

Supplementary material

Appendix 2. Critical appraisal results

Supplementary table 1. JBI critical assessment for case-controlled trials

(reproduced from Brophy L, Oostermeijer S, Minshall C, Harvey C, Hamilton B, Roper C, Martel A, Fletcher J. Designing mental health facilities that prevent the use of seclusion and restraint: an Evidence Check rapid review brokered by the Sax Institute (www.saxinstitute.org.au) for the NSW Ministry of Health, 2020.Appendix 1)

	Andersen et al., 2017
1. Were the groups comparable other than the presence of disease in cases or the absence of disease in controls?	UC
2. Were cases and controls matched appropriately?	UC
3. Were the same criteria used for identification of cases and controls?	UC
4. Was exposure measured in a standard, valid and reliable way?	UC
5. Was exposure measured in the same way for cases and controls?	UC
6. Were confounding factors identified?	UC
7. Were strategies to deal with confounding factors stated?	UC
8. Were outcomes assessed in a standard, valid and reliable way for cases and controls?	UC
9. Was the exposure period of interest long enough to be meaningful?	UC
10. Was appropriate statistical analysis used?	UC

Note. UC = unclear.

Supplementary table 2. JBI critical assessment for non-randomised trial

(reproduced from Brophy L, Oostermeijer S, Minshall C, Harvey C, Hamilton B, Roper C, Martel A, Fletcher J. Designing mental health facilities that prevent the use of seclusion and restraint: an Evidence Check rapid review brokered by the Sax Institute (www.saxinstitute.org.au) for the NSW Ministry of Health, 2020.Appendix 1)

	Ash et al., 2015	Bak et al., 2014	Blair et al., 2017	Bobier et al., 2015	Borckardt et al., 2011	Bowers et al., 2010	Bowers et al., 2012	Cummings et al., 2010	Eggert et al., 2014	Espinosa et al., 2015	Fletcher et al., 2019	Georgieva et al., 2010	Jenkins et al., 2014	Lloyd et al., 2014	Madan et al., 2014	Maguire et al., 2012	Mann-Poll et al., 2011	Novak et al., 2012	Seckman et al., 2017	Sivak, 2012	Smith & Jones., 2014	Southard et al., 2012	Trzpcu et al., 2016	Ulrich et al., 2018	van der Schaaf et al., 2013	Yakov et al., 2018
1. Is it clear in the study what is the 'cause' and	Y	UC	Y	Y	Y	Y	Y	UC	N	N	Y	Y	Y	Y	UC	UC	Y	Y	UC	UC	Y	UC	UC	Y	UC	Y
2. Were the participants included in any	UC	UC	Y	Y	Y	UC	UC	UC	UC	UC	NA	NA	Y	UC	UC	UC	NA	Y	Y	UC	Y	UC	UC	Y	UC	UC
3. Were the participants included in any	Y	UC	Y	Y	Y	UC	UC	UC	UC	UC	NA	UC	Y	Y	UC	UC	NA	Y	Y	UC	Y	UC	UC	UC	UC	UC
4. Was there a control/ comparison group?	UC	UC	Y	Y	Y	UC	UC	UC	UC	UC	NA	N	Y	Y	Y	Y	NA	Y	Y	UC	Y	N	N	Y	Y	Y
5. Were there multiple measurements of the	Y	UC	Y	Y	Y	UC	UC	UC	UC	UC	NA	UC	Y	UC	UC	UC	NA	Y	Y	UC	UC	UC	Y	Y	UC	UC
6. Was follow-up complete and if not, were the	UC	UC	Y	UC	Y	UC	UC	UC	UC	UC	Y	UC	UC	UC	UC	UC	NA	UC	NC	UC	UC	UC	UC	UC	UC	UC
7. Were the outcomes of participants' comparisons	UC	UC	Y	Y	Y	UC	UC	UC	Y	UC	Y	UC	Y	Y	Y	Y	Y	Y	Y	UC	UC	Y	Y	UC	Y	Y
8. Were outcomes measured in a reliable way?	UC	UC	Y	UC	Y	UC	UC	N	UC	UC	Y	N	Y	UC	UC	UC	UC	UC	UC	N	UC	UC	UC	UC	Y	UC
9. Was appropriate statistical analysis used?	UC	UC	Y	UC	Y	UC	UC	N	UC	UC	Y	N	Y	UC	UC	UC	Y	Y	UC	N	UC	UC	UC	UC	Y	UC

Note. Y= yes, N= no, UC = Unclear, NA = not applicable.

Supplementary table 3. JBI critical assessment of qualitative studies

(reproduced from Brophy L, Oostermeijer S, Minshall C, Harvey C, Hamilton B, Roper C, Martel A, Fletcher J. Designing mental health facilities that prevent the use of seclusion and restraint: an Evidence Check rapid review brokered by the Sax Institute (www.saxinstitute.org.au) for the NSW Ministry of Health, 2020.Appendix 1)

	Björkdahl et al., 2016	Brophy et al., 2016a	Brophy et al., 2016b	Fletcher et al., 2019	Forsyth et al., 2018	Lindberg et al., 2019	Muir-Cochrane et al., 2015	Rose et al., 2015	Smith & Jones al., 2014	Trzpcuc et al., 2016
1. Is there congruity between the philosophical perspective and the research?	Y	Y	Y	Y	Y	Y	Y	Y	UC	Y
2. Is there congruity between the research methodology and the research question?	Y	Y	Y	Y	Y	Y	UC	UC	UC	Y
3. Is there congruity between the research methodology and data collection?	UC	Y	Y	Y	Y	Y	UC	Y	Y	UC
4. Is there congruity between the research methodology and the data analysis?	UC	Y	Y	Y	Y	Y	Y	Y	UC	Y
5. Is there congruity between the research methodology and the interpretation of results?	Y	Y	Y	Y	Y	Y	Y	Y	UC	Y
6. Is there a statement locating the researcher culturally or theoretically?	UC	Y	Y	UC	UC	UC	UC	Y	UC	Y
7. Is the influence of the researcher on the research, and vice- versa, addressed?	UC	Y	Y	Y	UC	UC	UC	UC	UC	Y
8. Are participants, and their voices, adequately represented?	Y	Y	Y	Y	Y	Y	Y	Y	UC	Y
9. Is the research ethical according to current criteria or, evidence of ethical approval?	Y	Y	Y	Y	Y	Y	Y	Y	Y	N
10. Do the conclusions drawn in the research report flow from the analysis, or interpretation?	UC	Y	Y	Y	Y	Y	Y	Y	UC	Y

Note. Y= yes, UC = Unclear.

Supplementary table 4. JBI critical assessment of expert opinion publications

(reproduced from Brophy L, Oostermeijer S, Minshall C, Harvey C, Hamilton B, Roper C, Martel A, Fletcher J. Designing mental health facilities that prevent the use of seclusion and restraint: an Evidence Check rapid review brokered by the Sax Institute (www.saxinstitute.org.au) for the NSW Ministry of Health, 2020.Appendix 1)

	Dresler et al., 2015
1. Is the source of the opinion clearly identified?	Y
2. Does the source of opinion have standing in the field of expertise?	Y
3. Are the interests of the relevant population the central focus of the opinion?	UC
4. Is the stated position the result of an analytical process, and is there logic in the opinion expressed?	UC
5. Is there reference to the extant literature?	Y
6. Is any incongruence with the literature/sources logically defended?	UC

Note. Y= yes, UC = Unclear.