

## S4 File. Johns Hopkins Nursing Evidence-Based Practice Appraisal Tool

### Johns Hopkins Nursing Evidence-Based Practice

## Appendix D

### Evidence Level and Quality Guide

Evidence Levels	Quality Ratings
<p><b>Level I</b></p> <p>Experimental study, randomized controlled trial (RCT)</p> <p>Explanatory mixed method design that includes only a level I quantitative study</p> <p>Systematic review of RCTs, with or without meta-analysis</p>	<p><b>Quantitative Studies</b></p> <p><b>A High quality:</b> Consistent, generalizable results; sufficient sample size for the study design; adequate control; definitive conclusions; consistent recommendations based on comprehensive literature review that includes thorough reference to scientific evidence.</p> <p><b>B Good quality:</b> Reasonably consistent results; sufficient sample size for the study design; some control, fairly definitive conclusions; reasonably consistent recommendations based on fairly comprehensive literature review that includes some reference to scientific evidence.</p> <p><b>C Low quality or major flaws:</b> Little evidence with inconsistent results; insufficient sample size for the study design; conclusions cannot be drawn.</p>
<p><b>Level II</b></p> <p>Quasi-experimental study</p> <p>Explanatory mixed method design that includes only a level II quantitative study</p> <p>Systematic review of a combination of RCTs and quasi-experimental studies, or quasi-experimental studies only, with or without meta-analysis</p>	<p><b>Qualitative Studies</b></p> <p>No commonly agreed-on principles exist for judging the quality of qualitative studies. It is a subjective process based on the extent to which study data contributes to synthesis and how much information is known about the researchers' efforts to meet the appraisal criteria.</p> <p><i>For meta-synthesis, there is preliminary agreement that quality assessments of individual studies should be made before synthesis to screen out poor-quality studies<sup>1</sup>.</i></p> <p><b>A/B High/Good quality</b> is used for single studies and meta-syntheses<sup>2</sup>.</p> <p>The report discusses efforts to enhance or evaluate the quality of the data and the overall inquiry in sufficient detail; and it describes the specific techniques used to enhance the quality of the inquiry. Evidence of some or all of the following is found in the report:</p> <ul style="list-style-type: none"> <li>• <b>Transparency:</b> Describes how information was documented to justify decisions, how data were reviewed by others, and how themes and categories were formulated.</li> <li>• <b>Diligence:</b> Reads and rereads data to check interpretations; seeks opportunity to find multiple sources to corroborate evidence.</li> <li>• <b>Verification:</b> The process of checking, confirming, and ensuring methodologic coherence.</li> <li>• <b>Self-reflection and scrutiny:</b> Being continuously aware of how a researcher's experiences, background, or prejudices might shape and bias analysis and interpretations.</li> <li>• <b>Participant-driven inquiry:</b> Participants shape the scope and breadth of questions; analysis and interpretation give voice to those who participated.</li> <li>• <b>Insightful interpretation:</b> Data and knowledge are linked in meaningful ways to relevant literature.</li> </ul> <p><b>C Low quality</b> studies contribute little to the overall review of findings and have few, if any, of the features listed for high/good quality.</p>
<p><b>Level III</b></p> <p>Nonexperimental study</p> <p>Systematic review of a combination of RCTs, quasi-experimental and nonexperimental studies, or nonexperimental studies only, with or without meta-analysis</p> <p>Exploratory, convergent, or multiphasic mixed methods studies</p> <p>Explanatory mixed method design that includes only a level III quantitative study</p> <p>Qualitative study Meta-synthesis</p>	