

	Low risk of bias
	Moderate risk of bias
	High risk of bias
	Not reported

Supplementary Material 1. Assessment of Risk of Bias

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
(Brewis and Wutich, 2012)	Low	Low	Not	Low	High	High	Not	Low	Low	Low	Low	Moderate	Not	High	Not	Low	Low	Moderate	Not	Low
(Hansson and Rasmussen, 2014)	Low	Low	Not	Low	Moderate	High	Not	Low	Low	Low	Low	Moderate	Not	High	Moderate	Low	Low	Low	Not	Low
(Hilbert et al., 2017)	Low	Low	Not	Low	Low	Low	Not	Low	Low	Low	Low	Low	Not	High	Moderate	Low	Low	Low	Not	Low
(Jimenez-Cruz et al., 2012)	Low	Low	Not	Low	High	High	Not	Moderate	Low	Low	Moderate	Low	Not	High	Moderate	Moderate	Moderate	Moderate	Not	Low
(Lippa and Sanderson, 2012)	Low	Moderate	Not	Low	Moderate	High	Not	Low	Low	Low	Low	Low	Not	High	Low	Low	Low	Low	Not	Low
(Lund et al., 2015)	Low	Low	Not	Low	Moderate	High	Not	High	High	Low	Moderate	Moderate	Not	High	Low	Low	Low	Low	Not	Low
(Oliver and Lee, 2005)	Low	Low	Not	Low	Low	Low	Not	Not	Not	Low	Low	High	Moderate	High	Low	Low	Low	High	Not	Low
(Puhl et al., 2011)	Low	Low	Not	Low	Low	Low	Not	Low	Low	Low	Low	Low	Not	High	Low	Low	Low	Low	Not	Low
(Puhl et al., 2015)	Low	Low	Not	Low	Low	Low	Not	Low	Low	Low	Low	Low	Not	High	Low	Low	Low	Low	Not	Low
(Puhl and Heuer, 2011)	Low	Low	Not	Low	Low	Low	Not	Low	Low	Low	Low	Low	Not	High	Not	Low	Low	Low	Not	Low
(Puhl et al., 2015)	Low	Low	Not	Low	Low	Low	Not	Low	Low	Low	Low	Low	Not	High	Low	Low	Low	Low	Not	Low
(Puhl and Liu, 2015)	Low	Low	Not	Low	Low	Low	Not	High	Low	Low	Low	Low	Not	High	Low	Low	Low	Low	Not	Low
(Seo and Torabi, 2006)	Low	Low	Not	Low	Low	Low	Not	Not	Not	Low	Low	Moderate	Not	High	Not	Low	Low	Low	Not	Low
(Sikorski et al., 2012)	Low	Low	Not	Low	Low	Low	Not	Low	Low	Low	Low	Moderate	Not	High	Low	Low	Low	Low	Not	Low
(Suh et al., 2014)	Low	Low	Not	Low	Moderate	Low	Not	Low	Low	Low	Low	Low	Not	High	Low	Low	Low	Low	Not	Low
(Swami and Monk, 2013)	Low	Low	Not	Low	High	High	Not	Low	Low	Low	Low	Moderate	Not	High	Low	Low	Low	Low	Not	Low

AXIS – Tool to assess the quality of cross-sectional studies (Downes et al., 2016)

1. Were the aims/objectives of the study clear?
2. Was the study design appropriate for the stated aim(s)?
3. Was the sample size justified?
4. Was the target/reference population clearly defined? (Is it clear who the research was about?)
5. Was the sample frame taken from an appropriate population base so that it closely represented the target/reference population under investigation?
6. Was the selection process likely to select subjects/participants that were representative of the target/reference population under investigation?
7. Were measures undertaken to address and categorise non-responders?
8. Were the risk factor and outcome variables measured appropriate to the aims of the study?
9. Were the risk factor and outcome variables measured correctly using instruments/measurements that had been trialled, piloted or published previously?
10. Is it clear what was used to determine statistical significance and/or precision estimates? (eg, p values, CIs)
11. Were the methods (including statistical methods) sufficiently described to enable them to be repeated?
12. Were the basic data adequately described?
13. Does the response rate raise concerns about non-response bias?
14. If appropriate, was information about non-responders described?
15. Were the results internally consistent?
16. Were the results for the analyses described in the methods, presented?
17. Were the authors' discussions and conclusions justified by the results?
18. Were the limitations of the study discussed?
19. Were there any funding sources or conflicts of interest that may affect the authors' interpretation of the results?
20. Was ethical approval or consent of participants attained?