Office for National Statistics

Compendium

National Measurement of Loneliness: 2018

This compendium provides comprehensive information on the loneliness measurement landscape, the recommended national indicators of loneliness and the question testing underpinning our recommendations.

Chapters in this compendium

Compendium

Introduction: Developing national indicators of loneliness

Why loneliness should be investigated, the rationale for national indicators across all ages and how we define loneliness.

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1 . Why does "loneliness" matter?

Loneliness is a feeling that most people will experience at some point in their lives. However, prolonged and extreme exposure to loneliness can seriously impact an individual's well-being, and their ability to function in society. As loneliness has been shown to be linked to poor physical and mental health, and poor personal well-being with potentially adverse effects on communities, it is an issue of increasing interest to policy-makers at local and national levels as well as internationally.

In January 2018, the Prime Minister tasked Office for National Statistics (ONS) with developing national indicators of loneliness suitable for use on major studies to inform future policy in England, including people across society and of all ages. We have worked with the cross-government Tackling Loneliness Team and a Loneliness Technical Advisory Group (TAG) comprising experts in loneliness measurement and analysis to agree a working definition of loneliness, and ideal criteria for the indicators and for the collection of data.

The Jo Cox Commission on Loneliness published its manifesto in 2017, setting out a series of recommendations to central government as well as local authorities and wider civil society. In response to their recommendations, the Prime Minister set out the government's plans in January 2018, which included appointing a Minister for Loneliness and committing the government (as well as other commitments) to:

- develop the evidence-base around the impact of different initiatives in tackling loneliness, across all ages and within all communities

- establish appropriate indicators of loneliness across all ages with ONS so these figures can be included in major research studies

Agreeing a definition for loneliness is crucial for proceeding with the government's work programme, but it has specific implications when considering and establishing measurement. There are many definitions for loneliness that are currently in use and the lack of harmonisation could lead to users being unable to compare measures of loneliness between different datasets and outputs. A consistent definition of loneliness will be useful to those in central or local government who are considering how best to measure loneliness in accordance with the government's Loneliness Strategy announced in October 2018. It will also be helpful to those working in academia or the private sector who would like to measure loneliness as part of their work and make a positive contribution to the evidence base on loneliness.

2 . Why do we need national indicators?

As part of their call to action (PDF, 2.6MB), the Jo Cox Commission highlighted the need for a "national indicator of loneliness" to enable better measurement of progress towards preventing and alleviating loneliness. This is based on their observation that:

"Over the years, studies on loneliness have reached different conclusions about the levels and overall distribution of loneliness across the UK and among different groups. Studies have found relatively consistent levels of chronic loneliness among older people – with between five and 15 per cent reporting that they are often or always lonely. However, we have much less robust data on loneliness among children, young people and adults of working age."

One of the reasons why studies may have reached different conclusions is that various approaches have been used to measure loneliness, potentially leading to quite different results. Additionally, terms such as "loneliness" and "social isolation" are often used interchangeably, though they are separate concepts requiring different approaches to measurement. This can confuse the picture further.

The rationale for recommending national measures of loneliness is to address these deficits in the evidence base by:

- encouraging more consistent use of standard measures of loneliness, enabling more robust comparisons between studies

- adapting measures for use among children and young people, to enable consistent measurement of loneliness among those aged from 10 to 15 years

- addressing the lack of conceptual clarity by recommending measures focused on the subjective experience of loneliness (rather than social isolation or other related concepts)

3 . Defining "loneliness" and the criteria required in national indicators

There are a range of ways in which national measures of loneliness may be used; these include:

- improving our understanding of loneliness across all ages

- monitoring loneliness across the population and for specific sub-groups

- capturing changes in prevalence or groups most affected over time

- enabling comparisons of local estimations of loneliness with national estimates or between estimates of local service providers with estimates for the wider population in the area

- bringing greater measurement consistency and build the evidence on loneliness in a more coherent way

- enabling decision-makers in government, private sector and the third sector to take action on the basis of the findings

- enabling resources to be effectively prioritised and targetted at those most in need

- enabling service providers to measure and demonstrate the impact of their work

This range of uses meant looking at various criteria we might seek in our national indicators of loneliness. Therefore, first of all, it was crucial to define:

- what we meant by the term "loneliness" and how it could be defined

- what the ideal standard(s) associated with indicators of loneliness were

The definition of loneliness adopted for our purposes is aligned to the definition used by the Jo Cox Commission and in the Loneliness Strategy, which is based on a definition first suggested by Perlman and Peplau in 1981:

"A subjective, unwelcome feeling of lack or loss of companionship. It happens when we have a mismatch between the quantity and quality of social relationships that we have, and those that we want."

Although it was unlikely that any single measure could fulfill all our ideal criteria, the following served as a useful checklist for comparing how well different measures performed:

- appropriate for relevant age groups (from age 10 years and over)

- suitable for use with diverse ethnic groups (ideally including those with limited English)

- captures self-perceived loneliness (whether respondents consider themselves to be lonely)

- captures severity of loneliness – including frequency, intensity and duration

- does no harm to respondents

- does not stigmatise loneliness

- reliable, but sensitive to change over time

- able to be used easily on national surveys as well as local resident surveys, local programme evaluations and so on (without adding too much time, expense, respondent burden)

- tested for administration via different modes with clear guidance available

- produces internationally-comparable findings

- validated for use with "clinical" populations (to meet the needs of people with chronic health problems, including mental health challenges)

4 . Identifying where and how to collect loneliness data

As well as considering what we wanted in the indicators, we also took into account the types of surveys where the measures could most helpfully be used. Working with the Loneliness Technical Advisory Group (TAG), we identified a range of criteria regarding the design, sample and geographical coverage of the surveys on which we would ideally like the measures to be placed, including:

- longitudinal surveys to measure durations of loneliness and transitions in and out of loneliness

- cross-sectional surveys to enable regular monitoring of prevalence across the population using representative samples

- large samples to enable greater granularity (smaller geographical areas, further breakdowns by sociodemographic characteristics, further information about specific groups).

- ethnic boosts for understanding differences between ethnic groups, including immigrants

- surveys of children and young people as well as adults to capture the full age range

- surveys incorporating well-being measures and measures of mental and physical health or illness, and other relevant impacts and risk factors

- surveys linked to activities associated with loneliness or increased social connectedness such as sport, volunteering, culture or arts

- geographical coverage of England at a minimum

The way the survey is administered is also an important consideration, but the "ideal" form of administration is likely to vary depending on the needs of the group in question. For example, older people may find face-to-face surveys preferable to those administered online, while younger people may prefer the latter.

Feedback from the TAG members also suggested that there may be "good enough" approaches that could be adopted if the "ideal" is not feasible. For example, it may be possible to measure durations of loneliness by asking questions about this on cross-sectional surveys like the BBC Loneliness Experiment, as well as seeking to include the indicators on longitudinal surveys.

To contribute to the wider roll-out of the Loneliness Strategy, we considered possible surveys that could include the loneliness measures and made suggestions to colleagues from the Loneliness Strategy Team at the Department for Digital, Culture, Media and Sport (DCMS) who liaised with survey managers about their possible inclusion. The list of surveys which will include our recommended indicators for loneliness can be found in Measuring loneliness: guidance for use of the national indicators on surveys.

5 . Addressing the need for indicators across all ages

Loneliness can occur at any point in life and is an experience likely to affect most of us at some point. It becomes a more serious issue, associated with poor health outcomes, when it is a frequent experience. The Loneliness Strategy summarised some of the most important known effects of loneliness in the following way:

"Feeling lonely frequently is linked to early deaths. Its health impact is thought to be on a par with other public health priorities like obesity or smoking. Research shows that loneliness is associated with a greater risk of inactivity, smoking and risk-taking behaviour; increased risk of coronary heart disease and stroke; an increased risk of depression, low self-esteem, reported sleep problems and increased stress response; and with cognitive decline and an increased risk of Alzheimer's. What's more, feeling lonely can make a person more likely to perceive, expect and remember others' behaviour to be unfriendly. This can increase social anxiety and cause them to withdraw further, creating a vicious cycle."

"… Feeling lonely frequently has a direct impact on individuals and can also have wider effects for society. For example, lonely people are more likely to be readmitted to hospital or have a longer stay. There is also evidence that lonely people are more likely to visit a GP or A&E and more likely to enter local authority funded residential care. At work, higher loneliness among employees is associated with poorer performance on tasks and in a team, while social interaction at work has been linked to increased productivity. A study by the Co-op and New Economics Foundation attempted to calculate the cost of this, estimating that loneliness could be costing private sector employers up to £2.5 billion a year due to absence and productivity losses".

The evidence on loneliness is currently quite patchy. We have much more robust and extensive data on loneliness in older people, but much less for other age groups including children and young people. The same quality and quantity of data does not exist for younger people's experiences of loneliness. We know much less about why younger people become lonely and how this compares with factors associated with loneliness in older people.

Questions about loneliness are sometimes included on major studies of children and young people (for example, the Millennium Cohort Study; the Environmental Risk Longitudinal Twin Study). However, there are currently no national studies regularly collecting data on loneliness in children and young people below the age of 16 years, while studies like the English Longitudinal Study of Ageing have been consistently collecting data on loneliness in older people for many years. We also need to understand more about the factors most associated with loneliness, what the effects of loneliness are for different people and how we can prevent or alleviate it. If more people measure loneliness in the same way, we will build a much better evidence base more quickly. This is why the Prime Minister asked Office for National Statistics (ONS) to develop national indicators of loneliness for people of all ages, suitable for use on major studies.

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Mapping the loneliness measurement landscape

Review of existing loneliness measures and shortlisting of existing measures for testing.

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1 . Review of existing loneliness measures

Many different approaches have been used to measure loneliness. These include both loneliness multi-item scales and single item measures. Some measures ask about loneliness directly, while others ask about emotions associated with loneliness from which loneliness is then inferred. There are advantages and disadvantages associated with each.

Office for National Statistics (ONS) undertook a programme of scoping work and consultation with experts on existing approaches to measuring loneliness. We developed a list of current measures of loneliness, which are either in use or have been used in the past. Members of the Loneliness Technical Advisory Group (TAG) provided invaluable support through meetings and correspondence to collate this information. Specifically, we gathered information on:

- findings from studies including loneliness measures (for example, surveys and evaluations)

- any cognitive question testing already carried out

- any results of pilot work

- types of surveys on which loneliness measures have been used (for example, longitudinal or cross-sectional)

- any adaptations made to the questions or response scales and the reasons why this was done

- any comparative data on findings using different single item measures, different scales for loneliness measurement and combinations of these

- any longitudinal data of loneliness using these measures

- mode effects (how the method of administering the survey may affect responses)

1.1 Direct measures of loneliness

As loneliness is a subjective emotional state, which we may each experience differently and which may vary over the life course, asking people directly is an important way of allowing them to express their own emotions and to capture self-perceived loneliness. Some existing surveys use a single item question on its own, while others include a single item question along with a loneliness scale comprising several questions exploring aspects of loneliness. There are several versions of single item questions currently in use, focusing on specific issues such as intensity or frequency of loneliness. Typically, respondents are required to define "loneliness" for themselves rather than being offered a definition. Table 1 provides examples of some direct measures of loneliness used in the UK.

Table 1: Examples of direct measures of loneliness

Survey	Question or item wording	Response categories
Community Life Survey (CLS)	How often do you feel lonely?	1. Often/Always 2. Some of the time 3. Occasionally 4. Hardly ever 5. Never
English Longitudinal Study of Ageing (ELSA) / Understanding Society	How often do you feel lonely?	1. Hardly ever or never 2. Some of the time 3. Often
British Household Panel Survey	How often do you feel lonely?	1. Very often 2. Quite often 3. Occasionally 4. Hardly ever
Health behaviours in school aged children – England	Thinking about the last week, have you felt lonely?	1. Never 2. Rarely 3. Quite often 4. Very often 5. Always
Mental Health of Children and Adolescents in Great Britain	In the past two weeks, I felt lonely.	1. Mostly true 2. Sometimes true 3. Not true

Community Life Survey (CLS) and English Longitudinal Study of Ageing (ELSA) are both major surveys covering England and both include the question, "How often do you feel lonely?". These are some of the largest surveys that currently collect data on loneliness in England and, as a result, there is more evidence for this specific wording than other versions of the single item questions.

Despite using the same question wording, they have different response categories, as shown in Table 1. Fewer response categories tend to be more beneficial for telephone data collection and for certain age groups as they are easier to remember. However, in terms of measuring the impact of interventions and changes over time, more response categories may be more useful in detecting changes over time.

Although a single-item measure might be beneficial in encouraging wider adoption and roll-out, posing minimal extra burden on respondents and survey costs, there are also some possible disadvantages. These include:

- the potential for under-reporting due to a perceived stigma attached to loneliness; this seems to be more evident for males, introducing a possible gender bias (Borys and Perlman, 1985)

- that respondents must define "loneliness" for themselves, which may lead to people describing different types of feelings and experiences as "loneliness", some of which may not align with the definition of loneliness used for policy or analytical purposes

- the difficulty of capturing the severity of loneliness in a single item measure (as "severity" is defined as a combination of the frequency, intensity and duration of self-perceived loneliness)

1.2 Indirect measures of loneliness

Non-direct measurement of loneliness relies on researchers designing measures to capture specific aspects of the concept of loneliness and defining someone as more or less lonely depending on their answers to these questions. This means we are more likely to identify people who feel similar, but it is ultimately the designer of the measurement scale who decides whether what they are feeling is loneliness.

The review highlighted three indirect measures, which are either currently in use on an existing national survey in the UK, or which were assessed as meeting aspects of our ideal criteria well. These have been summarised in Table 2.

Table 2: Examples of indirect measures of loneliness

Scales	Items	Response categories
The three-item UCLA Loneliness scale on ELSA	1. How often do you feel that you lack companionship? 2. How often do you feel left out? 3. How often do you feel isolated from others?	1. Hardly ever or never 2. Some of the time 3. Often
The six-item De Jong Gierveld Loneliness scale	1. I experience a general sense of emptiness 2. I miss having people around me 3. I often feel rejected 4. There are plenty of people I can rely on when I have problems 5. There are many people I can trust completely 6. There are enough people I feel close to	1. Yes 2. More or less 3. No
The Campaign to End Loneliness scale	1. I am content with my friendships and relationships 2. I have enough people I feel comfortable asking for help at any time 3. My relationships are as satisfying as I would want them to be	1. Strongly Disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly Agree 6. Don't Know

Loneliness scales are often used either in addition to or instead of single-item questions on loneliness. The loneliness scales vary in length, with longer and shorter versions available for some, for example, the UCLA scale and the De Jong Gierveld scale. The number of items in the scale is an important issue in this context, as the intention is for the loneliness measure to be used on national surveys. An important consideration has been to avoid over-burdening respondents, which could compromise response rates, and to keep costs and survey space within feasible limits.

2 . Shortlisting of existing measures for testing

After the initial scoping review of measures and further discussion with the Technical Advisory Group (TAG), the decision was taken to base our preliminary recommendations on existing measures rather than developing new ones. This was based on the following main reasons:

- the desire to see them widely and consistently used, which would be more likely if we could encourage more researchers to choose measures already established and in use

- the existence of measures that have produced helpful insights, are well-tested and have a track record in relation to how well they perform for different population groups and using different approaches to data collection

- the advantages associated with building on the existing evidence base to bring further comparable insights into loneliness quicker than would be the case if new measures were used

Based on these considerations, we decided to focus on the following measures for further testing:

- the direct question of loneliness currently in use on the Community Life Survey (CLS)

- the short form (three-item) of the UCLA loneliness scale currently in use on the English Longitudinal Study of Ageing (ELSA) and the Understanding Society study

The UCLA loneliness scale was designed to measure relational connectedness, social connectedness and self-perceived isolation. There are several versions including a 20-item and a three-item scale. Due to our requirement to use the measure on national surveys, only the three-item scale was considered. Although the UCLA scale uses negative wording (for example, focusing on a perceived lack of social connection), it is well-established internationally, aiding wider comparisons and suggesting translations are readily available if required. It has also been found to perform well both in self-completion questionnaires and in telephone interviews.

The use of both a direct question and a scale measure is the approach currently taken by ELSA and Understanding Society. This enables measurement of loneliness via a scale that has been assessed as valid and reliable, as well as allowing the respondent to report for themselves whether they feel lonely, providing further insight into the subjective feeling of loneliness for different people. Also, there is variation in how people understand the term "loneliness" and some people might be reluctant to admit to loneliness, and this might be particularly true of certain groups such as men. Those who are most lonely may find it upsetting to discuss their feelings and experiences of loneliness. A multi-item measure that does not mention loneliness directly can be helpful to address these issues.

We undertook a programme of work to test our preliminary recommended measures involving question testing on surveys across all age groups (from the age of 10 years) and cognitive question testing (see the Cognitive testing of loneliness questions and response options and Testing of loneliness questions in surveys chapters). All of the existing and new evidence was brought together to inform the recommended measures for loneliness, which have now been proposed as interim harmonised principles for use across the Government Statistical Service (GSS).

We will work with colleagues at the Department for Digital, Culture, Media and Sport (DCMS) and the GSS Harmonisation Team to encourage the roll-out of these indicators and suggest taking stock and making any refinements necessary within two years, after surveys using these measures have data available for analysis. After this, we will consider any further refinements needed to the indicators or guidance for their use before proposing the final Harmonised Principle (see the Recommended national indicators of loneliness chapter). To accompany the loneliness measurement recommendations, we have also developed a guidance report with suggestions for how to incorporate the measures in relevant surveys and interpret the results.

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Cognitive testing of loneliness questions and response options

Findings from our cognitive testing of loneliness questions with children and young people.

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1 . Introduction

Many different approaches have been used to measure loneliness. These include both loneliness multi-item and single-item measures. Some measures ask about loneliness directly while others ask about emotions associated with loneliness, from which loneliness is then inferred. There are advantages and disadvantages associated with each. We undertook a programme of scoping work and consultation with experts on existing approaches to loneliness measurement. From this, two preliminary measures (both a direct and an indirect measure of loneliness) were selected as meeting many criteria we required for the loneliness indicators.

However, before making a final recommendation on the measures, cognitive and survey testing of our preliminary recommended measures of loneliness was conducted. This was intended to provide further information on how they would work for people of different ages and backgrounds and how well they would perform on different types of surveys. The main findings from the survey testing have been reported in the Testing of loneliness questions in surveys chapter, while this chapter focuses on our cognitive testing work. Our cognitive testing involved qualitative interviews in which respondents were first asked to answer the proposed loneliness questions, followed by discussion of their interpretations of the questions and use of the response scales. As the questions were already in use among adults, the cognitive testing focused on how well the questions would work with children and young people.

In particular, this chapter outlines:

- the questions and response options that were tested

- the methodological approach for the cognitive testing

- the findings from the cognitive testing for children (aged 10 to 15 years)

- the findings from the cognitive testing for young adults (aged 16 to 24 years)

- children's and young adults' preferences for response categories

- children's and young adults' preferences on where they would complete these questions

- children's and young adults' opinions on the impact these questions would have on survey respondents

The findings and recommendations in this chapter were used to inform our recommended national indicators and the guidance for measuring loneliness in national surveys.

2 . Questions and response options tested

Following an initial scoping review and short-listing of loneliness measures with experts, we cognitively tested four questions to capture different aspects of loneliness. The first three questions were from the UCLA three-item loneliness scale, which is currently used in the English Longitudinal Study of Ageing and the last is a direct question about how often the respondent feels lonely, currently used on the Community Life Survey.

2.1 Young adults

These questions were tested with young adults aged 16 to 24 years:

1. How often do you feel that you lack companionship?

2. How often do you feel left out?

3. How often do you feel isolated from others?

4. How often do you feel lonely?

Response categories: Hardly ever or never / Some of the time / Often

2.2 Children and young people

An adapted version of the measures was tested for use with children and young people aged 10 to 15 years. The wording for the children's measure was changed to a more "plain English" version, reflecting concerns that the words "companionship" and "isolation" are difficult for children to read and may be interpreted in a range of different ways. We revised the questions and tested them qualitatively (to understand children's ease of use and interpretations) and on a survey of children conducted by The Children's Society.

The following questions were tested with children and young people aged between 10 and 15 years:

1. How often do you feel that you have no one you can talk to?

2. How often do you feel left out?

3. How often do you feel alone?

4. How often do you feel lonely?

Response categories: Hardly ever or never / Some of the time / Often

3 . Methodology

Children's and young adults' understanding of the questions, the meanings of the words and concepts, and the suitability of the response options were cognitively tested. The cognitive testing was the first part of a semi-structured interview, which focused on respondents' understanding and experiences of loneliness. The interviews lasted approximately 60 minutes for young adults (aged 16 to 24 years old) and around 30 minutes for children and young people (aged 10 to 15 years old). The cognitive part of the interview asking about understanding of the questions lasted for approximately half of the interview.

3.1 Approach to sampling and recruitment

Recruitment of respondents took place during July 2018. The main sampling criteria were agreed and monitored throughout recruitment of study respondents to try to achieve a balanced sample.

Several methods were used to recruit respondents including asking Office for National Statistics (ONS) to circulate information about the research to people with children and young people aged 10 to 24 years (see Annex 1). Recruitment was also carried out in collaboration with children's charities, namely The Children's Society and Whizz-Kidz. The latter acted as an intermediary, passing on information about the research to potential respondents on our behalf, while researchers from The Children's Society collaborated with ONS throughout and were actively involved in the design of study materials, respondent recruitment and interviews.

The sample design sought an even balance between males and females, age groups, region, and rural and urban areas. Other characteristics such as ethnicity and disability were to be monitored to help ensure a mixture of views and experiences among respondents. The achieved sample had slightly more females than males and more respondents living in urban than rural areas. The age breakdown of respondents included an even mix of children and young people in two age groups (sixteen children aged 10 to 11 years and fifteen young people

aged 12 to 15 years) and young adults, also in two age groups (sixteen young adults aged 16 to 18 years and sixteen aged 19 to 24 years).

All respondents were given a token of appreciation to thank them for taking part. These were in the form of a £15 high street store voucher for those aged 10 to 15 years and £30 in cash for those aged 16 to 24 years.

3.2 Achieved sample

In total 63 interviews were completed. Table 1 provides a breakdown of the characteristics of the respondents.

Table 1 : Breakdown of children and young people respondents' characteristics: by age, sex, and location

Table 1 : Breakdown of children and young people respondents' characteristics: by age, sex, and location

England

Children and young people (10- to 15-year-olds)

	South West / Midlands	South East / London	North	Total	Rural	Urban
Females	4	10	4	18	5	13
Males	4	2	8	14	5	9

Young Adults (16 to 24-year olds)

	South West / Midlands	South East / London	North	Total	Rural	Urban
Females	6	5	6	17	4	13
Males	3	6	5	14	2	12

Source: Office of National Statistics

Most interviews were conducted during August 2018 in the participant's own home, with six conducted in a youth centre and four at ONS premises. The interviews were predominantly completed face-to-face with no one else present although several younger children were interviewed with a parent or guardian present.

3.3 Topic guides, recording and transcription

The interviews were based on a topic guide used as an aide memoir that also allowed flexibility for responding to topics raised by respondents. Small changes were made to the topic guide as the research progressed in order to make the interview flow more smoothly and to enable questions emerging from previous interviews to be addressed. A copy of the final topic guides can be found in Annex 2 and Annex 3.

In keeping with best practice, all interviews were recorded with permission of the respondents (and their parents where appropriate) and transcribed word for word. Prior to turning on the recorder, respondents were reminded of the reason for the interview and what would happen with their information and that the findings from the study would be reported anonymously with their data held confidentially. They were also informed that they could stop the interview at any time and that they did not have to answer any questions that made them feel uncomfortable.

Children and young people along with a parent or guardian were asked to read and if in agreement sign a consent form (Annex 4). Parents and guardians in conjunction with their children were then asked if they would like to be present during the interview. A similar process was conducted with young adults and they were asked to sign a consent form, though their parents or guardian were not present (Annex 5). A copy of the signed consent form was left with the respondents so that they could contact the interviewer at a later date if required.

Our analysis, as described in Section 3.4, is based on the transcribed data.

3.4 Approach to analysis

The qualitative data from the cognitive interviews were analysed in a multi-stage process:

- immediately after the interviews the interviewers wrote up the main themes based on the original topic guide; slight revisions were then made to the topic guide to incorporate any emerging themes to be explored in subsequent interviews

- regular meetings were held between interviewers and other members of the research team to share and explore emerging initial themes

- the transcribed interview data were used for the full thematic analysis, with the thematic framework developed collaboratively by the research team

- to generate early themes, the same transcript was analysed by several members of the team to ensure a consistent approach

- finally, all transcripts were analysed using the agreed thematic framework

This report presents the findings from part of the interview data involving cognitive testing of respondents' interpretations of the loneliness questions and possible alternatives. Substantive findings about children and young people's experiences and perspectives on loneliness have been published separately.

4 . Findings from cognitive testing with children and young people

This section presents the findings from cognitive testing of children and young people (aged 10 to 15 years), focusing on their understanding and interpretations of each of the four loneliness questions.

4.1 "How often do you feel that you have no one to talk to?"

4.1.1 Understanding of the question

Children interviewed generally showed good understanding of the question, "How often do you feel that you have no one to talk to?".

A common interpretation was that the question was asking if they had someone to talk to about their feelings and issues important to them in particular:

"So basically, how often is there no one around which you can trust to say stuff to. […] Yeah because you won't tell someone everything who you've just met. Like you won't go I live at blah, blah to a complete stranger who you've never met before." (Male, 12)

Similarly:

"How often do you feel like you can go to someone and express how you feel and your emotions and what you're thinking about?" (Female, 15)

The "double negative" aspect of the question could be challenging to interpret, as highlighted by the need for a respondent to re-phrase it aloud before answering:

"I always have someone to talk to, so that's hardly ever." (Male, 15)

The lack of a specified timeframe for the question could also be problematic:

"[…]trying to remember because it's really hard to remember back all the way to first school, like year 1 and Reception." (Male, 12)

4.1.2 Alternative interpretations

We found some variation in children's understanding of what it means to have someone to talk to. For some, the question simply asked if they had anyone to talk to at all:

Interviewer: "How often do you feel that you have no one to talk to, can you tell me what you think that question is asking you?"

Child: "How often is there people around to talk to?" (Male, 14)

4.1.3 Understanding of "companionship"

We tested the "How often do you feel that you have no one to talk to?" question in place of the UCLA original item "How often do you feel that you lack companionship?" due to concerns that younger children may have difficulty understanding the concept of "companionship" or reading the word. Our testing supported this view, as there was variation in whether children aged 10 and 11 years had ever heard the word, or knew what it meant. Among those who understood the concept of companionship, there was little consensus on its interpretation. A companion could be synonymous with a friend or family member:

"Like your friends like they're your companion, I guess." (Female, 14)

"Is it like a companion where you're together or something, like your friends or family?" (Male, 12)

Alternatively, companionship could imply a closer relationship than just someone to talk to. For example, a companion was considered to be someone they could rely on to be there for them and who they felt comfortable with. This view was more common among older children:

"Companionship sounds more like a closer relationship than just someone there, because you can really, if you feel comfortable with them, talk to them. But I'm not best friends with my form tutor or my parents, so companionship's maybe more of like a closer bond." (Female, 14)

Another interpretation was that it referred to relationships with pets. It is possible that is interpretation has its roots in children's stories that often include animal "companions" and may be where many children first encounter the concept of companionship.

"Like a friend, someone that you do a lot of things with[…] or like a pet, a dog." (Female, 11)

4.1.4 Preferred question wording

Respondents who preferred the revised version ("How often do you feel that you have no one to talk to?") felt it was easier to understand:

"[I would prefer the no one to talk to question] because if they're like my age but slightly older, sometimes people aren't quite sure, like they think they know what it means slightly but not fully. So, I'd probably keep [how often do you feel you have no one to talk to]." (Female, 11)

Similarly:

"Well I think the first one [about no one to talk to] because I think the second one's [companionship] a bit too vague. Because lacking companionship, like some people might not exactly understand what that means, like lacking companionship does that mean that you don't have friends or that you don't spend time with your friends or that you don't feel that you like your friends or like being around your friends." (Male, 14)

They also believed that other children would have no difficulties understanding and responding to the question, "How often do you feel that you have no one to talk to?".

4.2 How often do you feel left out?

4.2.1 Understanding of the question

Children commonly had a good understanding of the question, "How often do you feel left out?" and had no difficulty responding. They understood being "left out" as meaning excluded or marginalised in relation to group activities or relationships. For example:

"It's where they don't want to play with you, you're not allowed to play and you're sitting in a corner and then ten people are just playing over there, football, and they won't let you play." (Male, 12)

"Left out in my opinion would be that you're with a group of people and they've sort of gravitated towards each other but away from you. So, you're sort of left on your own, on your little island, the figurative island and away from them. And I guess you're sort of isolated because people, they probably won't to talk to you because they're talking to each other. And yeah, I think that's a good explanation of it." (Male, 14)

4.2.2 Alternative interpretations

Being left out could also be interpreted as social exclusion in a wider sense:

"How often do you feel like you have no place, or like serve no purpose or feel isolated within society?" (Female, 15)

Considering why people are left out, it could be either be something imposed by others or it could be self-imposed:

"So like when you're with your friends, how often do they leave you out the group, how often do they not let you join in with what they're doing or talking about?" (Female, 11)

"[…]If you tell yourself oh they don't want me there or they don't want me to do that, then you can get yourself in that mindset and be like I'm not going to go because I know they don't want me. But also, people can also shut you out and not let you do stuff with them and deliberately leave you out." (Female, 14)

When discussing what being left out feels like, it was very much about being alone with no social support:

"Well when you've got no one, you've got no friends or you've got no one there to talk to, and you're just always by yourself." (Female, 11)

4.3 "How often do you feel alone?"

4.3.1 Understanding of the question

Children also showed a good understanding of the question, "How often do you feel alone?", and had little difficulty answering the question. Again, understandings varied. The question could imply how often you feel by yourself:

"When you have no-one really or, yeah, you just feel alone[…] You could be in a group, but they don't include you. You could feel lonely, but you wouldn't be alone." (Female, 14)

It could also mean being around people who aren't engaging with you:

"Alone means there's people around you but they aren't talking." (Male, 11)

4.3.2 Alternative interpretations

Although all children were asked about "feeling" alone, some misunderstood or interpreted this as "being" alone:

"I'd probably think of alone as being by yourself." (Female, 11)

"Like how do you feel when you're by yourself, not a lot of people around you, socialising." (Female, 10)

Being alone was not always seen as a negative thing, and there was some indication that time away from other people provided a way to get desired privacy or a way to calm down:

"Yeah because you want a moment to yourself, some privacy, yes." (Male, 12)

"You can be alone by yourself if you have got into an argument and you want to calm down, you can be alone." (Female, 10)

Choice was an influential factor when deciding if being alone was a positive or negative thing. Young people felt that being alone by choice could be a positive experience, but that being alone without choosing was negative:

"I think that sometimes it's good to be alone. You don't want to constantly be surrounded by people. But I think it should be a choice. You don't want to be alone without wanting to be. It's not a very nice feeling." (Female, 13)

A distinction was also drawn between being left out and being alone, with being left out leading to being alone if you had no one else to go to:

"Being left out is just being left out of one thing, but then you can find something else to do; whereas being alone is like you've got no one else to go to if you've been left out of something." (Female, 11)

4.3.3 Understanding of "isolated"

Again, we tested the "How often do you feel alone?" question in place of the UCLA original item "How often do you feel isolated?" due to concerns that younger children may have difficulty understanding the concept of "isolated". This concern was shared by respondents who felt that some children would not understand the word "isolated":

"Some people might not fully understand what isolation is. They might feel like it's something different than it is. But most people will know what alone means and lonely, so again it's more straightforward." (Female, 13)

"Because isolated is quite a more dramatic word than alone. So, they might not understand it or they might just like, I don't know how to explain it, but they might just like feel more sad." (Female, 10)

"Isolation" appeared to have a wider range of interpretations than "alone". For example, isolation was seen as more extreme or severe than being alone:

"If you're isolated it's like you're on your own and no one else can get to you. It's a bit different to alone I think. Because sometimes you can feel alone even though there's other people around you or people like there, you just maybe make yourself feel more alone because you want to be by yourself instead of forced to be by yourself, maybe isolated is more[…]" (Female, 14)

Similarly:

"[…] isolated I feel it's a much harsh term. Like isolated could imply that you feel that there's no one around you, that no one wants to talk to you, there's no way you'll talk to anyone. And yeah I think that alone and isolated probably on the same spectrum but I think isolated is more extreme than alone." (Male, 14)

Isolation was also associated with punishment in schools such as when a child is separated from their classmates and sent to do their work alone somewhere else:

"It means when you're alone. Because we have isolation at school where you're put on a table by yourself outside the office, so you don't distract other people. […] Alone, by yourself, no one." (Male, 11)

This connection to punishment could contribute to the perceived severity of the word "isolated" among children.

Another interpretation of isolation was that of self-isolation and withdrawing oneself from others:

"I think alone because there are very few people cut themselves off from your world because people generally do have friends and family to talk to. So being alone I think is more common than being isolated." (Female, 14)

"To me, if you're isolated, it means that you're not only being like left out you've also got to the point where you're pushing people away or isolating yourself." (Female, 13)

4.3.4 Preferred question wording

When asked whether young people felt it better to ask "How often do you feel alone?" or "How often do you feel isolated?", "alone" was preferred over "isolated" due to concern that other children would not understand the question and the belief that "isolation" was a far more severe experience.

4.4 How often do you feel lonely?

4.4.1 Understanding of the question

Children understood the question well, but felt that it was similar to or the same as, "How often do you feel alone?".

"When you have no-one really or, yeah, you just feel alone[…]You could be in a group, but they don't include you. You could feel lonely, but you wouldn't be alone." (Female, 14)

This also highlights a clear understanding of the difference between feeling alone and being alone, the former being a state of mind, regardless of the physical presence of others:

"Like how often do you feel like by yourself at home, at school, anywhere round where you are by yourself, no one talking to you, just by yourself, no one but there's a lot of people around you." (Male, 13)

Respondents also noted that a defining aspect of loneliness was a negative feeling:

"Lonely is just like you're by yourself but you're sad. But alone is just you're by yourself" (Male, 13).

4.4.2 Alternative interpretations

Another aspect of "feeling lonely" is that it could be seen as a more prolonged and potentially damaging emotional state than "feeling alone":

"How often, I feel like alone is like a short period of time you can feel alone, but then lonely is like a long period of time. So, you can feel lonely for a long time but alone is more like you feel alone for a day and then you can kind of snap out of it or you can kind of go get better again and, you know, do something." (Female, 14)

"I'd say being alone would be a much more present feeling, something you feel right now; being lonely would be something a lot more prolonged. I think lonely would be where you've spent so much time alone that it's started to have a negative effect on your mental wellbeing […] where it starts to feel negative, where you start to think, I don't like this" (Male, 14)

5 . Findings from cognitive testing with young adults (aged 16 to 24 years)

A total of 31 young adults between the ages of 16 and 24 years took part in similar cognitive interviews as those reported in Section 4 with children and young people. The questions and response options tested with this group were the same questions used on the English Longitudinal Study of Ageing (ELSA) and Community Life Survey (CLS), although the latter survey uses a five-item response scale. The CLS also includes this age group as part

of its adult general population sample but only has the direct question on loneliness. This testing enabled further insights into how young adults in the UK respond to the UCLA questions, first developed among university students in the United States.

In general, the four questions were answered by the 16- to 24-year-old respondents without any difficulty. In the following sections we focus on interpretations of each question.

5.1 How often do you feel you lack companionship?

5.1.1 Understanding of the question

Respondents of this age generally understood the question about lacking companionship in terms of lacking friends or friendship, but a range of interpretations were offered as to the depth and nature of the relationship implied by the word "companionship".

Respondents thought that companionship meant having someone they could talk to, who would understand them and offer support when required:

"It's sort of like if I was having a bad day or if I was, you know, if I needed someone to talk to I would have access to someone to talk to, like a friend or a close family member who I could look at and look for help from." (Female, 23)

"Well I suppose it's probably asking if you, no matter where you are if you feel like you don't have any company or someone to talk to. You're just, doesn't really matter who they are it's just if you have someone who you're with or you can speak to, or like a friend or family. And I suppose yeah, makes sense yeah." (Male, 19)

They also noted that this was not a word they would normally use, which may help to explain why there were varying interpretations as to the type of relationship implied by it:

"I laughed because we would never say that. Why would you? You wouldn't say it." (Female, 18)

"It depends. Everybody's got a different definition of companionship. What one person would consider companionship is going to be different from what somebody else considers it to be." (Female, 23)

"Companionship to me is like a relationship between two people in a way, or multiple people. Like, there's a bond there between them. It could be friend. It could be romantic. It can be anything." (Male, 16)

5.1.2 Alternative interpretations

Companionship could be interpreted as a more superficial friendship, potentially lacking depth or closeness:

"So I see it in terms of being close to someone. You can have companions but still like kind of be[…] it's a bit like glass between the friendship and it doesn't actually feel like you know them well. Then you'll have people you know who you feel very warm around – more intimate – relationships where you feel like very comfortable. You know you can be companions with someone and still feel like you lack companionship if that makes sense." (Female, 23)

"Companionship is probably more open, because at least if you have a companion you can at least try and build on that relationship[…] you just meet someone. You wouldn't say you were friends with someone immediately after you meet them. But then you might go to have a drink at Costa or something. That's a companion." (Male, 18)

It could also imply a more romantic or intimate relationship. This was mentioned by respondents of both sexes from across the age range:

"I would say it's more like probably like dating life and stuff like that really especially with my sort of age." (Male, 23)

"I guess you could look at it in terms of general friendship maybe also in the sense of a relationship like a more intimate kind of companionship. That's sort of how I see it." (Female, 23)

This theme also carried through into a sense of discomfort that the word could be interpreted as a romantic relationship and should be avoided for that reason:

"Maybe change the word companionship, because some people can take that as an affectionate, so you've got a companion in your life could be like wife, girlfriend, boyfriend, stuff like that." (Male, 16)

"I suppose I feel like perhaps especially, more men would feel a bit, maybe the word companion would feel a bit flowery or[…] I feel like I know that a lot of my male friends probably wouldn't say they would have a companion because while you have a great relationship, you can have a really great relationship with another guy, it's kind of, I think calling them your companion wouldn't feel right." (Male, 17)

The term "companion" was also interpreted in quite different ways by disabled respondents. A companion could be someone who provides care or support with daily activities (as in companion care) or alternatively, a companion may be a friend, but not a paid carer:

"A lot of people think of, especially in the disability sector, companionship is relying on someone else[…] in the disability sector companion is quite often a negative connotation because it's kind of like a carer. So for me companion makes it feel like I rely on someone, whereas actually rather than being supported by someone." (Female, 21)

"Well do you lack a person there that's not helping, not designed to help you. Basically somebody who's not there as a helper, but more as a friend I suppose[…] Somebody who isn't a carer. Because carers, as nice as they are, are paid to be there, they're there to support you, and they shouldn't really be used as a substitute." (Male, 22)

5.1.3 Understanding of "no one to talk to"

We also compared interpretations of the companionship question with the "plain English" adaptation of the question used with children and young people ("Having no one to talk to"). Respondents commonly felt that this was more straightforward and easier to understand:

Respondent: They're the same[…]

Interviewer: Which one is better?

Respondent: Having someone to talk to[…] not many people know the meaning of companionship (Female, 18)

"I prefer 'having someone to talk to' [than companionship]. Companionship just it doesn't really explain what it is. And having someone to talk to is just having someone to talk to. It explains it without, I don't know, it's just better, clearer." (Female, 18)

When asked to explain what they thought companionship meant, one interpretation is that it's about "having someone to talk to". However, there was also a belief that you can have someone to talk to without having the depth of relationship that might be implied by companionship:

"It is a massive thing because I suppose it is kind of separate from parents, I wouldn't think of a parent as a companion. Having a companion is, it's someone who you can talk to about anything. With parents there will always be certain topics that you just can't talk about because it's not the kind of thing that you talk about. And it's having someone around your age, perhaps who go through similar situations, who perhaps also doesn't really know the answer. Sometimes you don't need an answer you just want to talk through something and say how you're feeling and get it out and having that mutual trust with someone or even multiple people is a huge thing just to get things off your chest. I think if I didn't have that I wouldn't talk to anyone really. I wouldn't talk to my parents about it." (Male, 17)

Similarly, a distinction was also drawn between having someone to talk in a professional capacity versus having a companion one could talk to:

"Well it may be because having someone to talk and a companion in my opinion, I would go to like probably my boyfriend or something like that, and maybe sometimes my dad. But someone to talk to can be like a counsellor or something like that. I've been through that and they've been my 'someone' to talk to. But I wouldn't ever describe them as a companion. I'd call a companion someone to talk to and a companion like. The companion and someone to talk to can be used together but I don't think, like in that sense of the way, but not in the other side of it. Does that make sense? It makes sense in my brain but." (Female, 20)

5.2 "How often do you feel left out?"

5.2.1 Understanding of the question

Respondents were able to answer this question using the response options offered without a problem. Similarly to the findings for children aged 10 to 15 years, feeling "left out" was understood by the majority of respondents as not being included in social situations, activities or discussions:

"You're asking how often am I feeling like I'm left out of situations with my friends, with my family, people maybe not telling me things or inviting me somewhere, those kinds of situations." (Female, 18)

5.2.2 Alternative interpretations

Respondents were asked if they could suggest an alternative to "How often do you feel left out?". This helped to clarify that feeling left out could be experienced in a number of ways including:

- others not giving you an opportunity to join in activities, reflecting an externally imposed sense of exclusion:

"How often do you feel that you are not given an opportunity to engage in a pastime, or how often do you feel you're not involved in an activity." (Male, 16)

- feeling unable to approach or talk to people or on a different level with those around you, reflecting a sense of emotional exclusion from others:

"Do you feel isolated, do you feel you can't approach people? Do you feel you can't talk to people, communicate and all of that." (Male, 17)

"I think it's about, you've got like communication, if you're not on the same level, if everyone's talking or everyone's got a dynamic which you're not part of, even when you're with them you feel left out. It's like, in essence, third-wheeling really." (Male, 18)

It was also suggested that there are many ways that people can be left out, making this open to a range of interpretations:

"I think it's like anything if you're going to interview people about loneliness, you're going to have to ask them have you felt left out. But isn't it left out in what sense? Kind of left out of what? So, you can see a way it can be an open-ended question". (Female, 23)

There are a range of situations in which young adults said they felt left out:

"Like sort of, of a conversation or something like that. If you're sat around a table or even if people make plans. Or, you know, if you feel like, I feel like things go on around me that I'm unaware of but I feel like I should be aware of. Like family, like group chats and stuff, there's a lot of things that go on. And then they'll, like my family will chat but they'll chat separately. And then they'll be like oh you knew this. No, I didn't, you didn't tell me. There's a lot of, you know, that sort of thing. Or you're sort of sat there at the table and you're just like I don't really feel like I have any contribution or no one's bringing my opinion into it or. I would say if you went out with friends and had plans, but that doesn't really, I don't really go out or anything so." (Female, 20)

With such a wide range of ways that individuals could feel left out, this may have implications as to how often it occurs and hence how frequently respondents report it in surveys. However, this specific question was generally answered quickly by respondents and only on reflection did they think more deeply about its full meaning.

There were also comments from disabled people suggesting that isolation can be closely related to social inclusion and accessibility, and a sense of exclusion may be a very common experience:

"Do you feel included in your community? Do you feel included in your friendship groups? Do you feel like you're not involved in those[…] it's quite personal in terms of access and disabled access there is a lot of social inclusion issues. So feeling left out is something I feel every single day." (Female, 21)

5.3 "How often do you feel isolated from others?"

5.3.1 Understanding of the question

As with the previous two questions, respondents were able to answer the question on how often they feel isolated from others with ease. Their interpretations focused different aspects of isolation:

- socially or emotional isolation, implying little or no meaningful communication with others even though others may be physically close

- physical isolation through distance from others though contact may still be possible remotely (for example, by phone, text or social media)

These different dimensions of isolation may mean people take different things into account when responding:

"How often do I feel like I'm kept separated from other people. I can't maybe contact people or talk to them. Yeah, I'd say that was a little bit more of a challenging question for me to think about[…]. Yeah, I'd say because is it like a physical isolation from them or is it, yeah, I wasn't too sure where to take that question[…] Do we mean that I can't contact somebody on my phone? Do I mean that they don't want to talk to me? Do you mean I can't physically see them? Like, that is what I mean like I didn't know quite where to take that question." (Female, 18)

5.3.2 How often do you feel alone?

Respondents were also asked what they thought the difference was between "How often do you feel isolated" and "How often do you feel alone"? The questions were thought to ask very similar things, though some distinctions between them were noted. For example, being alone can be a positive choice, whereas isolation is unlikely to be. Similar findings emerged as for children and young people, in which "isolation" was seen as a more extreme state than "feeling alone":

"It depends on the value of the question because if you ask people how often do you want to be alone, I want to be alone most days. I don't want to talk to people. But if you'd ask somebody how often do they want to be isolated, they'd say they wouldn't want to be isolated because it sounds a bit more negative and dire in a sense than how often do you want to be alone. Because you can be in a busy place where it's noisy and people are talking – I want to be alone. I can't be doing with this right now. I just want a cup of coffee. And you could have a grumpy day, like I don't like mornings; I just want to be alone until 10:00am. But you wouldn't say I want to be isolated till 10:00am." (Female, 23)

"How often you feel alone is not really a big thing. It's like because everyone feels alone at some point. Literally everybody will feel alone at some point in their life. I feel like with isolated not as many people will feel that, […] and people will feel like they won't really have much support." (Male, 16)

Isolation was also thought to reflect a more prolonged and negative mental state than feeling alone, which could be a transient experience:

"For me kind of isolation is more kind of impacting than being left out. If you're left out you can kind of renew it. You can try again, go to a different place with your friends or do something else. You can fight to change being left out. Whereas feeling isolated is something very internal and it's an emotional symptom of being left out for so long that you kind of internalise. So for me kind of feeling isolated is now a mental barrier where I can't let people in emotionally or I feel like I can't do certain things or I won't do certain things because of my previous experiences." (Female, 21)

These feelings were echoed by other respondents who also felt that being alone could be a first stage towards being isolated. This point was reflected in an example from a young person who described a transition from "feeling alone" to "feeling isolated", which happened after increasingly withdrawing from situations in which they might feel left out. Self-imposed isolation was also something noted by respondents as potentially associated with mental health issues.

5.3.3 Preferred wording

Respondents preferred "feeling alone" to "isolation" because it was clearer wording, but they understood the meaning of isolation and applied it appropriately in the examples they gave. It was not associated with punishment as it was with those aged 10 to 15 years.

5.4 "How often do you feel lonely?"

5.4.1 Understanding of the question

Respondents were also asked the direct question, "How often do you feel lonely?". They did not find this difficult to answer, but noted it felt similar to the other questions:

"I'd say it was quite similar to the isolated one. I'd look at it and feel like how often do I feel like I'm by myself, alone, don't have, like I said, people to talk to, people to kind of offload any of my issues onto. And yeah just feeling very like you can't talk to people, trust people, yeah, in those situations." (Female, 18)

"Well it's just a combination of all three above together. It's like for me it just feels like a summary." (Male, 23)

5.4.2 Alternative interpretations

In keeping with the findings from younger respondents, "being lonely" was differentiated from being alone:

"You can feel lonely in a room full of people[…] it's not a physical thing. Lonely is a state of mind." (Female, 17).

Respondents clearly associated alone with a physical attribution, using the term "being alone", and lonely with an emotional one using the term "feeling lonely":

"Loneliness which is where you don't have anyone to fall back on, where you have that kind of emotional impact of having to go at it on your own, whether that be physical or emotional[…] I think being alone is a very physical thing if you don't see anyone. Being lonely is the emotional thing of not feeling understood, not feeling valued, not feeling like you have anyone to lean on, like you have no one who respects you and respects your dignity." (Female, 21)

6 . Response scales

During the cognitive interviews, respondents were asked how they felt about the response options for the questions and whether they would prefer specific alternatives.

6.1 Children and young people's use of the response scales

6.1.1 Alternative response scales considered

A specific suggestion put to children and young people was whether they would prefer to answer the questions on a 0 to 10 scale with 0 being "Never" and 10 being "Always" or using labelled response categories such as: "Hardly ever or never", "Some of the time" or "Often". The labelled response categories were used as part of the question testing so they had experience of this.

Labelled response scales

Those who preferred labelled response categories felt that words were easier to understand and more meaningful in terms of loneliness than numerical categories:

"I think words are better[…] it lets me draw more on my thoughts because it's prompting me more than a number I guess." (Male, 14)

"[…] it's easier to understand if you say words. People might not understand if you use a scale." (Female, 14)

Numerical response scales

Among those who reported that they would prefer the 0 to 10 scale, this was primarily because this approach enabled more response options:

"I think I'd prefer a 0 to 10 scale just because it's got more of range that you could like go into a bit more detail." (Female, 13)

"[…]You've got more of a range instead of just three answers[…] I think maybe numbers it'll have a wider range of choice." (Male, 13)

A possible trade-off was also noted between more choice in a 0 to 10 scale versus ease of understanding in response options with labels:

"Because there's more choice. It's easier to give a better answer[…] [but] it's easier to understand if you say words. People might not understand if you use a scale." (Female, 14)

A final observation is that children who answered "hardly ever or never" tended to treat this as two distinct response options and pick one:

Interviewer: "How often do you feel that you have no one to talk to: hardly ever or never, some of the time or often?"

Respondent: "Never."

6.2 Young adults' use of response scales

6.2.1 Alternative response scales considered

As with children and young people, young adults (aged 16 to 24 years) were also asked their views on whether they preferred the three-item labelled response categories used when they answered the questions ("Hardly ever or never", "Some of the time" and "Often") or a 0 to 10 scale with 0 being never and 10 being always.

There were advocates for both the labelled response scale and the numerical scale with spontaneous suggestions for other possible approaches including: a 0 to 5 numerical scale; a labelled five-item scale; and an open text box to enable people to give more details regarding how they feel.

Fans of the three-item labelled scale felt it offered sufficient response options. Similar to the findings for children and young people, there was a view it was easier to answer in words than numbers:

"Words is more straightforward[…][and] lets you be a little bit more specific[…] probably easier." (Male, 19)

Those who preferred labelled responses thought it was difficult to quantify an emotion:

"I think that because it's sort of like a subjective thing and a sort of emotional topic I don't think you can like quantify it and say 6 out of 10 because like your feelings can be different about different matters[…] I think the other answers are probably better for like description purposes because even if you said like, say if I felt left out eight of ten but because being left out can be different circumstances so I think it's more difficult, I don't think it's like appropriate to quantify it." (Female, 24)

The use of words in the response scale could also help to anchor the question in people's own experiences:

"I quite like the hardly ever, sometimes answer for this[…] because it helps you to think of specific situations and it helps you to clarify how often you feel that emotion and how often it kind of comes up[…] because I think it is one where you have to think about literal events or times that you felt like that." (Female, 24)

By contrast, the main advantage cited with the numerical scale was the wider breadth of response options:

I thought they were quite good categories. I mean I could choose. I'm trying to think. Maybe it would be nice to have a larger scale made like a 1 to 10 kind of thing, rather than limiting that. If you said one is never, and I suppose it's giving you quite a range then, but maybe that would be nicer to do it that way." (Female, 18)

"With three categories, it was three that you gave us before? I just think there's not much like what's the word, I can't think of the word – leeway. Whereas if it's like one to 10 you can proper put a finger on it". (Female, 17)

Young adults were clearly very used to taking part in surveys and this was also reflected in their responses:

"I think if you had a scale like you do like online ones, you can have all the time, some of the time, occasionally, hardly ever and then never, like a scale of five or so, and you give a little bit more differentiation there's more places people can fall[…] But it might be easier for people to relate to certain things: you might get more accurate or direct answers[…] I wanted to say a mix between all of the time and some of the time for some of those questions and occasionally and never, but if there wasn't an in-between option." (Male, 16)

Those who preferred more response options felt this would allow a more specific response, better reflecting individual experiences:

"I think that kind of gives it a bit more of a sliding scale because sometimes it's, you sit sometimes you think hardly never and sometimes it's finding that spot to explain your answer." (Female, 24)

"More of a scale might have been better[…] I just think it's easier to gauge because you can sort of giving something out of ten is I think more specific. Because sometimes you might have put yourself between a category or someone might find it hard to think between sometimes and often or something like that." (Male, 16)

7 . Views about where and how to ask the questions

Respondents were also asked about the environment in which they would prefer to answer these questions. We were particularly interested in exploring issues of where respondents would be most comfortable answering the question, confidentiality and the importance of support being available, if required.

7.1 Children's and young people's preferred environment for completing the questions

We asked children and young people whether they would prefer to answer the loneliness questions at home or at school.

7.1.1 At home

Among those who preferred to answer the questions at home, reasons given related to concerns about confidentiality and risk of embarrassment if peers or friends found out their responses:

"[At home] there's nobody to, there's nobody watching you really because you can trust your mum and not [others] at school[…] because usually they would go around telling everyone. That wouldn't really be that comfortable." (Male, 12)

"Probably at home, because I don't really want to be putting the same answers down as my friends or talking about it with them afterwards." (Female, 14)

"[…] what happened with us after the height and weight checks everyone was going 'oh what's your height?' 'oh yes, I'm taller than you'. Like not yes like ha ha, I'm better, like yes, I've grown. Like that. So, people might feel under pressure to tell other people. So, it would be better if you do it at home and then no one knows when you've done it and they can't ask." (Male, 11)

Creating a "safe" environment in which children and young people can answer the questions is important to enable them to answer honestly and to be clear there won't be negative repercussions from doing so.

Completing the survey on a computer at school was viewed as problematic in this regard if others could see their screen:

"It might be better at home because at school lots of people look at each other's screens. And go oh why are you looking at that. If you give me something I won't tell that you were looking at that. Or they can find out information you don't want them to know." (Male, 11)

The importance of not having to answer in front of others who aren't trusted completely was also highlighted by respondents:

"Because at school there's teachers there and you could feel like your answer could just like, if they didn't expect you to answer that you could just feel like weird or judged." (Female, 14)

"[…]So, with me, if I had to answer in front of my parent, I don't think my answers would change because I trust my parents. But maybe if someone didn't trust their parents as much, or if it was in front of a teacher or someone like that, they might be inclined to lie." (Female, 13)

7.1.2 Preference to answer loneliness-related questions alone

Concerns about confidentiality and fear for potential embarrassment or stigma, were also noted as reasons for preferring to be alone when answering loneliness-related questions:

"If family or friends are there they probably feel like they want to put the same answer as their friends, or if something was on their minds, they wouldn't want their family to know[…]" (Female, 14)

Although there were concerns expressed about being able to see others' screens at school, a self-administered survey, by computer, was suggested as preferable to an interviewer-led approach:

"I think they'd prefer to do it on a computer because I feel like some people, if someone's an introvert or something like that, they'd feel more comfortable doing it [by] themselves […]. They might feel inclined to be less honest if they're in front of people. […] It might make them inclined to lie." (Female, 13)

7.1.3 At school

Among those saying they would prefer to answer the questions at school rather than at home, they were still keen to suggest steps that should be implemented to ensure confidentiality or privacy and avoid others knowing their answers. These suggestions largely related to answering the questions alone:

"A private room at school with a laptop where you can just submit your answer and it's gone. And you can choose whether people know your name or they don't." (Male, 11)

"Probably by just letting me get on by myself probably because it would be a lot easier I'll find." (Male, 12)

7.2 Young adults' preferred environment for completing the questions

Similarly, to children and young people, young adults (aged 16 to 24 years) were also asked where and how they would prefer to answer the questions, focusing particularly on home or school or college.

As with the younger respondents, a consistent theme was that it was important to have privacy when answering the questions. Without this, people may not be inclined to answer openly:

"When you're with your group you act up in front of them don't you? Act like the big one. So they'll not answer honestly." (Female, 18)

"Not comfortable. I don't think I'd give a true, especially if I was around my parents, I wouldn't want, if it was people I didn't know that wouldn't bother me, but people I'm close to I wouldn't want them to know." (Female, 20).

7.2.1 The right conditions for answering the questions

Another similar idea to the findings for children and young people is that it is important to provide a safe and private space for answering the questions, where they feel at ease and can answer at their own pace:

"[…]it would be at home because you'd have the time, you'd have the facilities. You wouldn't have to rush. You'd make yourself a cup of tea and yeah, I've got to do this now. And it'd be just out of convenience really." (Female, 23)

"And a lot of times in college, I know when we got surveyed and stuff you never really finish. You just want to get it done as quickly as possible and get rid of it. That's usually what it was like at school because that's just the way it is. But at home, I think you'd answer it a bit more in-depth and stuff, yeah." (Male, 20)

"Home's probably better[…] first year of uni, it's a little bit more, you don't quite have your own space, but at home you definitely do." (Male, 18)

Place was also an important consideration for people with additional needs, with home noted as potentially being an easier and more comfortable option:

"Personally, I'd prefer to do it in my own space because it's a lot less clinical. And I know a lot of people, especially with additional needs know that there's a lot of anxiety around going to a different place already with oh is it going to be accessible, are the people's attitudes going to be accessible? Whereas when you're in your own environment it's a lot kind of easier to relax into the questions rather than having to go somewhere." (Female, 21)

7.2.2. Influence of people around you

Many respondents thought that it could be problematic if they had to answer these questions in front of others including friends, family and carers. There are clear implications for ethics and data quality if respondents are asked to complete surveys in front of other people where the confidentiality of their answers cannot be guaranteed:

"You probably wouldn't answer it clearly because they wouldn't want to tell their family and friends that that might be a problem. If I had my mum and dad behind me, if I did have a lack of companionship, I wouldn't answer that

in front of my family. Probably the reason being that you wouldn't want to admit it, maybe, if you were a young adult or a young child or whatever." (Male, 20)

"Some people try and impress people and they want to try and impress their friends and say oh no I'm never left out. People just wouldn't answer that." (Male, 20)

These issues should also be considered carefully and sensitively in circumstances where people may need support from a carer to participate:

"I have only got capacity to go somewhere else when there's a person with me. And quite frankly going somewhere else I'd have to watch who I then said it to." (Male, 16)

7.2.3 Potential to get support

A further view was that answering these questions around others might promote more open discussion and greater support:

"Probably school[…] if you had friends around you and you answered the question in front of them, they might realise." (Male, 19)

In terms of accessing support, young adults differed in their view as to where this might be more easily available at home or school and depended on the type of support required:

"Probably on a computer at home, or at school. Having it at school[…] because you've got the teachers and your schools friends around there. So they help you understand the meaning of it. I don't understand things or read well[…] Having your family to talk to about it. And probably being too scared to if they don't want to talk about it." (Female, 17)

"I think it would be better to do it at home because you can just talk about more. I don't know, if you're at school you're like around other people and you wouldn't feel like you could talk about it as much[…] I just think you could just tell the truth at home." (Female, 17)

7.2.4 Mode of response

Respondents discussed the advantages and disadvantages of a range of modes of completion, including face-to-face interviews, telephone and online. A computer-based interview was appealing for a number of reasons including: ease, speed of completion and could be completed at home in private:

"[…]it'd probably be a bit easier to click an option rather than just actually admit it over the phone probably, yeah […] on your own, probably at home. If you were say on your phone or on your laptop or something it would probably be the best way to answer it, yeah." (Male, 20)

Some concern was expressed about telephone interviews, which could be less comfortable for respondents:

"I definitely wouldn't do the phone one[…] I get very nervous. I don't mind face-to-face because you can get your message across to someone properly[…] I don't mind the internet because it's quick and easy. I'd probably pick the internet because I can easily slot that into my time." (Female, 17)

There was also concern about including the questions on a household survey, both because of a possible lack of privacy and the potential for raising difficult issues within the family:

"Yeah. If there was a way that it could be, you sit somewhere, do it and it's gone that's it. Done, dusted, they won't see it. Whereas if it's sent out to a household they could, I know what my mother's like." (Female, 20)

Finally, despite the privacy potentially afforded by completing the questions online, there were also concerns raised about the security of internet-based modes of completion:

"With online, because a lot of big things nowadays is big scares like something's going to be hacked or there's been a leak on iCloud or whatever, and I know that obviously won't affect a lot of things, but it would be quite scary in a way […]I'd probably say paper or, if the option's there, in person is quite nice. Because it's just like quite genuine and you can see someone's expression and see how they're reacting to this. But then with paper as well you write it down, it gets sent off[…]" (Male, 16)

7.3 Perceived impacts of the questions

7.3.1 Children and young people's views and experiences

Children were asked how they felt when answering the questions and whether they thought the questions could be upsetting for others. Although they acknowledged that all the questions had the potential to be upsetting to those affected by the issues, they did not relate this to themselves – even those who said they had experienced aspects of loneliness or had no one to talk to:

"It could be upsetting for some people. If someone is going through a time where they are lonely and they've got no one, it could upset them […] I think they could feel quite embarrassed, because some people might find it embarrassing because they're not as popular as anyone else." (Female, 11)

They emphasised that the questions might be upsetting depending on the experiences of the person answering them:

"It depends what they've been through, because if maybe they were a really lonely person it might be quite upsetting for them, but maybe if, a person who's had a lot of friends or maybe been a bit lonely it might be hard to answer it but you would know what to say in the end like I did. Or if you're just a person who's had friends from the beginning you probably would find it quite easy to talk about." (Male, 13)

Respondents also noted that if people had experienced loneliness, this may discourage them from answering the questions honestly:

"Some people who do feel lonely might not want to admit it because it might not be like a thing they want to admit, because like they might feel like it makes them sound weak or whatever or like they don't have friends or whatever." (Female, 14)

"It could be unnerving for the people who are lonely because they might not want to say and they could be like yeah I'm never alone when you can see in their eyes that they are." (Male, 11)

Although they felt the questions could be upsetting, respondents also recognised the value of asking about loneliness and encouraging people to talk about it:

"I think it's quite important to keep asking them because most children wouldn't reach out and say I feel left out of this. Whereas, if you're asking them, it's giving them an opportunity to share how they feel. […] Because I think that would be one of the main reasons that people could start to become isolated and start pushing people away if they think if I'm constantly being left out, why should I make efforts with people, why should I go and speak to someone. And I think that could be the root cause of leading to like things becoming worse." (Female, 13)

7.3.2 Young adults' views and experiences of answering loneliness questions

Among the young adult group (aged 16 to 24 years), as with the younger group, respondents felt the questions could be upsetting for those who were lonely or had little social support:

"Yeah, I know there would be [people who would be upset]. Like a couple of my friends, like people at my school, people I know, people I care about, I know they'd find it quite hard to answer that question due to upbringing or the situations they're in at the moment. And yeah, I think that's just it. Like they would find it quite difficult to answer due to circumstances." (Male, 16)

"Quite upsetting if that's how they felt. Like if they were alone and they got asked on it, it would be a bit awkward […] they might just reflect on themselves that they've got no one to talk to." (Female, 17)

Asking the questions and moving on quickly to other topics was suggested as a way to make it easier for people to answer and to minimise potential upset:

"Not as much, because it's just one little question. If you're having a conversation about it you've got to talk about it." (Female, 17)

"My feeling is just answer it, move on." (Male, 16)

However, those who said that they did feel aspects of loneliness also said that the questions were not particularly upsetting to them:

"I felt OK. I'm relatively open about talking. I talk quite a bit. But yeah, I feel if I don't talk about it then what's the point in having the ability to speak. Like I've got to talk about something and if a question's asked, I might as well answer it. And I don't really feel uncomfortable. I was all right with it, to be honest, pretty good." (Male, 16)

As noted previously, due to the sensitivity of the topic, providing a safe space where people can give honest answers in privacy is particularly important to avoiding adverse impacts:

"Maybe they wouldn't want to admit it, I think. It's quite a sensitive topic, really, to admit that you're lonely. It's quite a tough thing to do but I feel like if you were with someone, one-to-one you would answer that quite honestly." (Male, 20)

"I can see how it could be [upsetting] if it was asked to a certain type of person. And I mean, obviously there's people in school, you see it going on, they can be bullied. They'd be laughed at. There were a few people in my school that ended up moving schools. You can see how it probably would upset some of them. […] I don't know. Only people that are probably lonely." (Female, 23)

8 . Overall recommendations

8.1 Findings and recommendations on question wording for children and young adults

Children and young people aged under 16 years understood the questions well and were confident about how to respond to the adapted, plain English versions tested.

There were a range of interpretations given to the word "companionship" among children and young people as well as for those aged 16 to 24 years. This was not an easy term for people aged under 25 years and there was a lack of clarity about the nature and depth of relationship implied by it. Apart from varying interpretations from

platonic to romantic relationships and with different degrees of closeness, a companion might also include a pet, and for those requiring assistance with independent living, the term is also connected to professional carers (for example, companion care).

Much of the ambiguity was removed for children aged 10 to 15 years by adapting the question from "lacking companionship" to "having no one you can talk to".

Despite the varying interpretations of the question among those aged 16 to 24 years, we do not recommend alternative wording of the "companionship" question for adults. This is because it is part of a well-tested and validated scale currently in use on major surveys of adults in the UK and internationally, and it is important to retain the question wording to maintain comparability. For those undertaking surveys where these different interpretations of the question may be particularly relevant (for example, surveys of those with long-term health conditions or disabilities), it may be helpful to offer further clarification of what is meant by "companionship".

For children and young people under 16 years, the word "isolated" could be viewed as an externally-imposed separation from others, associated with punishment for bad behaviour at school. For both those under 16 years and those aged 16 to 24 years, the term was thought to imply a prolonged, severe and deeply-felt separation from others. For those aged 16 years and over, there was more recognition that isolation may be externally imposed or self-imposed and may involve a sense of emotional separation from others, physical separation or both.

For those under 16 years, we adapted the question about feeling "isolated" from others to ask, "How often do you feel alone?". Our testing of this showed this was well understood by children and was not associated with the idea of punishment. Different interpretations were noted in relation to "being alone", which could be a positive experience (for example, taking time out for oneself) and "feeling alone", which implied a more negatively experienced sense of aloneness not of one's choosing.

The question, "How often do you feel left out?" was well-understood by children and young people aged 10 to 15 years and those in the older age group aged 16 to 24 years. For children and young people, this was interpreted as being excluded from activities or friendship groups and might be temporary or more enduring. Some in their mid-teens and beyond also noted that this could relate to wider exclusion from full participation in society, such as social exclusion that may be experienced by minority groups. This was specifically noted by respondents both in relation to ethnicity and disability.

The direct question on loneliness, "How often do you feel lonely?" was well understood by respondents of all ages and was viewed similarly to the question on frequency of "feeling alone" for children and young people and to the question on frequency of "feeling isolated" for young adults. For both children and young adults, the term "lonely" was clearly associated with a state of mind and it was widely acknowledged that one could feel lonely even in the company of others.

8.2 Findings and recommendations on response scales

All the questions were tested qualitatively using a three-item response scale. This is consistent with how the questions are currently asked on the English Longitudinal Study of Ageing (ELSA) and Understanding Society.

When asked about ease of using the response scales and other possible options, a preference for more response options was expressed as the three-item scale didn't allow much distinction for expressing how frequently people feel a particular way. Coupled with this, there was a concern that the three-item response scale may not allow sufficient sensitivity for monitoring changes in the prevalence of loneliness over time.

To address these issues, we have recommended that the three-item response scale be retained for the first three questions based on the UCLA loneliness scale while a five-item response scale is used for the final, direct question on loneliness. This has the advantage of maintaining consistency with ELSA and Understanding Society on the first three questions from the UCLA scale, while ensuring that the final question is consistent with the loneliness question on the Community Life Survey (CLS).

One disadvantage of this solution is that the response scale used for CLS includes the word "occasionally", which experts from our Technical Advisory Group suggested may be difficult for some children to read and understand. This was not included in the main cognitive testing, as it only arose in relation to the perceived limitations of the three-item scale highlighted during the testing itself.

As part of scoping work on previously used loneliness measures, we have found that a similar question on loneliness with a five-item response scale was used for several years among 10- to 15-year-olds on the British Household Panel Survey (predecessor to the Understanding Society study). That scale included the word "occasionally" and we have not found any evidence to suggest it was problematic for respondents. To understand any possible issues with this more fully, we are working with The Children's Society to test this response scale among an additional group of children and we will update our guidance with any further suggestions that may be advised to maximise children's comprehension of the response options.

Although more plain English versions of the scale exist, which could be used instead, it would be very helpful to have a single question on loneliness asked in the same way to everyone from the age of 10 years upwards and comparable with the existing prevalence measure of loneliness from the CLS. Our recommendations reflect this goal.

8.3 Preferences and recommendations on how and where to ask the questions

On the advice of The Children's Society, we also asked children and young people where and how they would prefer to answer these questions. This arises from a concern to ensure that support is available if they are in any way upset by the questions or would like to discuss them further.

Our conversations with children and young people reflected an awareness of the possible need for further support among those particularly affected by the issues raised, but along with this was a strongly-felt suggestion that ensuring privacy and confidentiality to respondents should be an important priority. This was viewed as important regardless of the interview setting, but young people particularly worried about peer pressure at school to share responses. They also worried about their responses being seen by others, resulting in teasing or bullying at school or difficult conversations with family members if completed at home. Fear and embarrassment associated with others knowing their responses could result in a lack of honesty in how young people respond to the questions. This, along with possible embarrassment about answering the questions face-to-face or over the phone, was also associated with a preference for self-completion formats, either online or on paper, and administered in a way that guarantees confidentiality.

This is possibly reinforced by our experience with the cognitive testing, which involved asking these questions early in a face-to-face interview that usually took place in the respondent's home. Their responses to the initial questions often suggested that they were not often lonely. Later in the interviews when they were possibly more at ease, they sometimes gave clear examples of feeling lonely, being left out or having no one to talk to. They also gave examples of other people whom they thought were lonely.

It is also important to remember that these questions will not normally be asked in the context of a survey focused entirely on loneliness. Generally, surveys cover many topics, with loneliness only expected to comprise between one and four questions and taking no more than two minutes of total survey time. In this context, confidentiality is still important, but loneliness may not be the main issue young people want to discuss (or want to avoid discussing) afterwards. As part of a longer and wider-ranging survey, young people may be more comfortable answering the questions.

Compendium

Testing of loneliness questions in surveys

Overview of our loneliness question testing, methodology and findings.

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1 . Introduction

Many different approaches have been used to measure loneliness. These include both loneliness multi-item and single-item measures. Some measures ask about loneliness directly while others ask about emotions associated with loneliness, from which loneliness is inferred. There are advantages and disadvantages associated with each.

We undertook a programme of [scoping work](#) and consultation with experts on existing approaches to loneliness measurement. From this, two preliminary measures (both a direct and an indirect measure of loneliness) were selected as meeting many criteria we required for the loneliness indicators. However, before a final recommendation on the tools to be used to measure loneliness could be made, cognitive and survey testing of our preliminary recommended measures of loneliness was conducted. This was carried out to understand how they work for people of different ages and backgrounds and how well they perform on different types of surveys. The main findings from the cognitive testing have been reported in [Cognitive testing of loneliness questions and response options](#). The main aim of the survey testing covered here was to fill knowledge gaps, particularly in relation to:

- how well our preliminary recommended measures worked for people of different ages

- whether they gave us useful information about different aspects of loneliness and therefore merit being used together on the same survey

- whether responses may be affected by the order in which the questions are being asked, for example, using the indirect measure of loneliness before or after the direct measure

- how long the questions took to ask and answer

This chapter outlines:

- the questions and surveys that were used for testing

- the specific aims of the testing for each survey

- the statistical analysis used

- the main findings from testing

- our conclusions and recommendations

The findings in this chapter were used to inform [our recommended national indicators](#) and the guidance for measuring loneliness in national surveys.

2 . Overview of the surveys used for testing

We undertook question testing on two surveys, the Opinions and Lifestyle Survey and the Good Childhood Index Survey.

The [Opinions and Lifestyle Survey](#) (OPN) is an omnibus survey conducted by Office for National Statistics (ONS). Data are collected over the phone for UK residents aged 16 years and over. The survey is conducted over eight months of the year, and data are available two months later. The survey achieves a sample size of approximately 1,100 respondents each month. Alongside a variety of demographic variables, such as age, employment status and living situation, the survey frequently includes questions commissioned by outside parties. This flexibility, combined with the rapid fieldwork and data delivery, means that the survey is commonly used for question testing.

The UCLA scale and a direct question on loneliness were included on the OPN in July and August 2018. Both had a three-item response scale.

Two different orders (direct measure asked before the indirect measure and direct question asked after the indirect measure) were tested in both months, by randomly splitting the sample and creating two independent groups.

The Good Childhood Index Survey is run ad hoc (usually every few months) by The Children's Society, and was first conducted in 2010. The survey typically achieves a sample of approximately 2,000 households, and collects data on children aged 10 to 17 years. Questions are answered at home, through an online survey. The survey collects information on children's well-being, which is used to build The Children's Society's Good Childhood Index, and includes questions targeted towards the theme of the annual Good Childhood Reports.

The Children's Society agreed to test the recommended children's loneliness questions on Wave 17 of the survey. The wording of the recommended loneliness questions was modified to be simpler for children to understand. Data were collected during May and June of 2018.

The loneliness questions selected for testing have also been included on the English Longitudinal Study for Ageing (ELSA) for several years and the direct measure of loneliness has been used on the Community Life Survey (CLS) since 2014.

The ELSA is a longitudinal survey carried out every two years in England on residents aged 50 years and over. The achieved sample size is typically between 7,000 and 9,000 respondents. The first wave of data was collected in 2002 to 2003, and eight waves of data have been collected to date. Wave 8 data was collected in 2016 to 2017 and published in 2018. ELSA collects information on a variety of topics, including demographic variables such as age and retirement status, aspects of physical and mental health, household structure and relationships with family and friends.

As part of their assessment, ELSA includes questions on people's loneliness. Respondents are asked both the direct question of loneliness and the UCLA three-item scale, both with three response options (Hardly ever or never, Some of the time, Often). The loneliness questions are answered via a self-completion questionnaire.

The Community Life Survey (CLS) is a major survey of adults aged 16 years and over in England, held annually and designed to track measures that are important to understanding society and local communities. It asks questions that cover volunteering, views about the local area, community cohesion and participation, and subjective well-being.

The questions are asked either face-to face or are completed online. Respondents are asked the direct question of loneliness with five response options (Often/Always, Some of the time, Occasionally, Hardly ever or Never).

These two established surveys were used for comparability as well as the plausibility of using the combined (direct and indirect) measure of loneliness. This analysis focuses on establishing the reliability of the UCLA scale in relation to the direct measure of loneliness, for both adults and children, as well as analysing order effects and the effect of important demographic variables on loneliness.

3 . Questions and response options tested

Table 1 presents the measures and response categories tested for each survey.

Table 1: Questions and response options used on the surveys

Measures	Items	Response categories	Survey

The 3-item UCLA Loneliness scale	1. How often do you feel that you lack companionship? 2. How often do you feel left out? 3. How often do you feel isolated from others?	1. Hardly ever or never, Some of the time, Often 2. Hardly ever or never, Some of the time, Often 3. Hardly ever or never, Some of the time, Often	ELSA OPN
The 3-item UCLA Loneliness scale for children	1. How often do you feel that you have no one to talk to? 2. How often do you feel left out? 3. How often do you feel alone?	1. Hardly ever or never, Some of the time, Often 2. Hardly ever or never, Some of the time, Often 3. Hardly ever or never, Some of the time, Often	Good Childhood Index
The direct measure of loneliness	How often do you feel lonely?	Hardly ever or never, Some of the time, Often	ELSA OPN Good Childhood Index
		Often/ Always, Some of the time, Occasionally, Hardly ever, Never	CLS

4 . Aims of the survey testing

Overall, testing on the survey responses was aimed to check the reliability and validity of using the preliminary recommended loneliness measures on national surveys. Simply put, high reliability means that the questions are measuring the same concepts consistently, and high validity means that the question are measuring what we expect them to be measuring. The reliability and validity should yield similar estimates across all surveys. Each individual survey was used to answer specific research questions as described in this section.

English Longitudinal Study of Ageing

- To assess the relatedness of the University of California, Los Angeles (UCLA) scale and the direct measure of loneliness over a time series.

- To assess how consistent the reliability and validity is over time for the direct measure and the UCLA scale.

- To assess any effects of long-term limiting illness and sex on responses to the direct measure of loneliness and the UCLA scale.

Community Life Survey

- To assess the effect of important demographics on responses to the direct measure of loneliness.

- To compare the effect of important demographics on the direct measure of loneliness with the findings from the Opinions and Lifestyle Survey (OPN) and the English Longitudinal Study for Ageing (ELSA).

Opinions and Lifestyle Survey

- To assess the relatedness of the UCLA scale and the single-item question and to compare the findings with the established ELSA.

- To assess the effect of key demographics on responses to the direct measure of loneliness and the UCLA scale, and to compare the findings with the established CLS.

- To assess the effect of question ordering on responses to the direct measure of loneliness and the UCLA scale.

Good Childhood Index Survey

- To assess the relatedness of the children's UCLA scale and the direct measure of loneliness.

- To assess the reliability of the adapted wording of the children's UCLA scale.

- To explore any differences in responses to the questions in children when compared with adults' responses on other surveys.

- To assess effect of age and sex on responses to the children's UCLA scale and the direct measure of loneliness.

5 . Methodology

Missing data and weighting

"Missing data" refers to incidences when respondents have either refused to answer the questions on loneliness or have answered "don't know". When missing data was found, listwise deletion was used, which means the entire response was excluded from analysis if any single value from the University of California, Los Angeles (UCLA) scale or direct measure of loneliness was unanswered. This is because if, for example, a respondent had not answered the direct measure of loneliness but had answered the UCLA, the case could not be used in the analysis comparing the two.

Weights were included in the descriptive analysis to compensate for unequal selection probabilities and differential non-response. Weights were not used when statistical tests were run as the software used could not account for them correctly (for example, in the calculation of the degrees of freedom in a chi-Square test).

Presentation of the UCLA scores

In reporting the findings from the analysis, we used the UCLA questions for adults and children as intended by the developers of the scale – that is, by assigning a score to each response and creating a total score by summing the individual scores.

For example:

- "Hardly ever or never" equals 1

- "Some of the time" equals 2

- "Often" equals 3

The lowest possible combined score on the loneliness scale is 3 (indicating less frequent loneliness) and the highest is 9 (indicating more frequent loneliness). There is no standard accepted score above which a person would be considered lonely, so no threshold for loneliness was used in interpreting the analyses.

Statistical tests

To check the reliability and validity of the proposed loneliness measures, we used a number of different statistical tests, which are detailed in this section.

A p-value of less than 0.05 was taken as significant, as is reported in the statistics in the following section. This means that the test is showing a statistically significant result, and association between two variables is greater than would be expected by chance.

Pearson's chi square of association was used to see whether there was any association among selected variables. A chi-square test compares the observed frequencies with those you would expect to get by chance if there were no association. This test is used on categorical or ordinal data. Cramer's V was used as a follow-up test, as it tells us the strength of the association and therefore which factors have the greatest influence and the strongest relationships. The X^2 value is reported, as is standard when reporting the chi-square test, as well as the degrees of freedom, number of cases analysed (N) and the p value. For Cramer's V, a coefficient is reported, which can be interpreted similarly to a correlation coefficient. The closer the coefficient is to 1.00, the stronger the relationship between the variables is. Direction or causality cannot be expressed using a chi square.

A Goodman-Kruskal correlation was used to check how well the UCLA scores were associated with the direct measure of loneliness. This particular correlation test was used because the data are ordinal, that is, the data represent categories that make sense in a certain order, as opposed to numbers on a scale. The correlation coefficient (G) has been reported in the findings; if the number is closer to 1.00 then the correlation is high and the variables are closely related, whereas if it is closer to 0.00 then there is little to no correlation.

Cronbach's alpha was used to assess the internal reliability of the children's UCLA scale. Internal reliability is the degree to which questions in a scale can be said to measure the same concept; in this case it was used to check whether each UCLA question is measuring the same concept. This test is commonly used, and it measures how closely related a set of responses are as a group. The alpha coefficient is reported, which once again can be interpreted similarly to a correlation coefficient: high internal reliability is denoted with an alpha much closer to 1.00.

6 . Main findings from the survey testing

English Longitudinal Study for Ageing

The analysis used waves 4 to 8 of the English Longitudinal Study for Ageing (ELSA) data, unless otherwise stated. When using the Opinions and Lifestyle Survey (OPN), a sub-sample of those aged 50 years and over was analysed to ensure it was comparable to ELSA. Descriptive statistics, such as the percentage of people who responded in a particular way, were run on wave 8 and cross-sectional weights were used. The latest methodology on the waves and weights (PDF, 382.8KB) is available. For details of the full OPN sample, please see Table 3.

Frequency of loneliness

Around two-thirds of respondents reported "Hardly ever or never" feeling lonely, that is, 69.0% of respondents on ELSA and 65.0% on OPN. The difference in those reporting often feeling lonely was even smaller when comparing the ELSA and OPN, at 6.8% and 6.3%, respectively (Figure 1). Respondents also reported similar scores in response to the UCLA scale (Figure 2).

The similarity between frequencies when comparing the OPN to the ELSA suggest that the OPN has measured the same concept of loneliness. The differences might be due to mode effects (the mode in which the survey is

administered such as telephone or face-to-face interview). However, without more rigorous testing and analysis of the different modes used, it is difficult to say whether this definitively accounts for the differences in proportions reporting frequent and less frequent loneliness.

Figure 1: Reported frequency of loneliness for the direct measure
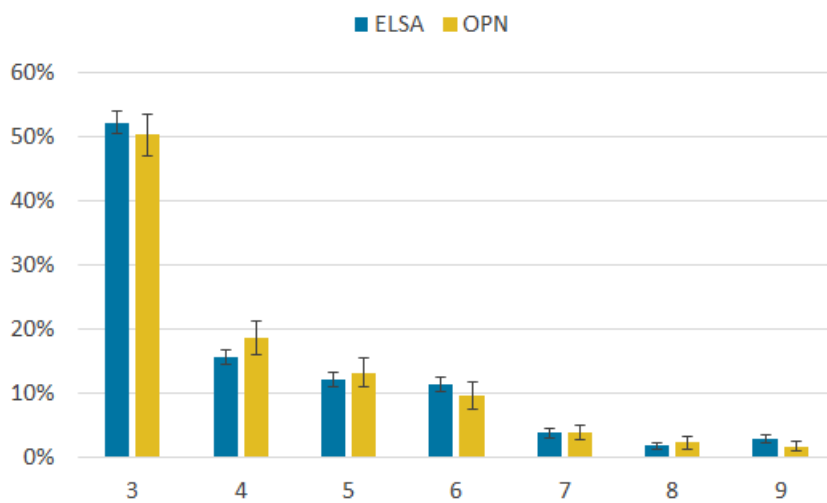
ELSA and OPN
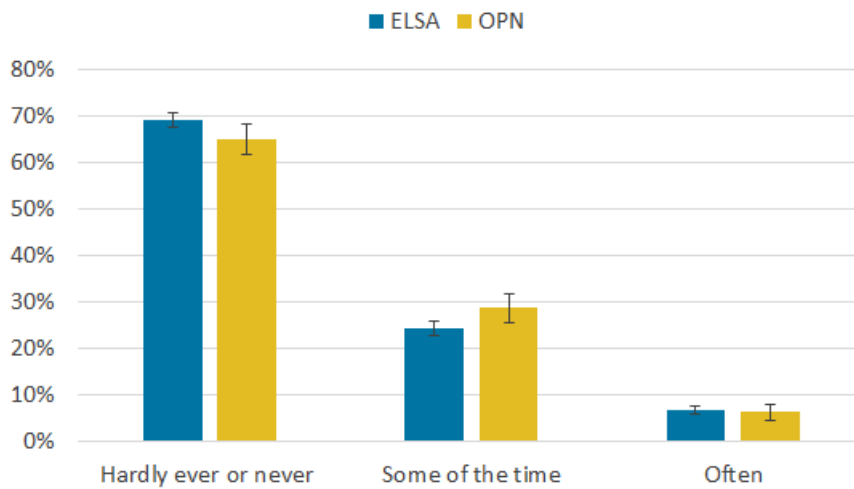
Source: Office for National Statistics: English Longitudinal Study of Ageing (ELSA); Opinions and Lifestyle Survey (OPN)

Notes:

1. ELSA data is from wave 8 (2016 to 2017).

2. OPN data is July to August 2018.

3. 95% confidence intervals are displayed on the chart.

Figure 2: Reported frequency of loneliness on the UCLA scale for wave 8 of the English Longitudinal Study for Ageing and the Opinions and Lifestyle Survey

ELSA and OPN

Source: English Longitudinal Study of Ageing (2016-2017) and Opinions and Lifestyle Survey (2018)

Notes:

1. ELSA data is from wave 8 (2016 to 2017).

2. OPN data is July to August 2018.

3. 95% confidence intervals are displayed on the chart.

UCLA compared with direct measure of loneliness

For each wave of the ELSA data, both the UCLA and the responses to the direct measure of loneliness showed strongly significant positive correlations (G = 0.875-0.888, p<.000). This indicates that if a person scored highly in one measure, they also tended to score highly in the other (that is, if a person rated themselves as lonely on the UCLA items they would also rate themselves as lonely on the direct measure of loneliness).

Using ELSA data from wave 8, a Cronbach's alpha test on the three questions comprising the UCLA scale showed high internal validity, with an alpha coefficient of 0.824.

These coefficients from the correlations and validity tests can be used as a "benchmark" for testing the OPN data. As the correlation scores for the ELSA ranged from 0.875 to 0.888, we would expect the OPN to have correlations in a similar region, and also for the internal consistency of the UCLA to have a similar alpha coefficient.

Demographics and loneliness

A chi-square test was used to see if sex and long-term illness or disability (independently) affected responses to the direct measure of loneliness and the UCLA scale, as has been found in [previous testing](#). Sex was significantly associated with both items; females were more likely than males to say they often felt lonely compared with hardly ever or never feeling lonely (direct measure: X^2 (2, N = 3117) = 48.388, p<.000, compared with UCLA: X^2 (6, N = 3065) = 23.784, p<.005).

Reporting having a disability or long-term limiting illness was also significantly associated with different answers on the direct measure of loneliness and UCLA (direct measure: X^2 (2, N = 3116) = 53.230, p<.000, compared with UCLA: X^2 (6, N = 3064) = 73.195, p<.000); odds ratios suggest respondents are more likely to respond "Often" on the direct measure of loneliness if they report having a disability or long-term illness than if they do not.

Community Life Survey

In April 2018, we reported the factors most associated with loneliness in the article, [Loneliness – What characteristics and circumstances are associated with feeling lonely?](#). The analysis was carried out using data from the 2016 to 2017 Community Life Survey (CLS) and identified a number of demographics associated with loneliness, such as sex, employment, marital status and age. These factors were also analysed here as part of the testing programme using OPN data to see if findings would be consistent. The analysis previously published on the CLS was carried out using a five-item response scale for the direct measure of loneliness (see Table 1). No analysis was possible for the UCLA scale as it was not used on the CLS survey. The statistical test used with the OPN data (a chi-square) was run using the CLS data to compare the results.

Demographics and loneliness

The variables tested were all found to have a significant relationship with the direct measure of loneliness, and are presented in Table 2. Some of the demographic variables presented on the CLS were not categorised in a similar way to the OPN or the questions were asked differently and therefore were not comparable. For example, employment had different categories on the CLS compared with OPN, in that the OPN did not have those defined as economically inactive.

The findings suggest that responses to the direct measure of loneliness are significantly associated with individual characteristics such as sex and age and show the same patterns of association across the two surveys. Although the effects sizes are small, tenure has the strongest relationship.

Table 2: Factors significantly associated with direct measures of loneliness on the Community Life Survey, 2016 to 2017

Variable	Categories	Chi-square statistic	Effect size[1]
Tenure	Owner Renter	X^2 (4, N = 8997) = 338.527, p <0.000	0.194
Marital status	Single Married/civil partnership Divorced/separated Widowed	X^2 (12, N = 9781) = 813.782, p <0.000	0.167
Health (self-reported)	Very good Good Fair Bad Very bad	X^2 (16, N = 7336) = 545.705, p <0.000	0.136
Sex	Male Female	X^2 (4, N = 9969) = 173.457, p <0.000	0.132
Age group	16 to 24 25 to 34 35 to 44 45 to 54 55 to 64 65 to 74 75 and over	X^2 (24, N = 9695) = 241.587, p <0.000	0.079

Source: Community Life Survey

Notes

1. Using Cramer's V coefficient. The closer the value is to 1.00 the bigger the effect size. Back to table

Opinions and Lifestyle Survey

Over the two months during which the questions were tested, the OPN combined sample size was 2,208 persons. The weighted demographic composition of the total sample is shown in Table 3.

Table 3: Weighted counts and proportions by age and sex of the Opinions and Lifestyle Survey testing, July and August 2018

	16 to 24	25 to 44	45 to 54	55 to 64	65 to 74	75 and over	Total
Male	14.2%	32.6%	17.1%	14.9%	12.2%	8.9%	48.9%
Female	13.6%	31.0%	17.0%	14.9%	12.6%	11.0%	51.1%
Total	13.9%	31.8%	17.1%	14.9%	12.4%	9.9%	100.0%

Source: Office for National Statistics

Frequency of loneliness

As shown in Figure 3, nearly two-thirds (65.0%) of respondents to the OPN survey reported that they hardly ever or never felt lonely in response to the direct question on loneliness.

This compares with half of respondents who had the lowest score on the UCLA scale (50.3%), meaning that they answered hardly ever or never to all three UCLA questions (Figure 4). This suggests that OPN respondents were more likely to report that they were never or hardly ever lonely when asked directly than when asked indirectly using the UCLA scale. This is also consistent with findings from other studies, such as ELSA.

Figure 3: Reported frequency of loneliness for the direct measure

OPN

Figure 3: Reported frequency of loneliness for the direct measure
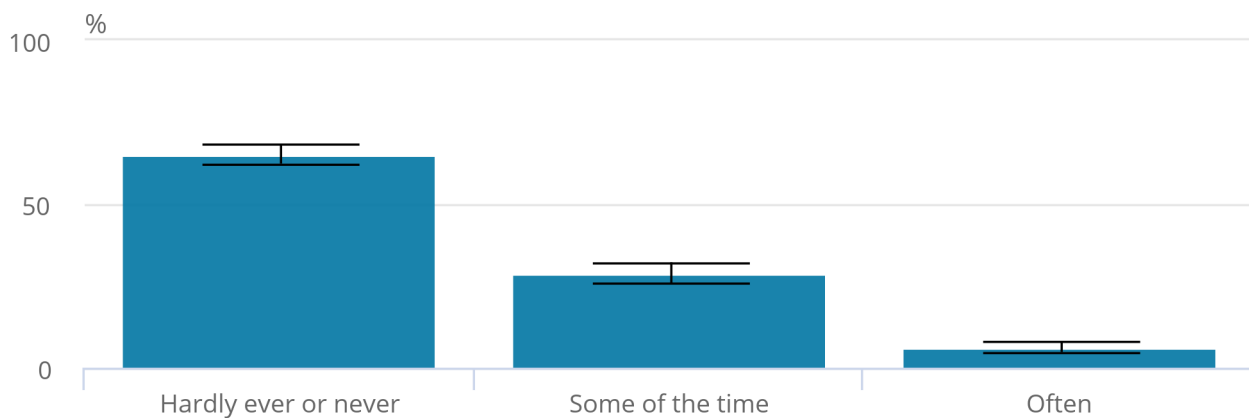
OPN

Source: Office for National Statistics, Opinions and Lifestyle Survey (OPN)

Notes:

1. July to August 2018.

2. 95% confidence intervals are displayed on the chart.

Figure 4: Reported frequency of loneliness for each score of the UCLA

OPN

Figure 4: Reported frequency of loneliness for each score of the UCLA
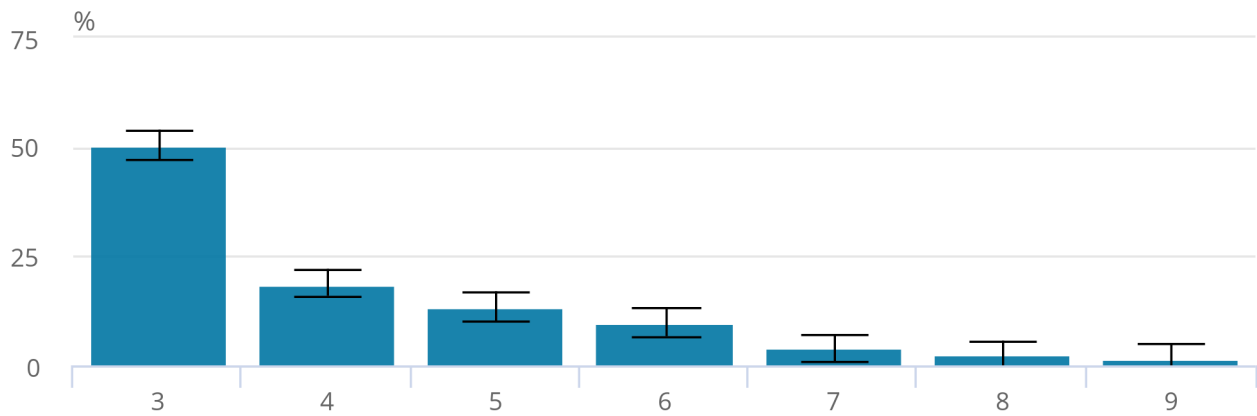
OPN

Source: Office for National Statistics, Opinions and Lifestyle Survey (OPN)

Notes:

1. July to August 2018.

2. 95% confidence intervals are displayed on the chart.

3. UCLA refers to the University of California, Los Angeles measure of loneliness.

As would be expected, people who scored hardly ever or never on the direct measure of loneliness also scored lower on the UCLA scale, and the other way around, with those answering some of the time on the direct measure most frequently scoring 6 on the UCLA (Figure 5).

Figure 5: Reported frequency of loneliness for each score of the UCLA OPN
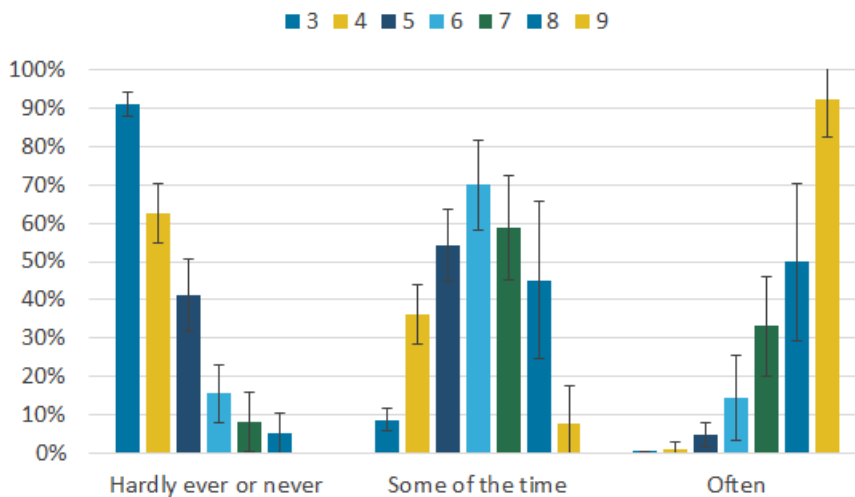
Legend: ■ 3 ■ 4 ■ 5 ■ 6 ■ 7 ■ 8 ■ 9

Notes:

1. July to August 2018.

2. 95% confidence intervals are displayed on the chart.

3. UCLA refers to the University of California, Los Angeles measure of loneliness.

Direct question of loneliness compared with UCLA scale

There was a significant strong positive correlation between UCLA scores and the responses to the direct measure of loneliness (G=.844, p<.000). That is, if a person scored highly in one measure, they were likely to score highly in the other measure. This suggests that the measures are related and both are capturing aspects of loneliness. This result is similar to the correlation coefficients produced for each wave of the ELSA data. Although the measures are related and move in similar directions, people appear to under-report loneliness on the direct measure compared with the indirect measure (UCLA). This is shown by the fact that people more frequently reported that they were "Hardly ever or never" lonely to the direct question than reported having the lowest loneliness to the indirect question.

The UCLA scale items also had fairly high internal consistency, with a Cronbach's alpha of 0.76, although this is lower than the alpha coefficient found using the ELSA data. Further investigation is needed to determine why the internal consistency of the UCLA scale is lower on the OPN than ELSA. Possible reasons are a difference in understanding of the UCLA by people of different ages, with the OPN sample having a wider age range than ELSA, or the fact that the ELSA is self-completed and the OPN is carried out via phone interview.

Demographics and loneliness

Chi-square tests were conducted on the OPN data to explore whether there were similar associations between loneliness and demographics, such as sex and age, as those found in the CLS analysis. A significant association was found between the direct measure of loneliness and sex, X^2 (2, N = 2203) = 28.6, p<.000, and the association between UCLA and sex was also found to be significant, X^2 (6, N = 2189) = 17.3, p<.05.

This indicates that there is a significant difference in males and females, on both the direct measure of loneliness and the UCLA scale. Women report higher levels of loneliness, which appears to be most sensitive on the middle categories (that is, "Some of the time" on the direct measure of loneliness and around score 6 on the UCLA scale), which is shown in Figures 6 and 7.

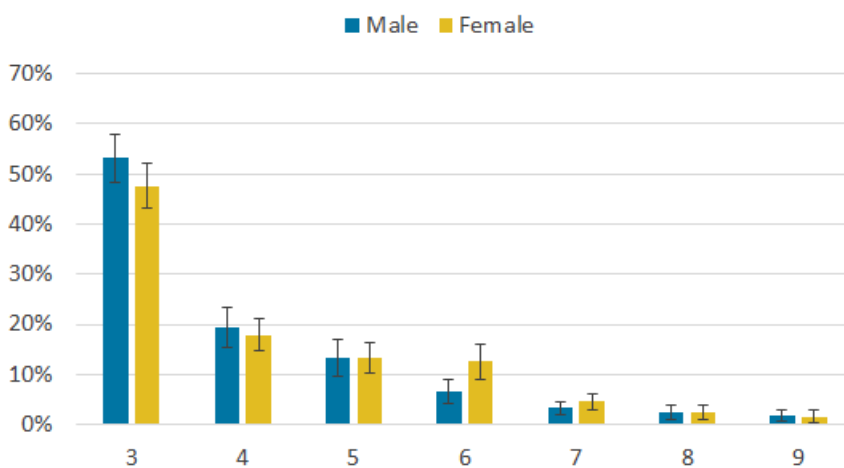**Figure 6: Reported frequency of loneliness for the direct measure, by sex**

OPN
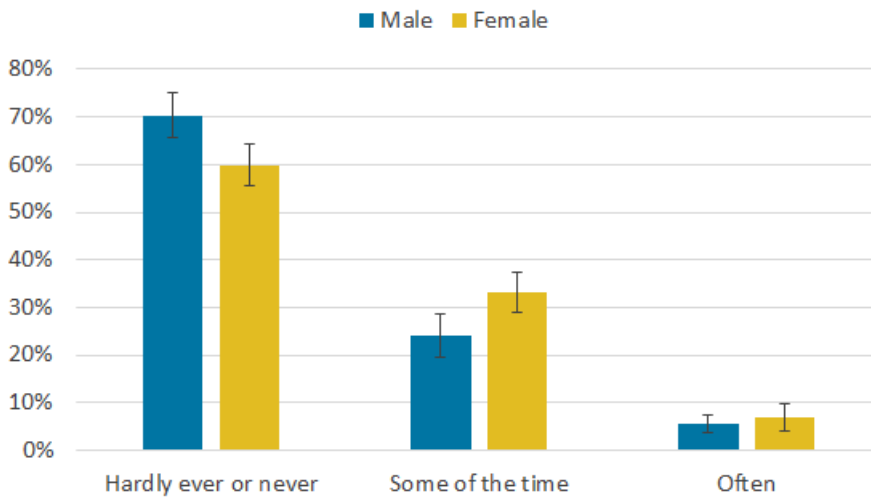
Source: Office for National Statistics, Opinions and Lifestyle Survey (OPN)

Notes:

1. July to August 2018.

2. 95% confidence intervals are displayed on the chart.

Figure 7: Reported frequency of loneliness on the UCLA scale, by sex

OPN

Source: Office for National Statistics, Opinions and Lifestyle Survey (OPN)

Notes:

1. When using the UCLA scale, men and women reported no significant difference in levels of loneliness.

2. UCLA refers to the University of California, Los Angeles measure of loneliness.

OPN data were also analysed to see if we would find the same significant associations with loneliness as identified using the CLS data (Table 4). It was not possible to replicate all the analysis reported for the CLS data due to differences in the questions asked on the surveys (see OPN section).

Table 4: Factors significantly associated with the direct measure of loneliness, Opinions and Lifestyle Survey

Variable	Categories	Chi-square statistic	Effect size1
Marital status	Single Married/civil partnership Divorced/separated Widowed	$X2$ (6, N = 2203) = 196.11, p<.000	0.211
Health (self-reported)	Very good Good Fair Bad Very bad	$X2$ (8, N = 2196) = 125.37, p<.000	0.169
Tenure	Owner Renter	$X2$ (2, N = 2159) = 49.95, p <.000	0.152
Sex	Male Female	$X2$ (2, N = 2203) = 28.55, p<.000	0.114
Age group	16 to 24 25 to 34 35 to 44 45 to 54 55 to 64 65 to 74 75 and over	$X2$ (12, N = 2203) = 38.77, p<.005	0.089

Source: Opinions and Lifestyle Survey

Notes

1. Using Cramer's V coefficient. The closer the value is to 1.00 the bigger the effect size. Back to table

Table 5: Factors significantly associated with the UCLA scale, Opinions and Lifestyle Survey

Variable	Categories	Chi-square statistic	Effect size1
Marital status	Single Married/civil partnership Divorced/separated Widowed	$X2$ (18, N = 2189) = 180.79, p<.000	0.166
Health (self-reported)	Very good Good Fair Bad Very bad	$X2$ (24, N = 2185) = 186.73, p<.000	0.146
Tenure	Owner Renter	$X2$ (6, N = 2146) = 97.66, p<.000	0.213
Sex	Male Female	$X2$ (6, N = 2189) = 17.28, p<.01	0.089
Age group	16 to 24 25 to 34 35 to 44 45 to 54	$X2$ (36, N = 2189) = 52.94, p<.05	0.063

55 to 64
65 to 74
75 and over

Source: Office for National Statistics

Notes

1. Using Cramer's V coefficient. The closer the value is to 1.00 the bigger the effect size. [Back to table](#)

Order effects

Chi-square tests of association were conducted to explore whether people responded differently to the questions depending the order in which they were presented. A significant association was found between UCLA and order (X^2 (2, N = 2189) = 17.1, p<.01), however, no significant association was found between the direct measure of loneliness and question order (X^2 (2, N = 2203) = 1.78, p=0.41). This suggests that the order in which the questions are presented to respondents affects their responses to the indirect questions on loneliness (the UCLA scale) but does not affect their responses to the direct question on loneliness.

Figure 8: Reported frequency of loneliness for each score of the UCLA, by order of questioning

OPN
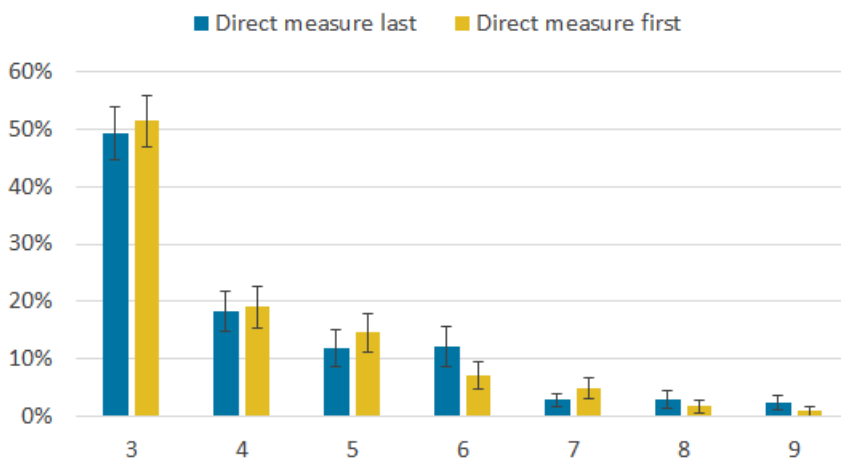
Source: Office for National Statistics, Opinions and Lifestyle Survey (OPN)

Notes:

1. July to August 2018.

2. 95% confidence intervals are displayed on the chart.

3. UCLA refers to the University of California, Los Angeles measure of loneliness.

Although the association between order and UCLA score was found to be significant, Figure 8 shows that order did not affect the UCLA uniformly. The difference in UCLA score was only seen in certain score ranges. In this case, respondents who scored 6 were most affected by order change. This indicates that those who experience very high or very low levels of loneliness are not affected by the difference between direct and indirect language, however, those who may experience more moderate degrees of loneliness will be impacted by order. In other words, the direct language of the single item appears to impact those who experience moderate degrees of

loneliness, making them more likely to change their responses. Because of this, it is recommended that the direct measure of loneliness follows the UCLA, unless it is used alone; this is consistent with established surveys such as the ELSA.

Question debriefing with OPN interviewers

The OPN telephone interviewers were de-briefed about their experiences of asking the questions in a telephone interview. The following are main points raised by the interviewers:

- many interviewers described a little apprehension about asking these questions before the testing had begun but were surprised at how easily and well they were received

- the questions did not seem to cause upset among respondents

- no one refused to answer the questions or stopped answering part way through

- the questions did not take long to ask and answer (they estimated about two minutes in total including the preamble)

- interviewers believed the questions were answered honestly, that respondents thought about their answer before answering, and they attributed this in part to the use of a word rather than numerical response scale

- they thought a broadly worded introduction (not mentioning loneliness) should be recommended with the questions as this helps to inform respondents about what is coming and helps make the questions flow

- they felt it was helpful that the loneliness questions followed the personal well-being questions on this survey, as it created a useful flow and suggested that putting the loneliness questions with health-related questions would also work well

Good Childhood Index Survey

The analysis carried out on the OPN was also run on the data available for children aged 10 to 15 years. As there has been comparatively less research into children's loneliness using the direct measure of loneliness and the UCLA scale, we conducted more descriptive analysis on these data to establish a fuller picture of how children respond to these measures. The Children's Society survey asks respondents their gender, while the other surveys analysed here have included the respondent's sex. To aid comparisons, and because of small sample sizes for children identifying as transgender, the analysis here only includes those who identified as the same sex assigned at birth.
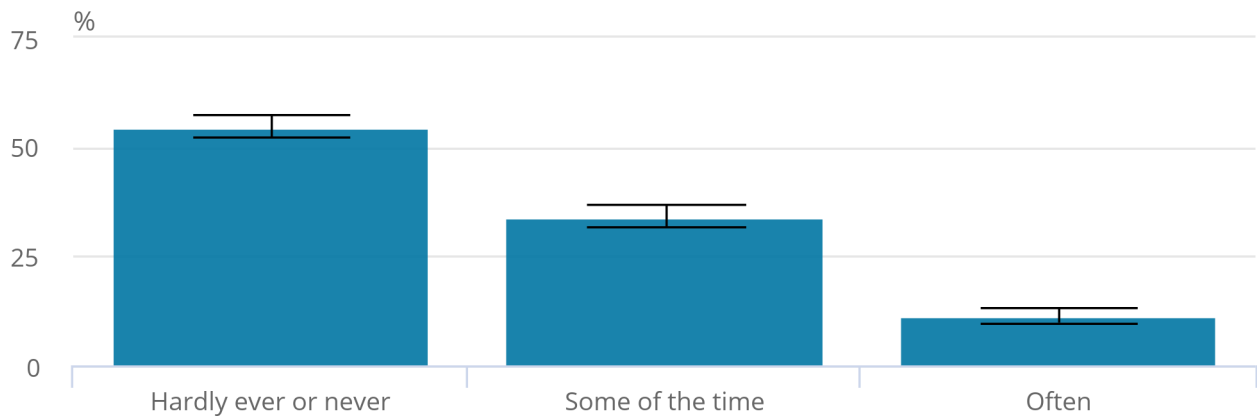
Frequency of loneliness

When asked how frequently they felt lonely using the direct question, 11.3% of children reported that they felt lonely often, while 54.6% of children reported that they hardly ever or never felt lonely (Figure 9). While adults seem to most frequently score 3 on the UCLA scale with a consistent decline in the proportion of respondents receiving each higher score, the pattern is a bit different for children. While they also most frequently score 3, there is another peak in the proportion of respondents scoring in the middle of the scale, as shown in Figure 10.

Figure 9: Reported frequency of loneliness for the direct measure

Good Childhood Index, ages 10 to 15

Figure 9: Reported frequency of loneliness for the direct measure

Good Childhood Index, ages 10 to 15

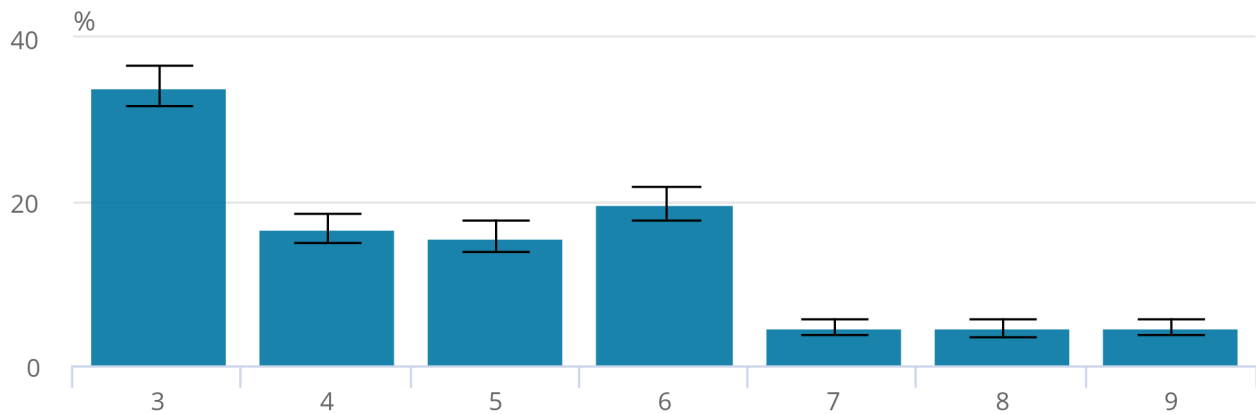**Source: The Children's Society, Good Childhood Index Survey**

Notes:

1. May to June 2018.

2. 95% confidence intervals are displayed on the chart.

Figure 10: Reported frequency of loneliness for each score of the UCLA

Good Childhood Index, ages 10 to 15

Figure 10: Reported frequency of loneliness for each score of the UCLA

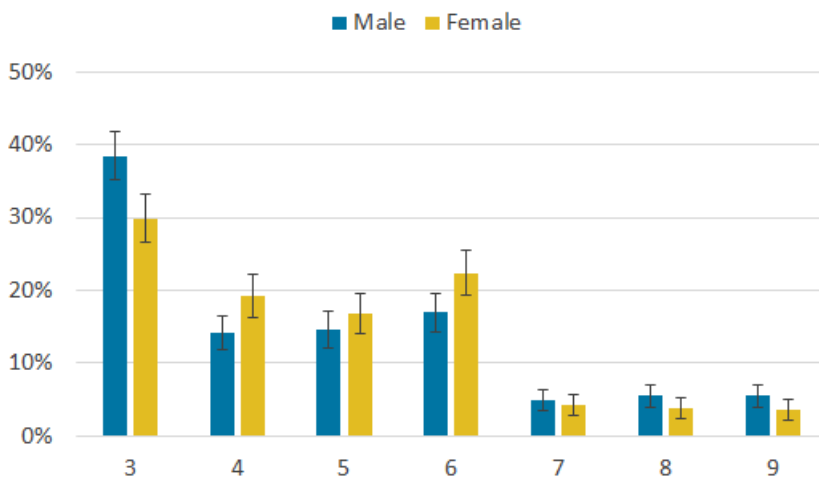Good Childhood Index, ages 10 to 15

Source: The Children's Society, Good Childhood Index Survey
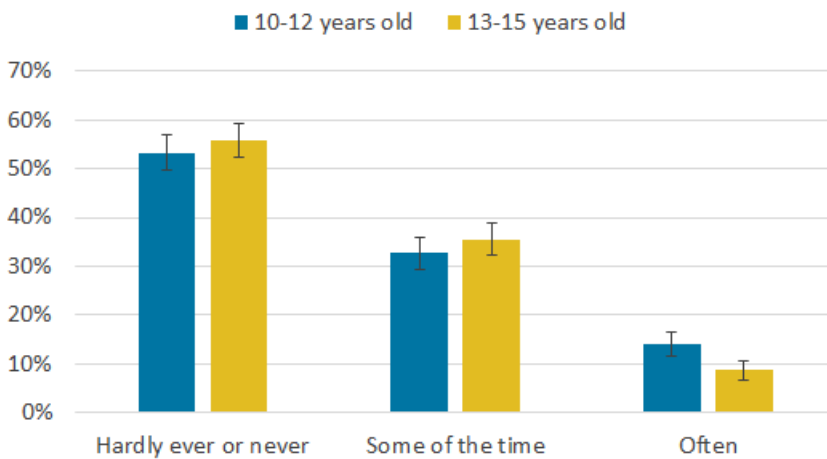
Notes:

1. May to June 2018.

2. 95% confidence intervals are displayed on the chart.

3. UCLA refers to the University of California, Los Angeles measure of loneliness.

UCLA compared with direct question of loneliness

As found for the other surveys, there was a strong, positive relationship between answers to the direct measure of loneliness and the UCLA scores (G = 0.877, p < 0.00). It can therefore be concluded that the direct measure and the UCLA scale are strongly related in children as well as in adults. Finally, the Cronbach's alpha test produced an alpha statistic of 0.846, indicating a high level of internal consistency within the adapted version on the UCLA scale for children.

Demographics and loneliness

The relationship between the direct measure of loneliness and sex was assessed using a chi-square test of association. This found a significant association between sex and responses to the single-item question (= x^2 (2, N=1538) = 7.2356, p<.05). The relationship between sex and the UCLA scale was assessed in the same manner, and again found a significant association (=x^2 (6, N=1537) = 27.256, p <.000). Despite these significant results,

further testing found that Cramer's V was 0.069 for the direct measure of loneliness and 0.133 for the UCLA scale, indicating a very weak association between sex and responses.

Figures 11 and 12 show the responses to the direct question of loneliness and the UCLA scale by sex. Both the direct measure and the UCLA scale showed that girls were less likely to report extreme values than boys, with girls' answers more likely to cluster around the middle scores of the direct question of loneliness and the UCLA scale.

Figure 11: Reported frequency of loneliness for the direct measure, by sex

Good Childhood Index, ages 10 to 15
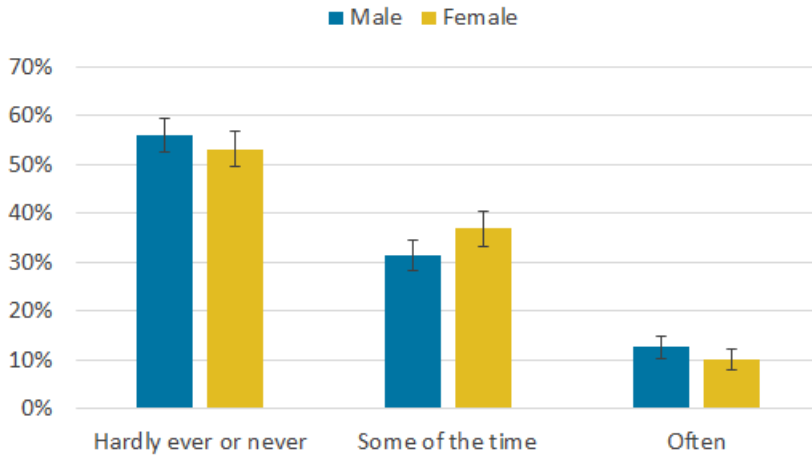
Source: The Children's Society, Good Childhood Index Survey

Notes:

1. May to June 2018.

2. 95% confidence intervals are displayed on the chart.

Figure 12: Reported frequency of loneliness for each score of the UCLA, by sex

Good Childhood Index, ages 10 to 15

Source: The Children's Society, Good Childhood Index Survey

Notes:

1. May to June 2018.

2. 95% confidence intervals are displayed on the chart.

3. UCLA refers to the University of California, Los Angeles measure of loneliness.

Further chi-square tests were conducted to assess the relationship between age and both the direct question of loneliness and the UCLA scale. The test was conducted using age groups of 10 to 12 and 13 to 15 years. Testing found that age was significantly related to responses to the direct question of loneliness (= x^2 (2, N=1538) = 12.964, p <.000). Cramer's V was 0.092, indicating a very weak effect between age and responses to the direct question. A significant relationship was also identified between age and responses to the UCLA scale (= x^2 (6, N=1537) = 38.988, p <.000, with a Cramer's V coefficient of 0.159, indicating a weak association between age and the UCLA scale.

Figures 13 and 14 show the responses to the direct measure question and the UCLA scale by age group. Younger children (aged 10 to 12 years) were more likely than older children (aged 13 to 15 years) to report that they often felt lonely on the direct measure of loneliness, or to report a high UCLA score.

Figure 13: Reported frequency of loneliness for the direct measure, by age groups

Good Childhood Index

Source: The Children's Society, Good Childhood Index Survey

Figure 14: Reported frequency of loneliness for each score of the UCLA, by age groups

Good Childhood Index
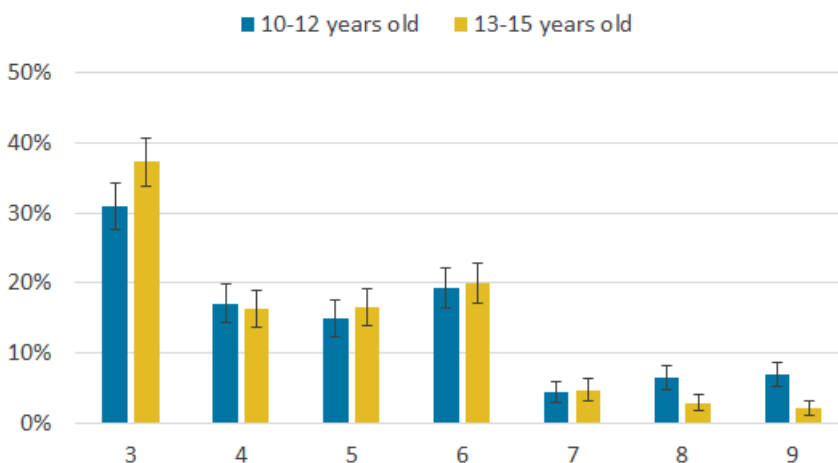
Source: The Children's Society, Good Childhood Index Survey

Notes:

1. May to June 2018.

2. 95% confidence intervals are displayed on the chart.

3. UCLA refers to the University of California, Los Angeles measure of loneliness.

7 . Conclusions

Many different approaches have been used to measure loneliness, including both multi-item scales and direct measures. There is also a variety of different approaches to survey administration are in use among the surveys that currently include the questions. Through our survey testing, we aimed to understand how our preliminary recommended measures of loneliness worked for people of different ages and backgrounds and how well they performed on different types of surveys.

Overall, when comparing responses to loneliness questions on surveys like ELSA, the Community Life Survey, and the Opinions Survey, the findings are consistent and relationships identified between loneliness and other factors are also similar. It is encouraging that the UCLA scale used on ELSA produces comparable findings when used on surveys covering a wider age range and performed well in tests of reliability and validity. The adapted version of the UCLA scale for use with children also performed well in similar testing. We suggest that this combination of indirect and direct measures of loneliness is therefore suitable for use on major studies.

There is a strong positive association between the UCLA scale and the direct measure of loneliness, with those who report feeling lonely on one often reporting feeling lonely on the other as well.

Assessment of the UCLA scale's internal consistency shows that it is high across all surveys tested. This indicates that the questions within the UCLA scale are measuring the concept of loneliness and that it is a reliable measure of loneliness when used on young people and adults, as well as in its adapted version for children.

The importance of question order comes into play in cases where both measures are included. A significant order effect was found, with responses to the UCLA scale affected if preceded by the direct question of loneliness. The direct question is not sensitive to order effects with the UCLA scale.

Opinions and Lifestyle Survey (OPN) interviewers described a little apprehension about asking the loneliness questions before the testing had begun but were surprised at how easily and well the questions were received. The questions did not seem to cause upset among respondents. Also, the questions did not take long to ask and answer.

Recommendations based on the findings

We suggest the use of both direct and indirect measures of loneliness as the "gold standard" where possible. This enables us to measure responses on a scale that has been assessed as valid and reliable, as well as allowing the respondent to say for themselves whether they feel lonely, providing further insight into the subjective feeling of loneliness for different people. Also, there is variation in how people understand the term "loneliness" and some people might be reluctant to admit to loneliness, and this might be particularly true of certain groups. A multi-item measure that does not mention loneliness directly can be helpful to address these issues. The recommended measures are well-tested, and have a positive track record for performing well in general population surveys using different approaches to data collection.

Although the combination of a direct and an indirect measure provides a more holistic picture of loneliness, where it is not possible to use all four questions as survey space is a major constraint, we would recommend at a minimum the use of the direct question to measure prevalence of loneliness.

Question order is important for comparability between surveys, as findings seem to indicate that asking the direct question of loneliness first impacts responses to the UCLA, within mid-level categories. For this reason, it is recommended that the direct question of loneliness follows the UCLA questions. The three UCLA questions should be kept together and in the order in which they are presented in Table 1 to ensure comparability of the findings with other surveys.

An adapted version of the UCLA questions should be used for children. The findings in this section show that this version is as reliable and valid as the general version for adults, and measures feelings of loneliness in those aged 10 to 15 years well. More substantive findings on the understanding of the UCLA questions among children can be found in Cognitive testing of loneliness questions and response options.

Interviewers noted that specifically mentioning "loneliness" rather than "relationships" in the introduction could have an effect on respondents' answers. Overall, it is recommended that the introduction or preamble should not mention loneliness and should introduce the topic as focusing on the participant's relationships with others.

Compendium

Recommended national indicators of loneliness

Overview of our recommendations for national measures of loneliness.

Table of contents

1 . Recommended measures for adults and children

Based on our review of <u>existing measures</u> and the results of our <u>cognitive testing</u> and <u>survey testing programme</u>, we recommend four questions to capture different aspects of loneliness. The first three questions are from the University of California, Los Angeles (UCLA) three-item loneliness scale and the last is a direct question about how often the respondent feels lonely, currently used on the <u>Community Life Survey</u>. The questions recommended for use with adults aged 16 years and over are detailed in this section.

Proposed indicators of loneliness for adults aged 16 years and over

Three-item version of UCLA scale

The three-item version of the UCLA scale asks indirectly about loneliness using the following questions:

- How often do you feel that you lack companionship?

- How often do you feel left out?

- How often do you feel isolated from others?

Response categories: "Hardly ever or never", "Some of the time" or "Often".

Responses to each question can be scored to provide a single loneliness score.

Direct measure

A single-item measure currently used on the Community Life Survey, which asks people directly about their experience of loneliness:

"How often do you feel lonely?"

Response categories: "Often or always", "Some of the time", "Occasionally", "Hardly ever" or "Never".

For clarity, we are not recommending that the direct measure of loneliness be combined with the UCLA scale into a composite score, but rather that the indirect (UCLA) measure and direct (single-item) measure should ideally be used together as a loneliness question module. The two approaches to measurement provide a more holistic picture of loneliness (as shown by findings from the <u>English Longitudinal Study of Ageing</u>).

Where it is not possible to use all four questions, as survey space is a major constraint, we would recommend at a minimum the use of a direct question on loneliness: "How often do you feel lonely?". This will provide an estimate of the prevalence of loneliness based on respondents' own perspectives and will give the greatest comparability with other surveys.

An adapted version of the measures is recommended for use with children and young people aged 10 to 15 years. The wording for the children's measure was changed to a more "plain English" version, reflecting concerns that the words "companionship" and "isolation" are difficult for children to read and may be interpreted in a range of different ways. We revised the questions and tested them cognitively (to understand children's ease of use and interpretations) and on a survey conducted among children by <u>The Children's Society</u>. The findings showed that the revised questions were appropriate for use with children.

Proposed indicators of loneliness for children aged 10 to 15 years

Modified version of UCLA scale

For children (aged 10 to 15 years), we suggest a slightly modified version of the UCLA scale using the following questions:

- How often do you feel you have no one to talk to?

- How often do you feel left out?

- How often do you feel alone?

Response categories: "Hardly ever or never", "Some of the time" or "Often".

Direct measure

The Direct measure currently used on the Community Life Survey, which asks children directly about their experience of loneliness:

"How often do you feel lonely?"

Response categories: "Often or always", "Some of the time", "Occasionally", "Hardly ever" or "Never".

To accompany the loneliness recommendations, we have also developed a [guidance report](#) for incorporating the measures in relevant surveys and interpreting the results.

2 . Harmonisation of national indicators of loneliness

Harmonisation is about ensuring consistency in the use of definitions, survey questions, administrative data and in the presentation of outputs across the Government Statistical Service (GSS). Harmonisation is important in maximising the usefulness of data collected and statistics produced. Ensuring comparability across the GSS is important as it maximises the power of data and analyses without compromising quality.

The Interim Harmonised Principle for loneliness has been agreed by the cross-government National Statistics Harmonisation Group (NSHG) and approved by the National Statistics Harmonisation Steering Group (NSH SG). From today (5 December 2018), the loneliness indicators outlined in this section will form part of a new GSS Interim Harmonised Principle for loneliness that can be accessed through the [GSS web pages](#).

We will encourage the roll-out of the Interim Harmonised Principles for loneliness across the GSS and more widely, and suggest taking stock and making any refinements necessary within two years, after survey data have been analysed, before proposing the final GSS Harmonised Principle. The GSS Harmonisation Team will monitor implementation of the loneliness principle to ensure harmonisation is adhered to.

We would welcome your feedback on how well the loneliness indicators work and any improvements you would suggest, before submitting them for final approval as GSS Harmonised Principles in 2020. Please get in touch with us by contacting:

- QualityofLife@ons.gov.uk

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Compendium

Acknowledgments

A list of acknowledgements for the loneliness compendium.

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1 . Acknowledgements

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Compendium

Annexes: Cognitive testing of loneliness questions with children and young people and young adults

A series of annexes relating to the loneliness compendium, which provides comprehensive information on loneliness measurement, national indicators of loneliness and the question testing underpinning our recommendations.

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1 . Annex 1: ONS calls for volunteer interviewees to help produce better statistics on loneliness

The Well-being, Inequalities, Sustainability and Environment (WISE) Division, alongside the Department for Digital, Culture, Media and Sport (DCMS), have been asked by the Prime Minister to undertake a programme of work to improve our understanding of, and in turn alleviate, loneliness.

To help provide better statistics on the subject and help policymakers make better decisions on how to support people, we're looking for volunteers in England between the ages of 10 and 24 years to be interviewed during July about their attitudes, ideas and experiences of loneliness. All the information will be kept confidential and respondents will receive an incentive as a thank you for taking part.

Jo Cox Loneliness Commission

The late Jo Cox MP campaigned to raise the profile of loneliness stating, "young or old loneliness does not discriminate", and the Jo Cox Loneliness Commission presented a number of recommendations to government to help tackle the problem.

In her response, the Prime Minister Theresa May committed government to improving the evidence base and establishing indicators to measure loneliness across all ages. Specifically, in her announcement in January 2018, the Prime Minister indicated that government would be "establishing appropriate indicators of loneliness across all ages with the Office for National Statistics so these figures can be included in major research studies."

The current evidence base on loneliness is patchy – while it is richer and more comprehensive for adult age groups, we know less about experiences of loneliness for younger age ranges. We know loneliness can be an issue across all age groups but need to better understand how certain factors interact to increase the risk of loneliness, and what could reduce or even protect from future feelings of loneliness.

If you know anyone living in England who may be willing to take part to help us improve our evidence base to inform better decisions on what help and support is provided, please contact either Name or Name for more information.

2 . Annex 2: Loneliness topic guide for children and young people (aged 10 to 15 years)

Interviewing tips

Use open questions – who, how, what, why, when? Closed questions are not as effective so try to turn closed into open wherever possible.

Do not be afraid to use silence – give respondents enough time to think and say what they want to. Some people need more time than others so be aware of that. Encouragement – reassure with "umm", "yes" or head nodding, for example. This shows you are listening and interested but do not lead respondents by over-using them. Hanging probes – you can leave a question or statement hanging for respondents to finish such as, "So you think…?".

Summaries – you can recap what respondents have said then ask if you have it right or not to check you've understood. You can also ask them to summarise their thoughts; this can often provide great quotes for reports too!

Paraphrasing – paraphrasing a lot of information is a further way to check you have understood their point.

Do not assume – never think you know what respondents mean. Try your hardest to take nothing at face value. Use probes, paraphrases and summaries to check you have understood what respondents say. As a general rule of thumb, it's good to remember that if the respondent did not say it on the recording, it does not count.

Tone – the interview should be conversational and you should try to sound relaxed so respondents are put at ease. One of the best ways to achieve this is to know the topic guide inside out so you do not sound script-bound. Remember that the probes are not set in stone; a good interviewer finds their own way to ask the probes without changing the meaning of the research objective.

Interview checklist

Topic guide, respondent's contact and address details, two copies of the consent form, a show card with the Loneliness measure questions, the useful contacts list, a dictaphone, voucher incentive, pens, notepad, and batteries.

Tips for getting them to talk

You can use an activity that often helps children to open up and focus. You give them a pen and a sheet of paper with concentric circles on it (these can be drawn by hand but we'll try to get a printed one). Ask them to write their name or "Me" in the centre then ask them to think about people in their lives and add them in the circles with the closest people near him or her and the people less close to him or her further out. This can be used to generate conversation, such as "Have any of these people been lonely?", or "Why do you think they are not lonely?".

Section 1 Introduction

Loneliness is something we're hearing a lot about lately in the news. It's a normal part of life, but we do not understand enough about it and what we can do to help people in our lives who may feel lonely. That's what we'd like to talk about today. We're speaking to children and young people as well as to adults to understand more about loneliness and what we can do about it. What you have to say will help us advise the Prime Minister on how we can tackle loneliness in the UK.

Loneliness questions

a. How often do you feel you have no one to talk to?

b. How often do you feel left out?

c. How often do you feel alone?

d. How often do you feel lonely?

Answers:

Hardly ever or never

Some of the time

Often

There are no right or wrong answers. We just want to find out what you think. Your answers will be kept private, and we will not tell anybody what you've said. Just so you are aware, if you tell me something that makes me concerned about your safety or the safety of someone else, then we'll need to talk about it, and I might have to share that with the Project Leader. We may also need to talk to your parent, guardian or teacher. You do not have to answer any question if you do not want to, and we can stop at any time. We usually record the interviews so that we can listen back to it later and make notes. Does that sound OK to you? Do you have any questions you want to ask before we start?

You also get a shopping voucher as a thank you for taking part. (Give them the voucher and ask the respondent and the adult to both sign two consent forms, keeping one copy for yourself.)

Section 2: Cognitive question testing

To get this right, we are thinking very hard about the type of questions we should be asking people about loneliness. So, I want to start by asking you four questions and I will ask you to answer these using three response options. Once we have completed this we can discuss your thoughts about the questions.

Interviewer – Read out each question one at a time and give the respondent the three answer options. Wait for a response before delivering the next question. (Try not to engage or answer any questions from the respondent at this time.)

Loneliness measure questions

How often do you feel that you have no one you can talk to?

1. In your own words, can you tell me what this question is asking you?

2. Can you think of another way of asking this question?

3. Can you give me some examples of who you might have that you can talk to? Who do you think other people might have to talk to?

4. How important do you think it is to have someone to talk to? Why?

5. How did you feel after answering this question? Do you think most children would feel that way? Do you think this question could be upsetting for children aged 10 to 15 years to answer?

6. How well do you think children between 10 to 15 years old would understand this question?

7. Children could be asked to answer this question in a survey on a computer at home. How do you think children would feel about answering this question in front of other people, their parents, teachers, or friends? What makes you think that?

8. Would you find this question easier to answer with a response scale from 0 to 10 where 0 is "never" and 10 is "all of the time"?

9. Would you feel better answering these questions in school or at home?

10. How important do you think it is to ask children how often they have someone to talk to?

11. Why do you think we might be interested in this question?

12. What do you think the word "companionship" means?

13. What do you think is the difference between "companionship" and "having someone to talk to"?

14. What do you think is a better question to ask? "How often do you feel that you have no one to talk to?" or "How often do you feel that you lack companionship?" Why? Do you think people would answer these questions differently?

How often do you feel left out?

1. What do you think this question is asking you?

2. Can you think of another way of asking this question?

3. What does it mean to be "left out"?

4. Can you give me an example of a time you have felt left out? What made you feel like this? How long did it take to recover from those feelings? How did you recover; what helped?

5. How did you feel after answering this question? Do you think most children would feel that way? Do you think this question could be upsetting for children aged 10 to 15 years to answer?

6. How important do you think it is to ask children how often they feel left out?

7. Why do you think we might be interested in this question about feeling left out?

How often do you feel alone?

1. In your own words, can you tell me what this question is asking you?

2. Can you think of another way of asking this question?

3. Can you give me some examples of when you may have felt alone? What reasons can you think of why someone might feel alone?

4. How do you think children would feel about answering this question in front of other people, their parents, teachers, or friends?

5. How important do you think it is to ask children how often they feel alone?

6. Why do you think we might be interested in this question?

7. What do you think the world "isolated" means?

8. What is the difference between being "isolated" and being "alone"?

9. What do you think is a better question to ask? "How often do you feel alone?" or "How often do you feel isolated?" Why? Do you think people would answer this question differently?

How often do you feel lonely?

1. What do you think this question is asking you?

2. What reasons can you think of why someone might feel lonely?

3. How did you feel after answering this question? Do you think most children would feel that way? Do you think this question could be upsetting for children aged 10 to 15 years to answer?

4. Children would be asked to answer this question in a survey on a computer at home. How comfortable do you think children would feel doing it that way? Why do you say that?

5. Would you find this question easier to answer with a response scale from 0 to 10 where 0 is "never" and 10 is "all of the time"?

6. Would you feel better answering these questions in school or at home?

7. In the question we looked at before this one, we used the word "alone". What do you think the differences are or what is the same between being alone or being lonely?

Section 3: In-depth subject investigation on loneliness

Other people's experiences of loneliness

(Start with other people to lead gently into the topic.)

I want to talk about the subject of loneliness a little more now.

1. So, if you can start by telling me about someone you know who feels lonely or someone who has felt lonely in the past?

2. If yes, do you know why they are lonely or can you think of any reasons for why they are lonely?

3. If yes, did they stop being lonely? How did that happen?

4. Who do you think would be most likely to feel lonely? Why?

5. When do you think people are more or less likely to be lonely? Why do you say that?

6. Do you think it is good to be alone sometimes or not? Why or why not?

7. How important do you think it is it to help young people who are feeling lonely?

8. What could we do to improve things for young people who feel lonely? (for example, at home, at school, in their neighbourhood)

Child's experiences of loneliness

I'd like us to talk about you now. I want to remind you that you do not have to answer any questions that make you feel uncomfortable. If you can tell us as much as you feel able we're very grateful. (If the respondent seems reluctant to talk about their experiences, remind them of the confidentiality clause.)

1. So, let's begin with what loneliness means to you? How would you describe loneliness?

2. Can you tell me about a time you have felt lonely? What were you doing? How long for?

3. How strong was the feeling? (You can use a scale to help respondents, such as 0 to 10 with 0 being "not lonely at all" and 10 being "completely lonely")

4. What caused you to feel lonely? (for example, were you missing somebody? Was it because of something to do with friends, family or people at school?)

5. How did you move on from being lonely? How lonely are you now?

6. What can you tell me about a time when you did not feel lonely at all?

7. If yes, why do you think that was? What was happening then? What were you doing then? Where were you? Were you alone or with other people? What feelings did you have instead?

8. What do you think the opposite of loneliness is?

9. What could we do to improve things for people feeling lonely? What would you find most helpful if you felt lonely? Are there things that you really would not find helpful?

Social networks

1. How close do you live to your friends? (Close, near-by or far away.)

2. How often do you see family members that you do not live with? (Often, sometimes, hardly ever or never.)

3. Is there anything that stops you from seeing friends and family as often as you would like? If so, what? Do you speak with them often in other ways, for example, by telephone, video calls or social media?

4. How much do you feel that you are listened to by family and friends? Why?

5. How well do you know what's happening with family and friends?

6. Can you give me examples of people who you can talk to about your feelings?

7. Would you say that you and/or your family are involved in the community? What sort of community activities are you involved in?

8. Have you and/or your family lived in the area for a long time?

9. How often do you go to after school clubs, youth clubs and sport clubs? (Often, sometimes, hardly ever, or never.)

10. Do you have good relationships with your neighbours, for example, do you spend time with them more than to just say hello?

11. How happy or unhappy are you with your friendships and relationships with other people? Why?

12. Can you give me examples of people who you can ask for help at any time? Why them? What makes them the people you can ask for help from?

13. Who are the people who you can trust? If nobody, why do you think that? How does that feel?

14. Can you give me examples of people who you feel close to? If nobody, who would you like to feel close to? Why?

Section 4: Finishing the interview

1. If there was money to spend in tackling loneliness in children, how could this be best spent to help young adults out of loneliness? What types of activities, help, groups and so on?

(Use these or any others you can think of to bring the child or young person out of the intensity of the subject.) You've told me lots of information. It's been useful. How did it feel for you? Is there anything you want to ask me since I've asked you lots and lots of questions? Thank you very much for answering the questions. We are really grateful. Your answers will help us to understand loneliness and how we can help people who might be feeling lonely. How do you feel? Do you feel OK? It can be an upsetting topic for some people, so I will leave this list of phone numbers with you. (If upset), I understand it can be an upsetting topic. It is totally normal to feel upset

sometimes. If you are feeling upset or worried, you might want to talk to your doctor, parent or teacher. Remember, you can always call Childline on 0800 1111.

Section 5: Safeguarding

What to do if the respondent discloses something that makes you concerned for their safety

Listen to what the respondent is saying. Do not offer advice or attempt to provide counselling. Do not try to stop them from speaking about the issue, as it might be the first time they have felt comfortable discussing the issue with somebody. Instead, ask the respondent:

- how does that make you feel?

- what do you think could be done to help?

- what would you like to be done?

- have you spoken to anyone else about this? (for example, a parent or teacher)

(If it is a safeguarding issue that needs to be reported), It is important that you are safe and not in any danger. What you've said makes me think that you might need to speak to someone else who will be able to help you. So, what I suggest is that I will speak to my Project Leader and let them know what you've said, to figure out if this should be mentioned to your teacher, parent or guardian. Does that sound OK?

Following the interview, you should report the issue with the safeguarding team, who will decide about whether action should be taken, and whether there are sufficient grounds for breaking confidentiality. They will decide whether to:

- take no further action

- recommend that the respondent passes on their concerns to the appropriate authority

- pass the concern on to the appropriate authority

- refer the situation to the National Statistician

For more information, please refer to the ONS Safeguarding Policy.

3 . Annex 3: Loneliness topic guide for young adults (aged 16 to 24 years)

Interviewing tips

Use open questions – who, how, what, why, when? Closed questions are not as effective so try to turn closed into open wherever possible.

Do not be afraid to use silence – give respondents enough time to think and say what they want to. Some people need more time than others so be aware of that.

Encouragement – reassure with "umm", "yes" or head nodding, for example. This shows you are listening and interested but do not lead respondents by over-using them. Hanging probes – you can leave a question or statement hanging for respondents to finish such as, "So you think…?".

Summaries – you can recap what respondents have said then ask if you have it right or not to check you've understood. You can also ask them to summarise their thoughts; this can often provide great quotes for reports too!

Paraphrasing – paraphrasing a lot of information is a further way to check you have understood their point.

Do not assume – never think you know what respondents mean. Try your hardest to take nothing at face value. Use probes, paraphrases and summaries to check you have understood what respondents say. As a general rule of thumb, it's good to remember that if the respondent did not say it on the recording, it does not count.

Tone – the interview should be conversational and you should try to sound relaxed so respondents are put at ease. One of the best ways to achieve this is to know the topic guide inside out so you do not sound script-bound. Remember that the probes are not set in stone; a good interviewer finds their own way to ask the probes without changing the meaning of the research objective.

Interview checklist

Topic guide, respondent's contact and address details, two copies of the consent form, the useful contacts list, a dictaphone, cash incentive, pens, notepad, and batteries.

Section 1: Introduction

Loneliness is something we're hearing a lot about lately in the news. It's a normal part of life, but we do not understand enough about it and what we can do to help people in our lives who may feel lonely. That's what we'd like to talk about today. We're speaking to children and young people as well as to adults to understand more about loneliness and what we can do about it. What you have to say will help us advise the Prime Minister on how we can tackle loneliness in the UK.

There are no right or wrong answers. We just want to find out what you think. Your answers will be kept private, and we will not tell anybody what you've said. Just so you are aware, if you tell me something that makes me concerned about your safety or the safety of someone else, then we'll need to talk about it, and I might have to share that with the Project Leader. You do not have to answer any question if you do not want to, and we can stop at any time. We usually record the interviews so that we can listen back to it later and make notes. Does that sound OK to you? Do you have any questions you want to ask before we start?

You also get a £30 cash incentive as a thank you for taking part. (Give them the money and ask the respondent to sign two consent forms, keeping one copy for yourself.)

1. Firstly, can I ask whether you are studying at school or college or university, working or doing something else?

2. Do you live with family, friends or someone else?

Section 2: Cognitive question testing

We are developing some questions about loneliness for our surveys, and we would like to ask you for your thoughts on the survey questions. So, I want to start by asking you four questions and I will ask you to answer these using three response options. Once we have completed this we can discuss your thoughts about the questions.

Interviewer – Read out each question one at a time and give the respondent the three answer options. Wait for a response before delivering the next question. (Try not to engage or answer any questions from the respondent at this time.)

Loneliness questions

a. How often do you feel that you lack companionship?

b. How often do you feel left out?

c. How often do you feel isolated from others?

d. How often do you feel lonely?

Answers:

Hardly ever or never

Some of the time

Often

Loneliness measure questions

How often do you feel that you lack companionship?

1. In your own words, can you tell me what this question is asking you?

2. Can you think of another way of asking this question?

3. Can you give me some examples of who you might have that you can talk to? Who do you think other people might have to talk to?

4. What do you think the word "companionship" means?

5. How important do you think it is to have a companion? Why?

6. How did you feel after answering this question? Do you think most young adults would feel that way? Do you think these questions could be upsetting for respondents?

7. How well do you think young people between 16 to 24 years old would understand this question?

8. Young people could be asked to answer this question in a survey on a computer at home. How do you think young people would feel about answering this question in front of other people, their parents, colleagues or friends? What makes you think that? Do you think there is a best location to answer this question (home, college, university or work)?

9. What do you think is the difference between "companionship" and "having someone to talk to"?

10. What do you think is a better question to ask? "How often do you feel that you have no one to talk to?" or "How often do you feel that you lack companionship?" Why? Do you think people would answer these questions differently?

How often do you feel left out?

1. What do you think this question is asking you?

2. Can you think of another way of asking this question?

3. What does it mean to be "left out"?

4. Can you give me an example of a time you have felt left out? What made you feel like this? How long did it take to recover from those feelings? How did you recover; what helped?

5. How did you feel after answering this question? Do you think most young adults would feel that way? Do you think these questions could be upsetting to answer?

6. How important do you think it is to ask young people how often they feel left out?

7. Why do you think we might be interested in this question about feeling left out?

How often do you feel isolated from others?

1. In your own words, can you tell me what this question is asking you?

2. Can you think of another way of asking this question?

3. Can you give me some examples of when you may have felt isolated from others? What reasons can you think of why someone might feel isolated from others?

4. How important do you think it is to ask young people how often they feel isolated?

5. What do you think the world "isolated" means?

6. What is the difference between being "isolated" and being "alone"?

7. What do you think is a better question to ask? "How often do you feel alone?" or "How often do you feel isolated?" Why? Do you think people would answer these questions differently?

How often do you feel lonely?

1. What do you think this question is asking you?

2. What reasons can you think of why someone might feel lonely?

3. How did you feel after answering this question? Do you think most young adults would feel that way? Do you think this question could be upsetting to answer?

4. Young people could be asked to answer these questions in a survey on a computer at home. How comfortable do you think young people would feel doing it that way? Why do you say that?

5. Would you feel better answering these questions in school or at home?

6. Would you find these questions easier to answer with a response scale from 0 to 10 where 0 is "never" and 10 is "all of the time"?

7. In the question we looked at before this one, we used the word "alone". What do you think the differences are and what is the same between being alone or being lonely?

Section 3: In-depth subject investigation on loneliness

Other people's experiences of loneliness

(Start with other people to lead gently into the topic.)

I want to talk about the subject of loneliness a little more now.

1. So, if you can start by telling me about someone you know who feels lonely or someone who has felt lonely in the past?

2. If yes, do you know why they are lonely or can you think of any reasons for why they are lonely?

3. If yes, did they stop being lonely? How did that happen?

4. Who do you think would be most likely to feel lonely? Why?

5. When do you think people are more or less likely to be lonely? Why do you say that?

6. Do you think it is good to be alone sometimes or not? Why or why not?

7. How important do you think it is it to help young people who are feeling lonely?

8. What could we do to improve things for young people who feel lonely? (for example, at home, at college or university, at work, or in their neighbourhood)

Young person's experiences of loneliness

I'd like us to talk about you now. I want to remind you that you do not have to answer any questions that make you feel uncomfortable. If you can tell us as much as you feel able we're very grateful. (If the respondent seems reluctant to talk about their experiences, remind them of the confidentiality clause.)

1. So, let's begin with what loneliness means to you? How would you describe loneliness?

2. Can you tell me about a time you have felt lonely? What were you doing? How long for?

3. How strong was the feeling? (You can use a scale to help respondents, such as 0 to 10 with 0 being "not lonely at all" and 10 being "completely lonely")

4. What caused you to feel lonely? (for example, were you missing somebody? Was it because of something to do with friends, family, people at college or university, or work?)

5. How did you move on from being lonely? How lonely are you now?

6. What can you tell me about a time when you did not feel lonely at all?

7. If yes, why do you think that was? What was happening then? What were you doing then? Where were you? Were you alone or with other people? What feelings did you have instead?

8. What do you think the opposite of loneliness is?

9. What would you find most helpful if you felt lonely? Are there things that you really would not find helpful?

Social networks

1. How close do you live to your friends? (Close, nearby or far away)

2. How often do you see family members that you do not live with? (Often, sometimes, hardly ever or never.)

3. Is there anything that stops you from seeing friends and family as often as you would like? If so, what? Do you speak with them often in other ways, for example, by telephone, video calls or social media?

4. How much do you feel that you are listened to by family and friends? Why?

5. How well do you know what's happening with family and friends?

6. Can you give me examples of people who you can talk to about your feelings?

7. Would you say that you and/or your family are involved in the community? What sort of community activities are you involved in?

8. How often do you go to after school clubs, youth clubs and sport clubs? (Often, sometimes, hardly ever or never)

9. Have you and/or your family lived in the area for a long time?

10. Do you have good relationships with your neighbours, for example, do you spend time with them more than to just say hello?

11. How happy or unhappy are you with your friendships and relationships with other people? Why?

12. Can you give me examples of people who you can ask for help at any time? Why them? What makes them the people you can ask for help from?

13. Who are the people who you can trust? If nobody, why do you think that? How does that feel?

14. Can you give me examples of people who you feel close to? If nobody, who would you like to feel close to? Why?

Section 4: Finishing the interview

1. If there was money to spend in tackling loneliness in young adults, how could this be best spent to help young adults out of loneliness? What types of activities, help, groups and so on?

(Use these or any others you can think of to bring the young adult out of the intensity of the subject.)

You've told me lots of information. It's been useful. How did it feel for you?

Is there anything you want to ask me since I've asked you lots and lots of questions?

Thank you very much for answering the questions. We are really grateful. Your answers will help us to understand loneliness and how we can help people who might be feeling lonely.

How do you feel? Do you feel OK? It can be an upsetting topic for some people, so I will leave this list of phone numbers with you. (If upset), I understand it can be an upsetting topic. It is totally normal to feel upset sometimes. If you are feeling upset or worried, you might want to talk to your GP, parent, colleague or friend. Remember, you can always call The Samaritans for advice and support on 0845 790 9090.

Section 5: Safeguarding

What to do if the respondent discloses something that makes you concerned for their safety

Listen to what the respondent is saying. Do not offer advice or attempt to provide counselling. Do not try to stop them from speaking about the issue, as it might be the first time they have felt comfortable discussing the issue with somebody. Instead, ask the respondent:

- how does that make you feel?

- what do you think could be done to help?

- what would you like to be done?

- have you spoken to anyone else about this? (for example, a parent or teacher)

(If it is a safeguarding issue that needs to be reported), It is important that you are safe and not in any danger. What you've said makes me think that you might need to speak to someone else who will be able to help you. So, what I suggest is that I will speak to my Project Leader and let them know what you've said, to figure out if this should be reported to someone else. Does that sound OK?

Following the interview, you should report the issue with the safeguarding team, who will decide about whether action should be taken, and whether there are sufficient grounds for breaking confidentiality. They will decide whether to:

- take no further action

- recommend that the respondent passes on their concerns to the appropriate authority

- pass the concern on to the appropriate authority

- refer the situation to the National Statistician

For more information please refer to the ONS Safeguarding Policy.

4 . Annex 4: Children and young persons' loneliness consent form (10- to 15-year-olds)

I understand that I have been asked to take part in an interview, which involves having a conversation with a researcher, about what loneliness means, what I think about loneliness, and whether I have ever been lonely, or if I know people who have been lonely.

I understand that the conversation will be recorded, so that the researcher can listen back to it later and makes notes, and the information I tell them will be used to help reduce loneliness.

I understand that I do not have to take part if I don't want to, and I can stop at any time, without having to give anybody a reason. I understand that I can ask questions at any time.

I understand that everything I say will be kept private. However, if I tell the researcher something that makes them worried about my safety, I understand they might have to report it to somebody else. I understand that the researcher will write a report, or paper, about the interview, but they won't mention my name or any other information about me, so it will all be anonymous.

I know that I will be given a £15 voucher, as a thank you for taking part.

Child's Consent

I, _____(NAME) am happy to take part in the interview about loneliness.

I, _____ (NAME) confirm I have been given a £15 voucher.

Signature of child: _____

Date: _____

Parent/Guardian's Consent

I, _____(NAME) consent to the researcher conducting the interview with my child.

Signature of Parent or Guardian: _____

Date: _____

Interviewer Contact Details

If you have any queries or comments following the interview, please feel free to contact me on (INSERT CONTACT NUMBER) or email me at (INSERT EMAIL). Office for National Statistics, Government Buildings, Cardiff Road, Newport, Wales, NP10 8XG

5 . Annex 5: Young adults' loneliness consent form (16- to 24-year-olds)

I understand that I have been asked to take part in an interview about my understanding, views and experiences of loneliness.

I understand that the interview will be recorded, and following the interview, will be transcribed and analysed. I understand the information I provide will be used to help the Office for National Statistics to produce a national measure for loneliness and help organisations design programmes to reduce loneliness.

I am aware that my participation is voluntary, and that I have the right to withdraw at any time, without giving a reason. I am aware that I have right to ask questions at any time.

I am aware that I will receive £30 as a thank you for taking part.

I understand that my participation and data will be kept confidential and all information will be stored securely and anonymously. However, if I disclose something which makes the researcher concerned for my safety, I understand that the researcher has a duty to report it. I am aware that the final report will not name or identify me in any way, nor will it contain any information which could be used to identify me.

I, _____ (NAME) consent to taking part in the interview.

I, _____ (NAME) confirm I have received £30 as a thank you for taking part.

Signature of Interviewee: _____

Date: _____

Interviewer Contact Details

If you have any queries or comments following the interview, please feel free to contact me on (INSERT CONTACT NUMBER) or email me at (INSERT EMAIL).

Office for National Statistics, Government Buildings, Cardiff Road, Newport, Wales, NP10 8XG