</td>
<td>1354</td>
<td>20</td>
<td>English</td>
<td>Females = 40.34</td>
<td></td>
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<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>4</td>
<td></td>
<td>Males = 40.34</td>
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<td>7.62</td>
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<td>7.62</td>
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<tr>
<td>Study</td>
<td>Measure Description</td>
<td>Sample Size</td>
<td>Age Range</td>
<td>No. of Items</td>
<td>Language</td>
<td>Reliability</td>
<td>Validity</td>
<td>Additional Information</td>
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<tr>
<td>Higbee &amp; Roberts 1994</td>
<td>Reliability and validity of a brief measure of loneliness with anglo-american and mexican american adolescents.</td>
<td>2614</td>
<td>11-14 years</td>
<td>8</td>
<td>English</td>
<td>.90</td>
<td>7.13</td>
<td>Anglo-American sample= 0.90 Hispanic sample= .87</td>
<td></td>
</tr>
<tr>
<td>Russell 1996</td>
<td>UCLA loneliness scale (version 3): Reliability, validity, and factor structure</td>
<td>489 students</td>
<td>No Age information</td>
<td>20</td>
<td>English</td>
<td>.92</td>
<td>40.08</td>
<td>(9.50)</td>
<td></td>
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<tr>
<td>Study</td>
<td>Research Question</td>
<td>Sample Details</td>
<td>Reliability and Validity</td>
<td>Sample Details</td>
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<tr>
<td>Lasgaard 2007</td>
<td>Reliability and validity of the Danish version of the UCLA loneliness scale.</td>
<td>Adolescents with ADHD= .84</td>
<td></td>
<td>Sample from regular schools= .91</td>
<td></td>
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<tr>
<td></td>
<td>Loneliness among second-generation migrants.</td>
<td>13-16 years</td>
<td>224</td>
<td>Sample from regular schools= 37.69 (10.23)</td>
<td></td>
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<tr>
<td>Goossens, Klimstra, Luyckx,</td>
<td>Reliability and validity of the Roberts UCLA scale (RULS-8) with Dutch-speaking</td>
<td>Adolescents with ADHD= 37.6</td>
<td></td>
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<tr>
<td>Vanhalst, &amp; Teppers 2014</td>
<td>adolescents in Belgium.</td>
<td>Sample 1= 282.</td>
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<tr>
<td></td>
<td>12-18 years</td>
<td>Sample 2= 1144.</td>
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<tr>
<td></td>
<td>1= never</td>
<td>Sample 3= 4810.</td>
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<tr>
<td></td>
<td>4= always</td>
<td>Sample 1= 20.</td>
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<tr>
<td></td>
<td>English</td>
<td>Sample 2= 8.</td>
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<tr>
<td></td>
<td>Sample 3= 8</td>
<td>Sample 3= 8.</td>
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<tr>
<td></td>
<td>Sample 1= Grades 7-8, ages 12 and 13</td>
<td>Sample 3= Grades 7-12, aged 12</td>
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<tr>
<td></td>
<td>Sample 2= Grades 9-12, aged 14-18</td>
<td>Sample 3= Grades 7-12, aged 12</td>
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<td></td>
<td>Sample 3= grades 7-12, aged 12-18</td>
<td>Sample 3= grades 7-12, aged 12</td>
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</tbody>
</table>

Note: 8: no data present; 6: 4= Often, 3= Sometimes, 2= rarely, 1= never
Table 4

Subsequent research papers investigating the reliability and validity of the CLS

<table>
<thead>
<tr>
<th>Authors</th>
<th>Year</th>
<th>Title</th>
<th>Participant Age</th>
<th>Number of participants</th>
<th>Number of items</th>
<th>Response Categories</th>
<th>Language of Sample</th>
<th>Cronbach’s Alpha</th>
<th>Mean (Standard Deviation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Development Paper: Asher, Hymel &amp; Renshaw</td>
<td>1984</td>
<td>Loneliness in children</td>
<td>Grade 3 to 6</td>
<td>506</td>
<td>24</td>
<td>5 (1= always true, 2= true most of the time, 3= true sometimes, 4= hardly ever true, 5= not true at all)</td>
<td>English</td>
<td>.90</td>
<td>32.51 (11.82)</td>
</tr>
<tr>
<td>Cassidy &amp; Asher</td>
<td>1992</td>
<td>Loneliness and peer relations in young children</td>
<td>5-7 years</td>
<td>452</td>
<td>23</td>
<td>3 “Yes” “No” “Sometimes”</td>
<td>English</td>
<td>.79</td>
<td>6</td>
</tr>
<tr>
<td>Goossens &amp; Beyers</td>
<td>2002</td>
<td>Comparing measures of childhood loneliness: internal consistency and confirmatory factor analysis</td>
<td>Grade 5- 6</td>
<td>292</td>
<td>24</td>
<td>5 η</td>
<td>Dutch</td>
<td>0.87</td>
<td>33.11 (9.98)</td>
</tr>
<tr>
<td>Author(s)</td>
<td>Year</td>
<td>Study Title</td>
<td>Age Range</td>
<td>Sample Size</td>
<td>Factor Loadings</td>
<td>Language</td>
<td>Ethnicity:</td>
<td>Grade:</td>
<td>Gender:</td>
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<tr>
<td>Bagner, Storch, &amp; Roberti</td>
<td>2004</td>
<td>A factor analytic study of the loneliness and social dissatisfaction scale in a sample of African American and Hispanic-American children</td>
<td>10-13 years</td>
<td>200</td>
<td>0.87, 0.84</td>
<td>English</td>
<td>African American= 29.63 (11.71)</td>
<td>Fifth Grade= 35.42 (13.74)</td>
<td>Boys= 33.43 (11.92)</td>
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<td></td>
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<td>24</td>
<td></td>
<td></td>
<td>Hispanic= 33.92 (12.42)</td>
<td>Sixth grade= 31.65 (11.10)</td>
<td>Girls= 33.07 (12.81)</td>
</tr>
<tr>
<td>Coplan, Clossen, &amp; Arbeau</td>
<td>2007</td>
<td>Gender differences in the behavioural associates of loneliness and social dissatisfaction in kindergarten.</td>
<td>Mean= 64.76 months</td>
<td>139</td>
<td>0.76</td>
<td>English</td>
<td></td>
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<tr>
<td>Ebetsutani, Drescher, Reise, Heiden, Hight, Damon, &amp; Young</td>
<td>2012</td>
<td>The loneliness questionnaire-short version: an evaluation of Grade 2-12 &amp; 6-18 years</td>
<td>Grade 2-12</td>
<td>12722</td>
<td>Reverse-worded items= .73</td>
<td>English</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Author(s)</td>
<td>Year</td>
<td>Design</td>
<td>Grade</td>
<td>Sample Size</td>
<td>Age Range</td>
<td>Item</td>
<td>Language</td>
<td>Invariance</td>
<td>Notes</td>
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<tr>
<td>Ritchwood, Ebesutani, Chin, &amp; Young</td>
<td>2017</td>
<td>The loneliness questionnaire: establishing measurement invariance across ethnic groups</td>
<td>Grade 2-12</td>
<td>12344</td>
<td>6-18 years</td>
<td>24</td>
<td>5</td>
<td>English</td>
<td>African American sample = .85</td>
</tr>
<tr>
<td>Parker &amp; Asher</td>
<td>1993</td>
<td>Friendship and friendship quality in middle childhood: links with peer group acceptance and feelings of loneliness and social dissatisfaction</td>
<td>Grade 3-5</td>
<td>881</td>
<td>7-10 years</td>
<td>Σ</td>
<td>6</td>
<td>English</td>
<td>.77</td>
</tr>
<tr>
<td>Ladd, Kochenderfer, &amp; Coleman</td>
<td>1996</td>
<td>Friendship quality as a predictor of young children’s early school adjustment</td>
<td>Average age = 5.61 years</td>
<td>82</td>
<td></td>
<td>3</td>
<td>“no”, “sometimes”, “yes”</td>
<td>English</td>
<td>Autumn = .75</td>
</tr>
<tr>
<td>Study</td>
<td>Year</td>
<td>Design</td>
<td>Participants</td>
<td>School Adjustment</td>
<td>Measures</td>
<td>Language</td>
<td>Winter</td>
<td>Spring</td>
<td>Notes</td>
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<tr>
<td>Ladd, Kochenderfer, &amp; Coleman</td>
<td>1997</td>
<td>Classroom peer acceptance, friendship, and victimization: distinct systems that contribute uniquely to children’s school adjustment.</td>
<td>Average age= 5:6 years</td>
<td>200</td>
<td>5</td>
<td>3</td>
<td>English</td>
<td>Autumn= .75</td>
<td>Spring= .78</td>
</tr>
<tr>
<td>Rotenburg, McDougall, Boulton, Vaillaincourt, Fox, &amp; Hymel</td>
<td>2004</td>
<td>Cross-sectional and longitudinal relations among peer-reported trustworthiness, social relationships, and psychological adjustment in children and early adolescents from the United Kingdom and Canada</td>
<td>Mean age= 9:9</td>
<td>Time 1= 505</td>
<td>4</td>
<td>Σ</td>
<td>Additional item= “I have no one to talk to”</td>
<td>Time 2= 475</td>
<td>.87</td>
</tr>
</tbody>
</table>

Notes: β: data not present; δ: 5 years, 3 months; θ: 7-10 years; η: see development paper response categories; Σ: Items included (1) I feel alone, (2) I feel left out, (3) I am lonely at school; λ: 3 items directly referring to loneliness, plus (4) Are you sad and alone at school? (5) Is school a lonely place for you?
Reliability and Validity

Subsequent psychometric studies using the LACA included samples of children and adolescents between grades 5 and 12 (ages 10-18 years), conducted between 1987 and 2020. Each used 4-part response categories scales, and either 36 or 48 items; those studies that used the 36 items dropped the L-PART (parent loneliness) subscale. The UCLA, the most widely adapted measure in subsequent studies, least often used with children, included 20, 8-, 6- and 4-item adaptations in psychometric studies between 1978 and 2020, with children and adolescents aged between 11- and 18-years. Studies with the CLS often used younger samples, between 5 and 13 years of age. In its original 24-item form, between three and five response categories were commonly used, prior to extraction of “pure” items (Ladd et al., 1996). Four papers implementing “pure” loneliness items from the CLS with participants aged between five and 11 years, presented inconsistent item numbers, and largely insufficient Cronbach’s alphas, ranging from .75 to .87 (Ladd et al., 1996; Ladd et al., 1997; Parker & Asher, 1993; Rotenberg et al., 2004). Papers included between three and five response categories, with one paper omitting that detail (Ladd et al., 1996).

Although broadly similar, “pure” loneliness items were not consistent across papers, with both 5-item measures referring to “three items relating to loneliness and an additional two semantically related items”, without clear explanation (Ladd et al., 1996; Ladd et al., 1997).

A Cronbach’s alpha of 0.8 or above was considered an acceptable rating of internal consistency, though a higher alpha does not directly illustrate greater internal consistency, as, if an alpha is too high, perhaps some items are measuring the same thing, in a different form. The largest discrepancy in alphas using the LACA was in the parental relationships subscale (L-PART; alphas between .81 and .93), suggesting difficulties in defining this type of loneliness. The original 20-item UCLA appears the most internally consistent version (between .71 and .96), though an alpha of .96
could suggest some unnecessary items. Contrarily, the lowest alpha was presented for the 4-item UCLA measure (.31) (Wilson et al., 1992) suggesting decreased reliability following item reduction. Lower alphas were further demonstrated through sample comparisons with populations deviating from the development sample (Hispanic ethnicity and those diagnosed with Attention Deficit Hyperactivity Disorder (ADHD), providing evidence of reduced reliability with populations other than young adults at university, who the scale was developed with. With the CLS, lower Cronbach’s alphas (.79/.76) were present in the studies using younger participants, highlighting potential problems with the measure often used with early-primary school aged children (youngest 5.3 years).

Both the CLS and UCLA development papers presented higher internal consistency estimates compared with subsequent studies. That raises questions about their generalizability across diverse child and adolescent samples. Studies with “pure” loneliness items were included in the review and included samples of children aged between 5 and 11 years. Only one demonstrated an acceptable Cronbach’s alpha value with children aged between 9 and 11 years (0.87) (Rotenberg et al., 2004).

Omitted data make mean score comparisons inconsistent, although the UCLA study presented equal scores for male and female samples, 40.34 (7.62), using the 20-item measure (Wilson et al., 1992). Mean and SD variations across different age and nationality sub-groups in the CLS were present in subsequent studies. Goossens and Beyers (2002) demonstrated intercorrelations/concurrent validity between the LACA peer related loneliness subscale and the CLS, though none of the development papers explicitly explored the effects of culture or measurement invariance upon measure completion.
Discussion

The current review examined development processes and subsequent reliability and validity testing of the three most widely used loneliness measures for youth: the CLS, UCLA and LACA. These measures were developed some time ago and when considered in relation to recent standards for measure development, it is clear that each omitted key processes, including interviews with children and adolescents, exploration of population variance, and comparisons with suitably related variables. Subsequent studies present scale adaptations with reduced reliability, and there is once more minimal investigation of the effects of culture. Absent also is exploration of concurrent validity. Inconsistencies are evident in research outlines, including descriptions of sample ages, response options, and item selection. In a time of increased focus and understanding of the impact of loneliness on youth, an appropriate measure for exploring the contemporary experience of loneliness among youth is required.

Despite strengths in psychometric development across the three measures, qualitative exploration of loneliness experiences with target populations is absent (Carpenter, 2018; Kapuscinski & Masters, 2010). None of the measures were developed from interviews with youth, suggesting that their views of the loneliness experience did not inform the measures. Partial support for four latent constructs of loneliness (peer-related loneliness, family-related loneliness, aversion to being alone and affinity for being alone), across the LACA and CLS has been suggested, with social loneliness best measured by the CLS and the peer-related subscale of the LACA (Goossens & Beyers, 2002). Prior to generation of these now well-established scales, it was perhaps difficult to accurately conclude their concurrent validity. However, the current literature review suggests that development procedures were incomplete, and subsequent use of scale items and response categories has been inconsistent. Therefore, the requirement for interviews to be
conducted with youth, to support increased understanding and foundation establishing concurrent validity for each of the scales moving forward, is highlighted.

“Pure” loneliness measures (of the CLS) sought to further extract loneliness from close constructs to support specific intervention. However, that measure is narrowly explored and, to date, inconsistently administered (Ladd et al., 1996; Parker & Asher, 1993; Rotenberg et al., 2004).

Development samples differed from target populations for the measures, potentially reducing validity and reliability (Spector, 1992), as score comparisons are not with demographically similar individuals. If the age range of respondents in subsequent papers is expanded, construct validity is questionable as loneliness is experienced differently across development (Qualter et al., 2015). The lack of cross-cultural perspectives (ONS, 2020) significantly undermines the generalizability of the measures. These issues present challenges for those seeking to explore loneliness in diverse groups of children and adolescents. Future research should consider the possible impact of virtual interactions and friendship upon feelings of loneliness, and subsequently during measure completion and item understanding, particularly following the recent impact on youth mental health following the Covid-19 pandemic (Singh et al., 2020). Additionally, further consideration of a diverse development sample, matching the age of proposed audience for the measure, in addition to consideration cross-cultural validity and measurement invariance are required to support the use of these measures with present youth populations.

Since development, scale adaptations have been subject to inconsistent reliability and validity testing, with varied use of items and category responses. Test users may choose loneliness measurements by generalizing internal consistency coefficients from original scales, but, if concept development is flawed, then adapted scales have issues of inaccuracy because they are based on inaccurate concepts. Three items taken from the UCLA are currently recommended by the ONS and
UK government (The Office for National Statistics, 2018), as the best measure of loneliness in youth following item revision and qualitative testing for ease and interpretation with young people ages 10 to 15 years. However, the current review has highlighted this was not the intended audience, and exploration of reliability and validity was absent, and so encouraging wider use of a similarly adapted scale, perhaps also in other countries, is founded on incomplete evidence.

The “pure” loneliness subscale of the CLS, distinct from social dissatisfaction, demonstrated confusion and inconsistent item selection, with a lack of detail being unsupportive of replication (Russell et al., 1980; Turbek et al., 2016). The current review has highlighted, that the CLS appears most widely used with younger children. Practitioners keen to explore loneliness in youth, should combine quantitative measures of loneliness with qualitative, tools and knowledge of individuals to support a holistic picture and understanding grounded in the conceptualization of loneliness in youth. Consideration of age, which scale version is most suitable and the resulting psychometrics, along with the subsequent interventions that may be selected because of loneliness scores is also pertinent for practitioners.

Limitations and Future Directions

The current review used robust review processes such as inter-rater agreement and collaborative development of the critical appraisal checklist. However, this tool was developed specifically for this project and further work to refine tools for the evaluation of development measures is warranted. Our findings also identified the need for an updated approach to measuring loneliness in youth, one that addresses the key steps in measure development. Incorporating the views of children and adolescents, and a more careful consideration of the effects of age and culture on how items are understood, and how loneliness is conceptualized, are particularly important to consider. Exploration of cut-offs is also needed if any measure is to be used for
screening purposes. School practitioners should exercise caution when choosing a suitable tool, mindful of the highlighted issues during development and subsequent adaptations. To build on quantitative measures of loneliness, further exploration of youth understanding and views of loneliness, supported by well-established measures, could support adaptation of such, bringing them in line with contemporary conceptualizations of loneliness, suitable for diverse samples.

Conclusions

The LACA, UCLA, and CLS, were insufficiently developed for use with children and adolescents, with additional gaps in our understanding of responses across diverse populations. High quality, robust measures of loneliness are required with clear concept constructs, grounded in qualitative exploration of youth loneliness experiences. Further exploration of reliability, validity, and generalisability of the measures for different populations is required, to support intervention evaluation and screening uses of the measures.
References


https://link.springer.com/content/pdf/10.1023%2FB%3ACHUD.0000014999.16111.2


https://doi.org/10.1007/s10826-015-0336-y


https://doi.org/10.1002/nur.4770130108


https://doi.org/10.1017/s0954579420001005


https://doi.org/10.1016/0191-8869(88)90024-4


Primary-school aged children’s understanding and experiences of loneliness: A qualitative enquiry.

Prepared for in accordance with author guidelines for submission to the International Pastoral Care in Education (Appendix 27)
Abstract

Loneliness in childhood and adolescence is currently measured using questionnaires and checklists. The most used questionnaires for youth are psychometrically limited, partly due to the absence of the young person’s voice from the measurement development process. Given this gap in the literature, the current study explored primary-school aged children’s understanding and experiences of loneliness, providing new information about the experience of loneliness in childhood to better inform conceptualisation and measurement of loneliness in children. Interviews took place during the COVID pandemic and were conducted with six Year 4 and 5 children (aged 8-10 years) and analysed using hybrid thematic analysis. Findings fit with existing conceptualisations of social and emotional loneliness and provide novel perspectives on solutions, the importance of play, and children’s perceptions of the adult experience. Directions for future research, and the impact after COVID are discussed.

Keywords: children, primary, loneliness, childhood, experiences, views
Introduction

In light of the Covid-19 pandemic and the associated lockdowns and social distancing rules, loneliness levels have increased (Groarke et al., 2020): young people are reporting more frequent loneliness, with negative impacts upon wellbeing and mental health (Liang et al., 2020; Millar et al., 2020; Office for National Statistics, 2021), with a specific increase in depressive symptoms in children aged 7-11 years during lockdown (Bignardi et al., 2020). Sources of loneliness change across the lifespan, and are often linked with belonging needs (Parkhurst & Hopmeyer, 1999; Qualter et al., 2015). In early childhood, sources of loneliness include the lack of a play partner and victimisation, whilst in middle and late childhood, such feelings emerge from peer rejection and a lack of close friends (Qualter et al., 2015). Recent data from the UK charity phone service, Childline shows adolescent descriptions of loneliness comprise intense emotions related to managing peer relationships, lacking close social connections, poor family relationships, and low self-worth and trust (Verity et al., 2021). Those feelings lead to barriers seeking support and the tendency to perceive individual experiences as abnormal. The current study provides a unique perspective on the experience of loneliness because data were collected during the Covid-19 pandemic, with school closures affecting approximately 1.2 billion children worldwide (UNESCO, 2020) and lockdowns and social distancing rules limiting social interaction with friends and family. To date, there are few studies on loneliness that have gathered child voice qualitatively. Instead, researchers often use quantitative loneliness measures, which have been highlighted as unsuitable for children and adolescents (Cole et al., 2021). The current study explores childhood loneliness experiences through interviews with participants in middle childhood, during the COVID-19 pandemic.
Understanding Loneliness

Current definitions of loneliness in the academic literature are often adult-centred and conclude that a discrepancy between an individual’s preferred and actual social relations leads to the experience of feeling alone, and feelings of distress, even when surrounded by family or friends (Perlman & Peplau, 1984; Weiss, 1973). There is a clear distinction between social and emotional loneliness: “social loneliness” is defined as “lacking intimate and sincere relationships”, and “emotional loneliness”, a “lack of trust in someone special or precious” (Çavdar et al., 2015; Mellor & Edelmann, 1988; Weiss, 1973).

Previous qualitative exploration of middle-childhood (typically age 6 to 12 years) concluded children as young as age five years have an understanding of loneliness (Cassidy & Asher, 1992), and understand loneliness as a situational experience (Demos, 1974); causes include exclusion, rejection and being ignored (Asher et al., 1984). Further research posits childhood loneliness arises from poor peer acceptance, lack of friends, and an absence of relationships meeting social needs (Parker & Asher, 1993). However, lacking is an in-depth understanding of children’s perceptions of loneliness through qualitative methods. Social contact is important for brain development, self-concept construction, and wellbeing (Loades et al., 2020; Orben et al., 2020), but those experiences that have been limited by social distancing restrictions during the Covid-19 pandemic. Whilst video contact with family and friends have been noted as supportive of positive emotional wellbeing during the Covid-19 pandemic (Waite & Creswell, 2020), the cost of computers and internet connectivity for some groups has increased pre-existing inequity (Silverman et al., 2020), which was linked directly to loneliness among youth pre-COVID-19 (Batsleer & Duggan, 2020).

Belonging is suggested as a human need defined by positive, stable interpersonal relationships arising from the enduring belief that oneself is value and cared for and is suggested to
be a need (Baumeister & Leary, 1995; Lambert et al, 2013). This links closely with descriptions of emotional loneliness. This suggestion is supported by the inclusion of belonging within Maslow’s (1943) hierarchy of needs. Research has demonstrated that strong feelings of belonging are associated with positive pupil outcomes (Abdelnoor, 2007), higher academic interest, motivation and engagement, and is particularly important through adolescence (Allen & Kern, 2017; Freeman, Anderman & Jensen, 2007; Osterman 2016).

**Effects of loneliness**

Childhood loneliness is often a consequence of peer rejection (Hutcherson & Epkins, 2009) and reduced validation and caring among friends (Parker & Asher, 1993) with sex differences not apparent in childhood (Koenig & Abrams, 1999). Social and emotional impacts include reduced positive attitudes towards others (Henwood & Solano, 1994), increased likelihood of adolescent depressive symptoms (Qualter et al., 2010), and social anxiety in pre-adolescent girls (Stednitz & Epkins, 2006) and young children (Coplan et al., 2007). Poor health outcomes across time (Cacioppo & Hawkley, 2003; Caspi et al., 2006; Qualter et al., 2015), including impaired sleep and daytime dysfunction (Eccles & Qualter, 2020; Harris et al., 2013; Hawkley et al., 2010) and reduced physical activity (Hawkley et al., 2009), have also been highlighted as negative outcomes of loneliness. Childhood loneliness is further associated with externalising problems, social withdrawal, and poor academic achievement (Asher et al., 1984; Cassidy & Asher, 1992), with more accepted children experiencing a sense of belongingness and relatedness, leading to increased motivation and engagement in learning with peers (Ladd et al., 1997).

**Measuring loneliness**

A recent review highlighted issues with the questionnaires most often used to measure loneliness among children and adolescents. Specifically, the review noted that key stages of
measure development processes were absent from the creation procedures (Cole et al., 2021).

Moreover, it has been argued that often loneliness is informed by self-report measures and, due to children’s limited linguistic abilities, they may not express themselves in ways in line with adult interpretations or expression (Rotenberg & Hymel, 2009). Research exploring loneliness through interviews has, to date, focused largely on older adults, with little research employing similar methods to explore loneliness conceptualisations in youth (Cohen-Mansfield et al., 2016; Kharicha et al., 2018). There is a need for research to consider subjective representations of childhood loneliness (Asher & Paquette, 2003) to gain a holistic perspective of child views first hand to tailor support, and raise awareness of how it is experienced in childhood.

**The role of school practitioners in loneliness**

Schools play a central role in supporting the mental health and wellbeing of children and adolescents (Department of Education, 2018) and previous research has stated the importance and effectiveness of teachers supporting children who report loneliness (Page, 1991). Caring and supportive relationships between teachers and pupils are said to reduce school dissatisfaction, and lead to higher school bonds (Murray & Greenberg, 2000), whilst a warm and supportive teacher presence represents a secure base from which material and emotional support can alleviate emotional loneliness (Galanaki, 2004). Support from school staff has been summarised to include intervention through listening, identification and understanding (Krause-Parello, 2008), helping, and bringing together those in need of support in the school climate (Ryan et al., 1998), with children reportedly having an understanding of strategies teachers can and should use to deal with their loneliness (Galanaki, 2004). Teachers trivialising loneliness was reported recently as a big barrier to seeking help with loneliness in school (Verity et al., 2021)
Observation guidelines for professionals to determine child loneliness (Bullock, 1993) include whether the child avoids others, lacks social skills, and whether the loneliness appears consistent across time. Despite this, many teachers report feeling ineffective in responding to loneliness and feel they would benefit from more training (Page, 1991). Whilst no recent research has since refuted or supported those proposals, the absence of explicit training in the UK, means it is unlikely that this has changed. Without an understanding of loneliness from the child’s perspective, or practitioner awareness of how to talk to children about school-based loneliness, it is difficult for school practitioners to provide suitable and targeted intervention to reduce feelings of loneliness, a gap the current study explores. Though existing literature makes links between teacher relations, school bonding and the social environment with loneliness, a more contextualised understanding of the impact of eco-systemic factors upon children is required.

Research with children

It has been suggested that theory related to child development contains assumptions and hypotheses (Dahl, 2017), and so by gathering child voice, we can reduce the impact of such assumptions upon theory and in the present study, the way in which childhood loneliness is conceptualised. Key considerations for researchers undertaking studies with children are that rich data can be generated (Thomas & O’Kane, 1998) when there is space for children to express themselves clearly and they are supported by research processes that incorporate and recognise child communication and facilitate participation (Mauthner, 1997). Furthermore, researchers can position themselves as people who want to find out what children think about things (Farquhar, 1990) in order to encourage openness.
The aim of the study was to investigate primary school-aged children’s understanding and experiences of loneliness in a unique context of a pandemic when feelings of disconnection were salient.

**Materials and Methods**

**Design**

Data gathering was conducted in two phases: an introductory focus group, followed by semi-structured interviews. The initial focus group, in December 2019, included six Year 4 children (aged 8-9 years), to gather child views about the best methods for interviewing about loneliness. Open questions explored their initial understanding of loneliness, and they were presented with a range of data collection tools suggested as suitable for child research (Mauthner, 1997; Mayall, 1994). Data from this focus group were used to inform the semi-structured interview schedule and activities for the second phase of the research, which were then trialled in the first interview and included in the data set. Considering the Covid-19 pandemic, the researcher added an opening dialogue in the interviews around our recent experiences of social isolation, although specific adaptations were not made to the interview schedule.

Interviews took place in June and September 2020 and were conducted virtually using a secure video platform with six children, supported by a school practitioner who knew the children well. Through a mixture of direct questioning, focused on what loneliness meant, what role friendship played, what being lonely feels like and what children do when they feel lonely. Through card sorting, a rating scale and “quick fire questions”, the researcher supported engagement and motivation, and triangulated children’s understanding and responses. The researchers analysed answers to interview schedule questions for each participant as part of the analysis.
Participants

Participants were recruited from two primary schools in socio-economically diverse communities in the North-West of England. Six randomly selected Y4 pupils (aged 8 and 9) participated in the first part of the study. Three Y5 pupils (aged 9 and 10) from the same school and three Y4 pupils from another school took part in the second part of the study. The sample was mixed gender with two girls, and four boys. In the focus group, two participants had English as an Additional Language (EAL) and one participant had Special Educational Needs (SEN), whilst one participant was EAL and two SEN amongst interview participants.

Data analysis

The researcher used a hybrid thematic analysis method to analyse interview transcripts (Fereday & Muir-Cochrane, 2006; Roberts et al., 2019; Swain, 2018). The first author generated a deductive a priori codebook (Crabtree & Miller, 1992), and discussed it with the second author to check for accuracy. A priori codes were drawn from existing loneliness literature and from themes incorporated into established loneliness measures. Following this, the first researcher coded each of the transcripts, grouping codes with deductive themes, and generating inductive codes representing novel ideas emerging from the data. Discussions between authors supported a shared understanding of the data and reliability of codes and overarching themes prior to generation of a thematic map (figure 2).

Dual Role of the researcher

The researcher remained mindful of the possible impact of her dual roles of TEP and researcher within sample schools. This was particularly true in the second school to be recruited, which was a primary school in the researcher’s cluster on her training placement. To support clear distinction between both roles, the researcher introduced herself to participants and staff as a
“student” like the prospective participants, who attended “university instead of school”. The researcher emailed schools from her university email address, with a signature that identified her as a student from the University of Manchester and visited and worked with schools outside of placement days. Considerations were also made regarding participant selection, with none being children or families with which the researcher had had previous involvement or planned future involvement through casework.

Findings

Using hybrid thematic analysis, the data suggests that some themes link closely with the current loneliness literature; some new themes were also evident. A priori codes, drawn from the literature, were Emotional Loneliness, Social Loneliness and Positively Experienced Loneliness. Inductive themes from the data, included Solutions, Recognising Loneliness and Adult’s Experience differs from Children’s.
Figure 2:

Thematic Map of interview data

Social Loneliness
- Alone
  - Physical
  - Positive
  - Experience

Emotional Loneliness
- Understanding/ Knowing you
  - Presence
  - Absence

- Having someone close
  - Presence
  - Absence

Positively Experienced Loneliness

Recognising Loneliness
- Appearance
- Feels like

Solutions
- Practical solutions
- The 'norm'
- Barriers to support

Adult Experience
- Differs from Child

A priori themes/ Inductive themes/ Subthemes/ Codes
Social Loneliness

The theme of social loneliness, largely defined as the absence of a social network, strongly emerged from the interview data of the present research. Subthemes were Alone, Friendship, Togetherness, and Play.

The subtheme alone was discussed as physical aloneness, the experience of being alone, and was associated with negative feelings. Participants referred to being “left out” (Participant 3; P3), “left by themselves” [P4], and having “no one to do stuff with” [P2]. References to feeling “not included” [P6], and “feeling ignored” [P3] were also prominent when others “stay away” [P4]. Participants clearly outlined the experience of being alone as feeling “empty” [P1], and “socially distancing” [P4], associating the experience with being told “no” [P5] and incorporating a relatively new term into descriptions. Despite that, participants acknowledged positively experienced loneliness, as being a choice or preference, and “wanting to be left by yourself” [P4].

Friendship appeared strongly linked with social loneliness. Friends were defined as someone who “cheers you up” [P4], “cares” [P5], and someone to “play games” with [P2]. Participants referred to friends as being someone to “rely on” [P3], who demonstrates “loyalty” [P2] and “respect” [P5]. Friendship appeared to act as a buffer against loneliness, with explicit reference to reduced chances of loneliness in a “big group of friends” [P2], as there is always “someone to play” [P2] with and always “one friend” [P6]. Being part of a group of friends also appeared important, seen as a protective factor, or causing negative feelings if “friends have other friends” [P4] and group connection is reduced. The subtheme of togetherness was outlined as combative for loneliness, through shared experiences and activities and “having lots of fun together” [P2]. Though this was referred to within the
theme of friendship, togetherness appeared to be viewed as a specific buffer against feelings of loneliness. This included being with other children and was outlined as the opposite of being alone.

Play was a central concept in the data, referred to in both positive and negative terms. Positive references to play included time spent playing “board games” [P2], being linked with reduced loneliness. Play was viewed as time spent getting “used to what they like to do” [P4] and “make up a game with the same things” [P1], a shared time or activity with another person with focus on a specific activity. Play was viewed by participants as a specific tool for reducing or overcoming loneliness. In contrast, negative references to play often referred to having “nobody to play with” [P1], or “not being allowed to play” [P3] if there are too many people, or friends “play with someone else you’re alone” [P2].

Emotional Loneliness

The a priori theme of emotional loneliness is evident in the data, though less explicitly. Subthemes included someone close and understanding/knowing you, both discussed as a presence and absence of such a person.

Participants referred indirectly to the presence of someone close, both adult and peer, as being someone who asks if you are okay and recognises loneliness. With reference to adults, participants referenced talking as a form of support, “have a little chat with them” [P4]. Peers were more strongly linked with the experience of shared activity. The absence of someone close was described as feeling as if “no one’s there to keep you safe” [P3] or “protect you” [P3] and feeling “in danger” [P5].
The subtheme *understanding or knowing you* was described as the presence of someone, “when you’re like sad, they just care about it” [P6]; and on a basic level, it was having a “person who you know” [P6]. Participants drew on the experience of *being known and understood* as having “someone that makes you laugh” [P4] and feeling “happy” [P6]. An absence of such a person was outlined as feeling like “no one would have a clue what you’re talking about” [P6] and a mismatch between knowing someone and being interested could, “cause some trouble” [P5].

**Positively Experienced Loneliness**

An a priori theme, *positively experienced loneliness* was evident in the data, with participants recognising nuance in welcome and unwelcome aloneness. Participants recognised that sometimes children “want to be alone” [P1] to “do the stuff we want to do...yourself” [P2]. The choice to be alone was also linked with thinking “about what’s happening” [P2], suggesting understanding of individual needs during the school day can fluctuate and do not always require support. Recognition of some peers finding friendships difficult was also evident, with participants stating that sometimes “people annoy” [P5] peers, and some “don’t like to be with other people” [P4]. The data suggests an understanding of the need for an individualised approach to loneliness and that loneliness is experienced with variation, with clear differences in individual needs for time alone.

**Solutions**

The theme of *solutions* for loneliness emerged inductively from the data, and included the subthemes *practical solutions, adult support, barriers to support, and the “norm”*. 
Participants referred explicitly to practical solutions that could be undertaken to overcome or manage loneliness. Participants shared they could “ask again” [P5] or “ask another person” [P5] if they were lonely themselves and wanted to be invited to play, or “ask if they want to play” when observing a lonely peer. Practical solutions included telling a lonely person “I’m your friend” [P6] and were described as simple, quick, and often related to play. Solutions did not appear differentiated for social and emotional loneliness, but were grouped together as being accessible, linked with playing and being part of a group, and some exploration of adults providing support when loneliness was more long lasting or enduring.

Adult support was referred to explicitly and appeared to be viewed as a separate source of support from peer-to-peer solutions. For example, “teachers, they still help you” or “might ask someone to come over” and play [P2]. Although some solutions noted here were similarly related to those offered for peers, they were adult initiated and arose from adult awareness of individuals and children seeking support being to “tell a teacher” [P4]. Participants outlined unhelpful adult support, as being told “you’ll be fine” [P4] and to “move on” [P4], suggesting a lack of understanding among teachers and parents.

Barriers to support included being “nervous” [P2] or “afraid” [P4] to ask for help, or, if peers “don’t really know what to do” [P4], perhaps linking once more with feeling misunderstood. A reluctance to acknowledge loneliness to others “won’t say ‘I’m lonely” [P1] or a lack of understanding, others “don’t know how it feels” [P6], were also described as barriers to getting and initiating support.
Recognising loneliness

Participants referred to the ways they could *recognise loneliness*, both in other people, the subtheme *appearance*, and in the self, under subtheme *feels like*. Participants referred to how loneliness looks and sometimes being “hard to spot” [P5], with different signals in the playground and classroom. Often lonely children “act like nothing’s happened” [P4] or “cross your hands” [P1] and become “huddled” over” [P3]. Participants described how loneliness feels, referring to different periods of time, for example, “can be long” [P4] and it can be “…like days, or just like a day” [P4], with no shared understanding of longevity.

Loneliness appeared to be viewed as a deviation from the “norm”, and a temporary state. For example, “usually have someone to play with” [P5], and “get out of the phase” [P4].

Adult experiences differ from child

The inductive theme, *adult experience*, in comparison to that of childhood loneliness was discussed, within the subthemes, the *adult experience* and *adults understanding children*.

Some children described the *adult experience* of loneliness as being distinctly different from their own, with some suggesting it was difficult to make comparisons as they were not adults yet. Participants suggested adults distract themselves and “do jobs” [P5] to “stop thinking about it” [P5]; others suggested “adults…pretend…that they’re okay” [P1].

The subtheme *adults understanding children* suggests children perceive adult understanding of their loneliness experiences to encompass “somebody new to be with” [P5] and if you’ve “not been lonely, then you don’t know what it feels like” [P5]. The emotional component of adult loneliness was described though to a lesser degree across participants, “probably be sad” [P2] and “…grow up, then you might have a mental problem” [P2].
Discussion

This exploratory study examined primary-aged children’s understanding and experiences of loneliness using qualitative methods and hybrid thematic analysis. The data supports existing ideas about childhood loneliness collected through quantitative methods, but also offers new information. Children’s understanding of social loneliness linked most strongly with the literature, with descriptions of aloneness and group inclusion proving central. However, friendship and play were fundamental to children’s understanding of loneliness, and they were seen as buffers against loneliness. Emotional loneliness was also highlighted, with reference to someone close, and the importance of feeling understood.

Solutions, recognising loneliness, and ideas about the differential adult experience of loneliness, offered new insights. The current data demonstrates children’s ability to reflect richly on the childhood experience of loneliness, confirming earlier work (Galanaki, 2004), and highlights that children’s views of friendship in middle childhood as requiring allies, with peer group rejection being a key source of loneliness (Qualter et al., 2015).

Social Loneliness

Often viewed as an absence of meaningful and sincere relationships, and linked with a lack of integration in social networks providing a sense of connection (Weiss, 1973), social loneliness was central in the data. Children referenced the absence of peers or feeling alone and left out to explain the feeling of social loneliness. This absence was often described negatively, with language such as isolation and separation, supporting previous research (Liepins & Cline, 2011). Friendship and togetherness were viewed as being the opposite of
this, further evidencing that largely, children have little desire to be alone (Parkhurst & Hopmeyer, 1999). Research has suggested difficulty distinguishing between aloneness and loneliness in childhood, (Cassidy & Asher, 1992), although this has since been challenged, particularly in later childhood (Hymel et al., 1999; Parker & Asher, 1993). The current data provides evidence that children can differentiate between these (Hymel et al., 1999), although children discussed loneliness being largely overcome by having one key peer (Cohn et al., 1985) perhaps providing further evidence of developmental differences in loneliness conceptualisation (Liepins & Cline, 2011). Previous research found children in grades 3-8 (age 7-13 years) understand psychological forms of distancing such as conflict, loyalty, inclusion in the group, and being ignored (Hymel et al., 1999), a suggestion evident in the current study. Descriptions of the experience of loneliness, and reference to “difference” in relation to loneliness (Liepins & Cline, 2011) was not viewed negatively, but to show variance in preferences for being alone. Attitudes towards aloneness are important when considering loneliness and coping (Maes et al., 2016), and linked with cognitive-personality, for example.

In the current study, children drew clearly on their experiences of friendship to define a friend, often including reference to spending time together, having fun, and being part of a group. While some loneliness measures focus upon friendship (Marcoen et al., 1987), asking about play partners and feeling left out, omitted is the central importance of togetherness and its role in buffering against loneliness present in the current study (Stocker, 1994). Previous suggestions of a desire for collaborative play and shared glee in middle childhood (Gottman & Parker, 1986), along with the desire for help and someone to talk to, previously evidenced in adolescence (Parkhurst & Hopmeyer, 1999), are supported.
Play was central in the children’s discussions, supporting previous conclusions about the impact of unsatisfactory social interactions or not being able to play, and the role of group interaction, humiliation and unavailable allies upon the likelihood of experiencing loneliness (Parkhurst & Hopmeyer, 1999). Discussed was the impact of peer exclusion and friends choosing to play with someone else. Descriptions of play supported previous interviews with children in middle childhood, with comments about a sense of “fun” and feeling “included”, and negative emotions occurring when “left out” (Cassidy & Asher, 1992; Howard et al., 2017). Play literature has highlighted links between play and positive emotions, shared experiences, and subsequent feelings of resilience in children (Goldstein & Brooks, 2005; Siraj-Blatchford, 2009), and our findings support that. A focus during middle childhood on shared norms and personal preferences through structured games is also reflected in the current study, along with navigating interaction with a large number of peers (Fink & Hughes, 2019). In the current study, play seemed a protective buffer against loneliness, which is not captured through a single score calculated on a loneliness measure (Liepins & Cline, 2011). Although there is no evidence of number of friends being related directly to loneliness (Asher & Paquette, 2003), current data implied that with an increased number of friends, the likelihood of loneliness is reduced in middle childhood, highlighting the importance of the peer group.

**Emotional Loneliness**

Emotional loneliness, understood as a “lack of trust in someone special or precious” and the affective state of feeling isolated (Çavdar et al., 2015; Weiss, 1973), was encompassed by not being understood or listened to, and feelings of safety, supporting previous conclusions that the quality of friendships impacts loneliness (Qualter & Munn,
2005), suggesting that attempts to understand loneliness through the quantity of friendships in loneliness measures, are insufficient (Asher et al., 1984). Previous research suggests that the presence of one close friendship cannot completely balance the negative impact of poor group relationships, and the same was true in reverse, however adaptive functioning in either peer context could lessen the negative effects of poor functioning in the other (Hoza et al., 2000). Similar conclusions were not evident in the present data, with some children suggesting that one good friend could reduce loneliness; that said, a focus across the data was the importance of being included in the peer group context. Previously, older children have demonstrated a developed understanding of others’ perspectives important for conflict negotiation, intimacy, and shared preferences (Fink & Hughes, 2019), although it appears from the current data that younger children in middle childhood also have some understanding of that.

The possible role of belonging in relation to emotional loneliness is also an important consideration, with the literature referring to school belonging incorporating closely related language; attachment, engagement, and connectedness (Barber & Schluterman, 2008; Brown & Evans, 2002; O’Brennan & Furlong, 2010), and supportive peers fostering acceptance (Reschly et al., 2008). Contrarily, negative peer experiences cause stress and social anxiety (Wang & Eccles, 2012). The present study provides support for a sense of belonging through positive peer relationships, reducing feelings of loneliness.

Interestingly, children did not reference parent related loneliness in the current study. That mirrors findings from in a recent study of adolescents (Verity et al., 2021). Such a finding in the current study was unexpected due to the age of the sample and the suggested reduced desire for autonomy and continued need for parental guidance.
(Marcoen et al., 1987). A possible explanation for such a finding is the fact that the interviews took place in school and may have predisposed the young participants to focus on school related loneliness.

**Positively experienced loneliness**

A concept previously highlighted by Marcoen & Brumagne (1985), positively experienced loneliness was understood as choosing aloneness and relying on individual resources to cope (Marcoen et al., 1987). Research often refers to the negative psychological experiences related to loneliness, making distinctions between loneliness and depression and belonging (Weeks & Asher, 2012), although the concept of choosing to be alone and experiencing this positively, is a novel contribution to childhood conceptualisations.

**Recognising and supporting loneliness**

Previous research has demonstrated that children who were both lonely and rejected by peers wander around the playground repeatedly attempting to initiate interactions following failure (Qualter & Munn, 2002), and that was reflected clearly in the present data. Referring to school-based loneliness, the participants suggested it looks different in the classroom and playground; they did not extend their discussion to talk about loneliness at home or in contexts external to the school environment. Perhaps that was due to the context of the research, with participants primed towards a school focus. Research has posited that treatment may be most effective if loneliness is conceptualised in terms of home and school, although the solutions offered in this research were rooted only in the school environment and can only be applied there (Solomon, 2000). Children recognised individual difference in the liking and need to spend time alone, and that universal support
for loneliness was rooted in playing and togetherness for everyone; that was despite the
literature emphasising the importance of matching the intervention to the individual (Eccles
& Qualter, 2020). Research has demonstrated that loneliness affects health outcomes
(Harris et al., 2013; Qualter et al., 2010) which some children acknowledged, demonstrating
awareness of the overwhelming sense of helplessness that has been shown to accompany
loneliness (Page et al., 1994).

Solutions were largely related to play, togetherness, and solving aloneness arising
from social isolation, with support being offered by adults and peers or self-initiated by the
lonely child. Children were solution-oriented, and well equipped to reduce their loneliness,
supporting previous research (Besevegis & Galanaki, 2010). Such findings suggest loneliness
is easily resolved for most children and is conceptualised as a transient experience. Current
interventions for childhood loneliness typically focus on social skills, social interaction, and
emotional skills, although, with youth, no one type of intervention has been shown to be
significantly more effective than another (Eccles & Qualter, 2020). In the current study, the
need for explicit social and emotional learning was not highlighted by the current data, but
children (1) outlined tenacity and motivation in requests to play and looking for peers to
play with, (2) wanted to solve loneliness independently, and (3) recognised their role in
including lonely children in games and taking collective responsibility. Thus, universal
approaches to facilitating play and friendships appear most important in middle childhood,
and teachers and education practitioners are encouraged to provide and support such
opportunities for children.
Adults provide support, and while children said that was often helpful, it was seen as less salient than support offered by peers, linking perhaps with perceptions of adults struggling to understand the childhood experience, or children believing the adult experience is different. Largely, adult support included encouraging play and togetherness; supporting recent research with adults (Verity et al., 2021), children highlighted how adults could often be dismissive of loneliness experiences, due to not experiencing loneliness themselves. Those findings highlight the importance of empathy and the ability of children to consider and spot a peer struggling and support them. While research has previously examined coping strategies in children, focusing on seeking contact, distraction, and cognitive restructuring (Besevegis & Galanaki, 2010), findings from the current study provide a novel understanding of the importance of peer support in preventing and alleviating childhood loneliness.

Barriers to support were both individual factors, such as difficulties asking for support or not sharing their feelings of loneliness, and collective factors including not being understood, thus linked with emotional loneliness. Loneliness was described as an undesirable, but normal, short term experience, supporting previous work (Asher & Paquette, 2003). The suggestion was that loneliness is a feeling that can be easily recovered from, and that children have internal resources to reduce loneliness and can use simple solutions, often related to peer contact. Therefore, following the reopening of schools post Covid-19, support for children should include safe spaces for peer interaction and connection, based on empathy and trust (Demkowicz et al., 2021).

Ideas about adult loneliness were mixed, with some suggestion that adults’ lives were different, and so, too, were solutions, highlighting an individual experience and
differences due to age, which are supported by the literature (Mund et al., 2020; Rokach, 2000). Loneliness in adults was not described in terms of friends and play, and reference to adults pretending was also insightful, presenting children’s view that adults develop coping strategies and masking techniques that make loneliness harder to spot.

Implications

The current study demonstrates the importance of asking children directly about their experiences and understanding of loneliness and provides a holistic understanding of the experience and subjective representations of children’s experiences. Questions were raised about approaches to intervention, the impact of small gestures of inclusion, and questions about what is required beyond universal support offered by peers and adults in school, suggesting that children often need support to join a group, with solutions related to play, and the awareness of peer difficulties helpful.

Collected during the Covid-19 pandemic, the current data offers a unique insight into children’s understanding of loneliness that may have been absent previously, many children may have experienced loneliness because of the related lockdown and social distancing rules. The benefits of play to development and emotional wellbeing for supporting a sense control (Bignardi et al., 2020; Office for National Statistics, 2021; Play England, 2020) are also highlighted, supporting the prioritisation of play and friendships following return to school (Carpenter & Carpenter, 2020), including opportunities to become reacquainted with friends (Mondragon et al., 2021), which will also support self-worth (Maunder & Monks, 2019). In the absence of the school environment, which plays a central role in peer and adult interaction, difficulty maintaining friendships and subsequent increased loneliness
during extended periods of school closures has been evident (Mondragon et al., 2020), so should be addressed as children return to school after the pandemic.

The time context of the present research perhaps led to an increased awareness and ability for participants to reflect first-hand experience on how loneliness feels, looks and can be supported, following prolonged periods of social isolation for many. This is evident in the use of Covid-19 related language “socially distant” in the data. Data was collected at two different time points. Initially, in the summer term of 2020 when schools remained closed to most pupils, and when government restrictions on mixing were beginning to reduce, and then in the Autumn term of 2020, when most pupils had returned to school and faced alterations to school environments to support social distancing, including changes to seating plans in classrooms, limited mixing across classes and playtime, and reductions in sharing of resources and access to some games and toys. These contexts perhaps enriched the data and supported participants to reflect on loneliness from different perspectives. It could be argued that as a result of this time contexts, the same research conducted a year earlier may have provided different results, perhaps different language, and a need for deeper reflection by participants about how loneliness is experiences in childhood. Due to the focus of the current research, it is not possible to reliably identify the direct impact the pandemic had upon the data, though additional research in future, with children who did not experience the pandemic, would support investigation of such.

For school practitioners, the current study offers guidance, re-establishes the importance of peer groups, and highlights their role in facilitating group inclusion. Primary-school aged children can understand and reflect upon the experience of loneliness and how it can be alleviated, in themselves and others, demonstrating the importance of gathering
data from children directly to support our understanding of the concept. It highlights ways
to discuss loneliness with children, and the importance of asking questions, to gain clear
descriptions of how loneliness feels and how it looks, calling attention to the importance of
being understood and of providing structured activities during unstructured times, to
promote a sense of community and collectiveness. Children appear internally motivated to
feel connected, and promoting friendship, play, and shared activities are simple but
supportive solutions for reducing loneliness and more of this could help children to feel less
lonely. Their insights offer new perspectives for teachers and practitioners wanting to
support children overcome loneliness.

Limitations
This exploratory qualitative study of children’s views of loneliness presents new
insights with some limitations, outlined in table 5.

Table 5

**Strengths and Limitations of the empirical study**

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Limitations</th>
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<tbody>
<tr>
<td>• Exploratory study offering qualitative insights and contributing to a gap in loneliness research</td>
<td>• Small sample of 6 children in North-West of England</td>
</tr>
<tr>
<td>• Conducted during Covid-19 pandemic, offering additional unique insights following likely recent experiences of social isolation</td>
<td>• Sample was not equally gender split (4 boys, 2 girls)</td>
</tr>
<tr>
<td>• Two schools in sample, increased from one prior to Covid-19.</td>
<td>• Sample schools were inclusive, emotionally aware contexts meaning participants may have been more able to share reflections or have had increased awareness of loneliness and</td>
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difference compared with children in less emotionally aware contexts

- Provides support for conducting research and interviews with children via virtual platforms to collect rich data when required

- Year 4 and 5 sample - limited aged range for exploratory study with additional research required.

- Contributes to literature gaps with child views on loneliness to support a review of quantitative measures - a gap identified in Paper 1

- The interview schedule was not trialled during the pandemic following its development

- Demonstrates that children can offer unique insights and rich perspectives on childhood experiences when given the opportunity to do so

- Uncertain about the possible impact of Covid-19 upon data
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Paper 3

The dissemination of evidence to professional practice
Introduction

This paper will consider the concepts of Evidence-Based Practice (EBP) and Practice-Based Evidence (PBE), along with dissemination strategies, with a view to supporting the effective dissemination of findings from Paper 1 and 2. Strategies for monitoring impact will also be outlined.

Section A: Evidence Based Practice and Practice Based Evidence

Evidence Based Practice

EBP is defined as “the integration of the best available research with clinical expertise in the context of patient characteristics, culture, and preferences” (American Psychological Association, 2006). The notion of EBP suggests the presence of accessible and coherent scientific evidence, which can be appropriately applied to support adoption, implementation, delivery and evaluation (Kratochwill & Shernoff, 2003).

Linking research and evidence is complex, and consideration of types, sources, quality and availability of research, is required (American Psychological Association, 2006; Frederickson, 2002). Within research, a traditional hierarchy of evidence exists, from
opinion to ‘gold standard” Randomised Control Trials (RCTs)(Fox, 2003; Slavin, 2013; see figure 3).

**Figure 3**

*Hierarchy of evidence (summarised from Slavin, 2002; Fox, 2003)*

- Systematic review of randomised controlled trials and meta-analyses
- Randomised controlled trials (RCTs)
- Cohort studies
- Case-control studies
- Cross-sectional studies
- Case series and case reports
- Opinion, anecdotes, editorials

However, it is suggested this creates assumptions about the nature of research science and knowledge to provide the “best available research”, with RCTs perhaps inappropriately relying on methodology to signal quality, and valuing rigour over meaning, with the need for a replacement model rather than abandonment (Gulliford, 2015; Petticrew, 2003).

Psychologists have a role in the development of EBP, improving economic efficiency and quality of care, and as practitioner-researchers, applying findings and making active and distinct contributions to the knowledge base (American Psychological Association, 2006; Birch et al., 2015; Fonagy et al., 2002). Educational Psychologists (EPs) must work with key stakeholders to support design, implementation, evaluation and dissemination of research activities and evidence-based research (HCPC, 2015, p. 24). This should occur in conjunction
with the application of approaches and interventions with demonstrable outcomes, as opposed to being based on weak or unverified evidence (Lilienfeld et al., 2012). Though difficulties occur in searching for precise actions to support effective integration of research evidence (Monsen & Kennedy, 2016).

Key issues include the representativeness of samples, the level at which results should influence practice, and the extent to which it is possible to alter practice following limited duration and breadth of application (American Psychological Association, 2006). Furthermore, despite research rigour, contradictions and inconsistencies may not be apparent prior to real world application and practitioner judgement, and so service user opinion and contextual factors may be obscured by a narrow conceptualisation of science in research (Argyris, 2004). Therefore, “evidence based practice in psychology is the integration of best available research with clinical experiences in context of patient characteristics, culture and preferences” (American Psychological Association, 2006; p.273).

**Practice-based evidence**

PBE acknowledges the macro (systemic) and micro (individual) factors (Kratochwill et al., 2012), contributing to the bidirectional relationship between research and practice (Weisz et al., 2005). PBE centres on three propositions, that is; the pursuit of knowledge should be a context-dependent process, research activity should accept difference, but accept such difference as having equal value, and theory-building should have direct relevance to practice settings (Fox, 2003). Ongoing assessment, intervention and monitoring is required, in addition to a balance of sufficiently robust methodologies to support credible information sharing, which allows for cost effective and contextual implementation within pre-existing systems (Kratochwill 2012).
Despite this, acknowledged are the complexities of evaluation including outcomes that are measurable within a complex, multi-professional working environment where EPs provide a psychological knowledge base, but are not solely responsible for intervention implementation, effectiveness, or outcome measurement to achieve the desired outcome (Dunsmuir et al., 2009; Turner et al., 2010). Thus it is perhaps difficult to incorporate evaluation into routine practice (Dunsmuir et al., 2009). EPs’ role within PBE is to strengthen EBP, in parallel to their own professional practice (Fox, 2011), and is dependent on individual understanding of good quality research and knowledge, although in education a shared view is yet to be reached (Fox, 2003). Contrarily, perhaps a lack of universally accepted research findings for interventions, leads to “best guess” intervention trials and outcomes, contributing variable problem explanations (Miller & Frederickson, 2006), and a broad framework for knowledge developing in PBE (Kratochwill et al., 2012). Thus recommended considerations are i) systematic evidence searching of evidence based intervention strategies, ii) implementation and adherence to intervention fidelity, iii) applying standards to support conclusions from interventions, iv) measuring outcomes using quality tools, and v) formal data analysis procedures to assess outcomes (Kratochwill et al., 2012, p.215).

The role of EBP and PBE

Within research, methodology encompasses the choices made about the methods for research, based on philosophical position (Slevitch, 2011). Our beliefs about reality determine what we understand as knowledge and how we obtain this knowledge through the research techniques applied (Guba & Lincoln, 1994). Fletcher (2017) presents Critical Realism (CR) as an “iceberg” metaphor composing three levels, “empirical”, “actual” and
“real”. “Empirical” refers to events we experience and can be measured empirically but involves the filter of human interpretation, whilst “actual” does not include the filter of human experience. The “real” level refers to causal structures whose inherent properties act as causal forces for events. The goal of CR is “to explain social events through reference to these causal mechanisms and the effects they can have throughout the three-layered ‘iceberg’ of reality” (Fletcher, 2017; p. 183).

Research evidence alone cannot guide an EP to what intervention to use, as they must draw upon knowledge and skills to inform practice (Health and Care Professions Council (HCPC), 2015). As Scientist-Practitioners (S-Ps), combining the roles of practitioner, consumer of research and producer of research (Crane & McArthur, 2002; Lane & Corrie, 2006), effective judgement, reasoning and problem-solving, psychologically grounded formulation, effective intervention planning and self-monitoring, are required (Lane & Corrie, 2006). Research conducted under ideal conditions, with high levels of fidelity amongst standardised samples presents issues for application, including altered efficiency and effectiveness in real world communities, and requires professional experience, supported by reasoning and contextual judgements, to support integration (American Psychological Association, 2006; Dunsmuir & Hardy, 2016; Monsen & Kennedy, 2016). The role of the S-P in PBE is the examination of the integrity of assessment to determine if intervention matches the originally intended procedure and population and if not, subsequent revisions made to outcomes (Kratochwill et al., 2012).
Section B: Dissemination and Research Impact

Dissemination

Dissemination, referred to as knowledge translation, knowledge exchange, knowledge utilisation (Rabin & Brownson, 2012), is a process involving consideration of target audience and settings, and communication and interaction, to facilitate understanding and adoption of research findings (Ross-Hellauer et al., 2020). This process increases the awareness and use of research evidence in policy and practice decision making by non-research audiences and stakeholders (Keown et al., 2008). When impact is effective, research findings are cascaded to those who can most benefit from them, without delay (LSE Public Policy Group, 2011; National Institute for Health Research, 2019). When dissemination is inactive, in the absence of spontaneous application, (Glasgow et al., 2004; Lehoux et al., 2005) a “translation gap” between the discovery of public health knowledge and application is present, evident in a range of research areas (Brownson et al., 2018; Rogers, 2010). Three strands of dissemination have been highlighted. Awareness refers to others being aware of the research, including audiences knowing the activities and outcomes generally, in the “word of mouth” manner. Dissemination for understanding refers to the audiences directly impacted, who should have a deeper understanding; whilst dissemination for action refers to practice change in individuals with influence to bring about change (Harmsworth & Turpin, 2000).

Though old, Shannon & Weaver's (1949) model of communication is particularly pertinent in the current study for considering non-linear dissemination in a process that is cyclical and with feedback loops (figure 4). Paper 1, a literature review of the development and subsequent psychometric properties of loneliness measures with youth, is arguably
most important for researchers and is grounded in evidence, acting as the “source” and “message” for an “audience” of EPs, school practitioners and professionals working with children and adolescents. Meanwhile, according to the model, Paper 2 perhaps represents the feedback loop from the audience to the source, starting with children and their views of loneliness to inform the basis of the measures discussed in the literature review. Read together, Paper 1 and 2 highlight the importance of a bi-directional relationship between EBP informing PBE, and PBE informing EBP. Emphasized also, is the value of both quantitative and qualitative methods to support understanding of concepts.

Figure 4

*Model of Communication (Shannon & Weaver, 1949)*

Impact

Impact has been outlined as beneficial change occurring as a result of research (Reed, 2016), though it should also be noted that not all change is beneficial to all stakeholders, at all times. Impact must be demonstrable, and posited are a range of impacts that a researcher can focus on when considering impact (figure 5), though often instrumental impacts take precedent. When dissemination and impact practices are lacking,
or when a natural evolution from evidence to uptake is assumed (Dingfelder & Mandell, 2011), practice wisdom often results (Herie & Martin, 2002).

**Figure 5**

*Types of impact adapted from Reed (2016)*

<table>
<thead>
<tr>
<th>Instrumental impacts</th>
<th>Conceptual impacts</th>
<th>Capacity-building impacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>e.g. changes in policy or practice</td>
<td>e.g. broad new understanding or awareness raising</td>
<td>e.g. training of students/professionals</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Attitudinal or cultural impacts</th>
<th>Enduring connectivity impacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>e.g. increased willingness to engage in new collaborations</td>
<td>e.g. follow-on interactions including reciprocal visits, sharing workshops and lasting relationships</td>
</tr>
</tbody>
</table>

Though the process of defining and measuring the impact of research dissemination are challenging, audience characteristics are important, with differing markers of success between academic and non-academic arenas (Brownson et al., 2018; Group, 2011; Luke et al., 2018). Acknowledgement of the characteristics of policy makers, and ways to evoke emotional interest and demonstrate usefulness are important for implementation, as engagement of stakeholders in research has been demonstrated to enhance dissemination (Brownson et al., 2006; Keown et al., 2008; Milkman & Berger, 2014; Purtle et al., 2018). In the current study, the impact of the research and routes to dissemination vary widely due to the top-down approach of Paper 1 and bottom-up approach of Paper 2. Table 6 demonstrates eight useful questions (Reed, 2016) considered by the researcher for separating both papers and considering their impact equally.
### Table 6
The Impact Handbook - Eight questions to identify your impacts (Reed, 2016)

<table>
<thead>
<tr>
<th>Question</th>
<th>T1</th>
<th>T2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. What aspects of your research might be interesting or useful to someone, or could you (or someone else) build upon to create something interesting or useful at some point in the future?</td>
<td>• Measure development procedures with youth</td>
<td>• Qualitative understanding of childhood loneliness</td>
</tr>
<tr>
<td></td>
<td>• Consideration of development sample characteristics and subsequent psychometric testing of the measures with different samples</td>
<td>• Impact of pandemic and school closures on understanding of loneliness</td>
</tr>
<tr>
<td></td>
<td>• How loneliness measures fit with our current understanding of the concept</td>
<td>• How children talk about and describe loneliness</td>
</tr>
<tr>
<td></td>
<td>• Highlighting changes in our understanding of loneliness and the existing gaps in our understanding</td>
<td>• What support is considered helpful for children?</td>
</tr>
<tr>
<td></td>
<td>• Highlights the lack of cross-cultural comparisons</td>
<td>• What are schools already doing to support loneliness, considered helpful by children?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Children can make distinctions between different types of loneliness and give perspectives on possible interventions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Play and being part of a group are important for children</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Children are active agents in research and can provide rich insights into childhood experiences when given the tools to share their ideas</td>
</tr>
<tr>
<td>2. Going beyond your research for a moment, think of issues, policy areas, sectors of the</td>
<td>• How is loneliness being measured now? Is this suitable?</td>
<td>• Interventions in school-centre, what is happening now?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• How can children be supported by universal</td>
</tr>
</tbody>
</table>
economy, practices, behaviours, trends etc. that link in some way to your research. What problems or needs are there in these places, and what are the barriers that are preventing these issues from being resolved? Could your research help address these needs and barriers in some way?

- Government recommendations about loneliness scale use for children and adolescents
- Loneliness in the curriculum
- Local authority services (e.g., EPs) measuring loneliness
- Universal approach needed for measuring loneliness

3. What is the most significant area of current policy, practice, or business that your research might change or disrupt?

- Loneliness measure suitability
- Inconsistency of use of measures
- Initial quality appraisal checklist for measure development

- Interventions for childhood loneliness
- Understanding of what loneliness is in childhood and how it differs from adulthood

4. Which are the individuals, groups or organisations that might be interested in this aspect of your research (whether now or in future)?

- School practitioners
- Researchers of loneliness
- Government policy makers
- Educational Psychologists

- School practitioners
- Researchers
- Government policy makers

Interventions related to play and group inclusion?

- Incomplete understanding and recommendations for intervention
- Asking children about their experiences leads to rich data
- Very little qualitative research has been done with children- how can we close these gaps in our understanding?
5. What aspects of your research are they likely to be most interested in, and what would need to happen for this to become more relevant to them? What could you do differently to make your research more relevant to these people? Who would you need help from?

- Which measure is best?
- Who to use which measures with?
- What to look out for when thinking about development procedures/selecting suitable measures?
- What measure adaptations to use?
- Which is most often used with different age groups and the reliability and validity of each?
- Is the research accessible and distributed in such a way that it reaches the correct audiences?
- How can the research be translated to support practice?

6. If these people took an interest in or used your research, what would change?

- Policy/recommendations around loneliness measures
- Understanding of loneliness would be increased and concept definitions reviewed
- Reviewing and adapting measures of loneliness for children and adolescents
- How loneliness feels for children
- How adults can support lonely children
- What support children find helpful and unhelpful
- Is the research accessible and distributed in such a way that it reaches the correct audiences?
- How can the research be translated to support practice?

7. Might you see changes in individuals, groups, organisations, or at a societal or some other level?

- Individual
- Group
- Organisations
- EPs
- Government
- Groups
- Schools
- Parents
- EPs
- Local Authorities
Dissemination and impact in education research

Investments in education have been made to identify what works, how and the scaling up of interventions (Blase et al., 2012), and the more clearly identified intervention components are, the more likely successful implementation is to occur (Bauman et al., 1991; Dale et al., 2002). Considering policy makers, dissemination strategies should consider unique characteristics (Brownson et al., 2018; Purtle et al., 2018), and the possibility that academic impact markers are different to that of practice and policy audiences (LSE Public Policy Group, 2011). Impact measurement should be time efficient, and complementary of organisational climate, culture, resources and staff skills (Jacob et al., 2010). Questions have been raised regarding the accessibility, clarity and usefulness of educational research to educators (Broekkamp & Van Hout-Wolters, 2007), along with the lack of attunement of researchers to the needs of educators (Neal et al., 2019).
Section C: Implications of the Current Research

Summary of Research Findings:

Paper 1, a literature review, concluded that current measures of loneliness for children and adolescents were developed using incomplete procedures, particularly an absence of interviews, and raised questions about their suitability for diverse populations. The review has direct implications for practice of researchers and academics, policy makers, EPs, and school practitioners, and shows the importance of child voice in contributing directly to the development of reliable and valid measures. It also suggests that in the current absence of such in the most widely used youth measures, a review is required, and caution exercised when using existing measures.

Paper 2 explored, using qualitative methods, the understanding, and experiences of loneliness in children and used hybrid thematic analysis to demonstrate support for previous ideas about loneliness evident in the questionnaires explored in Paper 1. Novel insights included the importance of group inclusion, play and friendship and, less often, by not feeling understood. Central also were clear solutions for loneliness based on searching out play mates, and asking adults for help with similar strategies, along with reference to how loneliness feels in childhood. These findings clearly support the need for a review and adaptation of the loneliness measures in Paper 1 and provides clear starting point to teachers, parents, EPs, and education professionals about how to talk to and support children with loneliness.

Key stakeholders to target at the research site, organisation level, and nationally to ensure effective research dissemination included:
School practitioners and Senior Leadership

Parents

Loneliness researchers and academics

Government policy makers e.g. The Loneliness Commission/Every Mind Matters/Emerging Minds Network

These stakeholders and their role in dissemination are considered in Table 7.
<table>
<thead>
<tr>
<th>Target audience(s)</th>
<th>Role and/or rationale for sharing research</th>
<th>Dissemination Level</th>
</tr>
</thead>
</table>
| (Individual level) Participants | • Feeling empowered to share their views  
• Understanding the point of the research | Dissemination for awareness |
| (Individual level) School practitioners | • Celebrating and informing about good practice  
• Support them to alter practice  
• Remind them of the things to look out for and support that should be given  
• Increased understanding of measures to support selection  
• Awareness of the views of children  
• Reminding them that children can be supported to share their viewpoints and methods that can help them with this | Dissemination for understanding and action |
| (Individual level) Parents | • Sharing the findings with parents/carers so they have an increased understanding about what loneliness is and how it feels for children | Dissemination for understanding and action |

Table 7

Key Stakeholders for dissemination, role and rationale and dissemination level

(Harmsworth & Turpin, 2000)
<table>
<thead>
<tr>
<th>Level</th>
<th>Organisation/Agency</th>
<th>Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organisational Level</td>
<td></td>
<td>Offering opportunities to celebrate what adults are already doing well to support children and offer ideas about how to further support loneliness</td>
</tr>
<tr>
<td>Senior Leadership</td>
<td></td>
<td>Supporting practitioner knowledge regarding loneliness, Changing school policy to support implementation of useful interventions</td>
</tr>
<tr>
<td>Educational Psychology Service</td>
<td></td>
<td>Awareness of child views of loneliness, Issues with loneliness measures, Supporting school practitioners to recognise and support lonely children, Increase awareness of loneliness in hypotheses</td>
</tr>
<tr>
<td>National Level</td>
<td></td>
<td>Recommendations for loneliness measure use, Policy changes on supporting lonely children, Getting loneliness on the mental health agenda, Increasing awareness of what is needed before suggesting use of a loneliness measure, Commissioning of further reliability and validity testing of loneliness measures, Sharing information about child views of loneliness, Encouraging further research across different ages, Reminder about the gaps and things that have not been considered in the loneliness measures they recommend</td>
</tr>
<tr>
<td>Local authorities, government policy makers, Loneliness Commission</td>
<td></td>
<td>Dissemination for understanding and action</td>
</tr>
</tbody>
</table>

Dissemination for understanding and action
| (International Level) Researchers/Academics | Recommendations made regarding loneliness measures • Recommendations made to national governments about the best loneliness measures for youth | Dissemination for understanding and action |
Research site level

The research findings from Paper 1 and 2, have important implications for participants and school practitioners at research sites, responsible for promoting the wellbeing of children. For participants, it is important for them to receive feedback about the views they shared, and the ways it may support other children in their school, and more widely. This is crucial to dissemination, particularly considering the principles of children’s rights (UNICEF, 1990) and ensuring meaningful participation in research (Barker & Weller, 2003).

Through consent processes prior to the focus group and interviews, including with parents and staff, there was an opportunity for raising awareness of childhood loneliness. In sharing review findings, gaps in the current measures are highlighted to practitioners who may use them to identify lonely children. Subsequently, Paper 2 findings including how loneliness feels, what good support looks like and what teachers can do to help, are important for shaping practice. Throughout the research process, school staff at the research sites had been keen to understand childhood loneliness and what they could do to further support lonely children in their school, therefore an opportunity to celebrate good practice and offer guidance about support based directly on child views, is presented. This includes identifying lonely children, intervention at a whole school and classroom level and could support increased staff confidence. The findings from Paper 2 support that childhood is an ideal time for research (Weeks & Asher, 2012) and the evident richness of data may support increased opportunities for children to be consulted directly about wider issues related to childhood to inform practice, as well as to support comparisons in experiences across development and with adults. Additionally, the findings support literature around
play and its importance in childhood and so offer support for increased social opportunities in childhood.

**Organisation Level**

Sharing research findings with Senior Leaders at the research sites is key to supporting ongoing practice development and change across the settings, to support transfer of knowledge, cascaded learning supported by management, and a culture of shared knowledge (National Children’s Bureau (NCB), 2016). The World Health Organisation (WHO) highlight that a holistic school approach with well-defined polices, processes and structures is supportive of desired outcomes, across the whole school community around wellbeing (WHO, 1997), and so by raising awareness of existing good practice, and offering guidance for staff about identifying and supporting loneliness. The findings could inform a school wide approach to wellbeing support. Perhaps the opportunity for modelling approaches to childhood loneliness to primary schools in the local area is also supported by the research.

Information sharing and awareness raising with stakeholders at an organisational level, including local authority teams working closely with schools is required. For example, EPs being aware of issues with existing loneliness measures and the need for caution when using or suggesting such measures, is an important outcome for practice change from the research. EPs also being aware of how loneliness looks, feels, and can be best supported from child views, could ensure loneliness is considered in work with schools. As S-Ps, an awareness of EBP issues with youth mental health and wellbeing, is essential. Review findings offer clear objections to loneliness measures (the evidence base) and offer guidelines regarding robust measure development and an initial critical appraisal checklist.
Meanwhile, Paper 2 findings provide some practice guidance for supporting schools and individuals.

Professional Level

Sharing research outcomes with government bodies who make recommendations around childhood loneliness, is an important outcome of the current research. Poor measurement development where there are inconsistent construct definitions, and the absence of child views, means that loneliness is currently measured unreliably, evidenced in Paper 1. The critical appraisal tool developed for Paper 1, offers an initial checklist for use when developing new measures or reviewing existing ones, outlining key points that should be evidenced, particularly consideration of child views in those measures developed for youth. Paper 1 findings also contribute to measure development literature more widely, a relatively new area of research, providing a clear example of application of a critical appraisal tool within loneliness research, and the subsequent gaps in research as a result of measure development procedures that are not robust. Sharing findings from the current study with policy makers will support government recommendations for suitable tools and offers clear guidance for practice. Namely, a review of existing measures and recommendations, consulting loneliness experts and youth, increased awareness of the measure development procedures and the impact of incomplete processes for intervening in mental health and wellbeing difficulties, across development and culture. Present government recommendations are likely to be considered by other countries as means for informing international policy. The current findings may lead to international policy makers being better informed, considering the utility of the measures across cultures and ultimately, reviewing their own loneliness practice. Additionally, recognition of the role
schools play in supporting loneliness and the need for awareness raising during teacher training courses as part of wider emotional wellbeing agendas is evident.

Primarily, the current study questions the psychometric properties of the three most often used loneliness measures with youth and suggests the need for review and revision of each measure, with the inclusion of child views and more diverse development samples. The findings offer evidence about which measures are most often used with which age groups, and which scale adaptations are most valid. The development of a critical appraisal tool for examining measure development, provides an initial example of investigating measure development and an opportunity for further trialling.

Paper 2 directly informs the recommendations from Paper 1 and offers initial exploration of child views of loneliness, including how they support and differ from the literature, and therefore could inform measure review. The study shows the requirement for additional exploration in middle childhood, as well as early childhood and adolescence, and across cultures, particularly as previous research highlights the impact of culture upon experiences of loneliness (Dykstra, 2009; Johnson & Mullins, 1987). Regarding solutions for loneliness, the current data suggests loneliness interventions based on group inclusion and play would be more broadly suitable, with support offered at a universal level, advocating the need for additional opportunities for play and shared experiences in childhood. Further research in this area could directly impact measurement and intervention in childhood loneliness and positively impact children’s wellbeing. Despite clear impacts of the findings from both studies for researchers, collaboration with policy makers is essential for the impact to be supportive for youth.
With a focus on the Covid-19 pandemic, drawing together research findings regarding the unequal impact of school closures and lockdown on ethnic minority and socially deprived groups upon loneliness, is an important issue for local authorities and the government. Particularly important is an awareness what loneliness looks like, the impact of increased loneliness levels following lockdown, and future support following the pandemic and returning to school, including the prioritisation of support for specific groups (Silverman et al., 2020).

Implications for EP practice arising from the current research, include increased awareness and consideration of loneliness as a hypothesis during casework, with an understanding of the wide-ranging negative impacts of childhood loneliness, and exploration of opportunities for psychoeducation with children, school practitioners and parents. With increased awareness and understanding of such, along with child views of what helpful support looks like, EPs could be instrumental in supporting schools to apply universal interventions for loneliness, including opportunities for play, socialising and group activities. Additionally, reinforcing the importance of these opportunities to school senior leaders for contributing to good emotional wellbeing in children, supporting academic progress, reduced need for support services and better sleep, for example. A further implication for practice is the use of the critical appraisal checklist when selecting suitable measures for use with youth, including the validity of such with target audiences and the inclusion of diverse development populations during development. The findings provide evidence for the use of quantitative measurement tools alongside triangulation of information from children, school practitioners and adults at home.
Implications for school practitioners include awareness and support for providing opportunities for socialising, play and sharing experiences at a universal level. Findings also provide some guidance for responding to children who share they are feeling lonely, and how to identify lonely children in the classroom and on the playground. The findings provide examples of best practice for school practitioners, particularly in the context of a post Covid-19 return to school.

Section D: Promoting and Evaluating the Research Dissemination

A key barrier to bridging the gap between evidence and practice is inadequate dissemination of research (Slavin, 2013), and despite a strong evidence base, an intervention is ineffective without good implementation. The Economic and Social Research Council (ESRC; 2021) outlined that research can have academic and economic and societal impact, with three levels supporting the development of the current impact plan (see table 8).

| Table 8 |
| Economic and Social Research Council- research impact levels and considerations for the present study |

| Instrumental: Influencing the development of policy, practice or service provision, shaping legislation, altering behaviour |
| Current study: Influence the development of policy around loneliness measurement, interventions and awareness to key education stakeholders. |
| Conceptual: Contributing to the understanding of policy issues, reframing debates |
Current study: Developing understanding of gaps in development procedures of youth loneliness measures and children’s views of loneliness.

Capacity Building: Through technical and personal skill development

Current study: Building on research understanding of adaptations required to existing loneliness measures. Building on the skills of professionals working with children around how to identify, selecting tools to measure loneliness and how to support loneliness.

Research site level (Capacity Building)

The researcher chose to feedback findings to participants with a letter and simplified thematic map visual (Appendix 23). This ensured participants had a good understanding of the impact of their contributions, in a child-friendly and accessible manner, including participants in the focus group and interviews. The researcher also plans to share these findings with the school practitioners at research sites during a staff meeting (see training slides, Appendix 24). The focus of this information sharing was to highlight and celebrate good practice within both research sites to support practitioner confidence about their ability to support lonely children through universal approaches central to their pastoral practice. The researcher also provided a 2-page research summary document outlining the key findings of the research to support ongoing identification and support for lonely children in school (Appendix 25). This was particularly pertinent at the time of sharing the research, following a return to school for most pupils following the Covid-19 pandemic wider school closures. The researcher felt that highlighting the possible impact of social isolation to feelings of loneliness in children, could be supportive of a climate in which staff
could empathise and provide suitable support, informed by child views from the research about what is helpful.

During the research, the researcher had established networks and relationships with school practitioners in both schools (Economic and Social Research Council, 2021) which supported the significance of the research findings and buy in from the school Leadership Team at both research sites for share and act upon research findings.

Local and Regional Level (Conceptual)

The researcher sought to develop understanding of gaps in development procedures of youth loneliness measures and children’s views of loneliness, along with supporting practitioners to identify and support children. Therefore, the researcher plans to share the findings with EP colleagues in the local authority in which the research took place, as a continued professional development (CPD) item (Appendix 24). Colleagues from two other local authorities within the region, working in similar contexts, may also be present. By highlighting the findings of the literature review to EPs, the researcher plans to demonstrate points to consider with relation to reliability and validity of the measures, as well as introducing the critical appraisal tool that colleagues could use to assess measures. The researcher hopes that by sharing the findings, EP colleagues will feel better equipped to support school practitioners in relation to childhood and adolescent loneliness.

As part of a government initiative following Covid-19 school closures, local “experts” have been provided funding to deliver Wellbeing Education Return (WER) training to school practitioners focussing on a range of wellbeing and mental health topics. The researcher plans to record a short webinar to support the series of WER resources to be shared on the local authority website. Additionally, the researcher has been given the opportunity to
provide some input for Educational Mental Health Practitioners in training within the local
authority. This is due to be completed in the academic year 2021-22.

**National and International Level (Instrumental)**

Paper 1 was submitted to the Journal of Environmental Research and Public Health, to be included in a special issue about loneliness. The literature review is in line with the aims and scope of the journal (Appendix 26), and the special issue (Appendix 27), and reaches an international readership. Loneliness is recognised as a public health issue (Royal College of Nursing, 2021) and papers included in the review were from international studies, therefore applicable to international audiences. The inclusion of the paper in a special issue about loneliness should result in dissemination to readers with an interest or investment in loneliness, that could directly impact practice in future and are likely to be linked with policy makers. That is particularly the case for researchers who may be likely to use existing loneliness measures and find the results of the review supportive of practice change, leading to a review of the loneliness measures. Key stakeholders and audiences were considered during the development of the paper and included school practitioners, parents, education professionals, local authorities, and government, with impacts for different audiences highlighted within the article.

Paper 2 will be submitted to the international publication, Pastoral Care in Education because it is relevant to the aims and scope of the journal (Appendix 28). Although the research was conducted with a UK population, it demonstrates key differences in loneliness understanding compared with adult definitions, and so is relevant to international audiences for supporting further exploration of child views. The choice of an applied journal,
rather than a scientific one, matches the utility of the findings for school practitioners, researchers, and EPs for supporting childhood loneliness.

Regarding changes to policy, the researcher plans to share the research findings at a brief meeting with Department for Digital, Culture, Media, and Sport (DCMS), who are tasked with developing the loneliness strategy for the England and meet with the Loneliness Commission and their ‘Campaign to End Loneliness’. Creating a poster for school practitioners, summarising the findings of the literature review and empirical study, will also be helpful for providing tips for supporting loneliness children. The researcher plans to make links with Every Mind Matters charity and the Emerging Minds network, who have received grant funding to support child wellbeing and consider applying to present a poster at the Developmental Psychology Conference in September 2021.

Conclusion

The impact of this research will be measured through monitoring research citations and reads through ResearchGate, along with evaluation forms completed during training and CPD input with school practitioners and the EP team. Following this, in an informal manner, ongoing discussions and focus upon loneliness within casework and the local authority generally, including its inclusion in the return to school agenda will be monitored.
References


Ageing (Vol. 6, Issue 2, pp. 91–100). https://doi.org/10.1007/s10433-009-0110-3


G. Colditz, & E. Proctor (Eds.), *Dissemination and Implementation Research in Health: Translating Science to Practice*. (2nd ed.). Oxford University Press.


https://doi.org/10.1016/j.psychres.2020.113429

Slavin, R. E. (n.d.). *Overcoming Four Barriers to Evidence-Based Education*. Retrieved March 5, 2021, from http://www.edweek.org/ew/articles/2013/05/01/30slavin.h32.html?t...


Appendices

Appendix 1: Record of checklists from which Critical Appraisal statements were drawn
General tool evaluating general key constructs underpinning measures

<table>
<thead>
<tr>
<th>Original checklist statement incorporated from</th>
<th>R1</th>
<th>R2</th>
<th>Quality Rating</th>
<th>Evidence in article</th>
</tr>
</thead>
<tbody>
<tr>
<td>1= COSMIN checklist (Mokkink, 2018)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2= Evidence Based Medicine and Practice (Roever, 2015)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3= Joanna Briggs Checklist for Prevalence Studies (Joanna Briggs Institute, 2016)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4= Quantitative SLR checklist University of Manchester Woods et al., 2011</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Development

1/2 Is a definition of the construct given?

2 Are research questions outlined?

1/3 Is a clear description provided of the target population for which the measure was developed?

1 Is theory on which the measure is based outlined and explained?

Quality Rating

2 stars (**) indicates this was done well or in detail, 1 star (*) indicates this was done partially, hyphen (-) indicates unclear or incomplete processes

Evidence in article

Y= present
N= not present
| 1/2 | Interviews conducted with children regarding concept definition? |
| 1/2 | Was an appropriate qualitative data collection method used to identify relevant items for a measure? |
| 3   | Is an explanation provided to allow for replication? |
| 1/3 | Appropriate method used to analyse the data? (Numbers? Reductive?) |

**Content validity/ Internal structure**

| 1   | Interviews conducted with experts regarding concept definition? |
| 3   | FA/structural equations model conducted at development stage? (bonus point) |

**Internal consistency**

| 1/3 | Was Cronbach’s alpha calculated above 0.8? |
| 1/3 | Invariance testing - Structural equation modelling in subsequent papers? (bonus point) |
| Cross-cultural validity\measurement invariance | 1 | Did the authors consider variance across different groups and demonstrate understanding there may be variability in measure perception? |
| Responsiveness (comparison to gold standard) | 1/2 | Does the author compare scores with variables expected to be related based on theory? |
| | 1 | Are they suitable? |
| Overall Quality Rating | Number of two-star (**) ratings: | Qualitative rating: |
| 1-4 ** ratings = low quality paper | 5-8 ** ratings = medium quality paper | 10-13 ** ratings = high quality paper |
Appendix 2: Critical Appraisal Tool for Measure development papers and explanations of statements
<table>
<thead>
<tr>
<th>Critical Appraisal statement</th>
<th>R1</th>
<th>R2</th>
<th>Quality Rating</th>
<th>Evidence from paper</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>2 stars (**) indicates this was done well or in detail, 1 star (*) indicates this was done partially, hyphen (-) indicates unclear or incomplete processes</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>Y= present</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>N= not present</strong></td>
<td></td>
</tr>
<tr>
<td>Development</td>
<td>Core: Construct Definition</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>Is a definition of the construct given?</em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>Clear reference to definition of loneliness being used</em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Core: Research questions outlined</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>Are research questions outlined?</em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Core: Clear description of target population</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>Is a clear description provided of the target population for which the measure was developed?</em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Core: Theory outlined and described</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>Is the theory on which the measure is based, outlined and explained in detail?</em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Core: Interviews conducted with children and/or adolescents</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------------------------------------------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Were interviews conducted with children/adolescents regarding concept definition? Part of the development process?</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Core: Data Collection method</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Was an appropriate qualitative data collection method used to identify relevant items for a measure? Interviews? Where did the items come from? Is this clearly explained?</em></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Core: Replication details included</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Is an explanation provided to allow for replication? Is it possible to replicate development procedures with details provided?</em></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Core: Appropriate data analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Appropriate method used to analyse the data? Numbers? Reductive? Correlations?</em></td>
</tr>
</tbody>
</table>
| Content validity/ Internal structure | Core: Interviews with experts regarding concept definition
*Interviews conducted with experts regarding concept definition? Inclusion of children/adolescents definition of loneliness?*

Supplementary expectation: Factor Analysis/structural equations model
*Was an Exploratory or Confirmatory FA or structural equations model conducted at the development stage?*
| Core: Good internal consistency
*Was Cronbach’s alpha calculated above 0.8?*

Supplementary expectation: Invariance testing
*Structural equation modelling in subsequent papers?* |
| Cross-cultural validity\measurement invariance | Core: Variance across different groups  
*Did the authors consider cross-cultural validity during measure development and sampling?*  
*Cross-cultural validity?*  
*Measurement invariance using multi-group CFA?* | | | |
|---|---|---|---|---|
| Responsiveness (comparison to gold standard) | Core: Scores compared with related variables  
*Compared with related variables?  
Suitably related?* | | | |
| | Core: Suitable comparisons  
*Is it clear what the comparator instrument(s) measure(s)? Is there a good level of reliability for comparator instrument? Is there a good level of validity for comparator instrument?  
Reference to concurrent validity?* | | | |
<table>
<thead>
<tr>
<th>Core: Overall quality decision</th>
<th>Number of two-star (***) ratings:</th>
<th>Qualitative rating:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-4 ** ratings = low quality paper</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5-8 ** ratings = medium quality paper</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10-13 ** ratings = high quality paper</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Critical Appraisal statements</td>
<td>R1</td>
<td>R2</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>----</td>
<td>----</td>
</tr>
</tbody>
</table>
| **Development** Core: Construct Definition | Some | N | * | ● “loneliness is thought to ensure when the person’s expectations regarding interpersonal relations cannot be met within his or her social network”  
● “Directly asking for feelings of isolation and desertion in different kinds of relations, therefore, may provide a more adequate picture of loneliness”  
● Describes Marcoen & Brumagne (1985)- children and adolescent measure” |
| Research questions outlined | Y | Y | ** | ● “Main objectives...(a) to develop a psychometrically sounds, multidimensional loneliness measure; (b) to use this instrument in an exploration of age and sex differences in loneliness through late childhood and adolescence; and (c) to provide concurrent validity data for each of the subscales” |
| Clear description of target population | Y | Y | ** | • Children and adolescents  
• “late childhood and adolescence”  
• Clear description of ages of participants |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Is a clear description provided of the target population for which the measure was developed?</td>
<td>Y</td>
<td>Y</td>
<td>**</td>
<td>---</td>
</tr>
</tbody>
</table>
| Theory outlined and described | Y | Y | ** | • “From the beginning of scale development process, a need was felt to cover related constructs of positively and negatively experienced aloneness”  
• Multidimensional instrument |
| Is the theory on which the measure is based, outlined and explained in detail? | Y | Y | ** | --- |
| Interviews conducted with children and/or adolescents | N | N | - | • Based on Marcoen & Brumagne (1985)- 2 subscales- parental relations and loneliness in peer relations and affinity for loneliness or aversion to loneliness  
• No interviews |
<p>| Were interviews conducted with children/adolescents regarding concept definition? Part of the development process? | N | N | - | --- |
| Data Collection method | N | N | - | • Refer to Marcoen and Brumagne (1985) paper and completed checklist |</p>
<table>
<thead>
<tr>
<th>Replication details included</th>
<th></th>
<th></th>
<th></th>
<th>• No explanation about how/why items chosen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is an explanation provided to allow for replication? Is it possible to replicate development procedures with details provided?</td>
<td>N</td>
<td>N</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Appropriate data analysis</th>
<th></th>
<th></th>
<th>**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appropriate method used to analyse the data? Numbers? Reductive?</td>
<td>Y</td>
<td>Y</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Content validity/Internal structure</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Interviews with experts regarding concept definition</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interviews conducted with experts regarding concept definition? Inclusion of children/adolescents definition of loneliness?</td>
<td>N</td>
<td>N</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Supplementary expectation: Factor Analysis/structural equations model</th>
<th></th>
<th></th>
<th>**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Was an Exploratory or Confirmatory FA or structural equations model conducted at the development stage?</td>
<td>Y</td>
<td>Y</td>
<td></td>
</tr>
</tbody>
</table>
| Internal consistency | Good internal consistency
Was Cronbach’s alpha calculated above 0.8? | Y | Y | ** | • Above 0.80 |
|----------------------|---------------------------------------------|---|---|----|---------------|
| Supplementary expectation: Invariance testing
Structural equation modelling in subsequent papers? | N | N | - | |
| Cross-cultural validity\measurement invariance | Some | Y | * | • Sex and age differences explored,
• No reference to cross-cultural differences |
| Responsiveness (comparison to gold standard) | Some | Some | * | • Compared to subjects’ age, sex, parental occupation, 16 question
• 4 categories- social integration, home environment, ecological situation, psychological factors
• Some comparison |
| Overall quality decision | Number of two-star (** ) ratings: 6 | Quality rating: Medium |
| 1-4 ** ratings = low quality paper |
| 5-8 ** ratings = medium quality paper |
| 10-13 ** ratings = high quality paper |
Appendix 4: Completed Critical Appraisal Checklist Marcoen & Brumagne (1985) (LLCA)
<table>
<thead>
<tr>
<th>Critical Appraisal statements</th>
<th>R1</th>
<th>R2</th>
<th>Quality Rating</th>
<th>Evidence from paper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core: Construct Definition</td>
<td>Som</td>
<td>Som</td>
<td>2 stars (**) indicates this was done well or in detail, 1 star (*) indicates this was done partially, hyphen (-) indicates unclear or incomplete processes</td>
<td>-</td>
</tr>
</tbody>
</table>
| Is a definition of the construct given? Clear reference to definition of loneliness being used | - | - | • “Little or no empirical research... age-linked feelings of loneliness among children and adolescents”
• Definition from Weiss (1973)- makes distinction between emotional isolation and social isolation
• “We distinguished between loneliness in relation to parents, or parent-relate loneliness, and loneliness in relation to peers or peer related loneliness”.
| Research questions outlined  | N  | N  | - | • “the relation of loneliness to another aspect of social status, namely, perceived social sensitivity, was examined in the present research”
• “No specific prediction with regard to the relation between perceived social sensitivity and parent-related loneliness were formulated”
• Research aims not clearly outlined |
<table>
<thead>
<tr>
<th>Clear description of target population</th>
<th>Y</th>
<th>Y</th>
<th>**</th>
<th>-</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is a clear description provided of the target population for which the measure was developed?</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Theory outlined and described</td>
<td>Some</td>
<td>Some</td>
<td>*</td>
<td>-</td>
</tr>
<tr>
<td>Is the theory on which the measure is based, outlined and explained in detail?</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Interviews conducted with children and/or adolescents</td>
<td>N</td>
<td>N</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Were interviews conducted with children/adolescents regarding concept definition? Part of the development process?</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Data Collection method</td>
<td>N</td>
<td>N</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Was an appropriate qualitative data collection method used to identify relevant items</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

- Outlines ages of participants
- Refers to children and adolescents on several occasions
- Refers to previous research on loneliness in children and adolescents
- Makes distinctions between emotional isolation and social isolation
- Family and peer group
- “original scale”
<table>
<thead>
<tr>
<th>for a measure? Interviews? Where did the items come from? Is this clearly explained?</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Replication details included Is an explanation provided to allow for replication? Is it possible to replicate development procedures with details provided?</td>
<td>N</td>
<td>N</td>
<td>-</td>
</tr>
<tr>
<td>Appropriate data analysis Appropriate method used to analyse the data? Numbers? Reductive?</td>
<td>Y</td>
<td>N</td>
<td>**</td>
</tr>
<tr>
<td>Content validity/ Internal structure Interviews with experts regarding concept definition Interviews conducted with experts regarding concept definition? Inclusion of children/adolescents definition of loneliness?</td>
<td>N</td>
<td>N</td>
<td>-</td>
</tr>
<tr>
<td><strong>Supplementary expectation: Factor Analysis/ structural equations model</strong>&lt;br&gt;Was an Exploratory or Confirmatory FA or structural equations model conducted at the development stage?</td>
<td>Y</td>
<td>Y</td>
<td><strong>•</strong></td>
</tr>
<tr>
<td>Internal consistency&lt;br&gt;Was Cronbach’s alpha calculated above 0.8?</td>
<td>Y</td>
<td>N</td>
<td><strong>•</strong></td>
</tr>
<tr>
<td>Supplementary expectation: Invariance testing&lt;br&gt;Structural equation modelling in subsequent papers?</td>
<td>N</td>
<td>N</td>
<td>-</td>
</tr>
<tr>
<td><strong>Cross-cultural validity\measurement invariance</strong>&lt;br&gt;Did the authors consider cross-cultural validity during measure development and sampling?</td>
<td>Some</td>
<td>Some</td>
<td>*</td>
</tr>
<tr>
<td>Responsiveness (comparison to gold standard)</td>
<td>Scores compared with related variables</td>
<td>Compared with related variables? Suitably related?</td>
<td>Some</td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>--------------------------------------</td>
<td>--------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>Suitable comparisons</td>
<td>Is it clear what the comparator instrument(s) measure(s)? Is there a good level of reliability for comparator instrument? Is there a good level of validity for comparator instrument?</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Overall quality decision</td>
<td>Number of two-star (**) ratings: 4</td>
<td>Qualitative rating: Low</td>
<td>Number of two-star (**) ratings: 4</td>
</tr>
<tr>
<td></td>
<td>1-4 ** ratings = low quality paper</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5-8 ** ratings = medium quality paper</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>10-13 ** ratings = high quality paper</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix 5: Completed Critical Appraisal Checklist Russell, Peplau & Ferguson (1978) (UCLA)
<table>
<thead>
<tr>
<th>Critical Appraisal statement</th>
<th>R1</th>
<th>R2</th>
<th>Quality Rating</th>
<th>Evidence from paper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core: Construct Definition</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is a definition of the</td>
<td>N</td>
<td>N</td>
<td>-</td>
<td>“Loneliness is a</td>
</tr>
<tr>
<td>construct given? Clear</td>
<td></td>
<td></td>
<td></td>
<td>condition that is</td>
</tr>
<tr>
<td>reference to definition of</td>
<td></td>
<td></td>
<td></td>
<td>widely distributed</td>
</tr>
<tr>
<td>loneliness being used?</td>
<td></td>
<td></td>
<td></td>
<td>and severely</td>
</tr>
<tr>
<td>Research questions outlined</td>
<td></td>
<td></td>
<td>*</td>
<td>“The present article</td>
</tr>
<tr>
<td>Are research questions</td>
<td>Y</td>
<td>Y</td>
<td></td>
<td>report the</td>
</tr>
<tr>
<td>outlined?</td>
<td></td>
<td></td>
<td></td>
<td>development of a</td>
</tr>
<tr>
<td>Clear description of</td>
<td></td>
<td></td>
<td></td>
<td>short and highly</td>
</tr>
<tr>
<td>target population</td>
<td>N</td>
<td>N</td>
<td>-</td>
<td>reliable general</td>
</tr>
<tr>
<td>Is a clear description</td>
<td></td>
<td></td>
<td></td>
<td>loneliness scale</td>
</tr>
<tr>
<td>provided of the target</td>
<td></td>
<td></td>
<td></td>
<td>that appears to</td>
</tr>
<tr>
<td>population for which the</td>
<td></td>
<td></td>
<td></td>
<td>have concurrent and</td>
</tr>
<tr>
<td>measure was developed?</td>
<td></td>
<td></td>
<td></td>
<td>construct validity,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>based on several</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td>criteria”</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>No reference to who</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>it is for</td>
</tr>
</tbody>
</table>

- “undergraduate students in introductory psychology classes”
- Sample age not defined clearly
<table>
<thead>
<tr>
<th>Theory outlined and described</th>
<th>N</th>
<th>N</th>
<th>-</th>
<th>• Talks generally about research loneliness and lack of simple methods of assessment.</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Is the theory on which the measure is based, outlined and explained in detail?</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Interviews conducted with children and/or adolescents | N | N | - | • No mention of children/adolescents  
• No age of participants given  
• “Undergraduate students”  
• No development info given |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Were interviews conducted with children/adolescents regarding concept definition? Part of the development process?</em></td>
<td></td>
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</table>

• “Items were selected to preserve diversity yet exclude very extreme statements” |
<table>
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<tr>
<td><em>Was an appropriate qualitative data collection method used to identify relevant items for a measure? Interviews? Where did the items come from? Is this clearly explained?</em></td>
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<tr>
<td>Content validity/Internal structure</td>
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<tr>
<td></td>
<td>Interviews conducted with experts regarding concept definition?</td>
<td>N</td>
<td>N</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Inclusion of children/adolescents definition of loneliness?</td>
<td>N</td>
<td>N</td>
<td>-</td>
</tr>
<tr>
<td>Appropriate data analysis</td>
<td>Y</td>
<td>Y</td>
<td></td>
<td>**</td>
</tr>
<tr>
<td>Appropriate method used to analyse the data? Numbers? Reductive?</td>
<td>Y</td>
<td>Y</td>
<td></td>
<td>**</td>
</tr>
<tr>
<td>Replication details included</td>
<td>Is an explanation provided to allow for replication? Is it possible to replicate development procedures with details provided?</td>
<td>Some</td>
<td>Some</td>
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</table>

Some

* Refers to 75 items that statements were selected from. No information on which from Sisenwein/Eddy
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<tr>
<th>Supplementary expectation: Factor Analysis/structural equations model</th>
<th>N</th>
<th>N</th>
<th>-</th>
<th>• Correlations between items and overall score</th>
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<td>Was an Exploratory or Confirmatory FA or structural equations model conducted at the development stage?</td>
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<td></td>
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<tr>
<td>Internal consistency</td>
<td>Good internal consistency</td>
<td>Y</td>
<td>Y</td>
<td>**</td>
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<tr>
<td>Was Cronbach’s alpha calculated above 0.8?</td>
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<tr>
<td>Supplementary expectation: Invariance testing</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Structural equation modelling in subsequent papers?</td>
<td>N</td>
<td>N</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>
| Cross-cultural validity/measurement invariance | Variance across different groups | Som e | Som e | * | • Examined by region and sex 
• Table 1- UCLA/Tulsa Sample 
• Males/Females |
| Responsiveness (comparison to gold standard) | Scores compared with related variables | | | | | * | • Correlation emotion/ emotional states Correlation between UCLA score and each item | | | | | | | Suitable comparisons | Is it clear what the comparator instrument(s) measure(s)? Is there a good level of reliability for comparator instrument? Is there a good level of validity for comparator instrument? | | | | | * | • Are the ratings of “depressed” and “anxious” a direct comparison to loneliness? | | | | | | Overall quality decision | Number of two-star (**) ratings: | 2 | Qualitative rating: | Low | | | 1-4 ** ratings = low quality paper | | | | 5-8 ** ratings = medium quality paper | | | | 10-13 ** ratings = high quality paper |
Appendix 6: Completed Critical Appraisal Checklist CLS
<table>
<thead>
<tr>
<th>Critical Appraisal statements</th>
<th>R1</th>
<th>R2</th>
<th>Quality Rating</th>
<th>Evidence from paper</th>
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<tbody>
<tr>
<td></td>
<td>Y= present</td>
<td>N= not present</td>
<td>2 stars (**) indicates this was done well or in detail, 1 star (*) indicates this was done partially, hyphen (-) indicates unclear or incomplete processes</td>
<td></td>
</tr>
<tr>
<td>Development</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Core: Construct</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Definition</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>*Is a definition of the</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>construct given? Clear</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>reference to definition of</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>loneliness being used</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Y</td>
<td>Y</td>
<td></td>
<td>**</td>
<td>• One limitation of the intervention literature has been the absence of information concerning unpopular children’s perspective about their own situation”</td>
</tr>
<tr>
<td>Research questions outlined</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*Are research questions</td>
<td></td>
<td></td>
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<tr>
<td>outlined?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Y</td>
<td>Y</td>
<td></td>
<td>**</td>
<td>• “The goals of the present research were to develop a reliable measure of children’s feelings of loneliness and social dissatisfaction and to learn whether children who are least accepted by their classmates are indeed more lonely”</td>
</tr>
<tr>
<td>Clear description of</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>target population</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*Is a clear description</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>provided of the target</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>population for which the</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>measure was developed?</td>
<td></td>
<td></td>
<td></td>
<td>• “Children” particularly least accepted by peers</td>
</tr>
<tr>
<td>Y</td>
<td>Y</td>
<td></td>
<td>**</td>
<td></td>
</tr>
</tbody>
</table>
| Theory outlined and described | Some | Some | * | · Some reference to previous research  
· Not provide exact theory  
· “may intervention studies with unpopular children use sociometric measures to select children who are least liked in their classroom” “one limitation has been the absence of information concerning unpopular children’s perspective about their own situation” |
| Interviews conducted with children and/or adolescents | N | N | - | · “a 24-item questionnaire was developed to assess children’s feelings of loneliness and social dissatisfaction”-no reference to where items came from |
| Data Collection method | N | N | - | · Questions developed by researchers? |

*Is the theory on which the measure is based, outlined and explained in detail?*

*Were interviews conducted with children/adolescents regarding concept definition? Part of the development process?*

*Was an appropriate qualitative data collection method used to identify relevant items for a measure? Interviews? Where did the items come from? Is this clearly explained?*
<table>
<thead>
<tr>
<th></th>
<th>Replication details included</th>
<th>Is an explanation provided to allow for replication? Is it possible to replicate development procedures with details provided?</th>
<th>Appropriate data analysis</th>
<th>Appropriate method used to analyse the data? Numbers? Reductive?</th>
<th>Content validity/Internal structure</th>
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</thead>
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<tr>
<td></td>
<td>N</td>
<td>-</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
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<td>Replication details included</td>
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<td>-</td>
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<td></td>
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<tr>
<td>Is an explanation provided to allow for replication? Is it possible to replicate development procedures with details provided?</td>
<td></td>
<td><strong>No details about how items were developed</strong></td>
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<td>Appropriate data analysis</td>
<td>Y</td>
<td><strong>Factor analysis conducted</strong></td>
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</tr>
<tr>
<td>Appropriate method used to analyse the data? Numbers? Reductive?</td>
<td>Y</td>
<td><strong>Factor analysis conducted</strong></td>
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</tr>
<tr>
<td>Content validity/Internal structure</td>
<td>N</td>
<td>-</td>
<td></td>
<td></td>
<td><strong>No reference to experts (children) being consulted in construction</strong></td>
</tr>
<tr>
<td><strong>Supplementary expectation: Factor Analysis/structural equations model</strong></td>
<td><strong>Was an Exploratory or Confirmatory FA or structural equations model conducted at the development stage?</strong></td>
<td>Y</td>
<td>Y</td>
<td><strong>•</strong></td>
<td>• Factor analysis conducted (Table 3)</td>
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<td><strong>Internal consistency</strong></td>
<td><strong>Was Cronbach’s alpha calculated above 0.8?</strong></td>
<td>Y</td>
<td>Y</td>
<td><strong>•</strong></td>
<td>• Above .80</td>
</tr>
<tr>
<td><strong>Supplementary expectation: Invariance testing</strong></td>
<td><strong>Structural equation modelling in subsequent papers?</strong></td>
<td>N</td>
<td>N</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td><strong>Cross-cultural validity/measurement invariance</strong></td>
<td><strong>Did the authors consider cross-cultural validity during measure development and sampling?</strong></td>
<td>N</td>
<td>N</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>
Responsiveness (comparison to gold standard)

Scores compared with related variables

Some

Compared with related variables? Suitably related?

Some

* • Sociometric measures, loneliness and sociometric status-positive nomination measure and rating-scale measure to rate each classmate

Notes issue...

“we considered whether children who might be targeted for intervention on the basis of sociometric measures reported greater loneliness and social dissatisfaction than their higher-status peers”

Second analysis was conducted to examine whether children with few or no best friendship nominations within their classroom would experience greater loneliness”

Suitable comparisons

Is it clear what the comparator instrument(s) measure(s)? Is there a good level of reliability for comparator instrument? Is there a good level of validity for comparator instrument?

Some

Some

* • Is there a close comparison between loneliness and dissatisfaction and sociometric status?

Overall quality decision

1-4 ** ratings = low quality paper

5-8 ** ratings = medium quality paper

10-13 ** ratings = high quality paper

Number of two-star (**) ratings: 6

Qualitative rating: Medium
Appendix 7: Ethical Approval Letter and Amendments Confirmation

Ref 2019-7778-11816

19/09/2019

Dear Miss Aimee Cole, Dr Caroline Bond, Prof Pamala Quahar

Study Title: An exploration of children’s understanding and experience of school-based loneliness in primary-school.

Environment, Education and Development School Panel PGR

I write to thank you for submitting the final version of your documents for your project to the Committee on 09/09/2019 19:03. I am pleased to confirm a favourable ethical opinion for the above research on the basis described in the application form and supporting documentation as submitted and approved by the Committee.

Please see below for a table of the titles, version numbers and dates of all the final approved documents for your project:

<table>
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<th>Document Type</th>
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<th>Version</th>
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<td>24/07/2019</td>
<td>1</td>
</tr>
<tr>
<td>Letters of</td>
<td>permission confirmation of taking</td>
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<tr>
<td>docs</td>
<td>Letter ethics submission</td>
<td>06/09/2019</td>
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</table>

This approval is effective for a period of five years and is on delegated authority of the University Research Ethics Committee (UREC) however please note that it is only valid for the specifications of the research project as outlined in the approved documentation set. If the project continues beyond the 5 year period or if you wish to propose any changes to the methodology or any other specifics within the project an application to seek an amendment must be submitted for review. Failure to do so could invalidate the insurance and constitute research misconduct.

You are reminded that, in accordance with University policy, any data carrying personal identifiers must be encrypted when not held on a secure university computer or kept securely as a hard copy in a location which is accessible only to those involved with the research.
For those undertaking research requiring a DBS Certificate: As you have now completed your ethical application if required a colleague at the University of Manchester will be in touch for you to undertake a DBS check. Please note that you do not have DBS approval until you have received a DBS Certificate completed by the University of Manchester, or you are an MA Teach First student who holds a DBS certificate for your current teaching role.

Reporting Requirements:
You are required to report to us the following:

1. Amendments: Guidance on what constitutes an amendment
2. Amendments: How to submit an amendment in the ERM system
3. Ethics Branches and adverse events
4. Data breaches

We wish you every success with the research.

Yours sincerely,

[Signature]

Dr Kate Rowlands

Environment, Education and Development School Panel PGR
APPROVED: Amendment Ref: 2020-7778-15744 (Automatic Email from the UoM Ethical Review Manager (ERM) system)

donotreply@infonetica.net <donotreply@infonetica.net>

Wed 17/06/2020 09:34
To: Caroline Bond <Caroline.Bond@manchester.ac.uk>; Pamela Qualter <pamela.qualter@manchester.ac.uk>; Aimee Cole <aimee.cole-2@postgrad.manchester.ac.uk>
Cc: Kate Rowlands <kate.rowlands@manchester.ac.uk>; SEED PGR Ethics <PGR.ethics.seed@manchester.ac.uk>

**Please ensure you read the contents of this message. This email has been sent via the Ethical Review Manager (ERM) system on behalf of the University of Manchester.**

Dear Miss Aimee Cole,

Thank you for submitting your amendment request for project: 2020-7778-15744; entitled: An exploration of children’s understanding and experience of school-based loneliness in primary-school. which has now been approved. Your documentation has been suitably updated to reflect the proposed changes, please ensure you use this documentation.

Please note that if you have submitted revised supporting documents to accompany your amendment request, the approved versions of these are listed in a table below.

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<th>Version</th>
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</table>

We wish you every success with the research.

Best wishes,

Dr Kate Rowlands

Environment, Education and Development School Panel PGR
Appendix 8: Focus Group Parental Information Sheet

An exploration of children’s understanding and experiences of school-based loneliness in primary school.

Participant Information Sheet (PIS)
Part 1 (Focus Group)
Your child is being invited to be involved in the initial part of a research study as part of a student project investigating children’s understanding and experiences of loneliness for a doctoral thesis. Before you decide whether you wish for them to take part, it is important for you to understand why the research is being conducted and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Please ask if there is anything that is not clear or if you would like more information. Thank you for taking the time to read this.

About the research

➢ Who will conduct the research?

Principal Researcher: Aimee Cole
(Room A5.14, Ellen Wilkinson Building, Manchester University, Manchester M15 6JA).

Supervisor: Dr Caroline Bond
(Room A6.20 Ellen Wilkinson Building, Oxford Rd, Manchester M13 9PL)

Caroline.Bond@manchester.ac.uk

➢ What is the purpose of the research?

The research aims to explore what Year 4 pupils generally understand loneliness to be. Loneliness leads to feelings of sadness and it is possible for anyone to feel lonely. However, the way in which we feel lonely differs across our life. There is lots of research talking about teenagers’ and adults’ experiences and understanding of loneliness, however very little research has asked primary-aged children what they think.

The purpose of the research is to investigate primary-aged children’s views of loneliness, how they understand it and support others. It is hoped that by asking children about this, we can gain a greater understanding of experiences in general and therefore support those children, across the country, who experience loneliness.

Your child is being asked to take part in an initial scoping exercise for the research so the researcher can find out what children want to be asked, how they like to communicate and what should be done with the findings.
➢ Will the outcomes of the research be published?

The primary purpose of this research is for a Doctoral thesis; however outcomes may later be presented for publication.

➢ Disclosure and Barring Service (DBS) Check

The researcher and any adults who may be involved in the research, has undergone an appropriate level of DBS check.

➢ Who has reviewed the research project?

The research project has followed Ethical Practice Policy and Guidance set by the Manchester Institute of Education and has been reviewed by my supervisor Dr Caroline Bond. The research proposal has been reviewed by The School of Environment, Education and Development Ethics Committee.

**What would my involvement be?**

➢ What would I be asked to do if my child took part?

If your child took part, they would be asked to take part in a focus group with 8-10 other Year 4 children. The researcher will ask questions about what they think loneliness is, what they think people should ask about loneliness and how the researcher should gather views from children in the next part of the study. Views of the group will be gathered collectively, and the focus group will be conducted in an informal manner.

The researcher does not expect there to be any risks to taking part in the research and participants won’t be asked personal questions, however the discussion will centre around the concept of loneliness. Prior to taking part, participants will be given a child-friendly participant information sheet, which will be explained verbally, before they are asked to sign a child-friend assent form. Full details about what will be required will also be explained, with the opportunity to ask questions. Children will be informed about their right to withdraw and stop taking part in the research at any time.

➢ Will I be compensated for taking part?

No financial reward is being offered for participating in this research. The research will take place in school, during time.

➢ What happens if I do not want to take part or if I change my mind?

It is up to you to decide whether or not you wish for your child to take part. If you do decide for your child to take part, you will be given this information sheet to keep and be asked to sign a consent form. If you decide for your child to take part, you are still free to withdraw their participation at any time without giving a reason and without detriment to yourself or your child. However, it will not be possible to remove your data from the project once it has been anonymised and forms part of the dataset as we will not be able to identify your specific data. This does not affect your child’s data protection rights. Due to the nature of the study, it is necessary for the focus group to be voice recorded, however should your child be uncomfortable with the recording process, they are free to stop recording and leave the study at any time.

**Data Protection and Confidentiality**
What information will you collect about me?

In order to participate in this research project, we will need to collect information that could identify you, called “personal identifiable information”. Specifically, we will need to collect:

- Your name, your child’s name.
- Audio recordings— they will consist of voice only and the surrounding environment. This will be transcribed by a professional, university approved transcriber. The data will then be analysed to collect views to assist with creation of the next phase of the research including an interview schedule and resources for the researcher to use.
- Any names of children or staff used during the focus group recording will be anonymised during transcription, along with the name of the participants, to ensure participants are unidentifiable. Following completion of the analysis, the voice recordings will be deleted, and the transcripts will be anonymised using pseudonyms so that individuals cannot be identified. Transcripts will be stored on the university encrypted P drive. With your consent, small quotes may be used in the write up of the research project in order to illustrate findings more easily.
- The researcher at the University of Manchester will have access to your child’s personal identifiable information in the consent form, that is, data which could identify your child to ensure they are not included in the second part of the study. This information will not be linked with any of the data collected. Your consent form and your child’s consent form, contact details, etc will be retained for 5 years on an encrypted drive. Only the researcher will have access to these details.
- Your child’s details will remain confidential unless they disclose any information to the researcher suggesting they are in danger. In which case the researcher will be obliged to pass this information on to school’s Designated Safeguarding Lead.

Under what legal basis are you collecting this information?

We are collecting and storing this personal identifiable information in accordance with data protection law which protect your rights. These state that we must have a legal basis (specific reason) for collecting your data. For this study, the specific reason is that it is “a public interest task” and “a process necessary for research purposes”.

What are my rights in relation to the information you will collect about me?

You have a number of rights under data protection law regarding your personal information. For example you can request a copy of the information we hold about your child, including audio recordings or photographs.

If you would like to know more about your different rights or the way we use your personal information to ensure we follow the law, please consult our Privacy Notice for Research. [https://www.manchester.ac.uk/discover/privacy-information/data-protection/website-privacy-notice/]

Will my participation in the study be confidential and my personal identifiable information be protected?
In accordance with data protection law, The University of Manchester is the Data Controller for this project. This means that we are responsible for making sure your personal information is kept secure, confidential and used only in the way you have been told it will be used. All researchers are trained with this in mind, and your data will be looked after in the following way:

In order to ensure confidentiality, voice recordings will be encrypted and pseudonymised during transcription. The professional, University approved transcriber has their own encryption and confidentiality processes in place.

Only the study team at The University of Manchester will have access to your child’s personal information, but they will anonymise it as soon as possible. Your child’s name and any other identifying information will be removed and replaced with a random ID number. Only the research team will have access to the key that links this ID number to your personal information. Your consent form and your child’s consent form, contact details, etc will be retained for 5 years on an encrypted drive. Only the researcher will have access to these details.

Any names of children or staff used during the focus group will be anonymised during transcription, along with the name of the participants, to ensure participants are unidentifiable. Following completion of transcription, the voice recordings will be deleted, and the transcripts will be anonymised using pseudonyms so that individuals cannot be identified. Transcripts will be stored on the university encrypted P drive. With your consent, small quotes may be used in the write up of the research project in order to illustrate findings.

The personal information the researcher will collect will include:

- Your name and contact details and your child’s name.
- Audio recordings will be taken of focus groups and deleted following transcription.
- Anonymised transcripts of audio data will be analysed.

Only the researcher will have access to this information. Supervisors will have access only to anonymised transcriptions.

It will also be necessary, for health and safety and attendance purposes, for key staff in school to know about your child’s participation in the study. There may circumstances under which the researcher would have to disclose information. Such instances include: if there are concerns about the participant’s safety or the safety of others, where there is a professional obligation to report misconduct, reporting of current/future illegal activities to the authorities.

Please also note that individuals from The University of Manchester or regulatory authorities may need to look at the data collected for this study to make sure the project is being carried out as planned. This may involve looking at identifiable data. All individuals involved in auditing and monitoring the study will have a strict duty of confidentiality to you as a research participant.

**What if I have a complaint?**

- Contact details for complaints
Minor complaints

➢ If you have a minor complaint then you need to contact the researcher(s) in the first instance (aimee.cole-2@postgrad.manchester.ac.uk). However, if you would prefer not to discuss with the researcher, please contact the research supervisor at Caroline.Bond@manchester.ac.uk.

If you wish to make a formal complaint to someone independent of the research team or if you are not satisfied with the response you have gained from the researchers in the first instance then please contact

The Research Governance and Integrity Officer, Research Office, Christie Building, The University of Manchester, Oxford Road, Manchester, M13 9PL, by emailing: research.complaints@manchester.ac.uk or by telephoning 0161 275 2674.

If you wish to contact us about your data protection rights, please email dataprotection@manchester.ac.uk or write to The Information Governance Office, Christie Building, The University of Manchester, Oxford Road, M13 9PL at the University and we will guide you through the process of exercising your rights.

You also have a right to complain to the Information Commissioner’s Office about complaints relating to your personal identifiable information. Tel 0303 123 1113 / https://ico.org.uk/make-a-complaint/

Contact Details

If you have any queries about the study or if you are interested in taking part then please contact the researcher(s).

If you have any queries about the study or if you are interested in taking part then please contact the researcher(s) at aimee.cole-2@postgrad.manchester.ac.uk /0161 275 3511, If you are happy for your child to take part in the research, please sign and return the consent form to school.
### Participant’s Parent Consent Form

**An exploration of children’s understanding and experiences of school-based loneliness in primary school.**

**Consent Form**

**Part 1: Focus Group**

If you are happy to participate please complete and sign the consent form below

<table>
<thead>
<tr>
<th>Activities</th>
<th>Initials</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I confirm that I have read the attached information sheet (<strong>Version 1, Date 24/07/2019</strong>) for the above study and have had the opportunity to consider the information and ask questions and had these answered satisfactorily.</td>
<td></td>
</tr>
<tr>
<td>2. I understand that my child’s participation in the study is voluntary and that I am free to withdraw at any time without giving a reason and without detriment to myself. I understand that it will not be possible to remove my child’s data from the project once it has been anonymised and forms part of the data set.</td>
<td></td>
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<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>3. I agree to the <strong>focus group</strong> being <strong>audio recorded</strong>.</td>
<td></td>
</tr>
<tr>
<td>4. I agree that anonymised quotes may be used in publications.</td>
<td></td>
</tr>
<tr>
<td>5. I agree that any data collected may be published in anonymous form in academic books, reports or journals.</td>
<td></td>
</tr>
<tr>
<td>6. I understand that data collected during the study may be looked at by individuals from The University of Manchester or regulatory authorities, where it is relevant to my taking part in this research. I give permission for these individuals to have access to my data.</td>
<td></td>
</tr>
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<td>---</td>
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</tr>
<tr>
<td>7</td>
<td>I agree that any <strong>anonymised</strong> data collected may be shared with other researchers.</td>
</tr>
<tr>
<td>8</td>
<td>I agree that the <strong>researchers/researchers at other institutions</strong> may contact me in future about other research projects for my child to take part in.</td>
</tr>
<tr>
<td>9</td>
<td>I agree that the researchers may retain my contact details in order to provide myself and my child with a summary of the findings for this study.</td>
</tr>
<tr>
<td>10</td>
<td>I understand that there may be instances where during the course of the <strong>focus group</strong> information is revealed which means that the researchers will be obliged to break confidentiality, and this has been explained in more detail in the information sheet.</td>
</tr>
<tr>
<td>11</td>
<td>I agree for my child to take part in this study.</td>
</tr>
</tbody>
</table>

**Data Protection**

The personal information we collect and use to conduct this research will be processed in accordance with data protection law as explained in the Participant Information Sheet and the [Privacy Notice for Research Participants](#).

________________________            ____________________
Name of Participant            Signature            Date

________________________            ____________________
Name of Participant’s Parent/Carer            Signature            Date

________________________            ____________________
Name of the person taking consent            Signature            Date

[You will keep one copy of the consent form and the research team will keep one copy which will be scanned and stored on the University P drive, with the hard copy being destroyed.]
Appendix 10: Focus Group Child Information Sheet

Exploring what children think about loneliness in primary school. (Part 1)

Who am I?
Hi, my name is Aimee Cole and my job is finding out about schools and pupils like you at the University of Manchester.

Would you like to help me with my work about what children think about being lonely and what I should do to find out what lots of other children think about it? You don’t have to if you don’t want to.

What are we doing?
I will ask you to meet me and a group of up to 10 other children. I will ask you what you think about being lonely and what you think I should find out from other children. I will also ask you to tell me the best way to collect and record what you say so I can write a long piece of work about it. This piece of work will be for lots of other people to read and learn about what children think about being lonely.

Lots of children can feel lonely and sometimes they feel lonely for a day, or a week or sometimes a really long time. I want to understand more about what this feels like, but I need your help to think about what I can do to collect this information.

Why Does This Happen?
Right now, we don’t know what makes some children feel lonely and that’s why I am talking to children like you to find out.
What do you have to do?
If you want to help, I will ask you to:

• Answer some questions about what you think being lonely is and what it might feel like.
• Talk with other people in the group about what they think so I can get lots of information to help me think about what to do next.
• I will record what the group says so I can listen again and remember everything.

Would that be ok?

Who gets to see your answers?
I will need to know your name, whether you are a boy or a girl, and your age.
Only Aimee will know this.
Your teacher will not.
I will keep your answers safe by making sure that no one else sees them other than me.
I will take your name off your work.
I will keep your answers for 5 years and then I will destroy them.
If you want to know more, please ask your mum, dad or the person who looks after you as I have given them a lot of extra information about this.

What Do you Do Now?

If you have any questions please ask me, your mum, dad or the person that looks after you.

Let me know if you would like to take part.

Thank you for reading this!
An exploration of children’s understanding and experiences of school-based loneliness in primary school.

**Part 1: Focus Group**
Tell us if you want to take part

<table>
<thead>
<tr>
<th>Activities</th>
<th>Yes/No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you know what we will be doing today?</td>
<td>☑/☒</td>
</tr>
<tr>
<td>Do you want to ask me any more questions about it?</td>
<td>☑/☒</td>
</tr>
<tr>
<td>Do you know that you can change your mind if you do not want to take part anymore? You do not have to tell me why.</td>
<td>☑/☒</td>
</tr>
<tr>
<td>Are you happy for me to record your voice during the group?</td>
<td>☑/☒</td>
</tr>
<tr>
<td>Are you happy for the <em>small sentences of what you say</em> to be used in my <em>books</em> and <em>reports</em>?</td>
<td>☑/☒</td>
</tr>
<tr>
<td>Are you happy if I write what you tell me in my <em>books</em> and <em>reports</em>?</td>
<td>☑/☒</td>
</tr>
<tr>
<td>Do you know that the things you tell me might be looked at by people who help to keep you safe?</td>
<td>☑/☒</td>
</tr>
<tr>
<td>Are you happy if I share what we do with other people who do work like me?</td>
<td>☑/☒</td>
</tr>
<tr>
<td>Do you know we might have to tell your parents/guardians/teachers things you say?</td>
<td>☑/☒</td>
</tr>
</tbody>
</table>
Are you happy to take part in what we talked about? ☺/

If you don’t want to take part, that’s okay. Do not sign your name!

If you do want to take part, you can write your name below

________________________          ________________________
Name of Child          Signature          Date

________________________          ________________________
Name of the person taking assent          Signature          Date

[You will keep one copy of the consent form and the research team will keep one copy which will be scanned and stored on the University P drive, with the hard copy being destroyed.]
Appendix 12: Scoping Focus Group Outline

- Hello, my name is Aimee and I’m a student, just like you, but I go to Manchester University instead of school.
- I hope you have all seen this (show child-friendly information sheet).
- If you haven’t seen this, put your hand up.
- Today we’re going to be talking about loneliness, relationships and your school environment.
- Run through consent, check names and explain safeguarding using cards.
- If at any point you want to stop taking part, that’s okay, tell an adult.
- Reminder about voice recording.
- Rapport building exercise- alphabet name game, throw and catch with names game.
- Outline of how focus group will work and what children will be asked to do.

1. I’m really interested in what the word “lonely” means to children. I’m going to give you a minute to think about it and you might want to talk about it with a partner.
2. What does the word “friend” mean?
3. Is there anything you think is really important about feeling lonely in school that I need to ask other children about?
4. I’m going to be doing some more work in school to find out what other children in your year group think about loneliness but I need your help to think about what is the best way to collect all your and their ideas. I’m going to show you some ideas that I’ve had already and I want to think about whether you think they will help other children to talk to me or what I could do to make them better.
5. Can you think of any other ways I could gather all of your thoughts?
6. Is there anything else you want to tell me?
What is important to me?
- Travelling
- Cake
- Spending time with my family and friends

What would I like to get better at?
- Speaking Spanish
- Ballet dancing

If I were a superhero...
I would be able to travel in time.

What do you people like about me?
I am enthusiastic.
I am reliable.
I am friendly and easy to talk to.

How might we work together?
When we meet on Microsoft Teams, I will ask you about yourself and introduce myself. I will explain about some of the things we might do together, and you can ask about anything you’re not sure about.

What is my job?
I am a ‘Trainee Educational Psychologist’ but you can call me Aimee. I am a student just like you, but instead of going to school, I go to university.

My job is to work with children and adults in school, to find out what is going well and what is tricky, so we can help to make children feel happier and enjoy school more.

I am also doing a project about what children think about loneliness. That is why I’m asking for your help. I will write up all the information I collect from children, into a long piece work called a ‘thesis’.

What about if you don’t want to work with me?
If you don’t want to meet me and work together, that is your choice. We will do as much or as little as you feel okay with.
Appendix 14: Interview Parental Information Sheet

Research Participant Information Sheet

An exploration of children’s understanding and experiences of school-based loneliness in primary school.

Participant Information Sheet (PIS)
Part 2: Individual Interviews

Your child is being invited to take part in the second part of a research study part of a student project investigating children’s understanding and experiences of loneliness for a doctoral thesis. Before you decide whether to take part, it is important for you to understand why the research is being conducted and what it will involve. Please take time to read the following information carefully before deciding whether to take part and discuss it with others if you wish. Please ask if there is anything that is not clear or if you would like more information. Thank you for taking the time to read this.

About the research

➢ Who will conduct the research?

Principal Researcher: Aimee Cole
(Room A5.14, Ellen Wilkinson Building, Manchester University, Manchester M15 6JA).

Supervisor: Dr Caroline Bond
(Room A6.20 Ellen Wilkinson Building, Oxford Rd, Manchester M13 9PL)

Caroline.Bond@manchester.ac.uk

➢ What is the purpose of the research?

The research aims to explore what Year 4 and 5 pupils generally understand loneliness to be. Loneliness leads to feelings of sadness and it is possible for anyone to feel lonely. However, the way in which we feel lonely differs across our life. There is lots of research talking about teenagers’ and adults’ experiences and understanding of loneliness, however very little research has asked primary-aged children what they think.

The purpose of the research is to investigate primary-aged children’s views of loneliness, how they understand it and support others. It is hoped that by asking children about this, we can gain a greater understanding of experiences in general and therefore support those children, across the country, who experience loneliness.
This will be done in several interactive ways selected following feedback from the previous part of the research in which Year 4 and 5 children indicated what they feel is important for people to know about loneliness in childhood.

➢ Will the outcomes of the research be published?

The primary purpose of this research is for a Doctoral thesis; however outcomes may later be presented for publication.

➢ Disclosure and Barring Service (DBS) Check

The researcher and any adults who may be involved in the research, has undergone an appropriate level of DBS check.

➢ Who has reviewed the research project?

The research project has followed Ethical Practice Policy and Guidance set by the Manchester Institute of Education and has been reviewed by my supervisor Dr Caroline Bond. The research proposal has been reviewed by The School of Environment, Education and Development Ethics Committee.

**What would my involvement be?**

➢ What would I be asked to do if I took part?

If your child took part, they would be asked to take part in an individual, video-interview over Microsoft Teams, with the researcher. This will take place during the school day, whereby the child will attend the interview in a quiet room in school. During which, the researcher will ask them some questions about what they think loneliness is and what it looks like in children. Children will be encouraged to share answers, either verbally or by drawing pictures, choosing picture cards or using rating scales. This will be done in an informal manner.

The researcher does not expect there to be any risks to taking part in the research and participants won’t be asked personal questions or about their own experiences of loneliness. However the discussion will centre around the concept of loneliness. Prior to taking part, participants will be given a child-friendly participant information sheet, which will be explained verbally, before they are asked to sign a child-friend assent form. Full details about what will be required will also be explained, with the opportunity to ask questions. Children will be informed about their right to withdraw and stop taking part in the research at any time.

School staff will be aware of who is taking part in the interviews and the researcher will check in verbally with staff following each interview, to confirm whether any emotional support may be required for individuals, in school following interviews. The children taking part in the interviews will also be aware of this key adult in school prior to and following the interviews should they have any questions or concerns. Several days following the interview, the researcher will contact this key adult in school to provide any support and answer any questions.

➢ Will I be compensated for taking part?

No financial reward is being offered for participating in this research.

➢ What happens if I do not want to take part or if I change my mind?
It is up to you to decide whether or not you wish for your child to take part. If you do decide for your child to take part, you will be given this information sheet to keep and be asked to sign a consent form. If you decide for your child to take part, you are still free to withdraw your child’s participation at any time without giving a reason and without detriment to yourself or your child. However, it will not be possible to remove your data from the project once it has been anonymised and forms part of the dataset as we will not be able to identify your specific data. This does not affect your data protection rights. Due to the nature of the study, it is necessary for participant interviews to be voice recorded, however should they be uncomfortable with the recording process, they are free to stop recording and withdraw from the interview at any time.

**Data Protection and Confidentiality**

- **What information will you collect about me?**

  In order to participate in this research project we will need to collect information that could identify you and your child, called “personal identifiable information”. Specifically we will need to collect:

  - Though interviews will be conducted through a virtual meetings platform Microsoft Teams, with video, the researcher will only record audio. Audio recordings-they will consist of voice only and the surrounding environment which will be obtained through scaling and rating exercises, open questions, sorting exercises and drawing tasks. This will be transcribed by a professional, university approved transcriber. The data will then be analysed for key themes and written up as part of a Doctoral Thesis.
  - Any names of children or staff used during the interview will be anonymised during transcription, along with the name of the participants, to ensure participants are unidentifiable. Following completion of the analysis, the voice recordings will be deleted, and the transcripts will be anonymised using pseudonyms so that individuals cannot be identified. Transcripts will be stored on the university encrypted P drive. With your consent, small quotes may be used in the write up of the research project in order to illustrate findings more easily.
  - The researcher at the University of Manchester will have access to your child’s personal identifiable information in the consent form, that is, data which could identify your child. Your consent form and your child’s consent form, contact details, etc will be retained for 5 years on an encrypted drive. Only the researcher will have access to these details.
  - Your child’s details will remain confidential unless they disclose any information to the researcher suggesting they are in danger. In which case the researcher will be obliged to pass this information on to school’s Designated Safeguarding Lead.

- **Under what legal basis are you collecting this information?**

  We are collecting and storing this personal identifiable information in accordance with data protection law which protect your rights. These state that we must have a legal basis (specific reason) for collecting your data. For this study, the specific reason is that it is “a public interest task” and “a process necessary for research purposes”.

- **What are my rights in relation to the information you will collect about me?**
You have a number of rights under data protection law regarding your personal information. For example you can request a copy of the information we hold about you, including audio recordings or photographs.

If you would like to know more about your different rights or the way we use your personal information to ensure we follow the law, please consult our Privacy Notice for Research. https://www.manchester.ac.uk/discover/privacy-information/data-protection/website-privacy-notice/

➢ Will my participation in the study be confidential and my personal identifiable information be protected?

In accordance with data protection law, The University of Manchester is the Data Controller for this project. This means that we are responsible for making sure your personal information is kept secure, confidential and used only in the way you have been told it will be used. All researchers are trained with this in mind, and your data will be looked after in the following way:

In order to ensure confidentiality, voice recordings will be encrypted and pseudonymised during transcription. The professional, University approved transcriber has their own encryption and confidentiality processes in place.

Only the study team at The University of Manchester will have access to your child’s personal information, but they will anonymise it as soon as possible. Your child’s name and any other identifying information will be removed and replaced with a random ID number. Only the research team will have access to the key that links this ID number to your personal information. Your consent form and your child’s consent form, contact details, etc will be retained for 5 years on an encrypted drive. Only the researcher will have access to these details.

Any names of children or staff used during the interview will be anonymised during transcription, along with the name of the participants, to ensure participants are unidentifiable. Following completion of transcription, the voice recordings will be deleted, and the transcripts will be anonymised using pseudonyms so that individuals cannot be identified. Transcripts will be stored on the university encrypted P drive. With your consent, small quotes may be used in the write up of the research project in order to illustrate findings.

The personal information the researcher will collect will include:

- Your name and contact details and your child’s name.
- Audio recordings will be taken of interviews and deleted following transcription.
- Anonymised transcripts of audio data will be analysed.

Only the researcher will have access to this information. Supervisors will have access only to anonymised transcriptions.

It will also be necessary, for health and safety and attendance purposes, for key staff in school to know about your child’s participation in the study. There may circumstances under which the researcher would have to disclose information. Such instances include: if there are concerns about the participant’s safety or the safety of others, where there is a professional
obligation to report misconduct, reporting of current/future illegal activities to the authorities.

Please also note that individuals from The University of Manchester or regulatory authorities may need to look at the data collected for this study to make sure the project is being carried out as planned. This may involve looking at identifiable data. All individuals involved in auditing and monitoring the study will have a strict duty of confidentiality to you as a research participant.

**What if I have a complaint?**

- Contact details for complaints

**Minor complaints**

- If you have a minor complaint then you need to contact the researcher(s) in the first instance ([aimee.cole-2@postgrad.manchester.ac.uk](mailto:aimee.cole-2@postgrad.manchester.ac.uk)). However, if you would prefer not to discuss with the researcher, please contact the research supervisor at [Caroline.Bond@manchester.ac.uk](mailto:Caroline.Bond@manchester.ac.uk).

If you wish to make a formal complaint to someone independent of the research team or if you are not satisfied with the response you have gained from the researchers in the first instance then please contact

The Research Governance and Integrity Officer, Research Office, Christie Building, The University of Manchester, Oxford Road, Manchester, M13 9PL, by emailing: [research.complaints@manchester.ac.uk](mailto:research.complaints@manchester.ac.uk) or by telephoning 0161 275 2674.

If you wish to contact us about your data protection rights, please email [dataprotection@manchester.ac.uk](mailto:dataprotection@manchester.ac.uk) or write to The Information Governance Office, Christie Building, The University of Manchester, Oxford Road, M13 9PL at the University and we will guide you through the process of exercising your rights.

You also have a right to complain to the [Information Commissioner’s Office about complaints relating to your personal identifiable information](https://ico.org.uk/make-a-complaint/) Tel 0303 123 1113 / [https://ico.org.uk/make-a-complaint/](https://ico.org.uk/make-a-complaint/)

**Contact Details**

If you have any queries about the study or if you are interested in taking part then please contact the researcher(s).

If you have any queries about the study or if you are interested in taking part then please contact the researcher(s) at [aimee.cole-2@postgrad.manchester.ac.uk](mailto:aimee.cole-2@postgrad.manchester.ac.uk)/0161 275 3511. If you are happy for your child to take part in the research, please sign and return the consent form to school.
Appendix 15: Interview Parental Consent Sheet

An exploration of children’s understanding and experiences of school-based loneliness in

primary school.

Consent Form
Part 2: Interview

If you are happy to participate please complete and sign the consent form below

<table>
<thead>
<tr>
<th>Activities</th>
<th>Initials</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I confirm that I have read the attached information sheet (Version 2, Date 12/06/2020) for the above study and have had the opportunity to consider the information and ask questions and had these answered satisfactorily.</td>
<td></td>
</tr>
<tr>
<td>2. I understand that my child’s participation in the study is voluntary and that I am free to withdraw at any time without giving a reason and without detriment to myself. I understand that it will not be possible to remove my child’s data from the project once it has been anonymised and forms part of the data set. I agree for my child to take part on this basis.</td>
<td></td>
</tr>
<tr>
<td>3. I agree for my child to take part in this interview over the virtual meetings platform Microsoft Teams.</td>
<td></td>
</tr>
<tr>
<td>4. I agree to the interviews being audio recorded.</td>
<td></td>
</tr>
<tr>
<td>5. I agree that anonymised quotes may be used in publications.</td>
<td></td>
</tr>
<tr>
<td>6. I agree that any data collected may be published in anonymous form in academic books, reports or journals.</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>I understand that data collected during the study may be looked at by individuals from The University of Manchester or regulatory authorities, where it is relevant to my taking part in this research. I give permission for these individuals to have access to my data.</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>8</td>
<td>I agree that any <strong>anonymised</strong> data collected may be shared with other researchers.</td>
</tr>
<tr>
<td>9</td>
<td>I agree that the <strong>researchers/researchers at other institutions</strong> may contact me in future about other research projects for my child to take part in.</td>
</tr>
<tr>
<td>10</td>
<td>I agree that the researchers may retain my contact details in order to provide myself and my child with a summary of the findings for this study.</td>
</tr>
<tr>
<td>11</td>
<td>I understand that there may be instances where during the course of the <strong>interview</strong> information is revealed which means that the researchers will be obliged to break confidentiality and this has been explained in more detail in the information sheet.</td>
</tr>
<tr>
<td>12</td>
<td>I agree for my child to take part in this study.</td>
</tr>
</tbody>
</table>

**Data Protection**

The personal information we collect and use to conduct this research will be processed in accordance with data protection law as explained in the Participant Information Sheet and the [Privacy Notice for Research Participants](#).

---

Name of Child/participant  
Signature  
Date

Name of Participant’s Parent/Carer  
Signature  
Date

Name of the person taking consent  
Signature  
Date

[You will keep one copy of the consent form and the research team will keep one copy which will be scanned and stored on the University P drive, with the hard copy being destroyed.]
Appendix 16: Interview Child Information Sheet

Exploring what children think about loneliness in primary school. (Part 2)

Who am I?
Hi, my name is Aimee Cole and my job is finding out about schools and pupils like you at the University of Manchester.

Would you like to help me with my work about what children think about being lonely and what it might feel like for children? You don’t have to if you don’t want to.

What are we doing?
I will ask you to spend some time on Microsoft Teams at school and I will ask you some questions about what you think about being lonely and how it might feel for children at school. Microsoft Teams is a computer programme, similar to Zoom and Skype, that allows us to see and talk to each other when we’re in different places. I might ask you to draw, or sort some cards or put some numbers next to sentences but you can help to choose how you want to answer the questions. I will record what you say so I can listen back and write a long piece of work about it. I will be asking some other children the same questions and will collect all this information to help me. This piece of work will be for lots of other people to read and learn about what children think about being lonely.

Lots of children can feel lonely and sometimes they feel lonely for a day, or a week or sometimes a really long time. I want to understand more about what this feels like, but I need your help to think about what I can do to collect this information.
Why Does This Happen?

Right now, we don’t know what makes some children feel lonely and that’s why I am talking to children like you to find out.

What do you have to do?

If you want to help, I will ask you to:

- Answer some questions about what you think being lonely is and what it might feel like.
- Help me to understand what you mean by doing some activities like drawing, talking, sorting cards.
- I will record what you say so I can listen again and remember everything.

Would that be ok?

Who gets to see your answers?

I will need to know your name, whether you are a boy or a girl, and your age.

Only Aimee will know this.

Your teacher will not.

There is an adult in school who knows you are taking part in this project and you can go to them if you feel worried or have any questions after the interview. This adult is *school staff’s name*

I will keep your answers safe by making sure that no one else sees them other than me.

I will take your name off your work.

I will keep your answers for 5 years and then I will destroy them.

If you want to know more, please ask your mum, dad or the person who looks after you as I have given them a lot of extra information about this.

What Do you Do Now?

If you have any questions please ask me, your mum, dad or the person that looks after you.

Let me know if you would like to take part.

Thank you for reading this!
An exploration of children’s understanding and experiences of school-based loneliness in primary school.

Part 2: Interview
Tell us if you want to take part

<table>
<thead>
<tr>
<th>Activities</th>
<th>Yes/No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Do you know what we will be doing today?</td>
<td>☑️/❌</td>
</tr>
<tr>
<td>2 Do you want to ask me any more questions about it?</td>
<td>☑️/❌</td>
</tr>
<tr>
<td>3 Do you know that you can change your mind if you do not want to take part anymore?  &lt;br&gt; You do not have to tell me why.</td>
<td>☑️/❌</td>
</tr>
<tr>
<td>4 Do you know that this interview will take place on Microsoft Teams and we will be able to see and hear each other?</td>
<td>☑️/❌</td>
</tr>
<tr>
<td>5 Are you happy for me to record just your voice during the interview?</td>
<td>☑️/❌</td>
</tr>
<tr>
<td>6 Are you happy for the small sentences of what you say to be used in my books and reports?</td>
<td>☑️/❌</td>
</tr>
<tr>
<td>7 Are you happy if I write what you tell me in my books and reports?</td>
<td>☑️/❌</td>
</tr>
<tr>
<td>8 Do you know that the things you tell me might be looked at by people who help to keep you safe?</td>
<td>☑️/❌</td>
</tr>
<tr>
<td>9</td>
<td>Do you know who the <strong>key adult</strong> is in school who you <strong>can go and talk</strong> to after the interview if you are <strong>worried</strong> or have any questions?</td>
</tr>
<tr>
<td>10</td>
<td>Are you happy if I share <strong>what we do</strong> with other people who do work like me?</td>
</tr>
<tr>
<td>11</td>
<td>Do you know we might have to tell your <strong>parents/guardians/teachers</strong> things you say?</td>
</tr>
<tr>
<td>12</td>
<td>Are you <strong>happy to take part</strong> in what we talked about?</td>
</tr>
</tbody>
</table>

If you don’t want to take part, that’s okay. **Don’t** sign your name!

If you do want to take part, you **can** write your name below

________________________          ________________________

Name of Child                    Signature                    Date

________________________          ________________________

Name of the person taking assent   Signature                    Date

[You will keep one copy of the consent form and the research team will keep one copy which will be scanned and stored on the University P drive, with the hard copy being destroyed.]
Appendix 18: Interview Schedule

- Today we’re going to be talking about loneliness, relationships and your school environment.
- Run through consent, check names and explain safeguarding using cards.
- If at any point you want to stop taking part, that’s okay, tell an adult.
- Acknowledge Covid-19 and its possible impact on our understanding of loneliness due to not being able to see our family and friends.

1. What does “lonely” mean?
2. Do you like being alone?
3. What is a friend?
   - Can you have lots of friends and be lonely?
4. Do you think children can get lonely?
   - What do you think would make children feel lonely?
5. How does it feel to be lonely?
   - Is this different to how adults feel when they’re lonely?
   - What would you do if you felt lonely?
   - What would you do if your friend told you they were lonely?
6. What do you think your teacher thinks ‘lonely’ means?
   - Does your teacher think the same about loneliness as you?
7. Is there anything your teachers do to help children who might be feeling lonely?
8. Is there anything your school does to help you make friends?

Sorting

Teacher-pupil relationships

My teacher listens to me.
My teacher makes sure I am part of the group.
I can talk to my teacher if I am feeling sad.
My teacher knows how to look after lonely children.
My teacher knows what to do if I felt lonely.
My teacher knows when I am not feeling okay.
Teachers know what loneliness is like for children.

Teacher Characteristics

My teacher is friendly
My teacher is approachable.
My teacher knows what to do to help me.
My teacher is good at noticing.
My teacher knows me.
My teacher understands me.
My teacher gives me time to talk.
My teacher makes time for me.

Rating scale (active)

Which of these things is most important to help children like you not to feel lonely?
Appendix 19: Interview Resources

Not having friends.  Having lots of friends.

Not having anyone to play with.  Having lots of people to play with.
Not getting on well

with other children.

Getting on with other children.

Feeling left out.

Feeling included.

Feeling listened to

Feeling ignored.
Getting help when you need it.

Talking to lots of children.

Having one good friend.

Not getting help.

Not talking to other children.

Having no good friends.
Playing with children who like the same things.

Playing with children who don’t like the same things.
Appendix 20: Initial Codes

Code

1% chance

A friend is someone to have lots of fun together

Adults aren't lonely

Adults are lonely without friends

Adults pretend

Adults would be sad if they’re lonely

Almost always someone to play with in a big group of friends

Alone

Alone is boring

Alone is lonely

Alone to do the stuff we want to do ourself

alone to think about what’s happening

alone when trying to calm down

ask if they’re okay

ask them out

ask them what they want to do
ask to play with them

boring

carry on asking if you are alright

cross your hands

different country

different on playground and in the classroom

do you want to play

doing things together

don't know what to do

easier to see in the playground

eat together with friends

embarrassed

everyone can be lonely

feel included

feel left out

feel sad because you're on your own

friend is someone to play lots of games with

friend is someone to rely on
friend not leave you alone

friends don't say they're lonely

friends is someone to spend time with

friends keep you safe

friends might want to play with other friends

friends play with you

Fun

get rough

'go away'

go away from each other

Go in the corner

go out, have a nice time

good friends at church

having one good friend isn't good or bad

help from parents and carers at home

help from teachers in school

hilariousness

huddled over
I would ask to play with them

if you don't get help really sad

keep it a secret

keeping company and keeping safe are the same

kindness

left out

less chance of being lonely if have a big group of friends

less people around easier to spot lonely children

let them play with me

like the same thing do it again

lonely but have people

lonely children on the playground

lonely if no one to be with

lonely if no one to do stuff with

lonely means nobody to play with

looked angry

looked sad

looking ready to cry
lots of people can give help

loyalty

make up a game with the same things

mental problem when adult

more chance of being lonely with a small group of friends

more likely someone play with

more lonely on the playground

More mad

nervous about asking for help

never happened to me

no friends means no one to play with

no one to keep you company

no one to keep you safe

no one to protect you

not allowed to play

Not an adult

not easy to spot lonely children

not getting help more lonely
not have anyone to play with
not having friends and nobody to play with is the same
not knowing where you are
not many lonely people
not seen anyone lonely at playtime
not sure about adults
not talk when you’re lonely
not want to play with you
on the playground lots of people running
people leave you
play a board game with them
play games around the table
play in a group
play together
play with friends
play with someone else and you’re alone
playing gentle games
playing nicely
playing online games together

playing with someone

pretend to be fine

pretend to be happy

quiet

realise when someone is lonely

Sad

say no from anger

see people playing with their friends

seen lonely children

seen people who want to play

so angry they want to be alone

some adults are lonely

some adults aren't pretending

some adults in this country

sometimes children like to be alone

sometimes like being alone

sometimes like to play alone
sometimes people argue and fight

talk to a teacher

talking can make you feel more or less lonely

teachers might ask someone to play with them

teachers noticing makes them more angry

tell them something important

tell them they can play

they ask you to play

tired

tone of voice

too many people playing

trust a friend

try and find who didn't let them play

upset

walk away

walking around

walking around by yourself

want to be alone
won’t say ‘I’m lonely’

Worried

would ask for help

you might not be able to get help
Appendix 21: A Priori Codebook with Codes
<table>
<thead>
<tr>
<th>A priori codebook</th>
<th>Inductive Themes</th>
<th>Inductive Subthemes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Code 1</td>
<td>Social Loneliness</td>
<td>Alone/Left out/by yourself</td>
</tr>
<tr>
<td>Label</td>
<td>Social Loneliness</td>
<td>Alone</td>
</tr>
<tr>
<td>Definition</td>
<td>Absence of social network</td>
<td>actually lonely</td>
</tr>
<tr>
<td></td>
<td></td>
<td>alone</td>
</tr>
<tr>
<td></td>
<td></td>
<td>alone is boring</td>
</tr>
<tr>
<td></td>
<td></td>
<td>alone is lonely</td>
</tr>
<tr>
<td></td>
<td></td>
<td>being worried about wanting to be by yourself</td>
</tr>
<tr>
<td></td>
<td></td>
<td>boring go away from each other</td>
</tr>
<tr>
<td></td>
<td></td>
<td>embarrassed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>empty</td>
</tr>
<tr>
<td></td>
<td></td>
<td>everyone can be lonely</td>
</tr>
<tr>
<td></td>
<td></td>
<td>'go away'</td>
</tr>
<tr>
<td></td>
<td></td>
<td>going away from you</td>
</tr>
<tr>
<td></td>
<td></td>
<td>just want to be friends</td>
</tr>
<tr>
<td></td>
<td></td>
<td>leave myself</td>
</tr>
<tr>
<td></td>
<td></td>
<td>left alone</td>
</tr>
<tr>
<td></td>
<td></td>
<td>left by themselves</td>
</tr>
<tr>
<td></td>
<td></td>
<td>like being with friends</td>
</tr>
<tr>
<td></td>
<td></td>
<td>like being with other people</td>
</tr>
<tr>
<td>left by yourself</td>
<td>like playing alone</td>
<td></td>
</tr>
<tr>
<td>------------------</td>
<td>-------------------</td>
<td></td>
</tr>
<tr>
<td>left out</td>
<td>like to be near people</td>
<td></td>
</tr>
<tr>
<td>less interest in you</td>
<td>lonely if no one to be with</td>
<td></td>
</tr>
<tr>
<td>like being with friends</td>
<td>lonely if no one to do stuff with</td>
<td></td>
</tr>
<tr>
<td>like being with other people</td>
<td>lonely means nobody to be with</td>
<td></td>
</tr>
<tr>
<td>like playing alone</td>
<td>lonely with people</td>
<td></td>
</tr>
<tr>
<td>like to be near people</td>
<td>look like playing together</td>
<td></td>
</tr>
<tr>
<td>lonely if no one to be with</td>
<td>look like they're with others</td>
<td></td>
</tr>
<tr>
<td>lonely if no one to do stuff with</td>
<td>near each other</td>
<td></td>
</tr>
<tr>
<td>lonely means nobody to be with</td>
<td>no attention</td>
<td></td>
</tr>
<tr>
<td>lonely with people</td>
<td>no- more lonely</td>
<td></td>
</tr>
<tr>
<td>look like playing together</td>
<td>no one lonely</td>
<td></td>
</tr>
<tr>
<td>look like they're with others</td>
<td>no one to keep you company</td>
<td></td>
</tr>
<tr>
<td>near each other</td>
<td>nobody around you</td>
<td></td>
</tr>
<tr>
<td>no attention</td>
<td>nobody left out</td>
<td></td>
</tr>
<tr>
<td>no- more lonely</td>
<td>nobody to play with</td>
<td></td>
</tr>
</tbody>
</table>
nobody around you

nobody's around you

nobody left out

nobody's around you

nobody to play with

not included

nobody's around you

not knowing where you are

not included

not often alone

not knowing where you are

not realise they're not
included

not often alone
not realise they're not included
not spending time with you
people leave you
separate
socially distance
some people are ignoring you
somebody else
sometimes better to do alone
sometimes people argue and fight
sometimes you want friends
stay away
staying away

not spending time with you
people leave you
sad when realise not included
some people are ignoring you
somebody else
sometimes better to do alone
sometimes people argue and
fight
sometimes you want friends
stay away
staying away
trying to be with other people
walk away

232


<table>
<thead>
<tr>
<th>Description</th>
<th>try to be with other people</th>
<th>want to be with someone</th>
<th>world is full of people</th>
</tr>
</thead>
<tbody>
<tr>
<td>being worried about wanting to be by yourself</td>
<td>want to be with someone</td>
<td>want to join in</td>
<td>don't want to be near each other</td>
</tr>
<tr>
<td>dislike being alone</td>
<td>feel all by themselves</td>
<td></td>
<td></td>
</tr>
<tr>
<td>want to be with someone</td>
<td>want to be with the person</td>
<td></td>
<td></td>
</tr>
<tr>
<td>want to join in</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>like being with friends</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>like being with other people</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>like to be near people</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>lonely but have people</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>lonely and sad</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>sad when realise not included</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Description**: Friends, play, social network, left out, aloneness, interests and ideas, social dissatisfaction, belonging, companionship, community, perceptions of friendship

**Experienced**
<p>| alone is boring |
| alone is lonely |
| embarrassed |
| empty |
| alone |
| dislike being alone |
| feel all by themselves |
| want to be with someone |
| want to be with the person |
| want to join in |
| like being with friends |
| like being with other people |
| like to be near people |
| lonely but have people |
| lonely and sad |
| separate |
| socially distance |
| world is full of people |</p>
<table>
<thead>
<tr>
<th>Friendship</th>
<th>Friendship Definitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>A friend cares</td>
<td></td>
</tr>
<tr>
<td>a friend is someone to have lots of fun together</td>
<td></td>
</tr>
<tr>
<td>almost always someone to play with in a big group of friends</td>
<td></td>
</tr>
<tr>
<td>always one friend</td>
<td></td>
</tr>
<tr>
<td>better to like different things</td>
<td></td>
</tr>
<tr>
<td>bit more of what you like to do</td>
<td></td>
</tr>
<tr>
<td>caring</td>
<td></td>
</tr>
<tr>
<td>cheers you up</td>
<td></td>
</tr>
<tr>
<td>comfort</td>
<td></td>
</tr>
<tr>
<td>different personalities</td>
<td></td>
</tr>
<tr>
<td>do lots of things</td>
<td></td>
</tr>
<tr>
<td>don't want friends because of something they do</td>
<td></td>
</tr>
<tr>
<td>don't want to be near each other</td>
<td></td>
</tr>
<tr>
<td>eat together with friends</td>
<td></td>
</tr>
<tr>
<td>enjoy time together</td>
<td></td>
</tr>
<tr>
<td>fall out</td>
<td></td>
</tr>
</tbody>
</table>

<p>| A friend cares |
| a friend is someone to have lots of fun together |
| caring |
| cheers you up |
| comfort |
| different personalities |
| eat together with friends |
| enjoy time together |
| friend is someone to play lots of games with |
| friend not leave you alone |
| friends |
| friends are different to you |
| friends is someone to spend time with |
| friends just are |
| friends play with you |
| friendship |
| fun |</p>
<table>
<thead>
<tr>
<th>Almost always someone to play with in a big group of friends</th>
<th>Good friends at church</th>
<th>Funny</th>
</tr>
</thead>
<tbody>
<tr>
<td>Friends and loneliness/preventing/impact of friends</td>
<td>Think they're weird</td>
<td>Kindness</td>
</tr>
<tr>
<td>Sharing</td>
<td>Think you're a good friend</td>
<td>Laughter</td>
</tr>
<tr>
<td>Loyalty</td>
<td>Good friends at church</td>
<td>Hilariousness</td>
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<td>Respect</td>
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<tr>
<td>Keep it a secret</td>
<td>Friends and loneliness/preventing/impact of friends</td>
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</tr>
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<td>Friendship group</td>
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<td>Shared activities</td>
</tr>
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<td>Friends and loneliness/preventing/impact of friends</td>
<td>Friendly</td>
</tr>
<tr>
<td>Think they're weird</td>
<td>Almost always someone to play with in a big group of friends</td>
<td>Friendly</td>
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<tr>
<td>Think you're a good friend</td>
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<td>Friendly</td>
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<tr>
<td>Fun</td>
<td>Almost always someone to play with in a big group of friends</td>
<td>Friendly</td>
</tr>
<tr>
<td>Kindness</td>
<td>Almost always someone to play with in a big group of friends</td>
<td>Friendly</td>
</tr>
<tr>
<td>Laughter</td>
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<tr>
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<td>Almost always someone to play with in a big group of friends</td>
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</tr>
<tr>
<td>Shared activities</td>
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</tr>
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<td>having no good friends doesn't mean no friends</td>
<td>always one friend</td>
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<td>hilariousness</td>
<td>better to like different things</td>
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<tr>
<td>keep it a secret</td>
<td>bit more of what you like to do</td>
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<tr>
<td>kindness</td>
<td>do lots of things</td>
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<tr>
<td>less chance of being lonely if have a big group of friends</td>
<td>don't want friends because of something they do</td>
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<tr>
<td>lots can be less than one friend</td>
<td>fall out</td>
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<td>lots of friends play with one</td>
<td>fall out with more than one friend</td>
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<td>loving</td>
<td>friend group</td>
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<td>loyalty</td>
<td>friends don't say they're lonely</td>
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<tr>
<td>may be included but not</td>
<td>friends have other friends</td>
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<tr>
<td>more friends less lonely</td>
<td>friends with other people</td>
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<tr>
<td>more likely someone play with new friends</td>
<td>friendship group</td>
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<td>no friends means no one to play with</td>
<td>having no good friends doesn't mean no friends</td>
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<td>not having friends and nobody to play with is the same</td>
<td>less chance of being lonely if have a big group of friends</td>
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<tr>
<td>one friend has given up</td>
<td>lots can be less than one friend</td>
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<tr>
<td>one friend makes you lonely</td>
<td>lots of friends play with one</td>
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<td>may be included but not</td>
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<td>one person without a friend to play</td>
<td>more chance of being lonely with a small group of friends</td>
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<tr>
<td>playing is better with friends</td>
<td>more friends less lonely</td>
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<tr>
<td>respect</td>
<td>more likely someone play with new friends</td>
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<tr>
<td>see people playing with their friends</td>
<td>no friends means no one to play with/not having friends and nobody to play with is the same</td>
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<tr>
<td>shared activities</td>
<td>one friend has given up</td>
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<td>one friend makes you lonely</td>
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<td>somebody who wants to be with you</td>
<td>playing is better with friends</td>
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<tr>
<td>someone else with no one to play with</td>
<td>see people playing with their friends</td>
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</tr>
<tr>
<td>sometimes better with someone else</td>
<td>someone else with no one to play with</td>
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<td>think they’re weird</td>
<td>sometimes better with someone else</td>
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<tr>
<td>think you’re a good friend</td>
<td>friend is someone to rely on</td>
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</table>

<p>| Play | Positive references to play |
| 1% chance actually lonely | 1% chance children like playing |
| almost always someone to play with in a big group of friends | children play together |
| doing things together |</p>
<table>
<thead>
<tr>
<th>children like playing</th>
<th>get used to what they like</th>
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<tr>
<td>children like playing</td>
<td>go out, have a nice time/ make up a game with the same things</td>
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<tr>
<td>children play together</td>
<td>may not be friends but got someone to play with</td>
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<tr>
<td>children play together</td>
<td>nobody to play with</td>
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<td>do you want to play</td>
<td>not having friends and nobody to play with is the same/ not want to play with you</td>
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<tr>
<td>do you want to play</td>
<td>one person without a friend to play</td>
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<tr>
<td>doing more things is fun</td>
<td>play a board game with them/ play games around the table/ play in a group/ play other people/ play something you like play together/ play what you want to play/ play with different friends/ play with friends/ play with them/ playing games/ playing gentle games</td>
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<tr>
<td>doing things together</td>
<td>playing is better with friends/ playing nicely</td>
</tr>
<tr>
<td>don't need to be by yourself</td>
<td>playing online games together/ playing together/ playing with people who like the same things not important/ playing with someone/ plays with you every day/ see people playing with their</td>
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<tr>
<td>get rough</td>
<td></td>
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<tr>
<td>get used to what they like</td>
<td></td>
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<tr>
<td>go out, have a nice time/ make up a game with the same things</td>
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<tr>
<td>hurt on the outside</td>
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<tr>
<td>like same thing less fun</td>
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<tr>
<td>like something else</td>
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<tr>
<td>like the same thing do it again</td>
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<tr>
<td>make up a game with the same things</td>
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<tr>
<td>may not be friends but got someone to play with</td>
<td></td>
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<tr>
<td>nobody to play with</td>
<td>friends/spend time with somebody else</td>
</tr>
<tr>
<td>nobody to play with</td>
<td>funny friends makes you happy</td>
</tr>
<tr>
<td>not allowed to play</td>
<td>Negative references to play</td>
</tr>
<tr>
<td>not having friends and nobody to play with is the same</td>
<td>get rough/hurt on the outside/like something else/nobody to play/not allowed to play/not having friends and nobody to play with is the same/not want to play with you/play with someone else and you're alone/too many people playing</td>
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<tr>
<td>not having friends and nobody to play with is the same</td>
<td>one person without a friend to play</td>
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<tr>
<td>not want to play with you</td>
<td>play a board game with them</td>
</tr>
<tr>
<td>not want to play with you</td>
<td>play games around the table</td>
</tr>
<tr>
<td>one person without a friend to play</td>
<td>play in a group</td>
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<tr>
<td>play a board game with them</td>
<td>play other people</td>
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<td>play games around the table</td>
<td>play something you like</td>
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<td>play in a group</td>
<td>play together</td>
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<td>play other people</td>
<td>play what you want to play</td>
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<td>play something you like</td>
<td>play with different friends</td>
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<tr>
<td>play together</td>
<td>play with friends</td>
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<td>play what you want to play</td>
<td>play with someone else and you're alone</td>
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<td>play with different friends</td>
<td>play with someone else and you're alone</td>
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<td>play with someone else and you're alone</td>
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<td>play with someone else and you're alone</td>
<td>play with someone else and you're alone</td>
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</tbody>
</table>
| Code 2 | play with someone to feel better  
play with them  
playing games  
playing gentle games  
playing is better with friends  
playing nicely  
playing online games together  
playing together  
playing with people who like the same things not important  
playing with someone  
plays with you every day  
see people playing with their friends  
spend time with somebody else  
too many people playing |
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<td>Label</td>
<td>Emotional Loneliness</td>
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<tr>
<td>Definition</td>
<td>Absence of an attachment</td>
</tr>
<tr>
<td>Description</td>
<td>Parent related loneliness, attachment figure, being understood, someone to talk to, playing makes you think about loneliness</td>
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<td>Code 3</td>
<td>Label</td>
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<td>-------</td>
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<tr>
<td></td>
<td>Definition</td>
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<tr>
<td></td>
<td>Description</td>
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Understanding/knowing you

- less interest in you/a friend understands you/being understood/care about somebody else/care when you're sad/understand them/ friends keep you safe/interested in you/someone understands you/someone who makes you laugh/tell them something important/trust a friend /person you know/same interests/try to make you happy/ still understand if not experienced/ somebody who likes you

- don't know you/don't know you well/not know what you're talking about/ just say they're lonely/ not get on well/not like same things cause trouble/not understand feelings
| loneliness experiences | yourself/alone to think about what's happening/you might not want friends/alone when trying to calm down/happy if don't know not included/happy to be alone/sometimes children like to be alone/sometimes like being alone/sometimes like to play alone/don't like to be with other people/more mad/people annoy them/sometimes better to do alone |

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<tr>
<th>Code 5</th>
<th>Label</th>
<th>Solutions</th>
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</thead>
<tbody>
<tr>
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<td>act like nothing's happened</td>
<td></td>
</tr>
<tr>
<td></td>
<td>can be long</td>
<td></td>
</tr>
<tr>
<td></td>
<td>cross your hands</td>
<td></td>
</tr>
<tr>
<td></td>
<td>different on playground and in the classroom</td>
<td></td>
</tr>
<tr>
<td></td>
<td>easier to see in the playground</td>
<td></td>
</tr>
<tr>
<td></td>
<td>act like nothing's happened/ cross your hands/ easier to see in the playground/easy to spot/hard to spot/ huddled over/less people around easier to spot lonely children</td>
<td></td>
</tr>
<tr>
<td></td>
<td>lonely children on the playground/looked sad/looking ready</td>
<td></td>
</tr>
<tr>
<td>Easy to spot</td>
<td>Go in the corner</td>
<td>Hard to spot</td>
</tr>
<tr>
<td>--------------</td>
<td>------------------</td>
<td>--------------</td>
</tr>
<tr>
<td><em>Feels like</em></td>
<td>to cry/not as happy/not easy to spot lonely children/not seen anyone lonely at playtime/not talk when you're lonely/on the playground lots of people running/playground/pretend to be fine/pretend to be happy/realise when someone is lonely/seen lonely children/sit on the ground/sitting alone/tone of voice/walking around/walking around by yourself/wandering around/want to play hide loneliness</td>
<td>can be long/different on playground and in the classroom/loneliness at school/lonely for days</td>
</tr>
</tbody>
</table>
pretend to be fine
pretend to be happy
quiet
realise when someone is lonely
Sad
say no from anger
seen lonely children
seen people who want to play
short period
sit on the ground
sitting alone
tone of voice
upset
walking around
walking around by yourself
wandering around
worried
different on playground and in the classroom
<table>
<thead>
<tr>
<th>Independent solutions</th>
<th>Practical solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>ask again</td>
<td>ask again/ask another person/ask if they want to play/ask them out/ask them to play/ask them what they want to do/ask if they want to play/do you want to play/find a friend/follow the person/follow them/help them to tell/helps you off the ground/ask to play with them/I'm your friend/let them play with me/look for a friend/play with them/they ask you to play/they can help you/try to play with someone/would ask for help</td>
</tr>
<tr>
<td>ask another person</td>
<td></td>
</tr>
<tr>
<td>ask if they want to play</td>
<td></td>
</tr>
<tr>
<td>ask them out</td>
<td></td>
</tr>
<tr>
<td>ask them to play</td>
<td></td>
</tr>
<tr>
<td>ask them what they want to do</td>
<td></td>
</tr>
<tr>
<td>ask if they want to play</td>
<td></td>
</tr>
<tr>
<td>ask them to play</td>
<td></td>
</tr>
<tr>
<td>do you want to play</td>
<td></td>
</tr>
<tr>
<td>find a friend</td>
<td></td>
</tr>
<tr>
<td>follow the person</td>
<td></td>
</tr>
<tr>
<td>follow them</td>
<td></td>
</tr>
<tr>
<td>help them to tell</td>
<td></td>
</tr>
<tr>
<td>helps you off the ground</td>
<td></td>
</tr>
<tr>
<td>I would ask to play with them</td>
<td></td>
</tr>
<tr>
<td>I'm your friend</td>
<td></td>
</tr>
<tr>
<td>ask to play with them</td>
<td></td>
</tr>
</tbody>
</table>
important to get help when you need it
less chance of being lonely if have a big
group of friends
let them play with me
look for a friend
they ask you to play
ey can help you
try to play with someone
would ask for help
you might not be able to get help
less chance of being lonely if have a big
group of friends
play with them

<table>
<thead>
<tr>
<th>Adult support</th>
</tr>
</thead>
</table>
| try and find who didn't let them play/can't help/teachers help
you/teachers might ask someone to play
with them/teachers noticing/makes
them more angry/tell a teacher/tell the
teacher/tell them they can play/move
on/you'll be fine/if you don't get help |
<table>
<thead>
<tr>
<th>Code 6</th>
<th>Label</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Adult experience differs from child</td>
</tr>
</tbody>
</table>

really sad/other people friends don't know

Barriers to support

lots of people can give help/need help/nervous about asking for help/not afraid to ask for help/say 'no'/say 'yes'/talking can/make you feel more or less lonely/don't know how it feels/don't know what to do/argue who's best/been lonely know what it/feels like/feel less lonely/children less lonely/went through it/won't say I'm lonely/you might not be able to get help

The ‘norm’

usually have something to play with/usually play with friends/usually with get out of the phase/relieved/feel different ways/ feels different for everyone
<table>
<thead>
<tr>
<th>Definition</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>The Adult experience</strong></td>
<td>adults distract themselves/adults do jobs/adults do jobs together/adults stop thinking about it/jobs to forget about it/adults lonely without friends/adults would be sad if they're lonely/don't get lonely/don't have distractions/mental problem when adult/not an adult/not sure about adults/some adults are lonely/some adults aren't pretending/some adults in this country/children can’t forget about it/different for adults and children/harder to forget</td>
</tr>
<tr>
<td><strong>Adults understanding children</strong></td>
<td>some adults understand child loneliness usual/adults think loneliness is need someone to be with/adults think loneliness need help/not been lonely not know feels like different country/teachers know what loneliness is like for</td>
</tr>
<tr>
<td>Code</td>
<td>Miscellaneous</td>
</tr>
<tr>
<td>------</td>
<td>---------------</td>
</tr>
<tr>
<td></td>
<td>arguments</td>
</tr>
<tr>
<td></td>
<td>happy</td>
</tr>
<tr>
<td></td>
<td>looked angry</td>
</tr>
<tr>
<td></td>
<td>upsetting</td>
</tr>
<tr>
<td></td>
<td>so angry they want to be alone</td>
</tr>
<tr>
<td></td>
<td>bullies</td>
</tr>
<tr>
<td></td>
<td>don't want anyone to feel lonely</td>
</tr>
<tr>
<td></td>
<td>get that feeling of someone hating you</td>
</tr>
<tr>
<td></td>
<td>lonely</td>
</tr>
<tr>
<td></td>
<td>never happened to me</td>
</tr>
<tr>
<td></td>
<td>not many lonely people</td>
</tr>
<tr>
<td></td>
<td>thinking differently about everything</td>
</tr>
<tr>
<td></td>
<td>tired</td>
</tr>
<tr>
<td></td>
<td>trip someone up</td>
</tr>
</tbody>
</table>
Appendix 22: Detailed thematic map with Themes, Subthemes and Codes
March 2021

Dear XXX,

I wanted to write you a letter after we worked together last year on Microsoft Teams and I asked you about loneliness. You might remember that I am doing a big project thinking about how adults measure loneliness and what children think about loneliness.

I spoke to 6 children in two different schools and found out lots of interesting information.

These are some of the most important points that children said:

- Children said loneliness feels “sad”, like “being alone” and “feeling ignored” and “left out”.
- Having friends to play with and being part of a group is important for not feeling lonely.
- Feeling understood and having friends that know you well was also important.
- Sometimes being alone is okay and children prefer being alone.
- Asking other children to play is a good way of helping themselves and others to stop feeling lonely. Asking adults for help with finding friends or joining in with a game is also helpful.
- Being afraid or not telling others that they feel lonely, might stop children from getting help.
- Children said its easy to spot someone who is lonely, as they often look “sad”, “walking around” with their “head down”, on their own.
- Being lonely as a child feels different to being lonely as an adult. Adults who know what it feels like might be better at spotting and helping lonely children, as they know what it feels like.

I have used all the information collected during the interviews to write my project and included some anonymous (without names)
quotes to help adults who work with children, to understand what they think about loneliness. I am going to share my project with adults in school and [local authority] who work with children, and adults in the UK who want to know how they can help children.

I hope you enjoyed taking part in the research. I learnt so much from talking to children and I think people reading about what you said will learn lots in the future. By taking part in my research, your thoughts and ideas will help other children who feel lonely, to feel understood, and to get some support.

If you would like to ask any questions, you can tell an adult in school or email me |

Thank you so much for taking part in my research project. 😊

Best wishes,
Aimee
(Trainee Educational Psychologist, University of Manchester)
What loneliness is like for adults

Solving Loneliness
- Things that stop us getting help
- Getting help from adults
- Things we can do

Spotting loneliness
- What it looks like
- What it feels like

Loneliness isn't always negative

Emotional
- Feeling understood
- Having someone close

Social
- Being alone
- Having friends
- Being together
- Play
Appendix 24: Presentation of findings for staff at research sites and EP Team CPD input

1

Loneliness in Childhood
Linking theory and measurement with childhood experiences

Aimée Cole
(Trainee Educational Psychologist)

2

Aims

- Loneliness definition
- Brief overview of my thesis: literature review and empirical paper
- Findings and recommendations for supporting schools

What is loneliness?

- A discrepancy between an individual's preferred and actual social relations leads to the experience of feeling alone, and feelings of distress, even when surrounded by family or friends (Perlman & Peplau, 1984; Weiss, 1973).

- Loneliness can affect academic attainment, emotional health difficulties and sleep quality in children and adolescents.
How do we measure it?

- Quantitatively
- 3 most popular checklists
  - The UCLA Loneliness Scale (UCLA)
  - Loneliness and Aloneness Scale for Children and Adolescents (LACA)
  - Children’s Loneliness and Social Dissatisfaction Scale (CLS)

Research Questions
1. Explore how the loneliness measures used to collect data from children and adolescents were developed, and, indeed, whether they followed the steps for successful measurement development.
2. Explore the reliability and validity estimates of each measure as they are presented in papers that have subsequently explored their psychometric properties.

Findings
- None of the measures were developed using child voice.
- Development samples were not representative of scale audiences.
- None of the measures explicitly explored cross-cultural validity.
- Scale adaptations have reduced reliability and are used inconsistently.

Literature Review
What does this mean for measuring loneliness and for schools?

None interviewed children/adolescents
Scale adaptations are often less reliable (UCLA and “pure” items of CLS)
Cross-culture validity was largely absent
Review of measures is required including information from children and adolescents
School practitioners should exercise caution when choosing a suitable tool

What next?

T2: Experiences and understanding of loneliness in childhood during Covid-19 pandemic
Covid-19
- School closures affecting approximately 1.2 billion children worldwide (UNESCO, 2020)
- Loneliness levels have increased (Graake et al., 2020)
- Subsequent negative effects are reportedly greater in ethnic minorities and lower-socioeconomic groups (Silverman et al., 2020)
- Increasing by up to ten percent in black and mixed race youth, compared with White and Asian peers (Lemola, 2020).

The role of schools
- Whilst warm and supportive teacher presence represents a secure base from which material and emotional support can alleviate emotional loneliness (Galanton, 2004)
- Support from school staff has been summarised to include intervention through listening, identification and understanding (Krause-Pariello, 2008)
- Teachers report feeling ineffective in responding to loneliness and feel they would benefit from more training (Page, 1991)

Aim: To investigate primary school-aged children's understanding and experiences of loneliness in a unique context of a pandemic when feelings of disconnection were salient

Participants: Year 4 and 5 children in two primary schools

Method: Interviews on Microsoft. Teams using a mixture of questions and activities to support understanding and triangulate the information

Analysis: hybrid thematic analysis
Findings

Social loneliness
- Aloneness: “no one to do stuff with” [P2], “not being included” [P5] and being told “no” [P5], “socially distancing” [P4]
- Friendship: “cheers you up” [P4], “play games with” [P2], “someone to play” [P2]
- Play: “used to what they like to do” [P4], “make up a game with the same things” [P4], “not being allowed to play” [P3], “play with someone else you’re alone” [P2]

Emotional loneliness
- Attachment figure: “when you’re like sad, they just care about it” [P6], “person who knows you” [P6], “having someone that makes you laugh” [P4]
- Positively experienced loneliness: “do the stuff we want to do ourselves” [P2], “don’t like to be with other people” [P4]
- Solutions: could “ask again” [P5], “ask if they want to play” [P2], “teachers, they still help you” or “might ask someone to come over and play” [P2]

Recognising loneliness
- “act like nothing’s happened” [P4] or “cross your hands” [P2] and become “huddled” over” [P3]

Adults are different
- “do jobs” [P5] to “stop thinking about it” [P5]
Recommendations

Group inclusion and togetherness through friendship and play are important for reducing loneliness.

Children value meaningful and sincere relationships, and these play a role in reducing loneliness.

Children also value opportunities to seek support from adults without being dismissed.

Children think loneliness being largely overcome by having one key peer (Cohn et al., 1985).

Play buffers against loneliness.

Lonely children often "look" lonely e.g., head down, hunched over, walking slowly.

Finding someone to play with is the key solution.

Children also value opportunities to seek support from adults without being dismissed.

Children see loneliness as a short-term experience, different from the norm.

Barriers to getting help include not having an opportunity to share how they are feeling, not being able to tell adults and not being able to find someone to play with.

Any questions?
References

Supporting Children with Loneliness

Loneliness is defined as a discrepancy between an individual’s preferred and actual social relations, leading to the experience of feeling alone, and feelings of distress, even when surrounded by family or friends (Perlman & Peplau, 1984; Weiss, 1973).

Following recent school closures for most pupils due to Covid-19, loneliness levels have reportedly increased (Groarke et al., 2020), particularly in ethnic minority populations (Levita, 2020).

Loneliness is currently measured using checklists. A recent literature review (Cole et al., 2021) found that the Children’s Loneliness and Social Dissatisfaction Scale (CLSS) appears the most reliable and valid measure of the three most widely used with youth. However, education practitioners should use these measures cautiously. Considerations include the representativeness of development samples, reduced validity of adapted scales and the absence of child voice in development.

A recent study interviewed Year 4 and 5 children to find out what loneliness feels and looks like in childhood. Below are the key themes from the data.

**Social Loneliness**
- Children talked about physical aloneness and being “left out”, “not included” and “feeling ignored”. Also using phrases like “socially distancing”.
- However, they also recognised there are times when children want to be alone.
- Friendship was important to children for avoiding feelings of loneliness. They talked about having someone who “cares” to “cheer you up” and “play games with”.
- Children suggested that having a big group of friends means there is always “someone to play with” and if friends aren’t around or play with other friends, this leads to loneliness.
- Being part of a group and having shared experiences through play, getting “used to what they like to do” and having chances “make up a game with the same things”, acted as buffers against loneliness.

**Emotional Loneliness**
- Children talked about the importance of feeling understood by friends and having someone to “protect you”, including “when you’re like sad, they just care about it”.
- They referred to adults as another form of support who can “have a little chat with them”.

**Recognising Loneliness**
- What it looks like
- What it feels like

**Solving Loneliness**
- Things that stop us getting help
- Getting help from adults
- Things we can do
- The ‘norm’
Positively Experienced Loneliness

- Children shared that sometimes they “want to be alone” and that being alone does not always require support.
- They were able to differentiate between individual needs, recognising that some children “don’t like to be with other people”.

Solutions

- Children referred to practical things they could do when feeling lonely, and these were often related to togetherness, friends, and play.
- Children said they could “ask again” when told “no” by peers, or “ask [others] if they want to play” when they see someone looking lonely, telling them “I’m your friend”, for reassurance.
- Adult support included asking “someone to come over”, and unhelpful adult support included being told “you’ll be fine” or to “move on”.
- Children showed awareness that sometimes asking for help might be hard if they are “afraid” or “nervous” or if others “don’t know how it feels”.

Recognising Loneliness

- Lonely children reportedly “act like nothing’s happened” or “cross your hands” and become “huddled over”.
- Childhood loneliness was widely viewed as a temporary feeling.

Adults’ experiences differ from children

- Children perceived that loneliness as an adult feels different, as adults can distract themselves, “stop thinking about it” and “do jobs”.
- Children suggested that if adults have not been lonely as a child, they cannot understand how it feels for children now.

What can adults in school do to support lonely children?

- Provide opportunities for a sense of togetherness, belonging and increased feelings of group identity, through a community ethos in school e.g., recognising similarities, promoting a sense of fun and curiosity
- Support children to practice scripts around asking to play and asking for help from children and adults.
- Recognise, talk about, and normalise feelings of loneliness and encouraging empathy for how loneliness might feel for others.
- Talk about what loneliness might look and feel like for children, and the steps that they could take if they see a peer looking lonely
- Give children opportunities to talk about what it feels like when they tell adults they feel lonely
- Create opportunities for play, shared interests, and building relationships through fun activities.
Appendix 26: Aims, Scope and Instructions for Authors: International Journal of Environment Research and Public Health

Research and Public Health

Aims and Scope

*International Journal of Environmental Research and Public Health (IJERPH)* (ISSN 1660-4601) is a peer-reviewed scientific journal that publishes original articles, critical reviews, research notes, and short communications in the interdisciplinary area of environmental health sciences and public health. It links several scientific disciplines including biology, biochemistry, biotechnology, cellular and molecular biology, chemistry, computer science, ecology, engineering, epidemiology, genetics, immunology, microbiology, oncology, pathology, pharmacology, and toxicology, in an integrated fashion, to address critical issues related to environmental quality and public health. Therefore, IJERPH focuses on the publication of scientific and technical information on the impacts of natural phenomena and anthropogenic factors on the quality of our environment, the interrelationships between environmental health and the quality of life, as well as the socio-cultural, political, economic, and legal considerations related to environmental stewardship, environmental medicine, and public health. As a comprehensive multi-disciplinary journal, IJERPH is comprised of nineteen major sections including the following:

- Children's Health
- Climate Change and Health
- Digital Health
- Ecology and the Environment
- Environmental Health
- Environmental Microbiology
- Environmental Science and Engineering
- Global Health
- Health Behavior, Chronic Disease and Health Promotion
- Health Care Sciences and Services
- Health Communication
- Health Economics
- Infectious Disease Epidemiology
- Mental Health
- Occupational Safety and Health
- Public Health Statistics and Risk Assessment
- Toxicology and Public Health
- Women's Health
- Exercise and Health
- Oral Health

The above-listed scientific sections cover critical areas of research discovery such as gene-environment interactions; global environmental health; ecotoxicology and ecological risk assessment and management; environmental chemistry and computational modeling; environmental education and public health; environmental engineering and technology; environmental epidemiology and disease control; environmental genomics and proteomics; environmental geology and health; environmental health and diseases; environmental medicine; environmental policy and stewardship; environmental toxicology, mutagenesis and carcinogenesis; health risk assessment and management; and natural resources damage assessment and management.
Therefore, this international journal covers a broad spectrum of important topics which are relevant to environmental health sciences and public health protection. It provides comprehensive and unique information with a worldwide readership. Emphasizing holistic approach, the journal serves as a comprehensive and multidisciplinary platform, addressing important public health issues associated with environmental pollution and degradation. A large number of eminent professors and scientists from all over the world serve as section editors and/or guest reviewers for the journal.

Instructions for Authors

Shortcuts
- Manuscript Submission Overview
- Manuscript Preparation
- Preparing Figures, Schemes and Tables
- Supplementary Materials, Data Deposit and Software Source Code
- Research and Publication Ethics
- Reviewer Suggestions
- English Corrections
- Preprints and Conference Papers
- Authorship
- Editorial Independence
- Conflict of Interests
- Editorial Procedures and Peer-Review
- Promoting Equity, Diversity and Inclusiveness Within MDPI Journals
- Resource Identification Initiative

Submission Checklist

Please:
- read the Aims & Scope to gain an overview and assess if your manuscript is suitable for this journal;
- use the Microsoft Word template or LaTeX template or Free Format Submission to prepare your manuscript;
- make sure that issues about publication ethics, research ethics, copyright, authorship, figure formats, data and references format have been appropriately considered;
- Ensure that all authors have approved the content of the submitted manuscript.
- Authors are encouraged to add a biography (optional) to the submission and publish it.

Manuscript Submission Overview

Types of Publications

UERPH has no restrictions on the length of manuscripts, provided that the text is concise and comprehensive. Full experimental details must be provided so that the results can be reproduced. UERPH requires that authors publish all experimental controls and make full datasets available where possible (see the guidelines on Supplementary Materials and references to unpublished data).

Manuscripts submitted to UERPH should neither be published previously nor be under consideration for publication in another journal. The main article types are as follows:

Articles: Original research manuscripts. The journal considers all original research manuscripts provided that the work reports scientifically sound experiments and provides a substantial amount of new information. Authors should not
unnecessarily divide their work into several related manuscripts, although Short Communications of preliminary, but significant, results will be considered. The quality and impact of the study will be considered during peer review. Articles should have a main text of around 3000 words at minimum.

**Reviews:** These provide concise and precise updates on the latest progress made in a given area of research. Systematic reviews should follow the PRISMA guidelines. The main text of review papers should be around 4000 words at minimum.

**Case reports:** Case reports present detailed information on the symptoms, signs, diagnosis, treatment (including all types of interventions), and outcomes of an individual patient. Case reports usually describe new or uncommon conditions that serve to enhance medical care or highlight diagnostic approaches.

**Submission Process**

Manuscripts for *IJERPH* should be submitted online at susy.mdpi.com. The submitting author, who is generally the corresponding author, is responsible for the manuscript during the submission and peer-review process. The submitting author must ensure that all eligible co-authors have been included in the author list (read the [criteria to qualify for authorship](#)) and that they have all read and approved the submitted version of the manuscript. To submit your manuscript, register and log in to the [submission website](#). Once you have registered, [click here to go to the submission form for *IJERPH*](#). All co-authors can see the manuscript details in the submission system, if they register and log in using the e-mail address provided during manuscript submission.

**Accepted File Formats**

Authors must use the [Microsoft Word template](#) or [LaTeX template](#) to prepare their manuscript. Using the template file will substantially shorten the time to complete copy-editing and publication of accepted manuscripts. The total amount of data for all files must not exceed 120 MB. If this is a problem, please contact the Editorial Office ijerph@mdpi.com. Accepted file formats are:

- **Microsoft Word:** Manuscripts prepared in Microsoft Word must be converted into a single file before submission. When preparing manuscripts in Microsoft Word, the *IJERPH Microsoft Word template file* must be used. Please insert your graphics (schemas, figures, etc.) in the main text after the paragraph of its first citation.

- **LaTeX:** Manuscripts prepared in LaTeX must be collated into one ZIP folder (including all source files and images), so that the Editorial Office can recompile the submitted PDF. When preparing manuscripts in LaTeX, please use the *IJERPH LaTeX template files*. You can now also use the online application writeLaTeX to submit articles directly to *IJERPH*. The MDPI LaTeX template file should be selected from the writeLaTeX template gallery.

- **Supplementary files:** May be any format, but it is recommended that you use common, non-proprietary formats where possible (see [below](#) for further details).

**Disclaimer:** Usage of these templates is exclusively intended for submission to the journal for peer-review, and strictly limited to this purpose and it cannot be used for posting online on preprint servers or other websites.

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*IJERPH* now accepts free format submission:

We do not have strict formatting requirements, but all manuscripts must contain the required sections: Author Information, Abstract, Keywords, Introduction, Materials & Methods, Results, Conclusions, Figures and Tables with Captions, Funding Information, Author Contributions, Conflict of Interest and other Ethics Statements. Check the Journal Instructions for Authors for more details.

Your references may be in any style, provided that you use the consistent formatting throughout. It is essential to include author(s) name(s), journal or book title, article or chapter title (where required), year of publication, volume and issue (where appropriate) and pagination. DOI numbers (Digital Object Identifier) are not mandatory but highly encouraged. The bibliography software package *EndNote*, Zotero, Mendeley, Reference Manager are recommended.

When your manuscript reaches the revision stage, you will be requested to format the manuscript according to the journal guidelines.

**Cover Letter**

A cover letter must be included with each manuscript submission. It should be concise and explain why the content of the paper is significant, placing the findings in the context of existing work and why it fits the scope of the journal. Confirm that neither the manuscript nor any parts of its content are currently under consideration or published in another journal. Any prior submissions of the manuscript to MDPI journals must be acknowledged. The names of proposed and excluded reviewers should be provided in the submission system, not in the cover letter.
Author Biography

Authors are encouraged to add a biography (maximum 150 words) to the submission and publish it. This should be a single paragraph and should contain the following points:

Authors’ full names followed by current positions;
Education background including institution information and year of graduation (type and level of degree received);
Work experience;
Current and previous research interests;
Memberships of professional societies and awards received.

Note for Authors Funded by the National Institutes of Health (NIH)

This journal automatically deposits papers to PubMed Central after publication of an issue. Authors do not need to separately submit their papers through the NIH Manuscript Submission System (NIHMS, http://nihms.nih.gov/).

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Manuscript Preparation

General Considerations

Research manuscripts should comprise:

Front matter: Title, Author list, Affiliations, Abstract, Keywords

Research manuscript sections: Introduction, Materials and Methods, Results, Discussion, Conclusions.

Back matter: Supplementary Materials, Acknowledgments, Author Contributions, Conflicts of Interest, References.

Review manuscripts should comprise the front matter, literature review sections and the back matter. The template file can also be used to prepare the front and back matter of your review manuscript. It is not necessary to follow the remaining structure. Structured reviews and meta-analyses should use the same structure as research articles and ensure they conform to the PRISMA guidelines.

Case reports should include a succinct introduction about the general medical condition or relevant symptoms that will be discussed in the case report; the case presentation including all of the relevant de-identified demographic and descriptive information about the patient(s), and a description of the symptoms, diagnosis, treatment, and outcome; a discussion providing context and any necessary explanation of specific treatment decisions; a conclusion briefly outlining the take-home message and the lessons learned.

Graphical Abstract:

A graphical abstract (GA) is an image that appears alongside the text abstract in the Table of Contents. In addition to summarizing content, it should represent the topic of the article in an attention-grabbing way.

The GA should be a high-quality illustration or diagram in any of the following formats: PNG, JPEG, EPS, SVG, PSD or AI. Written text in a GA should be clear and easy to read, using one of the following fonts: Times, Arial, Courier, Helvetica, Ubuntu or Calibri.

The minimum required size for the GA is 560 × 1100 pixels (height × width). When submitting larger images, please make sure to keep to the same ratio.

Abbreviations should be defined in parentheses the first time they appear in the abstract, main text, and in figure or table captions and used consistently thereafter.

SI Units (International System of Units) should be used. Imperial, US customary and other units should be converted to SI units whenever possible.

Accession numbers of RNA, DNA and protein sequences used in the manuscript should be provided in the Materials and Methods section. Also see the section on Deposition of Sequences and of Expression Data.

Equations: If you are using Word, please use either the Microsoft Equation Editor or the MathType add-on. Equations should be editable by the editorial office and not appear in a picture format.
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Front Matter

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Discussion: Authors should discuss the results and how they can be interpreted in perspective of previous studies and of the working hypotheses. The findings and their implications should be discussed in the broadest context possible and limitations of the work highlighted. Future research directions may also be mentioned. This section may be combined with Results.

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Patents: This section is not mandatory, but may be added if there are patents resulting from the work reported in this manuscript.

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Supplementary Materials: Describe any supplementary material published online alongside the manuscript (figure, tables, video, spreadsheets, etc.). Please indicate the name and title of each element as follows Figure S1: title, Table S1: title, etc.
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Supplementary Materials, Data Deposit and Software Source Code

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Data available in a publicly accessible repository that does not issue DOIs
Publicly available datasets were analyzed in this study. This data can be found here: [link/accession number]

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Data is contained within the article or supplementary material
The data presented in this study are available in [insert article or supplementary material here]

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Research and Publication Ethics

Research Ethics

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Dear Colleagues,

We would like to invite you to submit a contribution to a Special Issue on Loneliness in the International Journal of Environmental Research and Public Health, an interdisciplinary peer-reviewed open access journal (IF = 2.849, see for detailed information https://www.mdpi.com/journal/ijerph).

Across the lifespan, people may experience loneliness. Especially when prolonged, loneliness can have a long-lasting impact on both one’s mental and physical health and well-being. Consequences of loneliness have frequently been reported, but longitudinal designs remain relatively rare. Moreover, we know little about whether particular contexts would lead to different outcomes (e.g., depending on the age of the participants or the type of loneliness experienced).

In addition to research on the consequences of loneliness, it is of utmost importance to gain better insights into the factors that put people at risk for experiencing loneliness. A wide range of factors that contribute to the development and maintenance of loneliness have been reported, but, again, longitudinal studies remain relatively rare. We also know surprisingly little about why most people recover from temporary feelings of loneliness, while others continue to feel lonely for longer periods of time, and when and to what extent loneliness is contagious. Moreover, factors that contribute to the development of loneliness have been found at the individual level (e.g., genetic, personality, and cognitive factors), but also at the community level (e.g., in relationships with peers, family, and romantic partners) and the societal level (e.g., one’s socioeconomic background, and the neighbourhood or country one lives in). However, even though those contributing factors do not operate in isolation, there is a lack of (interdisciplinary) research examining factors from those different levels simultaneously and in interaction.

This Special Issue is open to original research articles and reviews from all over the world that improve our understanding of predictors, consequences, and the prevention of loneliness. We are particularly interested in studies with longitudinal designs and/or that take an interdisciplinary perspective. In addition, as the way we measure loneliness may influence all of the above, we also warmly welcome studies concerning the measurement of loneliness.

Dr. Marlies Maes  
Prof. Dr. Pamela Qualter  
Dr. Marcus Mund  
Guest Editors

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Keywords

loneliness
loneliness types
loneliness contagion
measurement of loneliness
risk factors
consequences
physical and mental well-being
public health
longitudinal research
interdisciplinary perspective
Appendix 28: Aims, Scope and instructions for Authors: Pastoral Care in Education

Pastoral Care in Education: An International Journal of Personal, Social and Emotional Development is directed at all teachers, professionals, researchers and academics who are concerned with the personal, social development, education and care of all pupils across the curriculum. The journal tackles important contemporary issues such as current developments in the curriculum - citizenship, health, social and moral education; managing behaviour; whole school approaches; school structures; as well as issues of care - school exclusion, bullying and emotional development. Approaches to personal/social education; pastoral care and the counselling and care of students all come within its remit.

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Instructions for authors

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Submitting Your Paper
Pastoral Care in Education is an international, peer-reviewed journal publishing high-quality, original research. Please see the journal’s [Aims & Scope](#) for information about its focus and peer-review policy.

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Pastoral Care in Education accepts the following types of article: original articles and shorter comment pieces of 2-3,000 words e.g. reviews of practice innovations, comments on policy and/or any emerging issues in the socio-cultural world that explore the impact on the field of pastoral care in educational settings.

Articles of a theoretical nature, and those reporting research or engaging in scholarly debate, are always welcome. However, articles which suggest practical ideas for improving what schools do are equally welcome. The journal encourages teachers, parents, governors and students who have not previously written for publication to share their experiences and their views with others. If you have an idea for an article, please contact the editor who will happily give advice on how this might be developed. The Editor also welcomes proposals for special issues.

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Should contain an unstructured abstract of 250 words.

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Updated 29-04-2020
Appendix 29: April Newsletter from the Head of Research, Policy and Practice at Campaign to End Loneliness, listing Paper 1 as recommended reading
Welcome

The latest Office for National Statistics (ONS) research published earlier in the month gave new insight into loneliness in local areas. Most importantly the number of adults saying they are lonely “always or often” has risen a lot from the beginning of lockdown to the October to February period. The research suggested it has gone up by over one million people from 2.6 million to 3.7 million people. I am so pleased that Chris Payne from ONS alongside a host of leading academics will be joining our next Research and Policy webinar on 19 May. Loneliness in Lockdown will help academics, policymakers and organisations in the loneliness field, examine in more detail what research is telling us about the impact of Covid-19 on loneliness.

Don’t forget our seminar in April on bereavement in lockdown! If you work for an organisation which supports people during bereavement, we are also running a webinar on 29 April, which includes speakers from both St Christopher’s Hospice and Cruse Bereavement UK.
Our next Research and Policy Hub event on May 19 will be a chance to see and discuss some of the latest research evidence on the impact of Covid-19 on loneliness. In a complex area of research - what do we know so far from both national and international research?

This is a must-attend event if you are a researcher, academic or policymaker wanting to get more clarity on the impact of the pandemic on loneliness. We will be hearing findings from major studies and leading loneliness academics.

Speakers and presentations will include:
Chris Payne, Head of Equalities and Well-being Quantitative Analysis Team, ONS
Loneliness during the Covid-19 pandemic

Dr Alexandra Burton, Senior Research Fellow, Covid-19 Social Study, UCL
Experiences of younger people (13-24) during lockdown

Professor Pam Qualer, Professor of Education, Manchester University
Health and wellbeing survey: Monitoring the impact of Covid-19

Professor Christina Victor, Professor of Gerontology and Public Health, Brunel University
New insights on loneliness: Covid-19 and beyond

There will also be breakout rooms to allow attendees to ask the speakers more questions in smaller groups and to allow deeper discussion of the issues raised.
Online ahead of print. PMID: 33739929

PMID: 33810076 Review.


Latest reports and news
Royal Colleges call to combat the mental health fallout of Covid-19

Aging in Place for Minority Ethnic communities is a research report which has been published to explore the types of social infrastructure that people aged 50 and over from ethnic minority communities use in specific places.
We are holding a webinar for people working for organisations which support people through bereavement. With expert presentations from representatives from Crusoe - the bereavement charity and St Christopher's Hospice, the webinar starts at 1pm. You can find out more and book your place.

Book Now

As reported above this event is a chance to explore some of the latest research evidence on the impact of Covid 19 on loneliness. We will be hearing findings from major studies and leading loneliness academics. This event is for you, if you are a researcher, academic or policymaker wanting to get more clarity on the impact of the pandemic on loneliness.

Book Now

And finally...

Stop Press:
Later today (Wednesday 21 April at 2pm), the All Party Parliamentary Group on loneliness are holding a webinar on digital infrastructure as part of a series of events in the run up to Loneliness Awareness Week. Today’s event will explore the role digital infrastructure and digital inclusion in addressing loneliness and social isolation.

Speakers include: Matt Warman, Minister for Digital Infrastructure at DCMS, Helen Milner, CEO of the Good Things Foundation, Kerensa Jennings, Digital Impacts Director at BT, and other guests. You can register by visiting the [event registration page](https://outlook.office365.com/mail/Id/AAQkADk50Wi4NTl4LWQ0OG01NCkwcG4ndFlwLWpNnjBzQ5tZmMgAQo46dTZUftrULt15EKSl... 5/6)
This fortnightly newsletter brings you all the latest news and events from the Campaign to End Loneliness. Any queries please contact Jenny Manchester at jenny@campaigntoendloneliness.org.uk
Appendix 30: Post for Manchester MIE BEE Blog

Considering Loneliness in Childhood and Adolescents: A public health issue

Aimeé Cole
Trainee Educational Psychologist
Aimee is training on the Doctorate in Educational and Child Psychology. She is researching qualitative experiences and understandings of loneliness in middle-childhood, and childhood loneliness measures. She can be contacted at a.cole@saithorpe.gov.uk.

Loneliness is a universal experience1, though much of our understanding centres around standardised measures, created from adult definitions. This blog post explores how we measure loneliness, what children think about loneliness, and suggests strategies school practitioners can use to support those experiencing loneliness.

How is loneliness measured currently?

Loneliness is measured quantitatively. The three measures used most often with children and adolescents are the Loneliness and Aloneness Scale for Children and Adolescents (LACA), Children's Loneliness and Social Dissatisfaction Scale (CLS) and the UCLA loneliness scale (UCLA). Questions include, feelings alone, isolation, being understood and having friends and someone to talk to. Recent research highlighted these questionnaires were developed without the inclusion of children and adolescent views 2, a key step that should be included when developing measures 3. Each of the measures have also been subject to alterations, which appears to make them less consistent and reliable.

Why is it important that school practitioners know about loneliness?

Loneliness negatively affects health outcomes including sleep, as well as academic progress4. Following recent school closures for most pupils due to Covid-19, loneliness levels have reportedly increased, particularly in ethnic minority populations 5. Therefore it is

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important that school staff are aware of what loneliness looks and feels like in children, so they can support the reduction in these feelings, and intervene when they occur.

What do children think?

In a recent study with Year 4 and 5 children in the North West of England, we asked children about their understanding and experiences of loneliness. Children said that loneliness felt like “being alone”, “isolated” and “not having any friends” to play with. They used words like “empty” and “sad” to describe the experience. The participants shared that it was important to be part of a group, have someone to play with, and feel understood. They also recognised that sometimes children want to be alone. These views largely matched existing ideas about loneliness, and the themes in loneliness questionnaires. Interestingly, however, children referred often to the ways in which loneliness can be overcome and appeared to view loneliness as a short-term experience, and a “phase” to “get out” of.

Children commented that asking to play with peers when they are feeling lonely is a key solution, along with finding a friend and receiving adult support. Children talked specifically about adults offering support to find a friend, but unhelpful support included being told to “move on”, and a lack of empathy when seeking help. Children recognised that sometimes getting help when feeling lonely is difficult if they feel nervous to ask for help, or reluctant to admit they feel alone. Participants in the study shared that lonely children often walk around the playground or sit down alone, with their “arms crossed” or “head down”. Children referenced loneliness looking and feeling different to loneliness in adulthood, suggesting adults are “busy” and have ways to “distract” themselves. They also implied that prolonged loneliness in adulthood can be more serious.

What should school practitioners look out for when trying to spot lonely children?

- Children spending lots of time alone and appearing withdrawn e.g. head down, cross arms
- Children choosing to spend time with adults or seeming reluctant to engage in group activities at unstructured times
- Children having difficulties getting involved in games or not being part of a friendship group.

How can school practitioners help?

Recent findings suggest good practice for preventing and supporting childhood loneliness includes:

- Promoting group inclusion and togetherness at an individual, group, and whole school level through universal play interventions, recognising similarities, and promoting a sense of fun and curiosity
- Supporting children to practice scripts around asking to play and asking for help from children and adults.
- Recognising, talking about, and normalising feelings of loneliness and encouraging empathy for how loneliness might feel for others.
- Talking about what loneliness might look and feel like for children, and the steps that they could take if they see a peer looking lonely
- Give children opportunities to talk about what it feels like when they tell adults they feel lonely and offer to support them to join in with games and find peers to interact with
- Create opportunities for play, shared interests, and building relationships through fun activities.