

# Measuring Children and Young People's Subjective Wellbeing

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## Measures bank user guide

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Photo credit: Ben Wicks (Unsplash)

### Authors

Dr. Magdalena Soffia (What Works Centre for Wellbeing)

Dr. Alexandra Turner (The Children's Society)

## About the authors

**Dr. Magdalena Soffia** is the What Works Centre for Wellbeing's Work & Wellbeing Analyst. She is a Doctor in Sociology with experience on quantitative measures of job quality and wellbeing in European and Latin American settings. Before joining the Centre, she worked as a research associate for the University of Cambridge and Police Care UK. Magdalena was also a consultant at the Population Division of ECLAC-United Nations for four years.

Magdalena can be contacted at [magdalena.soffia@whatworkswellbeing.org](mailto:magdalena.soffia@whatworkswellbeing.org)

**Dr. Alexandra Turner** is a mixed methods researcher working in the mental health and wellbeing policy and research team at The Children's Society. The main focus of her role is in providing expertise and guidance on the measurement and understanding of children's well-being. She provides support to local authorities, schools and partner organisations to better understand the needs and wellbeing of children and young people in their care. She holds a doctorate in the multidisciplinary fields of analytical forensic chemistry and criminology.

Alex can be contacted at [alexandra.turner@childrenssociety.org.uk](mailto:alexandra.turner@childrenssociety.org.uk)

## About the What Works Centre for Wellbeing

We are an independent collaborating centre that develops and shares robust and accessible wellbeing evidence to improve decision making that is used by governments, businesses and civil society.

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# Measuring Children and Young People's Subjective Wellbeing Measures Bank User Guide

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|   |           |
|---|-----------|
| <b>Introduction</b> .....   | <b>4</b>  |
| <b>Part 1: What to consider when setting out to measure children and young people's wellbeing</b> .....     | <b>5</b>  |
| 1. Why measure children's subjective wellbeing? .....   | 5         |
| 2. What is the purpose of your measurement? .....   | 5         |
| 3. Ethical considerations.....  | 6         |
| 4. Handling data .....  | 8         |
| 5. Considering where to collect your responses .....  | 8         |
| 6. Balance the data burden versus the importance of hearing from children and young people themselves ..... | 9         |
| 7. Wellbeing survey providers.....  | 9         |
| <b>Part 2: How to use the measures bank</b> .....   | <b>10</b> |
| 1. Measure bank spreadsheet explainer .....   | 10        |
| 2. Metric and basic characteristics explainers .....  | 11        |
| 3. Authorship and key references.....   | 14        |
| 4. Wellbeing domain of interest.....  | 15        |
| 5. Validation .....   | 17        |
| 6. Availability of benchmarking and norms .....   | 19        |
| 7. Administration conditions .....  | 19        |
| 8. A suggested selection of measures .....  | 21        |
| 9. Help us keep this bank up-to-date .....  | 21        |
| <b>Part 3: Making sense of your data</b> .....  | <b>22</b> |
| 1. Looking at population distributions beyond averages .....  | 22        |
| 2. Identifying specific low-wellbeing groups.....   | 23        |
| 3. Measuring change and impact.....   | 24        |
| <b>References</b> .....   | <b>26</b> |
| Appendix 1: Measures identified and excluded from bank (n=58) .....   | 28        |
| Appendix 2: Measures identified currently under assessment for inclusion (n=80) .....                       | 31        |
| Appendix 3: Measures included in bank (n=92).....   | 33        |

# Introduction

A key role for the What Works Centre for Wellbeing is to create robust, consistent wellbeing measures that can be used with confidence for different purposes and groups in the UK. With this project, we have developed a framework to measure the subjective wellbeing of children and young people, an area with growing national interest, particularly as a result of Covid-19.

This guide is designed to help you understand and use the bank. It is for academic and technical audiences who are familiar with how to conduct wellbeing measurement projects. It aims to provide guidance on what is important when measuring children and young people's wellbeing specifically, and how to use the children and young people's wellbeing measures bank.

Using rapid evidence assessment methodology, in partnership with The Children's Society and with funding from the Health Foundation, we have compiled a wellbeing measures bank to collate all known and validated measures that have been used during the last decade to measure children and young people's subjective wellbeing in the UK.

This guide is accompanied by a more detailed literature review that outlines how we have defined children's subjective wellbeing and why it is important, it [can be found here](#).

## Part 1

# What to consider when setting out to measure children and young people's wellbeing

This chapter looks at the required thinking and planning when measuring children and young people's subjective wellbeing. It outlines the ethical considerations that must be taken into account and data handling.

### 1. Why measure children's subjective wellbeing?

In our literature review, we make the distinction between objective measures of children's wellbeing – i.e. observable information about their lives – and subjective wellbeing – i.e. how children themselves think and feel about their lives.

We believe that to understand children's wellbeing we need to ask them the questions rather than rely on social indicators, or on adults, to report for them. That said, the measurement of subjective wellbeing should be encouraged not instead of objective approaches, but as a complementary approach, especially when no good objective indicators are available.

### 2. What is the purpose of your measurement?

There may be different needs and requirements for how you want to measure and understand children's wellbeing;

For example, if you have a predesigned research project and are looking for a validated measure of life satisfaction, you may want to jump to Part 2 on how to use the data bank.

However, if you are new to measuring children's wellbeing it might be helpful to think about why you are wanting to measure it, what you are hoping to learn and how you intend to use the information that you generate.

### 3. Ethical considerations

Undertaking research directly with children and young people can be as valuable as it can be challenging, especially when involving those experiencing adversity (e.g. domestic violence, homelessness, illness or hospitalisation) or living in atypical situations (e.g. in foster care, providing care to other family members or in juvenile justice systems). In academia, all projects should go through the relevant ethical review with approval granted based on the considered risks and benefits of that project. This is also true for statutory governmental bodies and larger voluntary sector organisations that have dedicated panels of experts to review and provide guidance on ethical approaches to working with children.

If, however, you are working in a practical setting, such as in a school or if your organisation does not have a dedicated ethics panel, the following section provides advice and guidance on the ethical considerations you may want to think about in relation to your own approach:

#### 3.1. Active participation

Using subjective or personal wellbeing measures is one part of recognising the role of children and young people as expert informants of their wellbeing. Giving this group a meaningful and active participatory role throughout the research is another way to acknowledge their expertise and reduce possible power differentials between the adult researcher and the children<sup>1</sup>. Children and young people's active role can be considered at every step of the research, from the design through to implementation and interpretation of findings.

Such engagement can be achieved, for instance, when providing participants with the opportunity to ask questions about the research and their role in it so that they do not feel pressured or obliged to participate. This is particularly relevant in situations where children and young people are institutionalised and may feel that 'opting out' can be problematic for their outcomes.

Establishing other communication spaces such as forums, workshops or consultation group meetings can also help to engage young people as active participants.

#### 3.2. Accessibility and inclusion

In every survey exercise with children and young people it is important to consider issues of literacy, learning difficulties and sensitivity<sup>2</sup>. The older the children are, the better they understand language, so visual, audio or digital aids may be particularly helpful with younger children or with those with special education needs. Things like response cards or visual stimuli will not only make the response task more interesting and concrete, but will also help with memory<sup>3</sup>. With older children you need to make sure the language used is inclusive too.

You may also want to think about groups of children and young people that are harder to recruit. Previous research has found, for instance, that children in lone-parent families, those that are being fostered by non-relatives or children of younger less educated

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1 Hanafin et al., 2014.

2 Hanafin et al., 2014.

3 Borgers, de Leeuw and Hox, 2000, p. 71.

mothers are significantly harder to recruit<sup>4</sup>. Their under-representation can be addressed through re-weighting your data.

### 3.3. Safeguarding

Along with the benefits of filling up the evidence gaps around children and young people's wellbeing, and promoting their active participation in research, comes the challenge of keeping them protected throughout the process and minimising the risk of social, psychological or physical harm.

Asking children and young people about their wellbeing can raise sensitive issues or distressful feelings so it may be helpful to consider what support can be offered to the child in that event.

### 3.4. Informed consent

Depending on the setting in which participants will be asked to complete the measure, it's important to be realistic about how much choice the children really have in taking part. Do the children have the option not to take part or to respond to specific questions? If not, what impact would enforced participation have on the results of the measurement?

There are three aspects<sup>5</sup> that you should consider when seeking consent from young people:

- Are potential participants provided with information they can understand?
- Is the consent voluntarily given?
- Does the potential participant have the capacity to give their consent? (i.e. are they of age to be considered autonomous?)

Sometimes participants are not capable of giving consent, for instance, because they are in their middle childhood still not in a position of controlling their own life. In these cases it is adequate to seek their assent, that is, the agreement and willingness to cooperate based on evidence that they understand the information provided.

In other cases, such as with babies and infants, it will be necessary to secure permission from additional parties like parents or guardians on behalf of the child.

### 3.5. Anonymity versus confidentiality

When thinking about the purpose of measuring children's wellbeing, attention needs to be given to whether anonymity can be ensured in the collection of that data by keeping the identity of individual subjects unknown to researchers. This may involve ensuring safe data storage, modification or removal of identifying information through encryption. One of the main advantages of collecting information from children anonymously is that they are likely to answer more openly.

However, there are necessary limits to this and depending on the nature of your project, for example participants' responses over time, you may not be able to offer complete anonymity. It should be made clear to all participants the extent to which their responses are anonymous and the impact that this has.

You will also need to be clear to any participants how far they will be afforded

<sup>4</sup> Hanafin et al., 2014.

<sup>5</sup> Hanafin et al., 2014.

confidentiality in relation to their responses and discuss the potential limits to such confidentiality, for example in cases of concerns over safety. Confidentiality refers to a condition in which the researcher knows the identity of the participant, but protects that identity from being disclosed to other parties unless the participant has granted their approval.

Anonymity and confidentiality are key conditions to respect and protect study participants. In the UK, these issues are governed by specific data protection legislation (see Section 4). It may be challenging to maintain a balance between protecting the child or young person and allowing them enough privacy to express their views<sup>6</sup>. All this information should be presented in language appropriate to their age so that they can make informed choices about what they share.

## 4. Handling data

When collecting any information or data from children you will need to ensure that your collection, handling and processing of that data is conducted in line with current data protection legislation.

The Information Commissioner's Office (ICO) outlines the requirements that are needed to be met for the safe handling of children's data under GDPR. This is available [here](#).

If you are planning on collecting any personal or special category data, you may be required to complete a Data Protection Impact Assessment (DPIA) before collecting the information from children. This can be a helpful exercise to do even if you are planning on collecting anonymised data as the process can highlight potential risks. The ICO has a handy guide on [how to produce a DPIA](#) and under what circumstances you will be required to produce one.

As you are collecting children's data, you may also need to state the legal basis you intend to use to process that data. The legal basis will be dependent on the purpose of your measurement and also the type of your organisation. Again, this information can be found on the ICO website or the [UK Data Archive](#) have a helpful step-by-step guide for applying GDPR in research contexts.

You will also need to provide the children and young people with a copy of your data policy in appropriate language so that they are aware of their rights in relation to GDPR and the data you will be collecting from them.

## 5. Considering where to collect your responses

As with considerations on how you intend to record the information from children, it is equally important to think about the impact of where the child will be when they are completing the questions.

You should consider the appropriateness of asking about certain aspects of children's lives relative to the setting in which they are responding, i.e. is it appropriate to ask about

<sup>6</sup> Hanafin et al., 2014.



satisfaction with specific aspects of family life in a school setting?

## 6. Balance the data burden versus the importance of hearing from children and young people themselves

The only way to truly understand how children and young people feel about their lives is to ask them, hence why we have collated all these measures of subjective wellbeing. However, it is also important to be mindful of data burden; that we do not ask too many questions in unnecessarily long surveys or over-survey specific cohorts of children. In Part 2, Section 6 of this guide is a list of data sources that use certain measures that can be readily accessed. It might be useful to consult these sources when thinking about the questions you are looking to ask about children's wellbeing.

## 7. Wellbeing survey providers

If you are looking to measure the wellbeing of a group of children in your practice setting, but do not have the necessary capacity or skills to run and analyse a survey yourself, you may want to consider partnering with an existing survey provider.

There are a number of companies that provide support and expertise in this area including:

- [BounceTogether](#)
- [ImpactEd](#)
- [CORC](#)

If you instead prefer to build and test your own questionnaire, you may find this [guidance by Bell \(2007\)](#) helpful.

# Part 2

## How to use the measures bank

The measures bank is [a downloadable Excel Workbook](#) that compiles all the different measures or tools currently used to capture different aspects of children and young people's subjective wellbeing, as identified through a Rapid Evidence Assessment (REA) of the literature.

The bank also contains useful information about each metric which will help you choose the right tools depending on your needs. You can apply the filter functionality in all the columns to navigate through.

|    | A   | B   | C  | D                   | E                                       | J                            | K                | L   | M   | N   |
|----|-----|-----|--|---------------------|---|------------------------------|------------------|---|---|---|
| 1  |     | SWB | Metric identifier                            |                     |   | Authorship                   |                  | Key Citations                                   |   |   |
| 2  |     |     | Metric/ Tool Name (acronym)                  | Measure description | Question items or statements [Preamble] | Developed by/ Author surname | Development year | References in academic peer-reviewed literature | References in grey literature (ordered by publication year) | Subjective Wellbeing Approach (AS DEFINED BY REVIEWERS) |
| 3  |     |     |  |                     |   |                              |                  |   |   |   |
| 4  | Yes | ▼   | Adolescent and Adult Time Inventory - Time A | The Time            | 1. I look forward to my future          | Mello and Worr               | 2007             | 1) Mello, Z. R.                                 |   | Eudaimonic  |
| 5  | Yes | ▼   | Adolescent and Adult Time Inventory - Time A | The Time            | 2. I am not satisfied with my           | Mello and Worr               | 2007             | 1) Mello, Z. R.                                 |   | Cognitive   |
| 6  | Yes | ▼   | Adolescent and Adult Time Inventory - Time A | The Time            | 3. I have very happy memories           | Mello and Worr               | 2007             | 1) Mello, Z. R.                                 |   | Cognitive   |
| 7  | Yes | ▼   | Adolescent and Adult Time Inventory - Time A | The Time            | 4. I doubt I will make something        | Mello and Worr               | 2007             | 1) Mello, Z. R.                                 |   | Eudaimonic  |
| 8  | Yes | ▼   | Adolescent and Adult Time Inventory - Time A | The Time            | 5. I am happy with my current           | Mello and Worr               | 2007             | 1) Mello, Z. R.                                 |   | Cognitive   |
| 9  | Yes | ▼   | Adolescent and Adult Time Inventory - Time A | The Time            | 6. My past is a time in my life         | Mello and Worr               | 2007             | 1) Mello, Z. R.                                 |   | Cognitive   |
| 10 | Yes | ▼   | Adolescent and Adult Time Inventory - Time A | The Time            | 7. My future makes me happy             | Mello and Worr               | 2007             | 1) Mello, Z. R.                                 |   | Eudaimonic  |
| 11 | Yes | ▼   | Adolescent and Adult Time Inventory - Time A | The Time            | 8. I have negative feelings about       | Mello and Worr               | 2007             | 1) Mello, Z. R.                                 |   | Cognitive   |
| 12 | Yes | ▼   | Adolescent and Adult Time Inventory - Time A | The Time            | 9. I have good memories about           | Mello and Worr               | 2007             | 1) Mello, Z. R.                                 |   | Cognitive   |
| 13 | Yes | ▼   | Adolescent and Adult Time Inventory - Time A | The Time            | 10. I don't think I'll amount to        | Mello and Worr               | 2007             | 1) Mello, Z. R.                                 |   | Eudaimonic  |
| 14 | Yes | ▼   | Adolescent and Adult Time Inventory - Time A | The Time            | 11. I am pleased with the present       | Mello and Worr               | 2007             | 1) Mello, Z. R.                                 |   | Cognitive   |
| 15 | Yes | ▼   | Adolescent and Adult Time Inventory - Time A | The Time            | 12. I am not satisfied with my          | Mello and Worr               | 2007             | 1) Mello, Z. R.                                 |   | Cognitive   |
| 16 | Yes | ▼   | Adolescent and Adult Time Inventory - Time A | The Time            | 13. My future makes me sad              | Mello and Worr               | 2007             | 1) Mello, Z. R.                                 |   | Eudaimonic  |
| 17 | Yes | ▼   | Adolescent and Adult Time Inventory - Time A | The Time            | 14. I am content with the present       | Mello and Worr               | 2007             | 1) Mello, Z. R.                                 |   | Cognitive   |
| 18 | Yes | ▼   | Adolescent and Adult Time Inventory - Time A | The Time            | 15. My past makes me sad                | Mello and Worr               | 2007             | 1) Mello, Z. R.                                 |   | Cognitive   |

Image of the measures bank spreadsheet

### 1. Measure bank spreadsheet explainer

The rows in the spreadsheet represent the different metrics identified through the REA in alphabetical order. There are over 150 metrics (although not all of them are strictly defined as measures of 'subjective wellbeing'). Since most of the metrics are in turn composed of several items or questions, the spreadsheet uses a different row for each of these items. For instance, in the screenshot above, the metric 'Good Childhood Index' is composed of 10 different questions, each of which uses a different row. This allows for a more flexible description of the metrics which sometimes can be composed of questions

that use a different response scale, or that measure wellbeing in different life domains.

Columns represent the various fields of information about each metric, extracted directly through the REA or defined by the reviewers as part of the critical assessment of each metric. The bank includes over 30 different fields related to authorship, validation, benchmarking, implementation, etc. In addition, there are 6 fields exclusively allocated to critically appraise the metric through a scoring system. If you do not know which specific metric you are looking for in your programme or research, then these fields can help you choose the most adequate option. The following sections describe the contents of each field.

## 2. Metric and basic characteristics explainers

**SWB** is short for 'subjective wellbeing'. It indicates whether the metric corresponds with a conceptualisation of subjective wellbeing as defined in our conceptual framework and therefore has been included in the bank. Possible values are:

- yes
- no
- undefined

For simplification, we have removed from the bank all the measures identified through the REA that do not correspond to subjective wellbeing (n=58), as well as those currently under assessment for inclusion (n=80). You can find the lists of these measures in Appendix 1 and Appendix 2.

**Metric/Tool Name** (acronym) - Official name that developers or authors assigned to the metric, followed by its acronym in parenthesis. If there are more than one edition of the same metric, this is also indicated in the name field. Currently, the bank includes 92 single measures (see Appendix 3). Examples:

- Coopersmith Self-Esteem Inventory - Long Form (SEI)
- Behavioural and Emotional Rating Scale - Version Two (BERS-2)

**Measure description** - Brief description of the composition of the metric and the aspects of wellbeing that it is meant to capture. Example:

- The ERICA is a 17-item index to assess the ability of children and adolescents to manage their emotions and behaviour toward the achievement of intrapersonal or interpersonal goals. It covers four domains: emotional control, emotional self-awareness, situational responsiveness.

**Question items or statements** [preamble] - This column represents the final operationalisation of each metric into questions, statements or items. Multiple-item measures will have, correspondingly, multiple rows assigned. In some cases, the full list of items comprising a metric are not publicly available, therefore we signal that with 'N/A'. If the items comprising a measure are preceded by the same heading, then this will be added in square brackets. Example items comprising the 'Good Childhood Index':

- *Your relationships with your family? [How happy are you with...]*
- *The home that you live in? [How happy are you with...]*

- *How much choice you have in life? [How happy are you with...]*
- *Your relationships with your friends? [How happy are you with...]*

### The importance of time frames

Some of the measures in the bank include questions that are positioned within a set time period, such as 'yesterday', 'during the past week', 'in the last year'. Asking about specific aspects of wellbeing within a prescribed time frame can be useful when trying to evaluate changes caused by a specific intervention, but may be less useful when used over longer time periods or as part of one-off measurements. When selecting the questions or measures that you intend to use it is important to consider the frequency with which you will be measuring children's wellbeing and the time frames during which this will take place.

**Response categories and scoring guideline** - This is information about the response scales, categories or values used for each item or question. Some metrics use exactly the same response values for all its items, while other more comprehensive tools may have different response types depending on the question. This field also includes information on the scoring process used to obtain total scores as referenced in the literature.

Example:

- *Each item is answered in a 3-point scale: "not true" (0), "sometimes true" (1), "true" (2). A final depression score is obtained by summing together the point values of responses for all 13 items. Higher values indicate higher emotional difficulties.*

### Number of response options

The number of response categories can have an effect on the reliability of the responses. An experimental study with children and adolescents as respondents found that the number of response options offered had an inverted u-shaped effect on reliability measures like item-rest correlation, suggesting that reliability starts decreasing after adding more than six response categories<sup>7</sup>. Other experts say that longer Likert scales, such as the 11-point scale used for the ONS Life Satisfaction measure, increase sensitivity compared to traditional 5-point Likert scales that only capture moderate levels of agreement<sup>8</sup>.

**Name of subscale** (if applicable) - Here we simply name the subscale to which each item belongs, as described in the literature. Subscales are a set of items aimed at measuring a single underlying concept. For example, 'Kidscreen-52' is comprised of 52 items in total, which in turn are meant to be grouped under the following 10 subscales or dimensions:

- physical wellbeing

<sup>7</sup> Borgers, Sikkil and Hox, 2004.

<sup>8</sup> Leung, 2011; Cummins and Gullone, 2000

- psychological wellbeing
- moods and emotions
- self-perception
- autonomy
- parent relations and home life
- social support and peers
- school environment
- social acceptance (bullying)
- financial resources

Not all instruments contain subscales, but if they do it is recommended that you follow the same validated structure suggested by the developers of the measure, unless you prefer to take an exploratory approach and test if such components make sense with a different sample.

**Structure type** - This field indicates whether each question or item is a measure in its own right or if it is part of a composite measure. The majority of the items in the bank are part of multiple-item scales, indices, inventories or screening tools.

Possible values:

- Single-item
- Multi-item component

### Single or multiple-item measure, what is best?

Single-item tools are easier to administer and communicate, more likely to increase response rates, often work well as global measures of wellbeing, and can be a good option when resources are scarce. They can, however, lose some of the complexity that is characteristic of subjective wellbeing.

Because wellbeing is multidimensional, multiple-item measures better capture its many components. In addition, multiple-item tools are generally more reliable than single-item indicators, particularly because they "produce more nuanced data with a more normal distribution that facilitates better analysis"<sup>9</sup>.

**Positive or negative wording** - This field describes the positive or negative orientation in which the measure is worded or phrased. For example, 'my life is going well' is considered a positive wording, whereas 'I wish I had a different kind of life' is defined as a negative wording. Possible values include:

- Positive
- Negative
- Neutral

<sup>9</sup> Ryff, 1989; Rees and Main, 2016.

### Positive or negative question phrasing

Various experts<sup>10</sup> recommend using positively-worded indicators over negatively-worded indicators. Questions with a negative formulation can force children to make a negative statement in order to deliver a positive response (e.g. 'do you find it difficult to finish your homework within the deadlines given?')<sup>11</sup>. Negatively phrased questions can be especially problematic with younger children (8–11 years old)<sup>12</sup>. That said, including a single negatively worded item within a scale can help to avoid leading children to answer in socially desirable ways.

## 3. Authorship and key references

**Developed by / author surname** - Surname of the personal or institutional authors of the metric. For example, the 'Positive and Negative Affect Schedule (PANAS-C)' and 'Kidscreen-52' were developed, respectively, by:

- Watson, Clark, and Tellegen
- E Bell, 2007. European Commission

**Development year** - A four-digit numeric value that indicates the year in which the metric was developed. This date often coincides with the year of publication of the first article or report describing or using the metric. Although the REA included only studies published from 2010 onwards, many of these studies continue to use measures that were developed a long time ago, therefore the values in this field can range from 1900 to 2021.

**References in academic peer-reviewed literature** (ordered by publication year) - This field includes both the key or seminal articles describing the development of the metric and some example peer-reviewed studies that have made use of the metric in recent years (only studies published from 2010 onwards). Example for 'Positive and Negative Affect Schedule (PANAS-C)':

- Watson D, Clark L A, Tellegen A (1988). Development and Validation of Brief Measures of Positive and Negative Affect: The PANAS Scales. *Journal of Personality and Social Psychology* 47:1063–1070. doi: 10.1037/0022-3514.54.6.1063
- Laurent J, Catanzaro SJ, Joiner TE, Rudolph KD, Potter KI, Lambert S, Osborne L, Gathright T (1999). A measure of positive and negative affect for children: Scale development and initial validation. *Psychol Assessment*, 11:326-338. <https://doi.org/10.1037/1040-3590.11.3.326>
- Amundsen R, Riby L M, Hamilton C et al. (2020). Mindfulness in primary school children as a route to enhanced life satisfaction, positive outlook and effective emotion regulation. *BMC Psychol* 8, 71. <https://doi.org/10.1186/s40359-020-00428-y>

**References in grey literature** (ordered by publication year) - As in the previous field, here we include key reports or publications of the last decade in which the metric has been implemented or discussed, but only referring to publications coming from the grey

<sup>10</sup> Ben-Arieh et al., 2013.

<sup>11</sup> Bell, 2007.

<sup>12</sup> Borgers, de Leeuw and Hox, 2000.

literature instead of academic or peer-reviewed literature. This may include publications from government departments or non-governmental organisations. Example for 'Positive and Negative Affect Schedule (PANAS-C)':

- Ryder R, Edwards A, Clements K (2017). Measuring the wellbeing of children in care: views from the frontline and opportunities for change. London: National Children's Bureau (NCB). <https://www.ncb.org.uk/what-we-do/research-evidence/our-research-projects/measuring-wellbeing-children-care>

#### 4. Wellbeing domain of interest

Subjective wellbeing approach (as defined by reviewers) - Indicates the main subjective wellbeing approach followed by the metric. Note that the value assigned does not necessarily match the tags assigned in the literature. Indeed, many items are difficult to categorise so if there was too much disagreement between reviewers, these were labelled 'undefined'. Possible values are:

- Affective
- Cognitive
- Eudaimonic
- (Undefined)

#### What are the different approaches to subjective wellbeing?

In our literature review we discuss three main approaches to the understanding of subjective wellbeing:

- a) affective or emotional (positive and negative);
- b) cognitive or evaluative; and
- c) eudaimonic wellbeing

The metric bank includes a variety of measures that can be used to measure wellbeing from each of these three approaches. Note, however, that affective, cognitive, and eudaimonic approaches to wellbeing are not always operationalised in mutually exclusive ways, but interdependently. This means that many measures will target more than one component domain or even cover all three. There is no approach more 'correct' than others, but it is important to consider what you would like to get from the data and how you will analyse it before choosing your questions. Research has shown, for instance, that measures of children's life satisfaction (evaluative approach) tend to be more stable over time, compared to measures of affective wellbeing. Therefore, the former might be more appropriate to use over a longer period of time<sup>13</sup>.

<sup>13</sup> The Children's Society, 2013, p. 11.

**Global or specific theme measured** – Based on our conceptual framework, this field indicates the specific life domain or theme captured by the item. Possible values are:

- (Undefined)
- Emotions: pleasant (e.g. alert, excited, contented, relaxed, calm)
- Emotions: unpleasant (e.g. tense, nervous, stressed, upset, sad, depressed, bored)
- Emotions: other
- Satisfaction with life
- Health: physical or mental
- Relationships: friends
- Relationships: family
- Relationships: other (e.g. loneliness)
- Physical environment: housing
- Physical environment: school
- Physical environment: neighbourhood
- Physical environment: other
- Time use: schoolwork/ learning
- Time use: leisure/ play/ culture & arts
- Time use: sports/ physical activity
- Time use: social media
- Time use: other
- Material/ economic resources
- Volunteering/ giving
- Spirituality
- Appearance
- Future/ prospects/ outlook (e.g. optimism, pessimism)
- Eudaimonic: Self-esteem/ self-acceptance
- Eudaimonic: Autonomy/ control
- Eudaimonic: Environmental mastery/ participation/ engagement
- Eudaimonic: Personal growth/ self-actualisation/ achievement/ competence
- Eudaimonic: Purpose/ meaning
- Other (see notes)

### Global or domain-specific measures

Measures in the bank also vary in terms of the specific life domain (or theme) they address, while others focus on life as a whole. Bear in mind that global measures can be more adequate for multivariate analysis because they are independent from other relevant variables that can be difficult to capture, whereas domain-specific measures "allow for an exploration of the relative importance of different domains (...), and of the relationships between such domains"<sup>14</sup>. You should clearly identify which aspects of children's wellbeing it is that you are hoping to measure.

<sup>14</sup> Rees and Main, 2016, p. 126.



## Global or domain-specific measures (continued)

The Multi-National Project for Monitoring and Measuring Children's Well-Being<sup>15</sup> recommends using holistic measures over specific-domain measures. However, if only some indicators or themes need to be selected, the preference is for those that children have ranked as more important for their lives or those that are policy-oriented and actionable. You may also want to consider selecting measures that capture themes for which there are not good, reliable objective measures. For instance, health and poverty have been traditionally measured through more objective indicators which have shown to be highly correlated with subjective wellbeing.

**[If domain-specific] Quantitative evidence of its association with global SWB** – This field provides any information available about the correlation between the domain-specific measure and other included global wellbeing measures included in the bank. Example from the 'Short Attachment to Pets Scale (SAPS)':

- *Positively associated with global wellbeing measures Kidscreen-10 ( $r = 0.116$ ,  $p < 0.001$ ) and Cantril's Life Satisfaction ( $r = 0.059$ ,  $p < 0.001$ ) for a sample of 7159 school pupils aged 11, 13 and 15 in Scotland and England (Marsa-Sambola et al 2016).*

## 5. Validation

**Details of development process** (e.g. adapted from adult tool, co-designed with children) – Whenever possible, we have retrieved information on whether the scale or tool was co-developed with a population of children and young people. Example from the 'Generic Children's Quality of Life Measure (GCQ)':

- *Developed using constructs provided by children when asked about QoL and designed to be more child-friendly than other measures of paediatric health-related QoL in terms of its layout and use of a story format (Constantinou et al. 2015).*

## Different ways to engage children and young people in the development of measures

Including a consultation with children: as done by The Children's Society and The Good Childhood Index, the wording of the questions was refined where these were not initially easily understood by children. They made sure that "children enjoy being asked these questions and that the topics are important to them".

Another approach is to frame the exercise asking children to be 'helpers'; that is, if they don't understand a question, many more children who would also struggle<sup>16</sup>.

<sup>15</sup> Ben-Arieh et al., 2013.

<sup>16</sup> See Marsa-Sambola et al., 2016.

### Different ways to engage children and young people in the development of measures (continued)

Furthermore, people of different ages and from backgrounds may interpret concepts differently, so you need to make sure that the language chosen is adequate. For instance, 'natural environment' can be differently understood between rural and urban children.

**Setting or practice field in which the metric has been tested or developed incl. literature reference** (e.g. medicine, education, social care, charity, sports) – Some measures have been used more often in specific practice settings such as schools, healthcare institutions or charities. If available, this information is included in the bank to help practitioners inform their work. For example, the 'Short Attachment to Pets Scale' has been tested in:

- *Education settings (Marsa-Sambola et al 2016)*

**Population groups in which the metric has been tested used or developed** (e.g. age category, genders, geography, special education needs, underlying health conditions or other vulnerable groups) – Some measures have been tested and validated for particular purposes or populations of children and young people. If available, this information is included to inform practitioners who work in similar settings or researchers who want to further validate the measure for other populations. For instance, the 'Cambridge Hormones and Moods Friendship Questionnaire' has been tested for:

- *Refugee children and young people, aged 6-16 living in London, UK (Samara et al. 2020)*

**Reported construct validity (incl. reference)** – Indicators of construct validity assess if the items or scales accurately represent the concept that they are meant to measure and the extent to which they are generalisable to different populations. Evidence of construct validity is typically reported through Exploratory or Confirmatory Factor Analysis or Principal Component Analysis. As an example, construct validity evidence for the 'Student Life Satisfaction Scale (SLSS)' includes the following:

- *Factor analysis (PCA with varimax rotation) was carried out extracting one factor (total initial eigenvalue 3.75) explaining 53.6% of the total variance. This suggests that the seven items measure a single construct (Rees et al 2010).*

**Reported internal consistency (incl. reference)** - The most commonly used assessment of internal validity is Chronbach's alpha ( $\alpha$ ), with coefficients above .70 considered adequate<sup>17</sup>. In multiple-item tools, different subscales can have different levels of internal consistency or reliability, therefore we indicate reliability measures for each corresponding sub-scale when possible. Also, reliability of a specific measure can vary across populations and settings, therefore we provide information of the sample for which reliability was reported. The following examples correspond to the 'Multidimensional Students Life Satisfaction Scale (MSLSS)' and the 'Strengths and Difficulties Questionnaire (SDQ)':

- *[Family subscale] Cronbach's  $\alpha$  = 0.896 (Rees et al., 2010)*
- *Cronbach's  $\alpha$  = .73-.84 for a sample of refugee children aged 6-16, living in in*

<sup>17</sup> Nunnally and Bernstein, 1994.

London, UK (Samara et al., 2020).

- Cronbach's  $\alpha = .77$  for a sample of 280 children, aged 9–11 years, in English primary schools, years 5 and 6 (Moore and Smith, 2017).

**Other validation properties reported** (e.g. inter-class correlation) (incl. reference) – This field contains any other validation properties reported which can include item-total correlation (with coefficients above 0.2 considered adequate)<sup>18</sup>, test-retest (measure that ensures whether responses are accurate by comparing how the same person responds to the same question at two different points in time), inter-rater reliability (which assesses whether there is cross-informant agreement between, for instance, teachers and students), criterion validity, concurrent validity, and predictive validity, among others<sup>19</sup>.

## 6. Availability of benchmarking and norms

Survey databases that include metric – It can be useful for comparability if the item or scale has been included as part of larger survey studies, from which a benchmark has been created. Through the REA we found that a number of measures of children and young people's subjective wellbeing have been included in larger scale databases such as:

- *International Survey of Children's Wellbeing (ISCWeB) by Jacobs Foundation - Children's World*
- *Health Behaviour in School-Aged Children (HBSC) by the World Health Organisation*
- *Millennium Cohort Study (MCS) by UCL*
- *Programme for International Student Assessment (PISA) by the OECD*
- *British Household Panel Survey (BHPS) and Understanding Society by ISER*
- *Gallup's World Poll*

**Link to latest data release** – This field contains the web address (URL) linking to the most recent available source of comparative data for each measure if available.

**Link to normative data (thresholds, averages, etc.)** – This field contains the web address (URL) linking to available sources of normative data, commonly reported by the developers of the measure or tool.

## 7. Administration conditions

**Licensing / Institutional owner** – Copyright and licensing information to correctly acknowledge intellectual property rights of each measure.

**Link to forms / questionnaires** – This field contains the web address (URL) linking to the metric questionnaire or survey forms, primarily in English.

**Cost** – Because monetary resources will also impact on the decision of which measure

<sup>18</sup> Streiner and Norman, 2003.

<sup>19</sup> Wigelsworth et al., 2017.

select, we include information on whether the tool is:

- Free (no permission required)
- Free (registration required)
- Priced

Whenever measures are priced, further information about the charging structure (e.g. cost single purchase, cost per child) is provided under the field 'OTHER implementation characteristics'.

**Length / time of administration** – The length of the measure or tool is important to consider when working with children and young people as this can negatively impact on survey completion, non-response level, attrition and also reliability of responses. Whenever it is available, we provide information about the time taken to complete. For instance, 'Kidscreen-52' normally takes 15-20 minutes to complete.

**Is it self-reported?** – Evidence on whether the metric is designed to be self-reported, that is, answered directly by children or young people and not through proxy responders such as parents, guardians, carers, teachers or doctors. Possible values are:

- yes
- no
- undefined

*Note that self-reported measures include those whose answers are recorded by a surveyor at the moment of implementation, as long as those questions capture the children's own report and not the observation of the surveyor. Because subjective wellbeing questions are often (but not always) self-reported, it is likely that most of the rows in this column will be valued as 'yes'. However, in many cases it is not obvious from the literature that the instrument is meant to be self-reported, therefore we have labelled those as 'undefined'.*

**Administration mode (one-on-one, group, paper, computer, telephone, postal mail, CAPI, etc)** – Information, where available, about the modes of delivery that the measures have either been validated against or used in relevant published studies<sup>20</sup>. You need to consider how your chosen mode of data capture impacts ethical considerations (see Section 3) and the data protection requirements (see Section 4).

**Suggested citation** – Some developers have included in the terms of reference of the measure a suggested citation for when the measure is implemented. For instance, developers of the 'Adolescent and Adult Time Inventory' recommend to use the following citation for the English version of the tool:

- *Mello, Z. R. and Worrell, F. C. (2007) The adolescent and adult time inventory – English. Berkeley: Authors.*

<sup>20</sup> For more information about the equivalence of paper and computer survey formats for children see Patalay et al., 2014.

## 8. A suggested selection of measures

We developed a scoring scheme to assess the overall quality of each metric and thus help users to identify which of all the options in the bank are, according to our criteria, the best quality measures.

As outlined in the table on the next page, the scoring scheme consists of only five items or questions that are assigned the value of 1 (yes) if the metric meets such a condition, and 0 (no) if there is no evidence that the metric meets such criterion.

The total score is obtained simply by summing up the values, thus ranging from 0 to 5.

Higher values indicate better quality measures of children and young people's subjective wellbeing.

| Question (field)   | Score         |
|--|---------------|
| Originally designed for children (vs adapted from adult scale)?                  | 0/1           |
| Is it obtainable at no cost?   | 0/1           |
| Is there interpretation guidance available (norms, categories, thresholds, etc)? | 0/1           |
| Is it included in any national survey or dataset (source of open data)?          | 0/1           |
| Are there published psychometrics for (any) UK population?                       | 0/1           |
| <b>Total score</b>   | <b>0 to 5</b> |

## 9. Help us keep this bank up-to-date

You will notice that several measures have incomplete information for some of the fields. The Rapid Evidence Assessment allowed us to quickly identify multiple instruments to measure children and young people's subjective wellbeing and few of their basic characteristics, such as the author and date of creation. However, this methodology does not lend itself to rapidly and systematically fill in all the more detailed fields of information about each metric, fields that ultimately will be crucial to critically assess how good the measures are.

We will continue to compile the information as long as our resources allow us, for instance, to cross-check targeted literature reviews. In parallel, should you have some of this lacking information at hand or if you wish to suggest amendments or updates to the current information, you are welcome to do so [by filling in the corresponding fields of this form](#) (which closely follows the structure of the bank). Please use a different form for each metric you would like to edit. Practitioners and the research community will benefit enormously from your contribution.

## Part 3

# Making sense of your data

So how do you intend to use the information you collect from children and young people?

Subjective wellbeing indicators will be good direct outcome measures if they are carefully applied and interpreted<sup>21</sup>. Depending on your purpose, these measures can be used to:

1. Give an overall picture of how a population of children and young people are faring in given circumstances at aggregate level (e.g. UK accountability of how young adults are doing during the pandemic);
2. Diagnose or identify groups that are experiencing low wellbeing and for whom services need to be improved (e.g. individual case working tools);
3. Evaluate change and impact of given policies or actions (e.g. an evaluation of the #BeeWell programme<sup>22</sup>)

### 1. Looking at population distributions beyond averages

Population benchmarking is helpful when you wish to analyse changes of a population over time at the aggregate level, or similar populations at one point in time, as to give you an idea of how that group is performing compared to given accepted standards.

There are different types of benchmarks. Focussing on averages can hide important underlying variation within and between population groups, places or regions. In addition, when comparisons are made over time, increases in averages may be entirely due to improvements among those with higher levels of wellbeing. Put differently, you may observe an increase in the average at the same time that those with the lowest levels of wellbeing are unaffected<sup>23</sup>. We recommend looking at the full distribution of responses, particularly in policy informing research which is concerned with the improvement of children and young people with low wellbeing.

In addition, collapsing the distribution of responses into different levels of wellbeing can ease interpretation of scales with several response options. The ONS, for instance,

<sup>21</sup> Thompson and Aked, 2009.

<sup>22</sup> The University of Manchester, 2021.

<sup>23</sup> What Works Centre for Wellbeing, 2017.

defines people with low wellbeing as those rating between 0 and 4 on the 11-point scale of Life Satisfaction.

Inequalities in wellbeing show the gap between those who feel their lives are progressing well and those who feel they are languishing<sup>24</sup>. They can show differences between groups, such as between females and males, between those in and out of school, or between areas. They can also show differences in wellbeing within a certain group.

### Other ways to report wellbeing inequalities

*Standard deviation (SD)* – represents how much the scores for individual members of a group differ from the mean value for the group. A large SD of subjective wellbeing implies a greater spread of responses within the group; a less equal distribution. This is calculated as the square root of the average square difference between individual scores within a group and the mean score across the group.

*Mean Paired Distance (MPD)* – a statistical measure of dispersion, also known as mean absolute difference. In this context, MPD is equal to the average absolute difference in wellbeing scores between two people drawn at random from the sample. In practice we can calculate it by taking the average absolute differences in scores between all survey participants. It is more complicated to measure than the SD, and also more difficult to test for meaningful differences between groups or changes over time. However, the principle is easy to understand and in contrast to the SD it is independent of the mean.

*Mean wellbeing of the bottom 40%* – can provide a useful focus on those with the lowest wellbeing and those who are struggling the most. To calculate, the scores are listed in ascending order and then the set of scores are partitioned into five equal parts. The mean is calculated for the lowest two parts combined. A t-test can be used to compare the difference between groups or change over time. Ordinary Least Squares regression on the bottom 40% can be used to test whether differences between groups are significant while controlling for other factors.

*80:20 difference* – represents the difference between the mean of the top 20% to the mean of the bottom 20% of scores. To calculate, the scores are listed in ascending order and partitioned into 5 equal parts. The means of the top 20% and bottom 20% are calculated. The mean of the bottom 20% is subtracted from the mean of the top 20%.

*Source: What Works Centre for Wellbeing, 2017.*

## 2. Identifying specific low-wellbeing groups

If you wish to analyse the wellbeing level of a particular group of children and young people and interpret those findings in relation to how other groups are doing, then it may be helpful to also gather data on key variables that you think can explain part of those

<sup>24</sup> What Works Centre for Wellbeing, 2017.

differences. Typically, survey studies with large samples of children and young people include socio-demographic variables such as gender, age band, ethnicity, disability status, learning difficulties, family characteristics, etc. These variables will allow you to learn more about diversity and representation of low-wellbeing groups. You just need to make sure you have large enough groups to avoid individual identification (see Part 1, section 3).

Benchmarks can also be a helpful resource for practitioners to plan what aspects of a given service or action need to be improved or which specific subgroups are fearing worse and need more attention.

In such cases it is important that you use the metric with the original wording and response categories determined by the developers to retain as much comparability as possible. If a measure has been well-validated and has good properties then it would be sensible to avoid making any changes as this may create bias, affecting the validity of the measure and the usefulness of the results<sup>25</sup>.

Rephrasing or slightly modifying the wording of an original measure to adapt it to your sample can be recommended in exceptional cases where culture or context-specific language affects the interpretation of a phrasing or word. If changes are made ideally the instrument should go through a validation process again. Prior to that, it might also be a good idea to contact the original developers of the measure and ask them what they think about the modifications you plan to do.

### 3. Measuring change and impact

If you are measuring children and young people's subjective wellbeing with the purpose of observing 'meaningful change' it is worth considering the level of 'responsiveness' of different measures.

For example, ratings of life satisfaction (evaluative aspects of wellbeing) tend to be more stable than affective aspects of wellbeing<sup>26</sup>. Therefore, if looking to measure change in the short-term, life satisfaction measures might not be the most sensitive option.

Responsiveness or sensitivity of measures will be a relevant aspect to consider if you are measuring change by comparing to normative data, standard thresholds or other benchmarks.

If your purpose is to measure the impact of a given intervention through, for instance, a Randomised Control Trial (RCT), then normative data are less important because a benchmark is being created in that case.

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25 Wigelsworth et al., 2017.

26 Ryff, 1989.



## Common measures used in wellbeing evaluation studies with children and young people

Evaluations are a particularly useful source of evidence thanks to the insight they provide into causation: whether, and to what extent, and for whom interventions improve wellbeing.

In October 2020, the What Works Centre for Wellbeing published the findings from a Rapid Evidence Assessment of wellbeing impact evaluations that used the ONS4 subjective wellbeing measures with UK adult populations<sup>27</sup>. Building on this work, the authors conducted full reviews of 1044 studies that were initially excluded from the REA because they were aimed at non-adult people, delivered outside of the UK or uses a much wider range of wellbeing measures.

Among the excluded studies, the review team found 19 wellbeing evaluations of interventions with children and young people delivered in the UK, and the majority used measures other than the ONS4.

There were only 3 evaluation studies using the ONS4 measures of personal wellbeing:

- A government-backed initiative providing young people with activities to promote their personal, social and civic development.
- A curriculum programme designed to boost pupils' academic achievement through improving their non-cognitive skills, which include motivation, resilience and self-regulation.
- A community-based music initiative designed and implemented to support the wellbeing of disadvantaged young people in Scotland.

The other 16 evaluations used other subjective wellbeing measures, including:

- Rosenberg Self-Esteem Scale
- S/WEMWBS Scales
- Stirling Children's Wellbeing Scale
- Ryff Psychological Wellbeing Scale
- WHO-5
- Satisfaction with Life Scale for Children

The evaluations identified for children and young people covered a range of primary thematic areas, such as family and parental and social relationships, mental health and psychological wellbeing, physical health, social care, anti-social behaviour, arts and culture, and school-related wellbeing.

Nearly half of the studies were of interventions targeting vulnerable or at risk children and young adults, including children with physical and mental health issues, children at risk of social deprivation and isolation, sexually exploited young people and children with substance-misusing parents.

27 Peto, Pittam and Musella, 2020.

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## Appendix 1: Measures identified and excluded from bank (n=58)

| Measure   | Reference                                     | Reason for exclusion   |
|---|---|--|
| Adolescent Alcohol Involvement Scale (AAIS)   | Mayer and Filstead, 1979                      | Health risk behaviour  |
| Adolescent Physical Activity Questionnaire (PAQ-A)  | Kowalski, Crocker, and Faulkner, 2007         | Not subjective wellbeing   |
| Affect Intensity and Reactivity Scale for Youth (AIR-Y)                                   | Jones, et al., 2009                           |  |
| All About Me Questionnaires   | -   | Qualitative  |
| Brief Sensation Seeking Scale (BSSS-4)  | Stephenson, Hoyle, Palmgreen and Slater, 2003 | Risk taking behaviour  |
| Bullying and Victimization Questionnaire  | Samara et al., 2020                           | Measure of bullying occurrence   |
| Bullying Experiences - Frequency (Primary School) / (Secondary School)                    | Bounce Together, 2021                         | Measure of bullying occurrence   |
| Bullying Experiences & Bullying Behaviours  | Bounce Together, 2021                         | Measure of bullying occurrence   |
| California Healthy Kids Survey - The Resilience Scale of the Student Survey               | Sun and Stewart, 2007                         | Survey developed by State of California that led to the development of the SRS |
| Child PTSD Symptom Scale (CPSS)   | Foa, Johnson, Feeny and Treadwell, 2001       | Diagnostic tool  |
| Child and Adolescent Symptom Inventories (CASI)   | Gadow and Sprafkin, 2002                      | Adult report diagnostic tool   |
| Child Health and Illness Profile – Child Edition (CHIP-CE) / Adolescent Edition (CHIP-AE) | Starfield et al., 1993                        | Clinical assessment tool   |
| Compassionate Engagement and Action Scales  | Gilbert, Catarino, Duarte, et al., 2017       | Adult orientated language but might be room for a CYP version                  |
| Depression Anxiety Stress Scale (DASS-21)   | Lovibond and Lovibond, 1995                   | Mental health measure  |
| Difficulties in Emotional Regulation Scale (DERS-16)                                      | Bjureberg et al., 2016                        | Measure of emotional regulation  |
| Emotional Behaviour Scale (EBS)   | Clarbour and Roger, 2004                      | Measure of emotional regulation  |
| Emotional Literacy: Assessment and Intervention (ELAI)                                    | Southampton Psychology Service, 2003          | Emotional literacy   |
| Emotional Literacy Checklist (ELC)  | Southampton Psychology Service, 2003          | Emotional literacy   |
| Emotional Regulation Index for Children and Adolescents (ERICA)                           | MacDermott et al., 2010                       | Measure of emotional regulation  |

## Continued: Measures identified and excluded from bank (n=58)

| Measure  | Reference                                     | Reason for exclusion                                |
|--|---|---|
| Emotional Regulation Q-Scale (Q-Scale)   | Shields and Cicchetti, 1997                   | -   |
| Edinburgh Study of Youth Transitions and Crime (ESYTC) - School Misbehaviour Subscale                            | McAra and McVie, 2018                         | Survey, not a measure                               |
| Emotional Regulation Questionnaire   | Gross and John, 2003                          | Adult version of ERQ-CA                             |
| Feeling Good, Living Life Measure of Spiritual Wellbeing   | Fisher, 2004                                  |   |
| Friedman Well-being Scale  | Friedman, 1994                                | For adults  |
| Gatehouse Bullying Scale (GBS)   | Bond, Wolfe, Tollit, Butler, and Patton, 2007 | Measure of bullying occurrence                      |
| Global Functioning: Social (GF-Social) and Global Functioning: Role (GF-Role) Scales                             | Carrión et al., 2018                          | Measures specific to functioning with Schizophrenia |
| Group Session Rating Scale (CGSR)  | Duncan and Miller, 2007                       | Feedback tool                                       |
| Health Related Quality of Life Measure for Adolescents and Young Adults Following Invasive Meningococcal Disease | Shevlin et al., 2016                          | Measure for specific disease                        |
| Juvenile Victimization Questionnaire (JVQ)   | Hamby, 2005                                   | Objective measure of exposure to victimization      |
| Kessler-10   | Kessler et al., 2002                          | Diagnostic tool                                     |
| Kid Cope I / II  | Spirito, Stark and Williams, 1988             |   |
| Liking for School / Trust in, and Respect for Teachers   | Battistich et al., 1995                       | Based on US population                              |
| Making Decisions in Everyday Life Scale  | Mincemoyer and Perkins, 2003                  | Skills/function based questions                     |
| Me and My Life Questionnaire   | -   | Survey for specific project, not a measure          |
| Measure of Delinquent Social Identity (MDSI)   | Boduszek and Debowska, 2017                   | List as specific to YOT                             |
| Mental Health Continuum - Short Form   | Keyes, 2005                                   | Mental health measure                               |
| Mental Health Knowledge Schedule (MAKS)  | Evans-Lacko et al., 2010                      | Mental health literacy measure                      |
| Mental Health Literacy Questionnaire   | Campos et al., 2014                           | Mental health literacy measure                      |
| Modified Aggression Scale - Bullying Subscale  | Bosworth et al., 1999                         |   |

## Continued: Measures identified and excluded from bank (n=58)

| Measure   | Reference                                     | Reason for exclusion   |
|---|---|--|
| Multidimensional Adolescent Functioning Scale (MAFS)                            | Wardenaar et al., 2012                        | Measure of functioning and no English version found                            |
| Multidimensional Peer-Victimization Scale (MPVS)                                | Mynard and Joseph, 2000                       | Objective measure of exposure to different types of victimization              |
| Paediatric Quality of Life (Child Health Utility-9D, CHU9D)                     | Stevens, 2009                                 |  |
| Paediatric Index of Emotional Distress (PI-ED)                                  | GL Assessment Ltd, 2010                       | Diagnostic tool  |
| Perceived Empathic Self-Efficacy (PESE) / Perceived Social Self-Efficacy (PSSE) | Di Giunta et al., 2010                        | From Swel, so 12-25.   |
| PGI Well-being Scale  | Verma et al., 1983                            | Study of a known wellbeing scale   |
| Popularity Questionnaire  | Samara et al., 2020                           |  |
| Problem Behavior Frequency Scale - Adolescent Report (PBFS-AR)                  | Farrell, Sullivan, Goncy, & Le, 2016          | Measure of behaviours  |
| Quality of Life in Short Stature Youth (QoLISSY)                                | The European QoLISSY Group, 2013              | Specific measure for specific condition  |
| Regulation of Emotions Questionnaire (REQ)                                      | Phillips and Power, 2007                      | Variant of the Emotional Regulation Questionnaire                              |
| Reported and Intended Behaviour Scale (RIBS)                                    | Evans-Lacko et al., 2011                      | Measure of behaviour   |
| SF-10 Short-Form Health Survey for Children                                     | Turner-Bowker et al., 2003                    | Parent report  |
| SF-12 Short-Form Health Survey  | Ware, Kosinski and Keller, 1996               | Measure of physical health   |
| Social and Emotional Health Survey  | Furlong et al., 2014                          |  |
| Social and Occupational Functioning Assessment Scale (SOFAS)                    | American Psychiatric Association, 1994        |  |
| Student Survey Questionnaire of Cyberbullying                                   | Campbell, Spears, Slee, Butler and Kift, 2012 | Victimisation diagnostic   |
| Trait Emotional Intelligence Questionnaire - Adolescent Short Form (TEIQue-ASF) | Petrides, 2009                                |  |
| Trauma Symptoms Checklist for Children - Alternate Form (TSCC-A)                | Briere, 1996                                  | Used to measure psychological wellbeing but it actually measures mental health |
| Wechsler Individual Achievement Test, Second Edition (WIAT-II)                  | Wechsler, 2005                                | Measure of IQ  |

## Appendix 2: Measures identified currently under assessment for inclusion (n=80)

| Measures identified   | Reference                                 |
|---|---|
| Adaptability Scale  | Martin et al., 2013                       |
| Adolescent Body Image Satisfaction Scale for Males (ABISS)                  | Leone et al., 2014                        |
| Adolescent Dispositional Hope Scale   | Pacico, Bastianello, Zanon and Hutz, 2013 |
| Affect and Arousal Scale (AFARS)  | Chorpita et al., 2000                     |
| Affectometer  | Kammann and Flett, 1983                   |
| Anger Rumination Scale (ARS)  | Sukhodolsky et al., 2001                  |
| Attitudes Towards School Scale  | Anderson, 1999                            |
| Behavioural and Emotional Reactivity Index (BERI)                           | Bartle and Sabatelli, 1995                |
| Body Esteem Scale (BES)   | Mendelson, Mendelson and White, 2001      |
| Boxall Profile  | Boxall, 1984                              |
| Brief Resilience Scale  | Smith et al., 2008                        |
| Child and Youth Resilience Measure - Child Version                          | Ungar and Liebenberg, 2011                |
| Child Behaviour Checklist (CBCL) - Youth Self Report (CBCL)                 | Achenbacht, 1991                          |
| Child Health Utility - 9 Dimension (CHU-9D)                                 | Stevens, 2012                             |
| Child Oral Health Impact Profile - Short Form (C-OHIP-SF19)                 | Sischo and Broder, 2011                   |
| Child Psychosocial Distress Screener (CPDS)                                 | Jordans et al., 2009                      |
| Children's Depression Inventory - Short Form                                | Kovacs and Beck, 1977                     |
| Children's Sadness Management Scale (CSMS)                                  | Zeman et al., 2001                        |
| COPE Scale - Brief  | Carver, 1997                              |
| Coping Strategy Indicator (CSI-15)  | Ellis, 2004                               |
| Cross-ethnic Friend Affirmation   | Bagci et al., 2017                        |
| Development and Wellbeing Assessment (DAWBA)                                | Goodman et al., 2000                      |
| Devereux Student Strengths Assessment (DESSA)                               | Nickerson and Fishman, 2009               |
| Ego-Resiliency Scale (ERS)  | Block and Kremen, 1996                    |
| Emotion Expression Scale for Children (EESC)                                | Penza-Clyve and Zeman, 2002               |
| General Help-Seeking Questionnaire (GHSQ)                                   | Wilson et al., 2005                       |
| Health of the National Outcome Scale for Children and Adolescents (HoNOSCA) | Gowers et al., 1998                       |
| How Are You?  | Bullinger et al., 2002                    |

## Continued: Measures identified currently under assessment for inclusion (n=80)

| Measures identified  | Reference                                   |
|--|---|
| Scale of Positive and Negative Experience (SPANES)                 | Diener et al., 2009                         |
| School Concerns Questionnaire (SCQ)                                | Thomasson, Field, O'Donnell and Woods, 2006 |
| Screen for Child Anxiety Related Emotional Disorders (SCARED)      | Birmaher et al., 1999                       |
| Self-Esteem Measure for Delinquents (SEM-D)                        | Debowska, Boduszek and Sherretts, 2017      |
| Self-Perception Profile for Children (SPPC)                        | Harter, 1985                                |
| Self-Worth Contingency Questionnaire (SWCQ)                        | Burwell and Shirk, 2003                     |
| Significant Others Scale (SOS)                                     | Power, Champion and Aris, 1988              |
| Social Functioning Scale (SFS) of the Lehman Quality of Life Scale | Lehman, 1988                                |
| Social Physique Anxiety Scale for Children (SPAS-C)                | Leary and Rejeski, 1989                     |
| Social Emotional Health Survey-Primary (SEHS-P)                    | SEHS System. (n.d.)                         |
| Spence Children's Anxiety Scale - Child Version (SCAS)             | Spence, 1997                                |
| State Self Esteem Scale (SSES)                                     | Heatherton and Polivy, 1991                 |
| Student Perception of Wellbeing Questionnaire (SPWQ)               | Taylor, 2015                                |
| Student Questionnaire  | Battistich et al., 1995                     |
| Subjective Vitality Scale  | Ryan and Frederick, 1997                    |
| Sustained Shared Thinking and Emotional Wellbeing Scale (SSTEW)    | Siraj, Kingston and Melhuish, 2015          |
| Thinking and Feeling Questionnaire                                 | Zoll and Enz,                               |
| Trait Meta-Mood Scale (TMMS)                                       | Salovey et al., 1995                        |
| Victimization by school-based peers                                | Whitney and Smith, 1993                     |
| World Health Organization's Brief Quality of Life (WHOQOL-BRIEF)   | WHO, 1996                                   |
| Youth Empowerment Scale (YES)                                      | Grealish, 2014                              |
| Youth Life Orientation Test  | Ey et al., 2004                             |
| Youth Outcome Questionnaire - Self-Report (Y-OQ-SR)                | Ridge et al., 2009                          |
| Youth Physical Activity Promotion model (YPAP)                     | Rowe, Raedeke, Wiersma and Maharl, 2007     |
| Youth Resiliency: Assessing Developmental Strengths (YR:ADS)       | Donnon and Hammond, 2003                    |



### Appendix 3: Measures included in bank (n=92)

| Measure  | Reference   |
|--|---|
| Adolescent and Adult Time Inventory - Time Attitudes Scale (AATI-TA)   | Mello and Worrell, 2007                             |
| Adolescent Interpersonal Competence Questionnaire (AICQ)               | Buhrmester, 1990                                    |
| Adolescent Stress Questionnaire (ASQ)                                  | Byrne, Davenport and Mazanov, 2007                  |
| Anger Rumination Scale (ARS)   | Sukhodolsky et al., 2001                            |
| Basic Psychological Need Satisfaction and Frustration Scale            | Ryan and Deci, 2000                                 |
| BBC Wellbeing Scale  | Kinderman et al., 2011                              |
| Beck Anger Inventory for Youth (BANI-Y)                                | Beck, 2005  |
| Beck Anxiety Inventory for Youth (BAI-Y)                               | Beck, 2005  |
| Beck Depression Inventory for Youth (BDI-Y)                            | Beck, 2005  |
| Beck Self-Concept Inventory for Youth (BSCI-Y)                         | Beck, 2005  |
| Behavioural and Emotional Rating Scale (BERS)                          | Buckley and Epstein, 2004                           |
| Body Esteem Scale for Adolescents and Adults                           | Mendelson, Mendelson and White, 2001                |
| Bright Spots   | Coram Voice, 2015                                   |
| Cambridge Hormones and Moods Friendship Questionnaire                  | Goodyer, Wright and Altham, 1989                    |
| Cantril Self-Anchoring Striving Scale (Cantril's Ladder)               | Cantril, 1965                                       |
| Child Adolescent Mindfulness Measure (CAMM)                            | Greco et al., 2011                                  |
| Child and Adolescent Wellness Scale (CAWS)                             | Copeland and Nelson, 2004                           |
| Child and Youth Resilience Measure (CYRM)                              | Ungar et al, 2008                                   |
| Child Health Questionnaire (CHQ-CF87)                                  | Landgraf, Grieken and Raat, 2018                    |
| Child Health Questionnaire (CHQ-CF45)                                  | Landgraf, Grieken and Raat, 2018                    |
| Children's Hope Scale (CHS)  | Snyder et al., 1977                                 |
| Children's Outcome Rating Scale (CORS)                                 | Miller and Duncan, 2000                             |
| Cognitive and Affective Mindfulness Scale - Revised (CAMS-R)           | Feldman, Hayes, Kumar, Greeson and Laurenceau, 2006 |
| Coopersmith Self-Esteem Inventory-Long Form (SEI)                      | Coopersmith, 1981                                   |
| Culture-Free Self-Esteem Inventory - Second Edition (CFSEI-2)          | Battle, 2002  |
| Daily Life Stressors Scale (DLSS)                                      | Kearney et al., 1993                                |
| Emotion Regulation Questionnaire for Children and Adolescents (ERQ-CA) | Gullone, 2011                                       |
| EPOCH  | Wille et al., 2010                                  |

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|--|---|
| EuroQol 5 Dimension - Child Version (EQ-5D-Y)                      | Wille et al., 2010  |
| Flourishing Scale  | Diener et al., 2009   |
| Friendships Qualities Scale (FQS)                                  | Parker & Asher, 1993  |
| General Health Questionnaire - 12-Item (GHQ-12)                    | Goldberg and Williams, 1988   |
| General Self-Efficacy Scale (GSE)                                  | Sherer et al., 1982   |
| Generic Children's Quality of Life Measure (GCQ)                   | Collier, MacKinlay and Phillips, 2000   |
| Global Health  | -   |
| GM Life Readiness Survey   | Greater Manchester Combined Authority (GMCA) and Youth Combined Authority, 2010 |
| Good Childhood Index   | The Children's Society, 2010  |
| Health Behaviour in School-Aged Children Survey Questions (HBSC)   | Health Behaviour in School-aged Children (HBSC) Network, 2014                   |
| How I Feel About Myself and School Questionnaire                   | McLellan and Steward, 2015  |
| Kidscreen - 52   | The KIDSCREEN Group Europe, 2006  |
| Kidscreen - 27   | The KIDSCREEN Group Europe, 2006  |
| KINDL (Kid)  | Bullinger, 1994   |
| KINDL (Kiddo) Children's Version/Teengers' Version                 | Bullinger, 1994   |
| Life-Satisfaction in Adolescents Scale                             | Funk et al., 2006   |
| Loneliness and Social Satisfaction Scale                           | Asher et al., 1984  |
| Me and My School / Me and My Feelings                              | Deighton et al., 2012   |
| Middle Year Development Instrument (MDI)                           | Schonert-Reichl, 2011   |
| Moods and Feelings Questionnaire - Long Version (MFQ-33)           | Angold and Costello, 1987   |
| Moods and Feelings Questionnaire - Short Version (MFQ-13/SMFQ)     | Angold and Costello, 1995   |
| Multidimensional Students Life Satisfaction Scale (MSLSS)          | Huebner, 1991   |
| Multidimensional Students Life Satisfaction Scale - Brief (BMSLSS) | Huebner, 2001   |
| Offer Self-Image Questionnaire for Adolescents (OSIQ)              | Offer, 1962   |
| ONS Anxiety  | ONS, 2011   |
| ONS Happiness  | ONS, 2011   |
| ONS Life Satisfaction  | ONS, 2011   |
| ONS Life Satisfaction (The Children's Society version)             | The Children's Society, 2013  |
| ONS Worthwhile   | ONS, 2011   |
| Paediatric Symptom Checklist - Youth Self-Report (PSC-Y)           | Jellinek et al., 1988   |
| Perceived Self-Efficacy Questionnaire                              | Muris, 2001   |
| Personal Wellbeing Index-School Children (PWI-SC)                  | Cummins and Lau, 2005   |

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| Piers–Harris Self-Concept (PH)   | Piers and Harris, 1969   |
| Piers–Harris Self-Concept (PH-2)   | Piers, 2002  |
| Positive and Negative Affect Schedule - Children 30-item version (PANAS-C)   | Watson, Clark and Tellegen, 1988   |
| Positive and Negative Affect Schedule - Children 10-item version (PANAS-C)   | Watson, Clark and Tellegen, 1988   |
| Profile of Mood States Questionnaire – Adolescent (POMS-A)                   | Terry et al., 1999   |
| Psychological General Well-being Index (PGWBI)                               | Dupuy, 1984  |
| Resilience Scale (RS-14)   | Wagnild and Young  |
| Resilience Scale for Adolescents (READ)                                      | Hjemdal et al., 2006   |
| Resiliency Scales for Children and Adolescents (RSCA)                        | Prince-Embury, 2001  |
| Revised Child Anxiety and Depression Scale (RCADS-25)                        | Chorpita and Spence, 1998  |
| Robson Self-Concept Scale  | Robson, 1989   |
| Rosenberg Self-Esteem Scale (RSES)   | Rosenberg, 1965  |
| Ryff Scales of Psychological Wellbeing                                       | Ryff, 1989   |
| Satisfaction with Life Scale - Children Version (SWLS-C)                     | Diener et al., 1985  |
| Self-Description Questionnaire I   | Marsh, 1992  |
| Self-Description Questionnaire II  | Marsh, Parker and Barnes, 1985   |
| Self-Efficacy Questionnaire for Children                                     | Muris, 2001  |
| Short Attachment to Pets Scale (SAPS)  | Muldoon and Williams, 2010   |
| Single Item Self Esteem Scale (SISE)   | Robins, Hendin and Trzesniewski, 2001  |
| Sport Climate Questionnaire  | Deci, 2001   |
| Stirling Children's Wellbeing Scale (SCWBS)                                  | Liddle and Carter, 2015  |
| Strengths and Difficulties Questionnaire (SDQ)                               | Goodman, 1997  |
| Student Life Satisfaction Scale (SLSS)                                       | Huebner, 1991  |
| Student Resiliency Survey (SRS)  | Sun and Stewart, 2007  |
| TNO-AZL Questionnaire for Children's Health-Related Quality of Life (TACQOL) | Brugman et al., 2000   |
| UCLA-3 Loneliness Scale  | Russell, 1996  |
| Understanding Society - Life & Family & Bullying                             | -  |
| Warwick Edinburgh Mental Wellbeing Scale (WEMWBS)                            | Tennant et al., 2007   |
| Warwick Edinburgh Mental Wellbeing Scale - Short Version (S-WEMWBS)          | NHS Health Scotland, University of Warwick and University of Edinburgh, 2006 |
| World Health Organisation- Five Well-Being Index (WHO-5)                     | WHO, 1998  |
| Youth Resiliency: Assessing Developmental Strengths (YR:ADS)                 | Donnon and Hammond, 2007   |
| Young Person's Clinical Outcomes in Routine Evaluation (YP-CORE)             | Twigg et al., 2009   |