

Appendix 2 Methodological Quality assessment Criteria

Reviewer 1				
Reviewer 2				
Author (s)				
Methods				
Study design				
Data				
Sampling				
Analysis				
Types of Study	Methodological Quality assessment Criteria	Yes	No	Cant tell
Screening Questions (for all types)	Are there clear research questions or objectives?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Do the collected data address the research question?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<i>Further appraisal is not feasible when the answer is 'No' or 'Can't tell' to one or both screening questions</i>			
Qualitative	1.1 Is there congruity between the stated philosophical perspective and the research methodology?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1.2 Are the sources of qualitative data (archives, documents, informants, observations) relevant to address the research question?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1.3 Is the process for analysing qualitative data relevant to address the research question?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1.4 Are participants, and their voices, adequately represented? (adequate quotes and text been used to represent the concept discussed)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1.5 Is there a statement locating the researcher culturally or theoretically? (Are the beliefs and values, and their potential influence on the study declared?)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1.6. Is the influence of the researcher on the research, and vice-versa, addressed? (<i>Addressing the potential for the researcher to either influence or to be influenced by the study</i>)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1.7. Do the conclusions drawn in the research report flow from the analysis, or interpretation, of the data?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1.8. Is the ethical issues adequately addressed? (<i>statement indicating appropriate ethics approval</i>)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Quantitative randomized controlled (trials)	2.1. Is there a clear description of the randomization (or an appropriate sequence generation)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	2.2. Is there a clear description of the allocation concealment or blinding when applicable)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	2.3. Are there complete outcome data (80% or above)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	2.4. Is there low withdrawal/drop-out (below 20%)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	2.5 Are the groups comparable at baseline?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	2.6 Are there complete outcome data?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	2.7 Are outcome assessors blinded to the intervention provided?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	2.8 Did the participants adhere to the assigned intervention?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Quantitative non-randomized (Cohort study, case-control study,	3.1. Are participants recruited in a way that minimizes selection bias?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	3.2 Were the criteria for inclusion in the sample clearly defined?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	3.3 Were the study subjects and the setting described in detail?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	3.4 Were objective, standard criteria used for measurement of the condition?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	3.5 Were the outcomes measured in a valid and reliable way?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	3.6 Was appropriate statistical analysis used?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	3.7 Is the ethical issues adequately addressed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

analytical cross-sectional)	(statement indicating appropriate ethics approval)			
	3.8 Do the conclusions drawn in the research report flow from the analysis, or interpretation, of the data?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	3.9 Are measurements appropriate (clear origin, or validity known, or standard instrument; and absence of contamination between groups when appropriate) regarding the exposure/intervention and outcomes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	3.11 In the groups being compared (exposed vs. non-exposed; with intervention vs. without; cases vs. controls), are the participants comparable, or do researchers take into account (control for) the difference between these groups?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	3.12 Are there complete outcome data (80% or above), and, when applicable, an acceptable response rate (60% or above), or an acceptable follow-up rate for cohort studies (depending on the duration of follow-up)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Quantitative descriptive	4.1. Is the sampling strategy relevant to address the quantitative research question (quantitative aspect of the mixed methods question)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	4.2. Is the sample representative of the population understudy?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	4.3. Are measurements appropriate (clear origin, or validity known, or standard instrument)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	4.4. Is there an acceptable response rate (60% or above)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mixed methods	5.1. Is the mixed methods research design relevant to address the qualitative and quantitative research questions, or the qualitative and quantitative aspects of the mixed methods question?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	5.2. Is the integration of qualitative and quantitative data (or results relevant to address the research question?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	5.3 Are the outputs of the integration of qualitative and quantitative components adequately interpreted?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	5.4 Are divergences and inconsistencies between quantitative and qualitative results adequately addressed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	5.5 Do the different components of the study adhere to the quality criteria of each tradition of the methods involved?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	5.6 Is appropriate consideration given to the limitations associated with this integration, e.g., the divergence of qualitative and quantitative data in a triangulation design?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<i>Apply the criteria use for qualitative data for the qualitative component and quantitative component respectively.</i>			
Overall Quality Score	<i>Comments on score: The overall quality score for the paper is... % and so meet the criteria for assigning high quality</i>	<input type="checkbox"/> Low (25%) <input type="checkbox"/> Medium (50%) <input type="checkbox"/> High 70% - 100%		
Reviewer 2	<i>Comments:</i>			

NB: Scoring metrics

The score can be computed by counting the total number of “yes” and expressing them as a percentage ie below 25% represent Low Quality, 50% represent Medium Quality, and 70% and above represent high Quality.