Supplementary Material: JBI Critical Appraisal Matrix

This supplementary document provides a neutral, tabulated Joanna Briggs Institute (JBI) critical appraisal matrix for the 39 sources included in the scoping review.

Rating legend: Yes (Y), No (N), Unclear (U), Not applicable (NA).

Table S1. Included studies and DOI.

Study ID	Short citation	Title	DOI
1	(Ismayilzada et al., 2025)	Serious Games Analytics in VR Environments: A Two-Stage Systematic Literature Review	**https://doi.org/10.70725/640534sztuwx**
2	(Cárdenas-López et al., 2023)	Semantic fusion of facial expressions and textual opinions from different datasets for learning-centered emotion recognition	**https://doi.org/10.1007/s00500-023-08076-1**
3	(Abbasi et al., 2025)	Exploring the impact of artificial intelligence on curriculum development in global higher education institutions	**https://doi.org/10.1007/s10639-024-13113-z** https://doi.org/10.1007/s10639-024-13113-z
4	(Abou Gamie et al., 2020)	Comparative Analysis for Boosting Classifiers in the Context of Higher Education	**https://doi.org/10.3991/ijet.v15i10.13663**
5	(Deri et al., 2024)	Leveraging Artificial Intelligence in Higher Educational Institutions: A Comprehensive Overview	**https://doi.org/10.1344/REYD2024.30.45777**
6	(Fang et al., 2023)	Research on student engagement in distance learning in sustainability science to design an online intelligent assessment system	**https://doi.org/10.3389/fpsyg.2023.1282386**
7	(Veerasamy et al., 2022)	Formative Assessment Tasks as Indicators of Student Engagement for Predicting At-risk Students in Programming Courses	**https://doi.org/10.15388/infedu.2022.15**
8	(Ma et al., 2023)	Philosophy of self-learning education implemented in a virtual education system	**https://doi.org/10.1016/j.lmot.2023.101916**
9	(Zaibout et al., 2024)	TOWARDS ADVANCED DIGITAL ASSESSMENTS: ARTIFICIAL INTELLIGENCE, GAMIFICATION, AND LEARNING ANALYTICS	(Journal does not assign DOIs; direct URL provided) https://www.iotpe.com/IJTPE/IJTPE-2024/IJTPE-Issue61-Vol16-No4-Dec2024/13-IJTPE-Issue61-Vol16-No4-Dec2024-pp93-105.pdf
10	(Prinsloo et al., 2023)	Multimodal learning analytics-In-between student privacy and encroachment: A systematic review	**https://doi.org/10.1111/bjet.13373**
11	(Truong & Pham, 2025)	Determinants of Adopting 3D Technology Integrated With Artificial Intelligence in STEM	**https://doi.org/10.1002/cae.70019**

		Higher Education: A UTAUT2 Model Approach	
12	(Al-Dokhny et al., 2024)	Can Multimodal Large Language Models Enhance Performance Benefits Among Higher Education Students? An Investigation Based on the Task–Technology Fit Theory and the Artificial Intelligence Device Use A	**https://doi.org/10.3390/su162310780**
13	(Al Husaini et al., 2025)	Predicting Student Academic Success Using Deep Learning: A Multi-Factor Approach to Performance Prediction	**https://doi.org/10.33168/JLISS.2025.0114**
14	(Khlaif et al., 2024)	University Teachers' Views on the Adoption and Integration of Generative AI Tools for Student Assessment in Higher Education	**https://doi.org/10.3390/educsci14101090**
15	(Chun et al., 2025)	A Comparative Analysis of On-Device AI-Driven, Self-Regulated Learning and Traditional Pedagogy in University Health Sciences Education	**https://doi.org/10.3390/app15041815**
16	(Southworth et al., 2023)	Developing a model for AI Across the curriculum: Transforming the higher education landscape via innovation in AI literacy	**https://doi.org/10.1016/j.caeai.2023.100127**
17	(Li et al., 2025)	A complex dynamical system approach to student engagement	**https://doi.org/10.1016/j.learninstruc.2025.102120**
18	(Ross et al., 2018)	Adaptive quizzes to increase motivation, Mark engagement and learning outcomes in a first year accounting unit	**https://doi.org/10.1186/s41239-018-0113-2**
19	(Song et al., 2024)	Integrating AI in college education: Positive yet mixed experiences with ChatGPT	**https://doi.org/10.1016/j.metrad.2024.100113**
20	(Martucci et al., 2025)	Emotional engagement in a humor-understanding reading task: an AI study perspective	**https://doi.org/10.1007/s12144-024-07228-2**
21	(Yang et al., 2023)	Developing a gamified artificial intelligence educational robot to promote learning effectiveness and behavior in laboratory safety courses for undergraduate students	**https://doi.org/10.1186/s41239-023-00391-9**
22	(Barbosa et al., 2024)	Adaptive learning in computer science education: A scoping review	**https://doi.org/10.1007/s10639-023-12066-z**
23	(Liu et al., 2025)	Application and optimization of digital situated teaching in university finance courses from a constructivist perspective: An analysis based on machine learning algorithms	**https://doi.org/10.1007/s10639-025-13496-7**
24	(Amashi et al., 2023)	Investigating the Association Between Student Engagement With Video Content and Their Learnings	**https://doi.org/10.1109/TE.2023.3303421**
25	(Pang et al., 2024)	Artificial Intelligence Use in Feedback: A Qualitative	**https://doi.org/10.53761/40wmcj98**

		Analysis	
26	(Rybinski, 2022)	Assessing how QAA accreditation reflects student experience	**https://doi.org/10.1080/07294360.2021.1872058**
27	(Moreira-Choez et al., 2025)	Validation of a teaching model instrument for university education in Ecuador through an artificial intelligence algorithm	**https://doi.org/10.3389/feduc.2025.1473524**
28	(Al Daraai et al., 2024)	Integrating AI in Higher Education: Applications, Strategies, Ethical Considerations	**https://doi.org/10.4018/979-8-3693-2145-4.ch008**
29	(Huang et al., 2025)	ChatGPT-enhanced mobile instant messaging in online learning: Effects on student outcomes and perceptions	**https://doi.org/10.1016/j.chb.2025.108659**
30	(Papamitsiou et al., 2020)	Utilizing Multimodal Data Through fsQCA to Explain Engagement in Adaptive Learning	**https://doi.org/10.1109/TLT.2020.3020499**
31	(Oc et al., 2024)	Generative AI in Higher Education Assessments: Examining Risk and Tech-Savviness on Student's Adoption	**https://doi.org/10.1177/02734753241302459**
32	(Plumley et al., 2024)	Co-designing enduring learning analytics prediction and support tools in undergraduate biology courses	**https://doi.org/10.1111/bjet.13472**
33	(Kharchenko et al., 2024)	Digital Technologies as a Factor of Transformation of Learning in the University Education	**https://doi.org/10.18662/rrem/16.4/909**
34	(Ren & Wu, 2025)	Examining Teaching Competencies and Challenges While Integrating Artificial Intelligence in Higher Education	**https://doi.org/10.1007/s11528-025-01055-3**
35	(Ulla et al., 2024)	How can GenAI foster an inclusive language classroom? A critical language pedagogy perspective from Philippine university teachers	**https://doi.org/10.1016/j.caeai.2024.100314**
36	(Quigley et al., 2017)	Using learning analytics to understand scientific modeling in the classroom	**https://doi.org/10.3389/fict.2017.00024**
37	(Camacho et al., 2020)	Data Capture and Multimodal Learning Analytics Focused on Engagement with a New Wearable IoT Approach	**https://doi.org/10.1109/TLT.2020.2999787**
38	(Wu & Luo, 2024)	Evaluating English Teaching Quality in Colleges Using Fuzzy Logic and Online Game-Based Learning	**https://doi.org/10.14733/cadaps.2024.S5.237-251**
39	(Nayak et al., 2024)	Inclusive Learning and Assessment in the Era of AI	**https://doi.org/10.1007/s42979-024-03346-7**

Table S2. JBI appraisal summary by study (counts per rating).

Study ID	Appraisal approach	Items	Y	N	U	NA
1	JBI Critical Appraisal Checklist for Systematic Reviews and Research Syntheses.	10	6	3	1	0
2	Algorithm/System Validation (Technical appraisal - No JBI checklist)	5	5	0	0	0
3	JBI Critical Appraisal Checklist for Analytical Cross Sectional Studies.	8	6	1	1	0
4	Algorithm/System Validation (Technical appraisal - No JBI checklist)	5	5	0	0	0
5	No specific JBI checklist (conceptual appraisal)	5	5	0	0	0
6	JBI Critical Appraisal Checklist for Mixed Methods Systematic Reviews (se utiliza como guía).	6	4	0	2	0
7	No specific JBI checklist (conceptual appraisal)	5	4	0	1	0
8	JBI Critical Appraisal Checklist for Quasi-Experimental Studies (aplicable por la naturaleza experimental reportada).	9	2	1	6	0
9	No specific JBI checklist (conceptual appraisal)	5	5	0	0	0
10	JBI Critical Appraisal Checklist for Systematic Reviews and Research Syntheses.	10	8	0	2	0
11	JBI Critical Appraisal Checklist for Analytical Cross Sectional Studies.	8	7	0	1	0

12	JBI Critical Appraisal Checklist for Analytical Cross Sectional Studies.	8	7	0	1	0
13	Algorithm/System Validation (Technical appraisal - No JBI checklist)	5	5	0	0	0
14	JBI Critical Appraisal Checklist for Mixed Methods Systematic Reviews (se utiliza como guía por la naturaleza mixta del estudio).	5	4	0	1	0
15	JBI Critical Appraisal Checklist for Quasi-Experimental Studies.	9	9	0	0	0
16	No specific JBI checklist (conceptual appraisal)	5	5	0	0	0
17	JBI Critical Appraisal Checklist for Analytical Cross Sectional Studies.	8	5	1	2	0
18	JBI Critical Appraisal Checklist for Quasi-Experimental Studies.	9	7	0	1	1
19	JBI Critical Appraisal Checklist for Case Series (aplicable aquí por su naturaleza descriptiva de un grupo).	10	7	0	1	2
20	JBI Critical Appraisal Checklist for Quasi-Experimental Studies (la más apropiada, ya que aunque no hay grupo de control, se manipula una tarea y se miden resultados).	9	4	2	1	2
21	JBI Critical Appraisal Checklist for Randomized Controlled Trials.	13	11	1	1	0
22	JBI Critical Appraisal Checklist for Systematic Reviews and Research	10	8	1	1	0

	Syntheses (aplicable a Scoping Reviews).					
23	JBI Critical Appraisal Checklist for Quasi-Experimental Studies.	9	4	1	2	2
24	JBI Critical Appraisal Checklist for Randomized Controlled Trials.	13	6	2	5	0
25	JBI Critical Appraisal Checklist for Qualitative Research.	9	6	0	3	0
26	JBI Critical Appraisal Checklist for Qualitative Research (aplicada conceptualmente).	8	2	0	6	0
27	Algorithm/System Validation (Technical appraisal - No JBI checklist)	8	8	0	0	0
28	No specific JBI checklist (conceptual appraisal)	5	5	0	0	0
29	JBI Critical Appraisal Checklist for Randomized Controlled Trials.	13	7	2	4	0
30	No specific JBI checklist (conceptual appraisal)	5	5	0	0	0
31	JBI Critical Appraisal Checklist for Qualitative Research.	9	6	0	3	0
32	No specific JBI checklist (conceptual appraisal)	5	5	0	0	0
33	JBI Critical Appraisal Checklist for Mixed Methods Systematic Reviews (se utiliza como guía por la naturaleza mixta del estudio, aunque no sea una revisión). Se evaluará la congruencia entre los componentes.	6	4	0	2	0

34	JBI Critical Appraisal Checklist for Systematic Reviews and Research Syntheses.	10	8	1	1	0
35	JBI Critical Appraisal Checklist for Qualitative Research.	9	9	0	0	0
36	JBI Critical Appraisal Checklist for Case Series (apropiada por su naturaleza descriptiva de un grupo en un contexto específico).	8	8	0	0	0
37	Algorithm/System Validation (Technical appraisal - No JBI checklist)	5	4	0	1	0
38	JBI Critical Appraisal Checklist for Quasi-Experimental Studies.	9	5	0	2	2
39	JBI Critical Appraisal Checklist for Qualitative Research.	8	5	0	3	0

Table S3. Item-level appraisal matrix (ordered as captured in the appraisal record).

Study ID	Appraisal approach	Item No.	Rating
1	JBI Critical Appraisal Checklist for Systematic Reviews and Research Syntheses.	1	Y
1	JBI Critical Appraisal Checklist for Systematic Reviews and Research Syntheses.	2	Y
1	JBI Critical Appraisal Checklist for Systematic Reviews and Research Syntheses.	3	N
1	JBI Critical Appraisal Checklist for Systematic Reviews and Research Syntheses.	4	N
1	JBI Critical Appraisal Checklist for Systematic Reviews and Research Syntheses.	5	N
1	JBI Critical Appraisal Checklist for Systematic Reviews and Research Syntheses.	6	Y
1	JBI Critical Appraisal Checklist for	7	Y

	Systematic Reviews and Research Syntheses.		
1	JBI Critical Appraisal Checklist for Systematic Reviews and Research Syntheses.	8	U
1	JBI Critical Appraisal Checklist for Systematic Reviews and Research Syntheses.	9	Y
1	JBI Critical Appraisal Checklist for Systematic Reviews and Research Syntheses.	10	Y
2	Algorithm/System Validation (Technical appraisal - No JBI checklist)	1	NA
2	Algorithm/System Validation (Technical appraisal - No JBI checklist)	2	NA
2	Algorithm/System Validation (Technical appraisal - No JBI checklist)	3	NA
2	Algorithm/System Validation (Technical appraisal - No JBI checklist)	4	NA
2	Algorithm/System Validation (Technical appraisal - No JBI checklist)	5	NA
3	JBI Critical Appraisal Checklist for Analytical Cross Sectional Studies.	1	N
3	JBI Critical Appraisal Checklist for Analytical Cross Sectional Studies.	2	Y
3	JBI Critical Appraisal Checklist for Analytical Cross Sectional Studies.	3	Y
3	JBI Critical Appraisal Checklist for Analytical Cross Sectional Studies.	4	Y
3	JBI Critical Appraisal Checklist for Analytical Cross Sectional Studies.	5	Y
3	JBI Critical Appraisal Checklist for Analytical Cross Sectional Studies.	6	Y
3	JBI Critical Appraisal Checklist for Analytical Cross Sectional Studies.	7	U
3	JBI Critical Appraisal Checklist for Analytical Cross Sectional Studies.	8	Y
4	Algorithm/System Validation (Technical appraisal - No JBI checklist)	1	NA
4	Algorithm/System Validation (Technical appraisal - No JBI checklist)	2	NA
4	Algorithm/System Validation (Technical	3	NA

	appraisal - No JBI checklist)		
4	Algorithm/System Validation (Technical appraisal - No JBI checklist)	4	NA
4	Algorithm/System Validation (Technical appraisal - No JBI checklist)	5	NA
5	Algorithm/System Validation (Technical appraisal - No JBI checklist)	1	Y
5	Algorithm/System Validation (Technical appraisal - No JBI checklist)	2	Y
5	Algorithm/System Validation (Technical appraisal - No JBI checklist)	3	Y
5	Algorithm/System Validation (Technical appraisal - No JBI checklist)	4	Y
5	Algorithm/System Validation (Technical appraisal - No JBI checklist)	5	Y
6	JBI Critical Appraisal Checklist for Mixed Methods Systematic Reviews (se utiliza como guía).	1	Y
6	JBI Critical Appraisal Checklist for Mixed Methods Systematic Reviews (se utiliza como guía).	2	Y
6	JBI Critical Appraisal Checklist for Mixed Methods Systematic Reviews (se utiliza como guía).	3	Y
6	JBI Critical Appraisal Checklist for Mixed Methods Systematic Reviews (se utiliza como guía).	4	Y
6	JBI Critical Appraisal Checklist for Mixed Methods Systematic Reviews (se utiliza como guía).	5	U
6	JBI Critical Appraisal Checklist for Mixed Methods Systematic Reviews (se utiliza como guía).	6	U
7	No specific JBI checklist (conceptual appraisal)	1	Y
7	No specific JBI checklist (conceptual appraisal)	2	Y
7	No specific JBI checklist (conceptual appraisal)	3	Y
7	No specific JBI checklist (conceptual	4	U

	appraisal)		
7	No specific JBI checklist (conceptual appraisal)	5	Y
8	JBI Critical Appraisal Checklist for Quasi-Experimental Studies (aplicable por la naturaleza experimental reportada).	1	N
8	JBI Critical Appraisal Checklist for Quasi-Experimental Studies (aplicable por la naturaleza experimental reportada).	2	U
8	JBI Critical Appraisal Checklist for Quasi-Experimental Studies (aplicable por la naturaleza experimental reportada).	3	U
8	JBI Critical Appraisal Checklist for Quasi-Experimental Studies (aplicable por la naturaleza experimental reportada).	4	U
8	JBI Critical Appraisal Checklist for Quasi-Experimental Studies (aplicable por la naturaleza experimental reportada).	5	U
8	JBI Critical Appraisal Checklist for Quasi-Experimental Studies (aplicable por la naturaleza experimental reportada).	6	U
8	JBI Critical Appraisal Checklist for Quasi-Experimental Studies (aplicable por la naturaleza experimental reportada).	7	Y
8	JBI Critical Appraisal Checklist for Quasi-Experimental Studies (aplicable por la naturaleza experimental reportada).	8	U
8	JBI Critical Appraisal Checklist for Quasi-Experimental Studies (aplicable por la naturaleza experimental reportada).	9	Y
9	No specific JBI checklist (conceptual appraisal)	1	Y
9	No specific JBI checklist (conceptual appraisal)	2	Y
9	No specific JBI checklist (conceptual appraisal)	3	Y
9	No specific JBI checklist (conceptual appraisal)	4	Y
9	No specific JBI checklist (conceptual appraisal)	5	Y

10	JBI Critical Appraisal Checklist for Systematic Reviews and Research Syntheses.	1	Y
10	JBI Critical Appraisal Checklist for Systematic Reviews and Research Syntheses.	2	Y
10	JBI Critical Appraisal Checklist for Systematic Reviews and Research Syntheses.	3	Y
10	JBI Critical Appraisal Checklist for Systematic Reviews and Research Syntheses.	4	U
10	JBI Critical Appraisal Checklist for Systematic Reviews and Research Syntheses.	5	U
10	JBI Critical Appraisal Checklist for Systematic Reviews and Research Syntheses.	6	Y
10	JBI Critical Appraisal Checklist for Systematic Reviews and Research Syntheses.	7	Y
10	JBI Critical Appraisal Checklist for Systematic Reviews and Research Syntheses.	8	Y
10	JBI Critical Appraisal Checklist for Systematic Reviews and Research Syntheses.	9	Y
10	JBI Critical Appraisal Checklist for Systematic Reviews and Research Syntheses.	10	Y
11	JBI Critical Appraisal Checklist for Analytical Cross Sectional Studies.	1	Y
11	JBI Critical Appraisal Checklist for Analytical Cross Sectional Studies.	2	U
11	JBI Critical Appraisal Checklist for Analytical Cross Sectional Studies.	3	Y
11	JBI Critical Appraisal Checklist for Analytical Cross Sectional Studies.	4	Y
11	JBI Critical Appraisal Checklist for Analytical Cross Sectional Studies.	5	Y
11	JBI Critical Appraisal Checklist for Analytical Cross Sectional Studies.	6	Y
11	JBI Critical Appraisal Checklist for Analytical Cross Sectional Studies.	7	Y
11	JBI Critical Appraisal Checklist for Analytical Cross Sectional Studies.	8	Y
12	JBI Critical Appraisal Checklist for Analytical Cross Sectional Studies.	1	U

12	JBI Critical Appraisal Checklist for Analytical Cross Sectional Studies.	2	Y
12	JBI Critical Appraisal Checklist for Analytical Cross Sectional Studies.	3	Y
12	JBI Critical Appraisal Checklist for Analytical Cross Sectional Studies.	4	Y
12	JBI Critical Appraisal Checklist for Analytical Cross Sectional Studies.	5	Y
12	JBI Critical Appraisal Checklist for Analytical Cross Sectional Studies.	6	Y
12	JBI Critical Appraisal Checklist for Analytical Cross Sectional Studies.	7	Y
12	JBI Critical Appraisal Checklist for Analytical Cross Sectional Studies.	8	Y
13	Algorithm/System Validation (Technical appraisal - No JBI checklist)	1	NA
13	Algorithm/System Validation (Technical appraisal - No JBI checklist)	2	NA
13	Algorithm/System Validation (Technical appraisal - No JBI checklist)	3	NA
13	Algorithm/System Validation (Technical appraisal - No JBI checklist)	4	NA
13	Algorithm/System Validation (Technical appraisal - No JBI checklist)	5	NA
14	JBI Critical Appraisal Checklist for Mixed Methods Systematic Reviews (se utiliza como guía por la naturaleza mixta del estudio).	1	Y
14	JBI Critical Appraisal Checklist for Mixed Methods Systematic Reviews (se utiliza como guía por la naturaleza mixta del estudio).	2	Y
14	JBI Critical Appraisal Checklist for Mixed Methods Systematic Reviews (se utiliza como guía por la naturaleza mixta del estudio).	3	Y
14	JBI Critical Appraisal Checklist for Mixed Methods Systematic Reviews (se utiliza como guía por la naturaleza mixta del estudio).	4	U

14	JBI Critical Appraisal Checklist for Mixed Methods Systematic Reviews (se utiliza como guía por la naturaleza mixta del estudio).	5	Y
15	JBI Critical Appraisal Checklist for Quasi-Experimental Studies.	1	Y
15	JBI Critical Appraisal Checklist for Quasi-Experimental Studies.	2	Y
15	JBI Critical Appraisal Checklist for Quasi-Experimental Studies.	3	Y
15	JBI Critical Appraisal Checklist for Quasi-Experimental Studies.	4	Y
15	JBI Critical Appraisal Checklist for Quasi-Experimental Studies.	5	Y
15	JBI Critical Appraisal Checklist for Quasi-Experimental Studies.	6	Y
15	JBI Critical Appraisal Checklist for Quasi-Experimental Studies.	7	Y
15	JBI Critical Appraisal Checklist for Quasi-Experimental Studies.	8	Y
15	JBI Critical Appraisal Checklist for Quasi-Experimental Studies.	9	Y
16	No specific JBI checklist (conceptual appraisal)	1	Y
16	No specific JBI checklist (conceptual appraisal)	2	Y
16	No specific JBI checklist (conceptual appraisal)	3	Y
16	No specific JBI checklist (conceptual appraisal)	4	Y
16	No specific JBI checklist (conceptual appraisal)	5	Y
17	JBI Critical Appraisal Checklist for Analytical Cross Sectional Studies.	1	U
17	JBI Critical Appraisal Checklist for Analytical Cross Sectional Studies.	2	Y
17	JBI Critical Appraisal Checklist for Analytical Cross Sectional Studies.	3	Y
17	JBI Critical Appraisal Checklist for Analytical	4	N

	Cross Sectional Studies.		
17	JBI Critical Appraisal Checklist for Analytical Cross Sectional Studies.	5	Y
17	JBI Critical Appraisal Checklist for Analytical Cross Sectional Studies.	6	Y
17	JBI Critical Appraisal Checklist for Analytical Cross Sectional Studies.	7	U
17	JBI Critical Appraisal Checklist for Analytical Cross Sectional Studies.	8	Y
18	JBI Critical Appraisal Checklist for Quasi-Experimental Studies.	1	Y
18	JBI Critical Appraisal Checklist for Quasi-Experimental Studies.	2	Y
18	JBI Critical Appraisal Checklist for Quasi-Experimental Studies.	3	NA
18	JBI Critical Appraisal Checklist for Quasi-Experimental Studies.	4	Y
18	JBI Critical Appraisal Checklist for Quasi-Experimental Studies.	5	Y
18	JBI Critical Appraisal Checklist for Quasi-Experimental Studies.	6	U
18	JBI Critical Appraisal Checklist for Quasi-Experimental Studies.	7	Y
18	JBI Critical Appraisal Checklist for Quasi-Experimental Studies.	8	Y
18	JBI Critical Appraisal Checklist for Quasi-Experimental Studies.	9	Y
19	JBI Critical Appraisal Checklist for Case Series (aplicable aquí por su naturaleza descriptiva de un grupo).	1	Y
19	JBI Critical Appraisal Checklist for Case Series (aplicable aquí por su naturaleza descriptiva de un grupo).	2	Y
19	JBI Critical Appraisal Checklist for Case Series (aplicable aquí por su naturaleza descriptiva de un grupo).	3	Y
19	JBI Critical Appraisal Checklist for Case Series (aplicable aquí por su naturaleza descriptiva de un grupo).	4	U

19	JBI Critical Appraisal Checklist for Case Series (aplicable aquí por su naturaleza descriptiva de un grupo).	5	NA
19	JBI Critical Appraisal Checklist for Case Series (aplicable aquí por su naturaleza descriptiva de un grupo).	6	NA
19	JBI Critical Appraisal Checklist for Case Series (aplicable aquí por su naturaleza descriptiva de un grupo).	7	Y
19	JBI Critical Appraisal Checklist for Case Series (aplicable aquí por su naturaleza descriptiva de un grupo).	8	Y
19	JBI Critical Appraisal Checklist for Case Series (aplicable aquí por su naturaleza descriptiva de un grupo).	9	Y
19	JBI Critical Appraisal Checklist for Case Series (aplicable aquí por su naturaleza descriptiva de un grupo).	10	Y
20	JBI Critical Appraisal Checklist for Quasi-Experimental Studies (la más apropiada, ya que aunque no hay grupo de control, se manipula una tarea y se miden resultados).	1	Y
20	JBI Critical Appraisal Checklist for Quasi-Experimental Studies (la más apropiada, ya que aunque no hay grupo de control, se manipula una tarea y se miden resultados).	2	NA
20	JBI Critical Appraisal Checklist for Quasi-Experimental Studies (la más apropiada, ya que aunque no hay grupo de control, se manipula una tarea y se miden resultados).	3	NA
20	JBI Critical Appraisal Checklist for Quasi-Experimental Studies (la más apropiada, ya que aunque no hay grupo de control, se manipula una tarea y se miden resultados).	4	N
20	JBI Critical Appraisal Checklist for Quasi-Experimental Studies (la más apropiada, ya que aunque no hay grupo de control, se manipula una tarea y se miden resultados).	5	N
20	JBI Critical Appraisal Checklist for Quasi-Experimental Studies (la más apropiada, ya que aunque no hay grupo de control, se manipula una tarea y se miden resultados).	6	U
20	JBI Critical Appraisal Checklist for Quasi-	7	Y

	Experimental Studies (la más apropiada, ya que aunque no hay grupo de control, se manipula una tarea y se miden resultados).		
20	JBI Critical Appraisal Checklist for Quasi-Experimental Studies (la más apropiada, ya que aunque no hay grupo de control, se manipula una tarea y se miden resultados).	8	Y
20	JBI Critical Appraisal Checklist for Quasi-Experimental Studies (la más apropiada, ya que aunque no hay grupo de control, se manipula una tarea y se miden resultados).	9	Y
21	JBI Critical Appraisal Checklist for Randomized Controlled Trials.	1	Y
21	JBI Critical Appraisal Checklist for Randomized Controlled Trials.	2	U
21	JBI Critical Appraisal Checklist for Randomized Controlled Trials.	3	Y
21	JBI Critical Appraisal Checklist for Randomized Controlled Trials.	4	N
21	JBI Critical Appraisal Checklist for Randomized Controlled Trials.	5	Y
21	JBI Critical Appraisal Checklist for Randomized Controlled Trials.	6	Y
21	JBI Critical Appraisal Checklist for Randomized Controlled Trials.	7	Y
21	JBI Critical Appraisal Checklist for Randomized Controlled Trials.	8	Y
21	JBI Critical Appraisal Checklist for Randomized Controlled Trials.	9	Y
21	JBI Critical Appraisal Checklist for Randomized Controlled Trials.	10	Y
21	JBI Critical Appraisal Checklist for Randomized Controlled Trials.	11	Y
21	JBI Critical Appraisal Checklist for Randomized Controlled Trials.	12	Y
21	JBI Critical Appraisal Checklist for Randomized Controlled Trials.	13	Y
22	JBI Critical Appraisal Checklist for Systematic Reviews and Research Syntheses (aplicable a Scoping Reviews).	1	Y

22	JBI Critical Appraisal Checklist for Systematic Reviews and Research Syntheses (aplicable a Scoping Reviews).	2	Y
22	JBI Critical Appraisal Checklist for Systematic Reviews and Research Syntheses (aplicable a Scoping Reviews).	3	Y
22	JBI Critical Appraisal Checklist for Systematic Reviews and Research Syntheses (aplicable a Scoping Reviews).	4	U
22	JBI Critical Appraisal Checklist for Systematic Reviews and Research Syntheses (aplicable a Scoping Reviews).	5	N
22	JBI Critical Appraisal Checklist for Systematic Reviews and Research Syntheses (aplicable a Scoping Reviews).	6	Y
22	JBI Critical Appraisal Checklist for Systematic Reviews and Research Syntheses (aplicable a Scoping Reviews).	7	Y
22	JBI Critical Appraisal Checklist for Systematic Reviews and Research Syntheses (aplicable a Scoping Reviews).	8	Y
22	JBI Critical Appraisal Checklist for Systematic Reviews and Research Syntheses (aplicable a Scoping Reviews).	9	Y
22	JBI Critical Appraisal Checklist for Systematic Reviews and Research Syntheses (aplicable a Scoping Reviews).	10	Y
23	JBI Critical Appraisal Checklist for Quasi-Experimental Studies.	1	Y
23	JBI Critical Appraisal Checklist for Quasi-Experimental Studies.	2	NA
23	JBI Critical Appraisal Checklist for Quasi-Experimental Studies.	3	NA
23	JBI Critical Appraisal Checklist for Quasi-Experimental Studies.	4	N
23	JBI Critical Appraisal Checklist for Quasi-Experimental Studies.	5	Y
23	JBI Critical Appraisal Checklist for Quasi-Experimental Studies.	6	U
23	JBI Critical Appraisal Checklist for Quasi-Experimental Studies.	7	Y

23	JBI Critical Appraisal Checklist for Quasi-Experimental Studies.	8	U
23	JBI Critical Appraisal Checklist for Quasi-Experimental Studies.	9	Y
24	JBI Critical Appraisal Checklist for Randomized Controlled Trials.	1	N
24	JBI Critical Appraisal Checklist for Randomized Controlled Trials.	2	U
24	JBI Critical Appraisal Checklist for Randomized Controlled Trials.	3	Y
24	JBI Critical Appraisal Checklist for Randomized Controlled Trials.	4	N
24	JBI Critical Appraisal Checklist for Randomized Controlled Trials.	5	U
24	JBI Critical Appraisal Checklist for Randomized Controlled Trials.	6	Y
24	JBI Critical Appraisal Checklist for Randomized Controlled Trials.	7	Y
24	JBI Critical Appraisal Checklist for Randomized Controlled Trials.	8	Y
24	JBI Critical Appraisal Checklist for Randomized Controlled Trials.	9	U
24	JBI Critical Appraisal Checklist for Randomized Controlled Trials.	10	U
24	JBI Critical Appraisal Checklist for Randomized Controlled Trials.	11	U
24	JBI Critical Appraisal Checklist for Randomized Controlled Trials.	12	Y
24	JBI Critical Appraisal Checklist for Randomized Controlled Trials.	13	Y
25	JBI Critical Appraisal Checklist for Qualitative Research.	1	Y
25	JBI Critical Appraisal Checklist for Qualitative Research.	2	Y
25	JBI Critical Appraisal Checklist for Qualitative Research.	3	Y
25	JBI Critical Appraisal Checklist for Qualitative Research.	4	Y

25	JBI Critical Appraisal Checklist for Qualitative Research.	5	U
25	JBI Critical Appraisal Checklist for Qualitative Research.	6	U
25	JBI Critical Appraisal Checklist for Qualitative Research.	7	Y
25	JBI Critical Appraisal Checklist for Qualitative Research.	8	U
25	JBI Critical Appraisal Checklist for Qualitative Research.	9	Y
26	JBI Critical Appraisal Checklist for Qualitative Research (aplicada conceptualmente).	1	Y
26	JBI Critical Appraisal Checklist for Qualitative Research (aplicada conceptualmente).	2	Y
26	JBI Critical Appraisal Checklist for Qualitative Research (aplicada conceptualmente).	3	U
26	JBI Critical Appraisal Checklist for Qualitative Research (aplicada conceptualmente).	4	U
26	JBI Critical Appraisal Checklist for Qualitative Research (aplicada conceptualmente).	5	U
26	JBI Critical Appraisal Checklist for Qualitative Research (aplicada conceptualmente).	6	U
26	JBI Critical Appraisal Checklist for Qualitative Research (aplicada conceptualmente).	7	U
26	JBI Critical Appraisal Checklist for Qualitative Research (aplicada conceptualmente).	8	U
27	Algorithm/System Validation (Technical appraisal - No JBI checklist)	1	NA
27	Algorithm/System Validation (Technical appraisal - No JBI checklist)	2	NA
27	Algorithm/System Validation (Technical appraisal - No JBI checklist)	3	NA

27	Algorithm/System Validation (Technical appraisal - No JBI checklist)	4	NA
27	Algorithm/System Validation (Technical appraisal - No JBI checklist)	5	NA
27	Algorithm/System Validation (Technical appraisal - No JBI checklist)	6	NA
27	Algorithm/System Validation (Technical appraisal - No JBI checklist)	7	NA
27	Algorithm/System Validation (Technical appraisal - No JBI checklist)	8	NA
28	No specific JBI checklist (conceptual appraisal)	1	Y
28	No specific JBI checklist (conceptual appraisal)	2	Y
28	No specific JBI checklist (conceptual appraisal)	3	Y
28	No specific JBI checklist (conceptual appraisal)	4	Y
28	No specific JBI checklist (conceptual appraisal)	5	Y
29	JBI Critical Appraisal Checklist for Randomized Controlled Trials.	1	Y
29	JBI Critical Appraisal Checklist for Randomized Controlled Trials.	2	U
29	JBI Critical Appraisal Checklist for Randomized Controlled Trials.	3	Y
29	JBI Critical Appraisal Checklist for Randomized Controlled Trials.	4	N
29	JBI Critical Appraisal Checklist for Randomized Controlled Trials.	5	N
29	JBI Critical Appraisal Checklist for Randomized Controlled Trials.	6	U
29	JBI Critical Appraisal Checklist for Randomized Controlled Trials.	7	Y
29	JBI Critical Appraisal Checklist for Randomized Controlled Trials.	8	Y
29	JBI Critical Appraisal Checklist for Randomized Controlled Trials.	9	Y

29	JBI Critical Appraisal Checklist for Randomized Controlled Trials.	10	U
29	JBI Critical Appraisal Checklist for Randomized Controlled Trials.	11	U
29	JBI Critical Appraisal Checklist for Randomized Controlled Trials.	12	Y
29	JBI Critical Appraisal Checklist for Randomized Controlled Trials.	13	Y
30	No specific JBI checklist (conceptual appraisal)	1	Y
30	No specific JBI checklist (conceptual appraisal)	2	Y
30	No specific JBI checklist (conceptual appraisal)	3	Y
30	No specific JBI checklist (conceptual appraisal)	4	Y
30	No specific JBI checklist (conceptual appraisal)	5	Y
31	JBI Critical Appraisal Checklist for Qualitative Research.	1	Y
31	JBI Critical Appraisal Checklist for Qualitative Research.	2	Y
31	JBI Critical Appraisal Checklist for Qualitative Research.	3	Y
31	JBI Critical Appraisal Checklist for Qualitative Research.	4	Y
31	JBI Critical Appraisal Checklist for Qualitative Research.	5	U
31	JBI Critical Appraisal Checklist for Qualitative Research.	6	U
31	JBI Critical Appraisal Checklist for Qualitative Research.	7	Y
31	JBI Critical Appraisal Checklist for Qualitative Research.	8	U
31	JBI Critical Appraisal Checklist for Qualitative Research.	9	Y
32	No specific JBI checklist (conceptual appraisal)	1	Y

32	No specific JBI checklist (conceptual appraisal)	2	Y
32	No specific JBI checklist (conceptual appraisal)	3	Y
32	No specific JBI checklist (conceptual appraisal)	4	Y
32	No specific JBI checklist (conceptual appraisal)	5	Y
33	JBI Critical Appraisal Checklist for Mixed Methods Systematic Reviews (se utiliza como guía por la naturaleza mixta del estudio, aunque no sea una revisión). Se evaluará la congruencia entre los componentes.	1	Y
33	JBI Critical Appraisal Checklist for Mixed Methods Systematic Reviews (se utiliza como guía por la naturaleza mixta del estudio, aunque no sea una revisión). Se evaluará la congruencia entre los componentes.	2	Y
33	JBI Critical Appraisal Checklist for Mixed Methods Systematic Reviews (se utiliza como guía por la naturaleza mixta del estudio, aunque no sea una revisión). Se evaluará la congruencia entre los componentes.	3	Y
33	JBI Critical Appraisal Checklist for Mixed Methods Systematic Reviews (se utiliza como guía por la naturaleza mixta del estudio, aunque no sea una revisión). Se evaluará la congruencia entre los componentes.	4	Y
33	JBI Critical Appraisal Checklist for Mixed Methods Systematic Reviews (se utiliza como guía por la naturaleza mixta del estudio, aunque no sea una revisión). Se evaluará la congruencia entre los componentes.	5	U
33	JBI Critical Appraisal Checklist for Mixed Methods Systematic Reviews (se utiliza como guía por la naturaleza mixta del estudio, aunque no sea una revisión). Se evaluará la congruencia entre los componentes.	6	U

34	JBI Critical Appraisal Checklist for Systematic Reviews and Research Syntheses.	1	Y
34	JBI Critical Appraisal Checklist for Systematic Reviews and Research Syntheses.	2	Y
34	JBI Critical Appraisal Checklist for Systematic Reviews and Research Syntheses.	3	Y
34	JBI Critical Appraisal Checklist for Systematic Reviews and Research Syntheses.	4	N
34	JBI Critical Appraisal Checklist for Systematic Reviews and Research Syntheses.	5	U
34	JBI Critical Appraisal Checklist for Systematic Reviews and Research Syntheses.	6	Y
34	JBI Critical Appraisal Checklist for Systematic Reviews and Research Syntheses.	7	Y
34	JBI Critical Appraisal Checklist for Systematic Reviews and Research Syntheses.	8	Y
34	JBI Critical Appraisal Checklist for Systematic Reviews and Research Syntheses.	9	Y
34	JBI Critical Appraisal Checklist for Systematic Reviews and Research Syntheses.	10	Y
35	JBI Critical Appraisal Checklist for Qualitative Research.	1	Y
35	JBI Critical Appraisal Checklist for Qualitative Research.	2	Y
35	JBI Critical Appraisal Checklist for Qualitative Research.	3	Y
35	JBI Critical Appraisal Checklist for Qualitative Research.	4	Y
35	JBI Critical Appraisal Checklist for Qualitative Research.	5	Y
35	JBI Critical Appraisal Checklist for Qualitative Research.	6	Y
35	JBI Critical Appraisal Checklist for Qualitative Research.	7	Y
35	JBI Critical Appraisal Checklist for Qualitative Research.	8	Y
35	JBI Critical Appraisal Checklist for Qualitative Research.	9	Y

36	JBI Critical Appraisal Checklist for Case Series (apropiada por su naturaleza descriptiva de un grupo en un contexto específico).	1	Y
36	JBI Critical Appraisal Checklist for Case Series (apropiada por su naturaleza descriptiva de un grupo en un contexto específico).	2	Y
36	JBI Critical Appraisal Checklist for Case Series (apropiada por su naturaleza descriptiva de un grupo en un contexto específico).	3	Y
36	JBI Critical Appraisal Checklist for Case Series (apropiada por su naturaleza descriptiva de un grupo en un contexto específico).	4	Y
36	JBI Critical Appraisal Checklist for Case Series (apropiada por su naturaleza descriptiva de un grupo en un contexto específico).	5	Y
36	JBI Critical Appraisal Checklist for Case Series (apropiada por su naturaleza descriptiva de un grupo en un contexto específico).	6	Y
36	JBI Critical Appraisal Checklist for Case Series (apropiada por su naturaleza descriptiva de un grupo en un contexto específico).	7	Y
36	JBI Critical Appraisal Checklist for Case Series (apropiada por su naturaleza descriptiva de un grupo en un contexto específico).	8	Y
37	Algorithm/System Validation (Technical appraisal - No JBI checklist)	1	NA
37	Algorithm/System Validation (Technical appraisal - No JBI checklist)	2	NA
37	Algorithm/System Validation (Technical appraisal - No JBI checklist)	3	NA
37	Algorithm/System Validation (Technical appraisal - No JBI checklist)	4	NA
37	Algorithm/System Validation (Technical appraisal - No JBI checklist)	5	NA

38	JBI Critical Appraisal Checklist for Quasi-Experimental Studies.	1	Y
38	JBI Critical Appraisal Checklist for Quasi-Experimental Studies.	2	Y
38	JBI Critical Appraisal Checklist for Quasi-Experimental Studies.	3	NA
38	JBI Critical Appraisal Checklist for Quasi-Experimental Studies.	4	Y
38	JBI Critical Appraisal Checklist for Quasi-Experimental Studies.	5	U
38	JBI Critical Appraisal Checklist for Quasi-Experimental Studies.	6	NA
38	JBI Critical Appraisal Checklist for Quasi-Experimental Studies.	7	Y
38	JBI Critical Appraisal Checklist for Quasi-Experimental Studies.	8	U
38	JBI Critical Appraisal Checklist for Quasi-Experimental Studies.	9	Y
39	JBI Critical Appraisal Checklist for Qualitative Research.	1	Y
39	JBI Critical Appraisal Checklist for Qualitative Research.	2	Y
39	JBI Critical Appraisal Checklist for Qualitative Research.	3	Y
39	JBI Critical Appraisal Checklist for Qualitative Research.	4	Y
39	JBI Critical Appraisal Checklist for Qualitative Research.	5	U
39	JBI Critical Appraisal Checklist for Qualitative Research.	6	U
39	JBI Critical Appraisal Checklist for Qualitative Research.	7	Y
39	JBI Critical Appraisal Checklist for Qualitative Research.	8	U