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i-HOP Guidebook: Using the Quality Assessment Tool for research concerning Children of Offenders

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i-HOP Guidebook: Using the Quality Assessment Tool for research concerning Children of Offenders
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Introduction

The i-HOP Research and Evidence Quality Assessment Tool (or QAT for short) is designed to appraise the quality of research studies and pieces of evidence listed on the i-HOP website and found elsewhere. There are many different interpretations of what is meant by “research quality”, but for the purposes of the QAT this has been defined in relation to the aims and objectives of the i-HOP website. The QAT comprises of four sections that cover:

1. **Methodological robustness** – an assessment of the quality of the methods used to generate findings and information. It variously covers issues such as the appropriateness of methods, validity and reliability of data collection techniques and analysis, clarity of reporting, and the associated credibility of findings and conclusions.

2. **Child-centredness** – an assessment of the extent to which the item acknowledges the importance of the children’s perspectives and values the original contribution that they can make to research.

3. **Relevance to policy and strategy-level work** – an assessment of the extent to which the item provides findings and information that could helpfully inform policy and strategy-level work that is relevant to children of offenders.

4. **Relevance to practice** – an assessment of the extent to which the item provides findings and information that could helpfully inform practice with children of offenders.

Assessing the quality of research and evidence can be a challenging task, and requires the application of some technical knowledge as well as an inevitable degree of individual subjective judgement. The aim of this Guidebook is to provide readers with a step-by-step guide to administering the QAT to items relevant to the children of offenders. The Guidebook is intended to be used alongside the i-HOP QAT and is not designed to provide an exhaustive guide to research quality that could be applied universally to all fields of research.

To support the ease of administration, the Guidebook is arranged in the same order as the QAT. At each stage of the QAT process, key terminology is explained and hints and examples are provided. The Guidebook also indicates where relevant information is likely to be found within items, although there are likely to be some exceptions to the rule.
Part 1: Identification of item type

The first stage of administering the QAT involves identifying what type of research or evidence is being assessed – this is an important part of the process as it determines which sections of the tool need to be completed for that particular item. There are a couple of things to bear in mind when categorising items:

1. The QAT is designed to be applicable to as many different types of items related to the children of offenders as possible. This means that the system for categorising items needs to be fairly broad and flexible so that it can adequately encompass a variety of different types of research and evidence from a number of different disciplines. In practice, this means that many items will fit neatly into one category but occasionally an item might feel like it could belong in two or more categories. It is recommended that items are categorised according to their ‘best fit’ or where they seem to most closely belong.

2. When identifying more specific aspects of study design or methodology, there arises the question of whether items should be categorised according to what the author reports them to be or what you, as the reader, perceive them to be. For the purposes of administering the QAT, it is recommended that items are categorised according to descriptions offered by the author, unless this seems erroneous in which case it would be more appropriate to use your own judgement.

The first step is to categorise the item as (a) a primary research study, (b) a secondary review study, (c) a theoretical or conceptual piece, or (d) as falling within the ‘other’ category (see Box 1).

Box 1: Classifying items as primary, secondary, theoretical/conceptual or ‘other’

**Primary research studies** – these studies collect and analyse brand new data that has been collected first hand by the researchers (this is often called ‘raw data’).

**Secondary review studies** – these studies take existing data or findings, perhaps from primary research studies or governmental datasets, and either conduct additional analysis on the data or provide a summary of the findings. They are distinct from primary studies in that they do not involve the collection of original data.

**Theoretical or conceptual items** – these types of items are often concerned with developing a new theory, presenting a particular argument, or advocating for a change in policy or practice. Although primary and secondary studies might also make reference to theory or present arguments, conceptual items can be distinguished in that they are not concerned with the collection or analysis of raw data. Items of this type include policy analysis and critique, and expert opinion pieces.

‘Other’ – items that do not fall into any of the previous three categories but still provide useful information or evidence concerning children of offenders are categorised as ‘other’. Items of this type include newsletters and briefing documents.

As illustrated in the flowchart on the first page of the QAT, primary, secondary and theoretical/conceptual items are suitable to be assessed on all four dimensions including methodological robustness, child-centredness, relevance to policy and strategy and relevance to practice. Categorising an item as ‘other’ will mean that it is not assessed for methodological quality as this is unlikely to make sense for an item of this type. It is more likely that it will be possible to assess the item according to the remaining three dimensions. A somewhat flexible approach is needed when administering the QAT to ‘other’ items; this is the most diverse category and there might be occasional instances where it would not be appropriate to assess the item on certain dimensions.

Primary and secondary research studies need to be further categorised according to the specific approach that they have taken to the collection or handling of data or information (see boxes 2 and 3 respectively). It is important to note that the information provided in these boxes in not intended
to provide an exhaustive discussion of research designs, but hopefully provides just enough detail to enable the categorisation of items.

Box 2: Types of primary research studies

Experimental designs
Experimental designs might also be called ‘Randomised Control Trials’ [RCTs], ‘intervention designs’ or ‘randomised designs’. In this type of study, participants are randomly allocated to a treatment/intervention group and control/comparison group, and then the performance of the two groups on a given outcome is measured and compared. Due to the many practical and ethical difficulties associated with undertaking experimental studies, researchers more often adopt a quasi-experimental design (below).

Quasi-experimental design
Also called a ‘matched case-control design’ (or similar). These are similar to experimental designs (a treatment/intervention group, a control/comparison group, compared on an outcome measure). BUT participants are not randomly allocated to conditions, allocation will be based on other means (such as a needs assessment or local availability of an intervention). There are variations in how a quasi-experimental design might be achieved, but the important features to look for are (a) a treatment and control group, (b) the absence of randomisation but alternative rigorous steps to ‘control for’ unwanted differences between groups, and (c) comparison on an outcome measure.

Observational – quantitative
Observational research is different from experimental or quasi-experimental design. Most obviously, the study might only consist of one group of children who are exposed to some form of treatment, intervention or phenomenon but lack any form of comparison or reference group. For example, the study might examine the mental health of children of offenders but make no comparison to mental health outcomes amongst other groups of children.

Even where there is a comparison between two or more groups, either random allocation will be absent or there will be insufficient steps in the analysis to control for unwanted differences between the groups. For example, researchers might compare the mental health outcomes of children of offenders who participate in a counselling programme with those who do not. In this instance, detailed case files might provide ample background information on the treatment group, but the absence of comparable files for the control group mean that important information on their background is not available. Hence, the researchers cannot control for unwanted differences between the groups and cannot confidently state that differences in mental health outcomes were due to participation in the programme.

Observational studies can be quantitative or qualitative (below) in nature. The defining features of a quantitative study are the collection and analysis of numerical data often with a view towards ‘quantifying’ some kind of phenomenon. For example, a study might attempt to ‘score’ children of offenders on the severity of mental health problems. Quantitative studies might also attempt to estimate the number of prisoners with children, or count the number of services for families of prisoners in a particular geographical region. The most common method of quantitative data collection is perhaps a questionnaire, and the analysis tends to rely heavily on statistical procedures.

Observational – qualitative
Observational qualitative research still lacks the key features of experimental or quasi-experimental designs, but is noticeably different to a study that has used quantitative methods of data collection and analysis. Qualitative research is less interested in ‘quantifying’ phenomenon and more concerned with developing an in-depth understanding of participants’ experiences or perceptions. For example, a study might be concerned with developing an understanding of children’s experiences of witnessing parental arrest, or the impact of parental imprisonment on social relationships. Common qualitative methods of data collection include focus groups, unstructured or semi-structured interviews, observations and ethnographies. Analysis is more often conducted on text-based data (e.g. interview transcripts or observation notes) using
techniques such as thematic analysis, discourse analysis, grounded theory or interpretative phenomenological analysis (IPA).

**Observational – mixed methods**  
Still non-experimental in design, this type of research involves the collection and analysis of both quantitative and qualitative data using any combination of the available methods (e.g. questionnaires and interviews). The intention is often to combine the strengths associated with the individual methods to produce a more comprehensive account of the topic under investigation. A ‘true’ mixed methods approach integrates the collection and/or analysis of qualitative and quantitative in a very complementary fashion as opposed to treating the two datasets separately. For example, a study might administer a quantitative tool to establish the presence of mental health problems and then supplement this with interview data designed to uncover the ‘lived experiences’ of mental health difficulties.

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**Box 3: Secondary review studies**

**Secondary data analysis**  
This approach takes existing data, perhaps governmental datasets or data from primary research studies, and performs further analysis on it to fulfill the aims of the review.

**Meta-analysis/synthesis**  
A meta-analysis combines findings from a number of independent quantitative studies using statistical techniques (often ‘odds ratios’). This is often done with a view towards providing a more comprehensive assessment than smaller individual studies can. Some meta-analyses are more qualitative in nature, and hence are called a meta-synthesis.

**Systematic review**  
This type of review adopts a comprehensive, systematic approach to searching for literature on a given topic. They utilise multiple online search tools and manually check reference lists. Studies are screened for relevance, appraised for quality, and often synthesised using formal quantitative or qualitative methods. They represent a robust, high quality synthesis of evidence on a given topic.

**Non-systematic reviews and Rapid Evidence Assessments (REAs)**  
These reviews also aim to synthesise existing evidence on a given topic. They might borrow some of the methods from systematic reviews, but on the whole, they are not as comprehensive or rigorous.
Parts 2 – 4: Assessing Methodological Quality

After the item type has been identified, the next stage of the QAT involves assessing the methodological robustness of the item (with the exception of ‘other’ items). Part 2 assesses the methodological quality of primary research studies, part 3 secondary research reviews, and part 4 theoretical/conceptual items.

When assessing methodological quality there are a number of important considerations such as the appropriateness of the chosen methods to addressing the aims of the study, the suitability of sampling techniques, adherence to ethical principles and the clarity of reporting. Of particular importance are issues surrounding validity and reliability – Box 4 provides a general explanation of these terms and further hints and tips are provided throughout the Guidebook in relation to specific questions on reliability and validity. To ensure that the QAT remains practically feasible and useful, a selection of the most pertinent issues to assessing quality in these areas have been included.

Box 4: Validity and reliability explained

Validity refers to the extent to which the study measured what it was supposed to measure. There are two types of validity, internal and external:

Internal validity – do the methods employed actually measure what they claim to measure? For example, a quasi-experimental study that claims parental imprisonment causes behavioural problems among children but forgot to control for other significant influences such as the presence of existing conduct disorders would not be considered particularly valid.

External validity – did the methods employed provide a ‘true’ picture of the topic of interest? For example, a study that observes parent-child interaction in an artificial setting such as a university laboratory might not be a good reflection of the real interaction that occurs in a natural home environment.

Reliability refers to the extent to which the methods employed are able to produce consistent results. If a study can be repeated and still produce similar results, then the results might be considered more ‘trustworthy’. Again, reliability can be divided into internal and external:

Internal reliability – if the study was repeated on the same participants at a different point in time would it produce the same results?

External reliability – if the study was repeated in a different location would it produce the same results?

Of course, the aforementioned criteria do not apply equally to all types of items and might need to be assessed in a slightly different way depending on the item type. The flowchart on the first page of the QAT indicates which sections need to be completed for each item type. For example, a secondary review study, which is more specifically a meta-analysis, requires the completion of methodology sections 3a and 3b (of course followed by the sections for child-centredness, and relevance to policy and practice).

The remainder of this section lists all of the questions concerning methodological robustness. The meaning of each question is explained and key definitions and examples are provided where relevant.
A note on scoring individual questions:

The QAT is designed so that individual questions are scored on a three-point scale that ranges from ‘low’ to ‘high’:

- **Low** – the item does not meet the requirements of the question, or only meets the requirements at a superficial level. **Scores 0**
- **Medium** – the item satisfies the requirements of the question to a reasonable degree. **Scores 1**
- **High** – the item is very effective at satisfying the requirements of the question. **Scores 2**

There are two other response options available but it is recommended that these are used sparingly:

- **Cannot say** – the item provided insufficient information to enable this question to be answered. **Scores 0**
- **N/A (Not applicable)** – as noted above, the QAT is designed to be administered to diverse range of research and evidence, and although the questions are intended to be applicable to as many items as possible, there might occasions where it would be inappropriate to score an item on a particular question. **Scores 0**

(For more information regarding scoring see page 27)

Part 2: Methodological quality of primary research studies

2a. Questions that apply to ALL primary research studies

[1] The design and method employed are appropriate to addressing the aims of the study
Were the methods employed successful in providing data that enabled the original aims of the study to be addressed? For example, a qualitative approach such as unstructured interviews might be well suited to providing an in-depth understanding of perceptions or experiences, whereas a questionnaire survey might be more appropriate when trying to estimate the scale of a problem or the number of services. Even where methods appear to be well suited, if participants are unable to properly comprehend what is being asked of them they are unlikely to be successful.
*Where to look: methods section, results section, discussion/conclusion*

[2] The data collection and analysis are sufficient to address the aims of the study
Was the volume of data collected and the depth of the analysis sufficient to address the aims of the study? Consider things such as the sample size, response rate, level of detail in data collection tools, and depth of analysis.
*Where to look: methods section, results section, discussion/conclusion*

[3] The timeframe of the study is appropriate so that one could reasonably expect to observe the intended outcomes
Were the intended outcomes likely to be present at the time of data collection? This is likely to depend on the aims of the study, for example a short timeframe might be appropriate to examining the immediate impacts of witnessing a parent’s arrest, but a longer timeframe might be needed to examine the psychological or emotional effects of parental imprisonment.
*Where to look: methods section*

[4] The original aims of the study have been explicitly addressed
How clearly/explicitly the article addressed its original objectives? Was this made very obvious or was a little more effort required on behalf of the reader to ascertain this?
*Where to look: discussion/conclusion*
[5] Adequate reference is made to previous literature and this is suitably connected to the aims and/or design of the current study
A discussion of how previous literature informed the aims of the study is to be expected. This might be achieved by outlining the background to the study, highlighting gaps or flaws in previous research, or by demonstrating how the study contributes to existing knowledge. Previous literature might also be used to support or justify the methodological design of the study.
Where to look: literature review, and possibly methods section

[6] The findings of the study are interpreted in relation to previous literature, including theory and/or empirical findings
Is there an explicit discussion of the findings of the study in relation to previous literature? Does this highlight any points of agreement or disagreement?
Where to look: discussion/conclusion

[7] The findings and conclusions of the study are supported by the data
Are the findings and conclusions credible in the sense that they are clearly backed up by the data and/or analysis?
Where to look: results section, discussion/conclusion

[8] The aims and objectives of the study are clearly defined and articulated
Are the aims, objectives, research questions or hypotheses (as applicable) of the study clearly and unambiguously stated?
Where to look: introduction

[9] The article has a clear structure that helpfully guides the reader through the various steps of the study
Are ideas presented in a logical order to help the reader to understand the progression of the study? This will typically involve an introduction to the subject area, followed by a description of the methodology, presentation of findings, and a discussion or conclusion of the main points. Subheadings might assist with the organisation of ideas.
Where to look: throughout the article

[10] The article is written in a style that is accessible to most audiences
Are descriptions clear and points well explained? Ideally specialist/technical terminology and principles should be clearly defined and explained.
Where to look: throughout the article

[11] Ideas are explained clearly and in sufficient detail to enable the reader to understand the meaning associated with the study
Does the clarity and depth of the commentary really enable the reader to develop a thorough grasp of the meaning associated with the study?
Where to look: throughout the article

[12] The methods of data collection are described in sufficient detail to enable replication of the study
Is there a clear and detailed discussion of how the study was undertaken, including details on the recruitment strategy and sample characteristics, the methods of data collection employed, and the approach to analysis? Ask yourself whether you could conduct a very similar study based on what is written?
Where to look: methods section

[13] The authors(s) have openly declared any organisational affiliations, interests or sources of bias
Have the authors stated their place of work or any other affiliations that could potentially bias their interpretation of the data?
Where to look: usually declared alongside the author details, in a footnote on the first page, or in an endnote on the last page
[14] Sources of support and/or funding have been declared
Have the authors stated if funding was obtained for the research? This might be from a government agency, research council or university. Even if the research was self-funded, perhaps as part of postgraduate study, this should be made clear.
Where to look: usually declared in a footnote or endnote, or sometimes alongside the author affiliations

[15] Limitations of the study have been appropriately acknowledged
Have important limitations of the study been openly and honestly acknowledged, especially if they are severe? Ideally there will be a discussion of how these limitations might have affected the data collection and interpretation of findings.
Where to look: towards the end of the discussion/conclusion section

[16] The author(s) openly discuss findings that are inconsistent with their original theoretical position or predictions
The opening sections of the article are likely to convey whether the author(s) have any preferred theoretical positions or expectations about the outcomes of the study. Rather than only presenting findings that support their original positions or predictions, the author(s) should openly and honestly acknowledge any unexpected findings.
Where to look: introduction/literature review, discussion/conclusion

[17] The authors openly acknowledge findings that do not follow the general pattern of results, or are not entirely consistent with the main conclusions of the study
Any ‘blips’ in the data that do not follow the general pattern of results are inconsistent with the main conclusions of the study should be highlighted.
Where to look: discussion/conclusion

[18] Key ethical principles have been adhered to
Is there some indication that the study has been conducted in accordance with the key ethical principles that govern that particular discipline or country? If data has been collected in more than one country, it might be necessary to adapt ethical principles accordingly. As ethical principles vary across disciplines and countries it is difficult to provide a definitive list but it might include things such as obtaining informed consent, confidentiality, right to withdraw and minimising physical/psychological harm to participants.
Where to look: methods section

[19] There is evidence of approval by an independent ethical panel
It is anticipated that the methodology might have been reviewed for adherence to ethical principles. This might have been undertaken by an ethics panel at a university, research council, or governmental or organisational body.
Where to look: methods section

[20] The methods employed enable as many children as possible to participate in the study to an equal degree
Have the methods used prevented any target groups of children from participating in the study? Consider things such as the timing and location of data collection, the use of age appropriate methods, and consideration for cultural traditions or sensitivities.
Where to look: methods section (and possibly limitations highlighted in the discussion/conclusion)

[21] The findings are interpreted in light of differing social and cultural contexts
Has the article considered whether the findings might be unique to the particular group studied, or whether they can be applied to other social and cultural contexts?
Where to look: discussion/conclusion
[22] The sample size was appropriate to the design and method employed in the study, and was large enough to inspire confidence in the findings
Is the sample size large enough to inspire confidence in the findings whilst bearing in mind what might be considered a reasonable sample size for a study of that type? Sample size is often influenced by the methods of data collection as some approaches are inherently more time consuming and resource intensive than others. The choice of analytic techniques can also have a bearing on sample size and quantitative approaches in particular often require a minimum sample size before any effects of patterns in the data can be properly detected – some researchers will perform ‘power analysis’ to check whether their sample is big enough. As a general rule, smaller samples tend to be more acceptable in qualitative research whereas quantitative studies tend to require a larger sample.
Where to look: methods section (and possibly limitations highlighted in the discussion/conclusion)

[23] The recruitment methods produced a sample that was representative of a defined target population
Are the participants included in the study (the sample) likely to provide a good representation of the group of interest (the population)? This is quite difficult to ascertain unless the article makes it clear whom the intended population is, and so this should also be taken into consideration when scoring this question. Consider whether the sample achieved a good balance of demographic characteristics (e.g. age, gender, ethnicity) and any other factors that might be important in that particular population (e.g. sentence length, caregiving arrangements). Also, consider whether the recruitment strategies might have introduced unwanted bias in the sample (e.g. recruitment at a prison visitor centre will only attract children that are in contact with their imprisoned parent).
Where to look: methods section (and possibly limitations highlighted in the discussion/conclusion)

[24] Inclusion and exclusion criteria were suitably defended
Inclusion criteria refer to characteristics that participants must have if they are to be included in the study, whereas exclusion criteria are those characteristics that disqualify individuals from participating in the study. Inclusion and exclusion criteria might include factors such as age, gender, ethnicity, offence type, or the presence of certain medical or psychological conditions. Does the article make it clear whether any inclusion/exclusion criteria have been applied and offer suitable justification for this.
Where to look: methods section

2b-f: Reliability and validity of primary research studies
2b. Additional questions that apply to experimental designs

[25] The sample includes enough participants in each subgroup to identify key differences
Does there appear to be enough participants in each group to identify differences in the outcome? This concerns the treatment vs. control group in particular, but also applies to any other groups that have been created as part of the analysis (e.g. males vs. females). This does not necessarily mean that the groups need to be equal in size but no groups should be so small that you would lack confidence in the findings.
Where to look: methods/results section (and limitations highlighted in the discussion/conclusion)

[26] The procedure for randomly allocating participants to conditions was suitably defended
Does the article describe the procedure for randomly allocating participants to the treatment vs. control group (e.g. coin toss, random number generator)? If allocation is entirely random, there should be an equal chance of being assigned to either group. Consider whether the procedures seem appropriate and check whether the authors have offered any justification for this.
Where to look: methods section

[27] At the start of the experiment, the groups were sufficiently similar on key factors that could affect the outcome
Randomisation should produce groups that are relatively similar in terms of their characteristics (with the exception of exposure to the treatment or intervention). The article should provide confirmation of this by comparing the groups in terms of key characteristics (e.g. age, gender, ethnicity).
Where to look: methods section, results section
Aside from the experimental intervention, the groups were treated equally
The two groups should be treated in an identical manner (with the exception of exposure to the treatment or intervention). For example, if the treatment group received counselling you would not want any of the control group independently seeking counselling during the study period. Check for any evidence of unintended differences between the groups.

Where to look: methods section (and possibly limitations highlighted in the discussion/conclusion)

Unintended differences between the groups were controlled for in the analysis and/or taken into consideration when interpreting the findings
Despite the researcher’s best efforts to ensure comparability between the groups, some unwanted differences might still occur. These need to be accounted for as part of the analysis, or at least taken into consideration when interpreting the findings. Check to see whether the article makes any reference to this, common phrases include ‘controlling for confounding factors’ or ‘controlling for extraneous variables’.

Where to look: results section (and possibly limitations highlighted in the discussion/conclusion)

Core aspects of the experiment (e.g. the aims and allocation to conditions) were adequately concealed from the participants and/or researchers so that this knowledge did not interfere with the outcomes of the study
If participants are able to ‘guess’ the aims of the study or ascertain which group they have been allocated to, this might affect their expectations and inadvertently influence the outcomes of the study. The same applies to the researchers, if they know which group a participant was allocated to, this might influence their expectations of the outcomes for that participant. Articles might refer to ‘single blind’ (only participants unaware of aims and/or allocation) or ‘double blind’ (both participants and researchers unaware of aims and/or allocation) procedures. The more the aims and allocation are concealed from participants and researchers, the better the integrity of the findings.

Where to look: methods section

The drop-out rate was acceptably low and was not noticeably different between groups
The ‘drop-out rate’ (or number of participants that do not complete the study) will vary depending on the type of study, for example online studies tend to experience a higher drop-out rate than those completed in person. If the drop-out rate is particularly large for one group, then there is good reason to believe that the groups might no longer be equal. Check whether the drop-out rate is acceptably low and there are no marked differences between groups (articles will usually state this explicitly).

Where to look: methods section

The authors’ explain how missing data was handled
It is not uncommon for studies to experience some missing data. It is anticipated that the article should explain how this was dealt with.

Where to look: methods section, results section

The choice of statistical tests was suitably justified
There should be some discussion as to why the statistical test(s) were suitable for the data in question. This is quite often, but not always, referred to as checking ‘test assumptions’.

Where to look: methods section, results section

The analysis was well-developed and rigorous
Were the various stages of the analysis clearly explained in detail?

Where to look: results section

2c. Additional questions that apply to quasi-experimental designs

The similarity of procedures for recruiting participants into each subgroup was suitably defended
In the absence of random allocation, the processes used for recruiting participants to the treatment and control group needs to be sufficiently similar to minimise unwanted differences between the groups. Check to see whether the article offers a sufficient defence of the recruitment process.

Where to look: methods section
2d. Additional questions that apply to observational qualitative studies

[43] A systematic approach was taken to the collection, recording and transcription of data (as applicable)
Consider whether the approach to data collection was rigorous or more haphazard. Data that is fully recorded (e.g. by audio or video-recording) and fully transcribed (perhaps according to transcription guidelines) is preferable.

Where to look: methods section
Reference is made to a recognised analytic technique, and there is a clear description of how this has been applied to the current study. The article should clearly state whether a particular approach was taken to the analysis of data (e.g. thematic analysis, discourse analysis). There should also be an explanation of how the analysis was actually applied to the data, for example how the themes or concepts were derived, and any systematic procedures that might have been adopted.

Where to look: methods section

Adequate evidence is provided to support the analysis (e.g. quotes, case studies, extracts from raw data). Consider whether the findings and conclusions of the study are backed-up by the data, or instead might be based on inadequate evidence. Comments should be clearly supported by quotes from participants and/or direct reference to observations.

Where to look: results section

The detail, depth and complexity (i.e. richness) of the data has been conveyed. Does the presentation of findings adequately communicate the depth and richness of the data? This might include highlighting the diversity of views or perspectives, or identifying patterns or linkages in the data.

Where to look: results section

Findings are discussed in sufficient depth and detail to provide meaningful insights into the topics under consideration. Consider whether the article offers meaningful insights into the subject or whether it is more superficial in nature.

Where to look: results section

The authors openly discuss findings that contradict their original theoretical position or predictions. This is particularly important for qualitative studies where there is increased potential to selectively report data/findings that confirm the preferred theoretical position or original predictions. Consider whether the article explicitly considers contradictory findings or only presents confirmatory evidence.

Where to look: results section, discussion/conclusion

The diversity of any theoretical perspective(s) and content has been explored. Consider whether the author(s) explore just one theoretical perspective and risk a biased interpretation of the data, or actively considered alternative explanations for the findings.

Where to look: throughout the article

Any theory which has been developed during the study provides a comprehensive picture of the phenomenon under study. If the article is concerned with developing a new theory, or adapting an existing theory, how well does this actually ‘fit’ the data? There might be aspects in the data that cannot be explained or accounted for by the theory.

Where to look: throughout the article

2e. Additional questions that apply to observational quantitative studies

Data collection tools were shown to be valid. If the study has utilised recognised instruments, it is anticipated that the validity of the tool will be reported, often with reference to the manual or another publication. Tools that have only recently been designed, or have been created specifically for the purposes of the study, might not have established credentials. Consider whether the authors have offered any defence of the validity of the tools.

Where to look: methods section, particularly under instruments or tools
[52] The variables that were measured appear to be a good representation of the main concepts in the study
If the study has adopted more bespoke methods, consider whether they are likely to provide a genuine indication of the areas of interest. For example, asking an organisation to provide figures on the number of children with a parent in prison will only provide an estimate based on the children that they know about and not a true figure. Check whether the authors have defended the validity of their methods, or have highlighted any limitations.
Where to look: methods section (and possibly limitations highlighted in the discussion/conclusion)

[53] The author(s) provided a discussion of how fieldwork methods or settings may have influenced the data collected
Consider whether the setting of the research or the dynamics between the researcher and participant might have influenced the findings in an unnatural way. For example, is there any reason to believe that the participants might have felt a sense of distrust or unease that would have produced less genuine answers? It is anticipated that the article would acknowledge this and discuss the implications for the findings of the study.
Where to look: methods section (and possibly limitations highlighted in the discussion/conclusion)

[54] Data collection tools were shown to be reliable
If the study used recognised instruments, it is anticipated that they will report on the reliability of the tool, often with reference to the manual or another publication. Tools that have only recently been designed, or have been created specifically for the purposes of the study, might not have established credentials. Consider whether the authors have offered any defence of the reliability of the tools.
Where to look: methods section, particularly under instruments or tools

[55] There was some attempt to objectively assess the variables being measured.
Self-report data can be subject to reporting biases such as socially desirable responding. Consider whether there was any attempt to ‘verify’ the data, for example by comparing reports from multiple respondents or contrasting data to case files.
Where to look: methods section

[56] The authors’ explain how missing data was handled
It is not uncommon for studies to experience some missing data. It is anticipated that the article should explain how this was dealt with.
Where to look: methods section, results section

[57] The choice of statistical tests was suitably justified in the study?
It is anticipated that there should be some discussion as to why the statistical test(s) were suitable for the data in question. This is quite often, referred to as checking ‘test assumptions’.
Where to look: methods section, results section

[58] The analysis was well-developed and rigorous
Were the various stages of the analysis clearly explained in detail?
Where to look: results section

2f. Additional questions that apply to observational mixed methods studies

[59] The qualitative and quantitative methods are sufficiently developed to support an integrated approach to the analysis
Studies that adopt a ‘true’ mixed methods approach use qualitative and quantitative data in a complementary fashion. This question requires a judgement about whether both the qualitative and quantitative aspects of the study were sufficiently developed to enable this. If one aspect had a small sample or was superficial in nature, for example, then this might present a challenge to the integration of data.
Where to look: methods section, results section
[60] The qualitative and quantitative findings are used in a complementary fashion to support the development of conclusions

How effectively does the study actually combine the qualitative and quantitative data in the analysis?
Does this process helpfully inform the development of conclusions?
Where to look: results section, discussion/conclusion

[61] Inconsistencies in quantitative and qualitative findings are openly acknowledged and discussed

Qualitative and quantitative data can provide a differing (or even contradictory) view of the topic under consideration, and this should be clearly discussed in the article.
Where to look: results section, discussion/conclusion

Part 3: Methodological quality of secondary review studies

3a. Questions that apply to ALL secondary review studies

[62] The original aims of the review have been explicitly addressed

How clearly/explicitly does the article address its original objectives? Was this made very obvious or was a little more effort required on behalf of the reader to ascertain this?
Where to look: discussion/conclusion

[63] The conclusions of the review are supported by the literature/data

The findings and conclusions should be credible in the sense that they are clearly backed up by the data or literature (as applicable).
Where to look: results section, discussion/conclusion

[64] The item has a clear structure that helpfully guides the reader through the various steps of the review

Ideas should be presented in a logical order to help the reader understand the progression of the review. This will typically involve an introduction to the subject area, followed by a description of the procedures to acquire data or literature, presentation of findings, and a discussion or conclusion of the main points. Sub-headings might assist with the organisation of ideas.
Where to look: throughout the article

[65] The item is written in a style that is accessible to most audiences

Are descriptions clear and points well explained? Ideally specialist/technical terminology and principles should be clearly defined and explained.
Where to look: throughout the article

[66] The aims and objectives of the review are clearly defined and articulated

The aims and objectives of the review should be clearly and unambiguously stated.
Where to look: introduction

[67] Ideas are explained clearly and in sufficient detail to enable the reader to understand the meaning associated with the review

Does the clarity and depth of the commentary really enable the reader to develop a thorough grasp of the meaning associated with the review?
Where to look: throughout the article

[68] The authors(s) have openly declared any affiliations, interests or sources of bias

The authors should state their place of work or any other affiliations that could potentially bias their interpretations.
Where to look: affiliation is usually declared alongside the author details, in a footnote on the first page, or in an endnote on the last page of the article

[69] Sources of support and/or funding have been declared

The authors should state if funding was obtained for the review, this might be from a government agency, research council or university. Even if the review was self-funded, perhaps as part of postgraduate study, this should be made clear.
Where to look: usually declared in a footnote or endnote, or sometimes alongside the author affiliations
[70] Limitations of the review have been appropriately acknowledged
Important limitations of the review should be openly and honestly acknowledged, especially if they are severe. Ideally there will be a discussion of how these limitations might have affected the interpretation of the data or literature.
Where to look: towards the end of the discussion/conclusion section

[71] The author(s) openly discuss literature/data that is inconsistent with their original theoretical position or predictions
The opening sections of the article are likely to convey whether the author(s) have any preferred theoretical positions or expectations about the outcomes of the review. Rather than only presenting findings that support their original positions or predictions, the author(s) should openly and honestly acknowledge any unexpected observations.
Where to look: introduction/literature review, discussion/conclusion

[72] The authors openly acknowledge literature/data that does not follow the general pattern of observations, or are not entirely consistent with the main conclusions of the review
Any evidence that does not follow the general pattern of findings or is inconsistent with the main conclusions should be highlighted. This means that differing perspectives among the literature should be discussed, and cases in the data that do not follow the typical trend should be commented upon.
Where to look: results section, discussion/conclusion

3b-e: Reliability and validity of secondary review studies

3b. Additional questions that apply to secondary data analysis studies

[73] The dataset(s) being analysed are shown to be valid and reliable
Secondary data that is collected by government agencies, universities, private organisations, non-profit organisations, public opinion polls etc. can vary enormously in quality. The author(s) should discuss the validity and reliability of the datasets, and in doing so offer some kind of confirmation that they are of sufficient quality to be used for the purposes of the article.
Where to look: methods section (and possibly limitations highlighted in the discussion/conclusion)

[74] There is evidence that the author(s) have further critically appraised the dataset(s)
Is there any evidence that the author(s) have further scrutinised the datasets? This might include checking for missing information or errors in data processing.
Where to look: methods section, results section (and possibly limitations highlighted in the discussion/conclusion)

[75] There is evidence of triangulation in the study
Given the variable quality of secondary datasets, the accuracy of the data might be ‘verified’ by comparing it to other sources of information.
Where to look: methods section, results section

[76] The authors make clear when they make any assumptions, judgements or ‘educated guesses’ in their analysis
Secondary datasets are often designed for purposes other than the review in question, and therefore the data might not be perfectly suited to addressing the aims of the review. Incomplete data might also mean that the aims of the review cannot be addressed as thoroughly as one might hope. If the author(s) have derived any findings or conclusions for which the evidence base is weak, then this should be highlighted as such.
Where to look: discussion/conclusion

[77] The author(s) contextualise their data by comparing it to other sources
It is advantageous to consider the findings of the review in a broader context, perhaps comparing findings to national or international data. Bearing in mind the limitations associated with secondary data, this can be helpful in terms of deciding whether the findings seem reasonable and logical.
Where to look: results section, discussion/conclusion
3c. Additional questions that apply to meta-analysis/synthesis

[78] The heterogeneity of the studies was carefully considered and described
Heterogeneity refers to the degree of variation in the individual studies that are being combined for the purposes of the meta-analysis/synthesis. The more different (or ‘heterogeneous’) the aims, methodologies and approaches to analysis, the more difficult it is to combine the studies in a manner that produces trustworthy results. An assessment of the similarity of the studies is to be expected.
Where to look: methods section

[79] In cases where the original studies were found to be heterogeneous (‘dissimilar’), the authors explored the causes of this and potential impacts that this might have on the results of the meta-analysis/synthesis
If the studies included in the review were found to be dissimilar, the authors should explicitly consider the impact of this on the findings of the meta-analysis/synthesis?
Where to look: results section, discussion/conclusion

[80] The author(s) suitably defended the combination of the results of the studies in this meta-analysis/synthesis
Consider whether the author(s) justified the combination of studies in the meta-analysis/synthesis. Ideally specific approach, or analytic techniques used to combine the studies would also be defended.
Where to look: methods section, results section

3d. Additional questions that apply to systematic reviews and rapid evidence assessments

[81] A highly comprehensive and systematic search strategy was adopted
A more comprehensive review is characterised by a great deal of time and effort spent collecting as much literature as possible on the topic of interest. This might mean that the review is extended beyond published work with efforts made to contact key authors to obtain unpublished materials. Other additional steps might include retrieving non-English publications and manually checking reference lists for other relevant sources. A highly systematic search strategy is likely to be characterised by rigorous and standardised protocols for identifying relevant literature. This question requires a judgement about how comprehensive and systematic the review process was.
Where to look: methods section

[82] Inclusion and exclusion criteria were pre-specified and clearly defined
Inclusion criteria refer to features that articles must possess in order to be included in the review, whereas exclusion criteria refer to features that exclude an article from the review. Inclusion/exclusion criteria should be clearly outlined and defined. It is common to specify the language of publication and cut-off dates for publication (e.g. all articles published since 1990). It is likely that the review will have used key search terms and these should also be clearly outlined.
Where to look: methods section

[83] Satisfactory steps were taken to critically appraise the studies included in the review
The methodological quality of studies considered for inclusion in secondary reviews can vary enormously. It is anticipated that there should be some assessment and/or discussion of the quality of the studies.
Where to look: methods section (and possibly limitations highlighted in the discussion/conclusion)

[84] There was an appropriate level of consistency to the review process
Consider whether items identified as part of the initial search were treated in the same manner. For example, was a standardised tool used to assess inclusion/exclusion criteria and methodological quality?
Where to look: methods section
[85] There was an appropriate degree of independence to the review process
To ensure that the review is as objective as possible, the review process might be repeated by two
independent reviewers. This would involve separately searching for items, reviewing inclusion/
exclusion criteria, and assessing methodological quality. If there were any disagreements, a third
reviewer might be appointed to provide a final decision.
Where to look: methods section

[86] The likelihood of a publication bias was given sufficient consideration
Publication bias refers to factors that either increase or decrease the likelihood that a study or article
will be published. Studies that find a ‘positive result’ or a significant trend or pattern in the data (e.g.
a study that revealed children of offenders were more likely to experience mental health problems
than other groups) or are written in English have a greater chance of being published, are published
earlier, and are more likely to be published in a high-ranking journal. This distorts the evidence that
is available on a particular topic and has an undue influence on systematic reviews. The author(s)
should explicitly check for the presence of a publication bias and discuss the implications of this for
the findings and conclusions of the review.
Where to look: methods section, results section (and possibly limitations highlighted in the
discussion/conclusion)

[87] The likelihood of a reporting bias was given sufficient consideration
Reporting bias refers to the selective reporting of certain results, often those which seem most
interesting or confirm original predictions. This might not provide a full picture of the topic under
investigation, and the effects of a reporting bias can be magnified in a systematic review. The
author(s) should explicitly check for the presence of a reporting bias and discuss the implications of
this for the findings and conclusions of the review.
Where to look: methods section, results section (and possibly limitations highlighted in the
discussion/conclusion)

3e. Additional questions that apply to non-systematic reviews

[88] A clear description of the strategies used to identify and select relevant publications
is provided
There should be a clear description of the procedures used to identify and select relevant literature,
including search strategies, key search terms and any inclusion/exclusion criteria. Ask yourself
whether you could replicate the review based on what is written?
Where to look: methods section

[89] There is evidence that the author(s) have been inclusive in the items included in the review
There is greater potential for researchers to select only those articles/studies which support their
preferred theoretical stance or argument. Consider whether the author(s) have included literature
that is not entirely consistent with their main position or argument.
Where to look: throughout the article

[90] There is some degree of critical appraisal of the items included in the review
It is anticipated that there should be some consideration of the quality of the studies/articles that
have been included in the review. This might include only selecting items from peer-reviewed
journals, or offering some commentary on the quality of the items (e.g. in relation to the robustness
of the methodology or analysis).
Where to look: throughout the article
Part 4: Methodological quality of theoretical/conceptual items

4a. General questions on theoretical/conceptual items

[91] The item has a clear structure that helpfully guides the reader through the various steps of the review
Ideas should be presented in a logical order to help the reader to understand the progression of the article. This will typically involve an introduction to the topic, followed by a more detailed commentary, and finally a conclusion of the main points. Sub-headings might assist with the organisation of ideas.
Where to look: throughout the article

[92] Ideas are explained clearly and in sufficient detail to enable the reader to understand the meaning associated with the subject of the article
Does the clarity and depth of the commentary really enable the reader to develop a thorough grasp of the meaning associated with the article?
Where to look: throughout the article

[93] The authors(s) have openly declared any affiliations, interests or sources of bias
The authors should state their place of work or any other affiliations that could potentially influence the direction of the commentary or argument.
Where to look: usually declared alongside the author details, in a footnote on the first page, or in an endnote on the last page

[94] Sources of support and/or funding have been declared
The authors should state if funding was provided to produce the article, this might be from a government agency, research council or university. Even if the production of the article was self-funded, perhaps as part of postgraduate study, this should be made clear.
Where to look: usually declared in a footnote or endnote, or sometimes alongside the author affiliations

4b. Reliability of theoretical/conceptual items

[95] The author(s) possess sufficient credentials and/or experience to provide a commentary on the topic
Does/do the author(s) possess sufficient expertise to provide a credible discussion of the subject? Consider things such as their qualifications, position of employment, duration of employment, any awards or indicators of esteem, and previous publications in the field.
Where to look: a brief biography might be provided alongside the author details, in a footnote on the first page, or in an endnote on the last page

[96] The item is published in a credible source, or is published by a recognised body/organisation
Items that are published by a government agency, recognised organisation, university, large reputable publisher, or academic journal are more likely to be credible than an item that is self-published. Items that have undergone some form of peer-review are preferable.
Where to look: check footnotes on the first page and endnotes on the last page for details of the publisher. It is not uncommon for there to be no reference to the peer-review process

[97] The statements presented appear credible
Consider whether the ideas or arguments presented are 'backed-up' by evidence, for example relevant literature or statistics.
Where to look: throughout the article

[98] The statements presented seem plausible
Are the statements broadly consistent with the wider knowledge-base in the area? Does the author build a convincing argument based on existing literature or does the item represent a more radical (and perhaps illogical) departure from accepted wisdom and practice?
Where to look: throughout the article
[99] The author(s) openly acknowledge evidence or arguments for and against their statements
Consider whether the article is generally balanced and fair. Does the author acknowledge alternative positions or evidence in opposition to their own argument?
*Where to look: throughout the article*

[100] The author(s) identify limitations to their statements
Does the author consider any limitations to their statements? For example, might they be applicable in different social or cultural contexts? Might there be political, legal, financial or practical barriers to implementing their ideal standards?
*Where to look: throughout the article*
Part 5: Child-Centredness

[101] The study (or article) is directly based on data collected from children and young people
There are two things to bear in mind when answering this question. Firstly, consider how much of the data was collected directly from children and young people as opposed to proxies such as parents, carers or professionals. This might require consideration of sample sizes and the extent of the data collection. Secondly, consider how prominently data from children and young people featured in the article. For example, was the data from children analysed as thoroughly and presented in as much detail as the data from other groups? This question clearly applies to primary research studies where the data was collected first-hand by the researchers. In the case of secondary reviews, theoretical/conceptual pieces and ‘other’ items, consider the extent to which the authors have drawn upon original data or literature that was based on the views of children.
Where to look: methods section, results section

[102] Where data is collected from groups other than children (e.g. parents, carers or professionals), the experiences and support needs of children are actively considered
If data has been collected from groups other than children, consider the extent to which information on the experiences and support needs of children was elicited.
Where to look: methods section, results section

[103] In the case of primary research, children and young people were allowed to express themselves in an age-appropriate way
Have the methods of data collection enabled children to fully express themselves in a style that would feel natural to them? Consider whether the methods were likely to be understood by the age group in question and whether they were designed to put them at ease.
Where to look: methods section

[104] The study (or article) clearly reflects children’s voices
Consider the extent to which the article retains the original style of expression used by children. For example, does the article use direct quotes from children or include drawings produced by children? Also consider the extent to which the article prioritises the inclusion of quotes etc. from children relative to those from other groups (e.g. parents, carers, professionals).
Where to look: results section

[105] Efforts are made to empower children
There are a number of ways in which researchers might seek to empower children and young people. Consider, for instance, whether the article was designed to provide children with a sense that their views and opinions were valued, or that their experiences and support needs had been recognised. Studies might also attempt to boost children’s self-confidence or attempt to give them a sense of ownership of the data by enabling them to contribute to the design of research methods, presentation of findings, dissemination of results, or formulation of policy recommendations.
Where to look: Throughout the article, but especially the introduction and methods sections

[106] The study (or article) carries tangible benefits for children and is not solely or largely concerned with furthering ideological or academic interests
This question requires a judgement about the motivations of the author(s) and is best inferred by considering the main focus of the article. For example, is the main purpose of the article to highlight a social problem that undermines the welfare of children and young people? Or alternatively, is the article more concerned with developing academic theory but with less consideration of how this might apply to the real world?
Where to look: Throughout the article

[107] The study (or article) directly considers the rights and needs of children independently of other groups (e.g. parents/carers)
To what extent are children’s rights and needs explicitly considered independently of other family members? For example, when considering the reduction in household income due to parental imprisonment, to what extent is the impact on children considered relative to the impact on other family members? Or to what extent are the benefits of prison visiting for the imprisoned parent balanced against the benefits to the child?
Where to look: results section, discussion/conclusion
[108] The study (or article) directly recognises the uniqueness in children’s experiences and support needs
Consider the extent to which the article highlights the diverse range of responses to parental imprisonment and the individual nature of children’s support needs.
Where to look: throughout the article

[109] The study (or article) directly considers the impact of the findings, conclusions or recommendations (as applicable) on children
Are the conclusions and recommendations orientated towards the welfare of children? If children are the main beneficiaries of the recommendations, then presumably their welfare is the central consideration. Where recommendations are designed to benefit other groups (e.g. the family unit as a whole or the non-imprisoned parent), has the knock-on effect on children been considered? For example, more frequent prison visits might be preferable in terms of supporting the imprisoned parent’s resettlement but has the impact on the child’s routine been considered?
Where to look: throughout the article
Part 6: Relevance to Policy and Strategy concerned with Children of Offenders

[110] The item provides information or knowledge that could usefully inform work at the policy or strategy level
Consider whether the article provides any information or knowledge that could usefully inform policy or strategy concerning children of offenders. For instance, are there any lessons that can be learnt with regards to service planning, programme implementation or inter-agency work?
Where to look: results section, discussion/conclusion

[111] The item makes direct recommendations for policy and/or strategy-level work
Does the article make explicit recommendations for policy and strategy-level work concerning children of offenders? This should be in the format of clear statements that argue for a specific approach or change.
Where to look: discussion/conclusion

[112] Where direct recommendations are made, the target audience(s) for these is clearly defined
If direct recommendations are made for policy or strategy, does the article make it clear who is responsible for implementing these recommendations?
Where to look: discussion/conclusion

[113] Consideration has been given to the practical feasibility of recommendations for policy and strategy-level work
Is there any evidence that the authors have considered the practical feasibility of implementing the recommendations for policy or strategy? For example, have they considered the financial and resource implications?
Where to look: discussion/conclusion

[114] Implications or recommendations are justifiable in the context of the methodological design, findings observations or commentary (as applicable)
Consider whether the recommendations for policy or strategy are believable – do they logically follow on from evidence presented earlier in the article? Also, consider whether the robustness of the methodology inspires confidence in the recommendations.
Where to look: discussion/conclusion

[115] Consideration has been given to adapting policy or strategy implications or recommendations to the local/national/regional context (as applicable)
Have the differences in the local, national and regional contexts for policy or strategy recommendations been considered? This could include a range of issues such as political, legal, budgetary and cultural factors. For example, recommendations for the UK would need to offer some consideration of the different jurisdictional geographies of England, Scotland and Wales.
Where to look: discussion/conclusion
Part 7: Relevance to Practice with Children of Offenders

[116] The item provides information or knowledge that could usefully inform practice
Consider whether the article provides any information or knowledge that could usefully inform practice with children of offenders. For example, are there any lessons to be learned about how practitioners conduct their work with these children?
Where to look: results section, discussion/conclusion

[117] The item makes direct recommendations for practice
Does the article make explicit recommendations for practice with children of offenders? This should be in the format of clear statements that argue for a specific approach or change.
Where to look: discussion/conclusion

[118] Where direct recommendations are made, the target audience(s) for these is clearly defined
If direct recommendations are made for practice, does the article make it clear who is responsible for implementing these recommendations?
Where to look: discussion/conclusion

[119] Consideration has been given to the practical feasibility of recommendations
Is there any evidence that the authors have considered the practical feasibility of implementing the recommendations for practice? For example, have they considered the financial and resource implications?
Where to look: discussion/conclusion

[120] Implications or recommendations are justifiable in the context of the methodological design, findings observations or commentary (as applicable)
Consider whether the recommendations for practice are believable – do they logically follow on from evidence presented earlier in the article? Also, consider whether the robustness of the methodology inspires confidence in the recommendations.
Where to look: discussion/conclusion

[121] Consideration has been given to adapting implications or recommendations for practice to the local/national/regional context (as applicable)
Has the local, national and regional contexts for the recommendations for practice been considered? This could include a range of issues such as political, legal, budgetary and cultural factors. For example, recommendations for the UK would need to offer some consideration of the different jurisdictional geographies of England, Scotland and Wales.
Where to look: discussion/conclusion
Part 8: Scoring and Awarding Icons

When all of the relevant sections have been completed, the final stage of the QAT is to calculate scores and ascertain whether any icons can be awarded. The scoring grid on the last page of the QAT provides a place to record scores and displays the cut-off criteria for awarding icons. The scoring instructions provided here are best understood whilst looking at the scoring grid.

Overall scores are calculated by adding up the individual scores for each question. These are scored as follows:

- Low – 0
- Medium – 1
- High – 2
- Cannot say – 0
- Not applicable – 0

Scoring methodological robustness

Firstly, begin by scoring the completed methodology sections according to the following system. The total score for each section should be calculated by adding up the scores for individual questions.

With the exception of ‘other’ items which are not scored according to this category, each item should receive two scores for methodological robustness. The first of these scores represents a score for general issues surrounding methodological quality (e.g. appropriateness, ethics, sampling, clarity of reporting) and the second represents a score specifically for reliability and validity. For example, a primary observational qualitative item will receive a score for sections 2a (methodological quality) and 2d (reliability and validity), whereas a primary observational mixed methods study will also receive two scores, a score for section 2a (methodological quality) and a score for reliability and validity which combines sections 2d, 2e and 2f.

In order to achieve an icon for methodological robustness, an item must score a **minimum of 50% on both parts**. The scoring was designed in this way to reflect the importance of reliability and validity in conjunction with other issues relating to methodological quality. For example, a theoretical/conceptual piece must score at least 4 on part 4a **and** at least 6 on part 4b in order to achieve an icon for methodological robustness.

Icon+ was designed to highlight items that excel on a particular dimension. In order to achieve an icon+ for methodological quality, an item must score a **minimum of 75% on both parts**. For example, a theoretical/conceptual piece must score at least 6 on part 4a **and** at least 8 on part 4b in order to achieve an icon+ for methodological robustness.

Scoring child-centredness, relevance to policy, and relevance to practice

The scoring for these dimensions is more straightforward. Firstly, calculate three separate scores for child-centredness, relevance to policy, and relevance to practice by adding up the scores for the individual items.

For each of these sections, an icon should be awarded if the item scores 50% or above, and an icon+ should be awarded if it scores 75% or above.