

JBI CRITICAL APPRAISAL CHECKLIST FOR COHORT STUDIES

Reviewer _____ Date _____

Author _____ Year _____ Record Number _____

Yes No Unclear Not applicable

1. Were the two groups similar and recruited from the same population? ☐ Yes ☐ No ☐ Unclear ☐ Not applicable
2. Were the exposures measured similarly to assign people to both exposed and unexposed groups? ☐ Yes ☐ No ☐ Unclear ☐ Not applicable
3. Was the exposure measured in a valid and reliable way? ☐ Yes ☐ No ☐ Unclear ☐ Not applicable
4. Were confounding factors identified? ☐ Yes ☐ No ☐ Unclear ☐ Not applicable
5. Were strategies to deal with confounding factors stated? ☐ Yes ☐ No ☐ Unclear ☐ Not applicable
6. Were the groups/participants free of the outcome at the start of the study (or at the moment of exposure)? ☐ Yes ☐ No ☐ Unclear ☐ Not applicable
7. Were the outcomes measured in a valid and reliable way? ☐ Yes ☐ No ☐ Unclear ☐ Not applicable
8. Was the follow up time reported and sufficient to be long enough for outcomes to occur? ☐ Yes ☐ No ☐ Unclear ☐ Not applicable
9. Was follow up complete, and if not, were the reasons to loss to follow up described and explored? ☐ Yes ☐ No ☐ Unclear ☐ Not applicable
10. Were strategies to address incomplete follow up utilized? ☐ Yes ☐ No ☐ Unclear ☐ Not applicable
11. Was appropriate statistical analysis used? ☐ Yes ☐ No ☐ Unclear ☐ Not applicable

Overall appraisal: Include ☐ Exclude ☐ Seek further info ☐

Comments (Including reason for exclusion)

JBI CRITICAL APPRAISAL CHECKLIST FOR ANALYTICAL CROSS SECTIONAL STUDIES

Reviewer _____ Date _____

Author _____ Year _____ Record Number _____

	Yes	No	Unclear	Not applicable
1. Were the criteria for inclusion in the sample clearly defined?	☐	☐	☐	☐
2. Were the study subjects and the setting described in detail?	☐	☐	☐	☐
3. Was the exposure measured in a valid and reliable way?	☐	☐	☐	☐
4. Were objective, standard criteria used for measurement of the condition?	☐	☐	☐	☐
5. Were confounding factors identified?	☐	☐	☐	☐
6. Were strategies to deal with confounding factors stated?	☐	☐	☐	☐
7. Were the outcomes measured in a valid and reliable way?	☐	☐	☐	☐
8. Was appropriate statistical analysis used?	☐	☐	☐	☐

Overall appraisal: Include ☐ Exclude ☐ Seek further info ☐

Comments (Including reason for exclusion)

JBI CRITICAL APPRAISAL CHECKLIST FOR QUALITATIVE RESEARCH

Reviewer_____Date_____

Author_____Year_____Record Number_____

	Yes	No	Unclear	Not applicable
1. Is there congruity between the stated philosophical perspective and the research methodology?	☐	☐	☐	☐
2. Is there congruity between the research methodology and the research question or objectives?	☐	☐	☐	☐
3. Is there congruity between the research methodology and the methods used to collect data?	☐	☐	☐	☐
4. Is there congruity between the research methodology and the representation and analysis of data?	☐	☐	☐	☐
5. Is there congruity between the research methodology and the interpretation of results?	☐	☐	☐	☐
6. Is there a statement locating the researcher culturally or theoretically?	☐	☐	☐	☐
7. Is the influence of the researcher on the research, and vice- versa, addressed?	☐	☐	☐	☐
8. Are participants, and their voices, adequately represented?	☐	☐	☐	☐
9. Is the research ethical according to current criteria or, for recent studies, and is there evidence of ethical approval by an appropriate body?	☐	☐	☐	☐
10. Do the conclusions drawn in the research report flow from the analysis, or interpretation, of the data?	☐	☐	☐	☐

Overall appraisal: Include ☐ Exclude ☐ Seek further info ☐

Comments (Including reason for exclusion)

Supplemental Digital Content 1: JBI critical appraisal tool for quasi-experimental studies

Assessor:		Date of Appraisal:	Record Number:			
Study Author:		Study Title:	Study Year:			

Internal Validity		Choice - Comments/Justification	Yes	No	Unclear	N/A
Bias related to temporal precedence						
1	It is clear in the study what is the “cause” and what is the “effect” (ie, there is no confusion about which variable comes first)?		☐	☐	☐	☐
Bias related to selection and allocation						
2	Was there a control group?		☐	☐	☐	☐
Bias related to confounding factors						
3	Were participants included in any comparisons similar?		☐	☐	☐	☐
Bias related to administration of intervention/exposure						
4	Were the participants included in any comparisons receiving similar treatment/care, other than the exposure or intervention of interest?		☐	☐	☐	☐
Bias related to assessment, detection, and measurement of the outcome						

5	Were there multiple measurements of the outcome, both pre and post the intervention/exposure?		Yes	No	Unclear	N/A
	Outcome 1		☐	☐	☐	☐
	Outcome 2		☐	☐	☐	☐
	Outcome 3		☐	☐	☐	☐
	Outcome 4		☐	☐	☐	☐
	Outcome 5		☐	☐	☐	☐
	Outcome 6		☐	☐	☐	☐
	Outcome 7		☐	☐	☐	☐
6	Were the outcomes of participants included in any comparisons measured in the same way?		Yes	No	Unclear	N/A
	Outcome 1		☐	☐	☐	☐
	Outcome 2		☐	☐	☐	☐
	Outcome 3		☐	☐	☐	☐
	Outcome 4		☐	☐	☐	☐
	Outcome 5		☐	☐	☐	☐
	Outcome 6		☐	☐	☐	☐
	Outcome 7		☐	☐	☐	☐

7	Were outcomes measured in a reliable way		Yes	No	Unclear	N/A
	Outcome 1		☐	☐	☐	☐
	Outcome 2		☐	☐	☐	☐
	Outcome 3		☐	☐	☐	☐
	Outcome 4		☐	☐	☐	☐
	Outcome 5		☐	☐	☐	☐
	Outcome 6		☐	☐	☐	☐
	Outcome 7		☐	☐	☐	☐

Bias related to participant retention

8	Was follow-up complete and if not, were differences between groups in terms of their follow-up adequately described and analyzed?					
	Outcome 1		Yes	No	Unclear	N/A
	Result 1		☐	☐	☐	☐
	Result 2		☐	☐	☐	☐
	Result 3		☐	☐	☐	☐
	Outcome 2		Yes	No	Unclear	N/A
	Result 1		☐	☐	☐	☐

JBI EVIDENCE SYNTHESIS

Result 2		☐	☐	☐	☐
Result 3		☐	☐	☐	☐
Outcome 3		Yes	No	Unclear	N/A
Result 1		☐	☐	☐	☐
Result 2		☐	☐	☐	☐
Result 3		☐	☐	☐	☐
Outcome 4		Yes	No	Unclear	N/A
Result 1		☐	☐	☐	☐
Result 2		☐	☐	☐	☐
Result 3		☐	☐	☐	☐
Outcome 5		Yes	No	Unclear	N/A
Result 1		☐	☐	☐	☐
Result 2		☐	☐	☐	☐
Result 3		☐	☐	☐	☐
Outcome 6		Yes	No	Unclear	N/A
Result 1		☐	☐	☐	☐
Result 2		☐	☐	☐	☐
Result 3		☐	☐	☐	☐

Outcome 7		Yes	No	Unclear	N/A
Result 1		☐	☐	☐	☐
Result 2		☐	☐	☐	☐
Result 3		☐	☐	☐	☐

Statistical Conclusion Validity

Choice - Comments/Justification

9	Was appropriate statistical analysis used?		
	Outcome 1		Yes No Unclear N/A
	Result 1	☐	☐
	Result 2	☐	☐
	Result 3	☐	☐
	Outcome 2		Yes No Unclear N/A
	Result 1	☐	☐
	Result 2	☐	☐
	Result 3	☐	☐
	Outcome 3		Yes No Unclear N/A
	Result 1	☐	☐
	Result 2	☐	☐
	Result 3	☐	☐

Outcome 4		Yes	No	Unclear	N/A
Result 1		☐	☐	☐	☐
Result 2		☐	☐	☐	☐
Result 3		☐	☐	☐	☐
Outcome 5		Yes	No	Unclear	N/A
Result 1		☐	☐	☐	☐
Result 2		☐	☐	☐	☐
Result 3		☐	☐	☐	☐
Outcome 6		Yes	No	Unclear	N/A
Result 1		☐	☐	☐	☐
Result 2		☐	☐	☐	☐
Result 3		☐	☐	☐	☐
Outcome 7		Yes	No	Unclear	N/A
Result 1		☐	☐	☐	☐
Result 2		☐	☐	☐	☐
Result 3		☐	☐	☐	☐

Overall appraisal:
Include: ☐
Exclude: ☐
Seek Further Info: ☐

Comments:

Assessor:	Date of Appraisal:	Record Number:
Study Author:	Study Title:	Study Year:

		Choice - Comments/Justification	Yes	No	Unclear	N/A
Internal Validity						
Bias related to selection and allocation						
1	Was true randomization used for assignment of participants to treatment groups?		☐	☐	☐	☐
2	Was allocation to treatment groups concealed?		☐	☐	☐	☐
3	Were treatment groups similar at the baseline?		☐	☐	☐	☐
Bias related to administration of intervention/exposure						
4	Were participants blind to treatment assignment?		☐	☐	☐	☐
5	Were those delivering the treatment blind to treatment assignment?		☐	☐	☐	☐
6	Were treatment groups treated identically other than the intervention of interest?		☐	☐	☐	☐
Bias related to assessment, detection and measurement of the outcome						
7	Were outcome assessors blind to treatment assignment?		☐	☐	☐	☐
	Outcome 1		☐	☐	☐	☐
	Outcome 2		☐	☐	☐	☐
	Outcome 3		☐	☐	☐	☐

Outcome 4		☐	☐	☐	☐	☐
Outcome 5		☐	☐	☐	☐	☐
Outcome 6		☐	☐	☐	☐	☐
Outcome 7		☐	☐	☐	☐	☐

8	Were outcomes measured in the same way for treatment groups?		Yes	No	Unclear	N/A
	Outcome 1		☐	☐	☐	☐
	Outcome 2		☐	☐	☐	☐
	Outcome 3		☐	☐	☐	☐
	Outcome 4		☐	☐	☐	☐
	Outcome 5		☐	☐	☐	☐
	Outcome 6		☐	☐	☐	☐
	Outcome 7		☐	☐	☐	☐

9	Were outcomes measured in a reliable way		Yes	No	Unclear	N/A
	Outcome 1		☐	☐	☐	☐
	Outcome 2		☐	☐	☐	☐
	Outcome 3		☐	☐	☐	☐
	Outcome 4		☐	☐	☐	☐

Outcome 5		☐	☐	☐	☐	☐
Outcome 6		☐	☐	☐	☐	☐
Outcome 7		☐	☐	☐	☐	☐

Bias related to participant retention						
10	Was follow up complete and if not, were differences between groups in terms of their follow up adequately described and analysed?					
Outcome 1		Yes	No	Unclear	N/A	
Result 1		☐	☐	☐	☐	
Result 2		☐	☐	☐	☐	
Result 3		☐	☐	☐	☐	
Outcome 2		Yes	No	Unclear	N/A	
Result 1		☐	☐	☐	☐	
Result 2		☐	☐	☐	☐	
Result 3		☐	☐	☐	☐	
Outcome 3		Yes	No	Unclear	N/A	
Result 1		☐	☐	☐	☐	
Result 2		☐	☐	☐	☐	
Result 3		☐	☐	☐	☐	
Outcome 4		Yes	No	Unclear	N/A	

Result 1		☐	☐	☐	☐	☐
Result 2		☐	☐	☐	☐	☐
Result 3		☐	☐	☐	☐	☐
Outcome 5		Yes	No	Unclear	N/A	
Result 1		☐	☐	☐	☐	
Result 2		☐	☐	☐	☐	
Result 3		☐	☐	☐	☐	
Outcome 6		Yes	No	Unclear	N/A	
Result 1		☐	☐	☐	☐	
Result 2		☐	☐	☐	☐	
Result 3		☐	☐	☐	☐	
Outcome 7		Yes	No	Unclear	N/A	
Result 1		☐	☐	☐	☐	
Result 2		☐	☐	☐	☐	
Result 3		☐	☐	☐	☐	

Statistical Conclusion Validity

11	Were participants analysed in the groups to which they were randomized?	
	Outcome 1	YesNoUnclearN/A

Result 1		☐	☐	☐	☐	☐
Result 2		☐	☐	☐	☐	☐
Result 3		☐	☐	☐	☐	☐
Outcome 2		Yes	No	Unclear	N/A	
Result 1		☐	☐	☐	☐	☐
Result 2		☐	☐	☐	☐	☐
Result 3		☐	☐	☐	☐	☐
Outcome 3		Yes	No	Unclear	N/A	
Result 1		☐	☐	☐	☐	☐
Result 2		☐	☐	☐	☐	☐
Result 3		☐	☐	☐	☐	☐
Outcome 4		Yes	No	Unclear	N/A	
Result 1		☐	☐	☐	☐	☐
Result 2		☐	☐	☐	☐	☐
Result 3		☐	☐	☐	☐	☐
Outcome 5		Yes	No	Unclear	N/A	
Result 1		☐	☐	☐	☐	☐
Result 2		☐	☐	☐	☐	☐
Result 3		☐	☐	☐	☐	☐
Outcome 6		Yes	No	Unclear	N/A	

Result 1		☐	☐	☐	☐	☐
Result 2		☐	☐	☐	☐	☐
Result 3		☐	☐	☐	☐	☐
Outcome 7		Yes	No	Unclear	N/A	
Result 1		☐	☐	☐	☐	
Result 2		☐	☐	☐	☐	
Result 3		☐	☐	☐	☐	

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Was appropriate statistical analysis used?						
Outcome 1		Yes	No	Unclear	N/A	
Result 1		☐	☐	☐	☐	
Result 2		☐	☐	☐	☐	
Result 3		☐	☐	☐	☐	
Outcome 2		Yes	No	Unclear	N/A	
Result 1		☐	☐	☐	☐	
Result 2		☐	☐	☐	☐	
Result 3		☐	☐	☐	☐	
Outcome 3		Yes	No	Unclear	N/A	
Result 1		☐	☐	☐	☐	
Result 2		☐	☐	☐	☐	

			☐	☐	☐	☐	☐	☐
Result 3								
Outcome 4			Yes	No	Unclear	N/A		
Result 1			☐	☐	☐	☐		
Result 2			☐	☐	☐	☐		
Result 3			☐	☐	☐	☐		
Outcome 5			Yes	No	Unclear	N/A		
Result 1			☐	☐	☐	☐		
Result 2			☐	☐	☐	☐		
Result 3			☐	☐	☐	☐		
Outcome 6			Yes	No	Unclear	N/A		
Result 1			☐	☐	☐	☐		
Result 2			☐	☐	☐	☐		
Result 3			☐	☐	☐	☐		
Outcome 7			Yes	No	Unclear	N/A		
Result 1			☐	☐	☐	☐		
Result 2			☐	☐	☐	☐		
Result 3			☐	☐	☐	☐		
			Yes	No	Unclear	N/A		

13	Was the trial design appropriate and any deviations from the standard RCT design (individual randomization, parallel groups) accounted for in the conduct and analysis of the trial?		☐	☐	☐	☐	☐
Overall appraisal:		Include: ☐	Exclude: ☐	Seek Further Info: ☐			
Comments:							

Table 3 – The JBI Critical Appraisal Tool for RCTs