

PHO MetaQAT form

QUALITY APPRAISAL FORM FOR ALL RESEARCH DESIGNS

- Read the *PHO MetaQAT Guide* before beginning using the form
- Record the citation for the article that you will be appraising into the first grey box below
- Record your research question or purpose into the second grey box
- Record your answer to each bolded question only, using the supplementary prompting questions to assist you as applicable, or feel free to develop customized prompting questions specific to your review or question
- To preserve the integrity of the tool, please **do not delete or alter the main MetaQAT questions.** **Modifications may be made to the prompting questions based on project needs and/or by drawing on the companion tool content**
- Not all prompting questions need to be considered; it will depend on the item being appraised
- The PHO Meta QAT does not use a numerical scale - the result will not be a number that can be said to be “good” or “bad”; however, an overall judgement is required for each domain and overall. This judgement should be transparent based on your domain assessments.
- To assist with the validity assessment in particular study designs, you may refer to the *Companion tools* section; which can provide you with additional prompts that can help you fill out the validity section. Keep this form as a record of your appraisal for future reference
- Other documentation formats are available, including MS Excel format. Contact library@oahpp.ca

Citation:

Research question:

1. ASSESSMENT OF RELEVANCY

Does the study address a topic(s) relevant to the issue under investigation?

(This step may be completed in a separate stage)

Prompting questions - you *may consider the following* questions to help you answer the **bolded** question.

Was the justification for the study clearly stated? (For example, does it address a gap in the existing literature?)

Do the results of the study apply to the issue under consideration?

How similar or different is the study population or setting to yours? Is a difference likely to matter for the issue at hand?

Is the research design appropriate for the methodology you are considering? (For example, if you are considering a systematic review, you will be reviewing only certain types of publications.)

Written answer:

Optional:

yes no unclear n/a

Overall comments on relevancy?

2. ASSESSMENT OF RELIABILITY

Reliability refers to the elements required so that one could reproduce the research. The main elements being assessed are the transparency of the research and the reporting quality.

a) Is the study presented clearly?

Prompting questions - you may consider the following questions to help you answer the bolded question.

Is the rationale for study clearly stated, and does the study focus on a clearly defined issue?

Is the conduct of the study clearly described and easy to follow?

Can you identify the research design?

Are all relevant results included?

Are the findings presented and discussed within the appropriate context?

Is there a conflict of interest statement?

Can the study be reproduced with the information provided?

Written answer:

Optional:

yes no unclear n/a

ASSESSMENT OF RELIABILITY continued

b) Are the research methodology and results clearly described?

Prompting questions - you may consider the following questions to help you answer the bolded question.

Does the methodology describe the population studied, the intervention given, and the outcomes?

Are all sources of information clearly identified?

Are inclusion and exclusion criteria defined?

Are the statistical and/or analytical methods described?

If applicable, are the results reported in data tables consistent with those described in the results section?

Could the methods be reproduced based on the information provided?

Written answer:

Optional:

yes no unclear n/a

ASSESSMENT OF RELIABILITY continued

c) Are ethics procedures described?

Prompting questions - you may consider the following questions to help you answer the bolded question.

Was appropriate informed consent obtained?

Was the study approved by an ethics review board?

Written answer:

Optional:

yes no unclear n/a

Overall comments on reliability?

3. ASSESSMENT OF VALIDITY

This section refers to the likelihood and magnitude of error or bias in the study

a) Is the study methodology appropriate for the scope of research?

Prompting questions - you may consider the following questions to help you answer the bolded question.

Is the research question congruent with the study design?

Does the methodology match the theory or the conceptual model?

Are appropriate controls considered if applicable?

Are the statistical/analytic methods appropriate for the design and/or the question?

Are important theoretical factors accounted for in the analysis?

Written answer:

Optional:

yes no unclear n/a

ASSESSMENT OF VALIDITY continued

b) Is the research methodology free from bias?

If needed, refer to [Recommended research design-specific CATS](#) complete this section using input from the other tools

Prompting questions - you may consider the following questions to help you answer the bolded question.

Were there major sources of bias with respect to:

Study design?

Study participants inclusion/exclusion?

Measurement of exposure/outcome or important confounders/predictors?

Data sources?

Analysis?

Selection of studies?

Are all comprehensive factors included in the research? I.e. were important factors not measured that are critical to interpretation?

Are the results consistent within the study?

Can chance findings be ruled out?

Were the analyses carried out appropriately?

Written answer:

Optional:

yes no unclear n/a

ASSESSMENT OF VALIDITY continued

c) Are the authors' conclusions explicit and transparent?

Prompting questions - you may consider the following questions to help you answer the bolded question.

Are the results conclusive?

Are the authors' conclusions clearly derived from the results (transparent)?

Are potential discrepancies discussed?

Written answer:

Optional:

yes no unclear n/a

ASSESSMENT OF VALIDITY continued

d) Can I be confident about the findings?

Prompting questions - you may consider the following questions to help you answer the bolded question.

Are there any major methodological flaws that limit the validity of the findings? (these may have been identified in a) or b))

Are the study's results similar to those of the existing body of literature? If not, are the reasons for the difference clearly explained?

Written answer:

Optional:

yes no unclear n/a

Overall comments on validity?

4. ASSESSMENT OF APPLICABILITY

How can the results be applied within the scope of public health?

Prompting questions - you may consider the following questions to help you answer the bolded question.

Can the study results be interpreted and analyzed within the context of public health?

Are there other important public health outcomes to be considered that were not included?

Can the results be applied to public health practice, based on the validity of the article and its relevance?

Are harms and benefits discussed?

Were the relevant stakeholders considered?

Written answer:

Optional:

yes no unclear n/a

Overall comments on applicability?

Overall comments on study