

Supplementary Materials

Table S1. Search Strategy

Databases	Selected databases	Search date	Other parameters	Keywords	Search hits
ProQuest	Australia & New Zealand Database Continental Europe Database Criminal Justice Database East & South Asia Database East Europe, Central Europe Database Policy File Index ProQuest Dissertations & Theses Global Psychology Database PTSDpubs Public Health Database Publicly Available Content Database UK & Ireland Database	2/3/2023	Source types included books, conference paper & proceedings, dissertations & theses, government & official publications, reports, scholarly journals.	In title or abstract: 1. (police OR policing OR officer* OR law enforcement) AND 2. (resilien* OR mindful* OR psychological OR mental OR toughness) AND 3. (training OR education* OR intervent* OR program*) AND In full text/all fields: 4. (experiment* OR quasi* OR evaluat* OR control* OR comparison* OR random* OR nonrandom* OR non-random OR RCT OR effect* OR impact* OR intervent*)	3,427
EBSCO	Academic Search Complete Alt HealthWatch APA Psych Articles APA Psych Books APA Psych Extra APA Psych Info	1/29/2023	Source types excluded magazines, trade publications, and news.		7,485

	Criminal Justice		
	Abstracts		
	Global Health		
	Health Source-		
	Nursing/Academic		
	Edition		
	MEDLINE		
	Mental Measurements		
	Yearsbook with Tests in		
	Print		
	National Criminal Justice		
	Reference Service		
	Abstracts		
	Psychology and		
	Behavioral Sciences		
	Collection		
	Public Administration		
	Abstracts		
	Social Work Abstracts		
	SocINDEX		
	Violence & Abuse		
	Abstract		
Web of	Social Sciences Citation	2/3/2023	1,586
Science	Index		
	Conference Proceedings		
	Citation Index – Social		
	Sciences and Humanities		
	Book Citation Index –		
	Social Sciences and		
	Humanities		

Table S2. Review studies used for handsearching

Review studies	Eligible studies identified from the references
<p>1. Alshahrani KM, Johnson J, Prudenzi A, O'Connor DB. The effectiveness of psychological interventions for reducing PTSD and psychological distress in first responders: A systematic review and meta-analysis. <i>PLOS ONE</i>. 2022;17(8):e0272732. doi:10.1371/journal.pone.0272732</p>	<p>Fitzhugh H, Michaelides G, Connolly S, Daniels K. <i>Mindfulness in Policing: A Randomized Controlled Trial of Two Online Mindfulness Resources across Five Forces in England and Wales</i>. College of Policing; 2019.</p>
<p>2. Brassington K, Lomas T. Can resilience training improve well-being for people in high-risk occupations? A systematic review through a multidimensional lens. <i>The Journal of Positive Psychology</i>. 2021;16(5):573-592. doi:10.1080/17439760.2020.1752783</p>	
<p>3. Claringbold G, Robinson N, Anglim J, Kavadas V, Walker A, Forsyth L. A systematic review of well-being interventions and initiatives for Australian and New Zealand emergency service workers. <i>Australian Journal of Psychology</i>. 2022;74(1):2123282. doi:10.1080/00049530.2022.2123282</p>	
<p>4. Corthésy-Blondin L, Genest C, Dargis L, Bardon C, Mishara BL. Reducing the impacts of exposure to potentially traumatic events on the mental health of public safety personnel: A rapid systematic scoping review. <i>Psychological Services</i>. 2022;19(Suppl 2):80-94. doi:10.1037/ser0000572</p>	
<p>5. Corthésy-Blondin L, Genest C, Dargis L, Bardon C, Mishara BL. Reducing the impacts of exposure to potentially traumatic events on the mental health of public safety personnel: A rapid systematic scoping review. <i>Psychological Services</i>. 2022;19(Suppl 2):80-94. doi:10.1037/ser0000572</p>	
<p>6. Edgelow M, Scholefield E, McPherson M, Mehta S, Ortlieb A. A review of workplace mental health interventions and their implementation in public safety organizations. <i>Int Arch Occup Environ Health</i>. 2022;95(3):645-664. doi:10.1007/s00420-021-01772-1</p>	

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7. Joyce S, Shand F, Tighe J, Laurent SJ, Bryant RA, Harvey SB. Road to resilience: a systematic review and meta-analysis of resilience training programmes and interventions. *BMJ Open*. 2018;8(6):e017858. doi:[10.1136/bmjopen-2017-017858](https://doi.org/10.1136/bmjopen-2017-017858)
 8. Maglione MA, Chen C, Bialas A, et al. Combat and Operational Stress Control Interventions and PTSD: A Systematic Review and Meta-Analysis. *Military Medicine*. 2022;187(7-8):e846-e855. doi:[10.1093/milmed/usab310](https://doi.org/10.1093/milmed/usab310)
 9. Robertson IT, Cooper CL, Sarkar M, Curran T. Resilience training in the workplace from 2003 to 2014: A systematic review. *Journal of Occupational and Organizational Psychology*. 2015;88(3):533-562. doi:[10.1111/joop.12120](https://doi.org/10.1111/joop.12120)
 10. Tan L, Petrie K, Deady M, Bryant RA, Harvey SB. Systematic review of first responder post-deployment or post-incident psychosocial interventions. *Occupational Medicine*. 2022;72(3):160-169. doi:[10.1093/occmed/kqab182](https://doi.org/10.1093/occmed/kqab182)
 11. Vadvilavičius T, Varnagirytė E, Jarašiūnaitė-Fedosejeva G, Gustainienė L. The Effectiveness of Mindfulness-Based Interventions for Police Officers' Stress Reduction: a Systematic Review. *J Police Crim Psych*. 2023;38(1):223-239. doi:[10.1007/s11896-022-09570-2](https://doi.org/10.1007/s11896-022-09570-2)
 12. Vanhove AJ, Herian MN, Perez ALU, Harms PD, Lester PB. Can resilience be developed at work? A meta-analytic review of resilience-building programme effectiveness. *Journal of Occupational and Organizational Psychology*. 2016;89(2):278-307. doi:[10.1111/joop.12123](https://doi.org/10.1111/joop.12123)
 13. Wild J, El-Salahi S, Esposti MD. The Effectiveness of Interventions Aimed at Improving Well-Being and Resilience to Stress in First Responders. *European Psychologist*. 2020;25(4):252-271. doi:[10.1027/1016-9040/a000402](https://doi.org/10.1027/1016-9040/a000402)
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Supplementary Material 3: Effect sizes calculation adjustment for quasi-experimental studies

$$d = \frac{\bar{X}_{txt-post} - \bar{X}_{ctl-post} - (\bar{X}_{txt-pre} - \bar{X}_{ctl-pre})}{\sqrt{((n_{txt}-1) s_{txt-post}^2 + (n_{ctl}-1) s_{ctl-post}^2) / (n_{txt} + n_{ctl} - 2)}}$$

in which $\bar{X}_{txt-post}$ is the mean score for the treatment group at post-training or follow-up, $\bar{X}_{ctl-post}$ is the mean score for the control group at post-training or follow-up, $\bar{X}_{txt-pre}$ is the mean score for the treatment group at baseline, $\bar{X}_{ctl-pre}$ is the mean score for the control group at baseline, $s_{txt-post}$ is the standard deviation of post-training score for the treatment group, $s_{ctl-post}$ is the standard deviation of post-training score for the control group, n_{txt} is the sample size of the treatment group, and n_{ctl} is the sample size of the control group. If two groups are similar in any given outcome at baseline (i.e., $\bar{X}_{txt-pre} - \bar{X}_{ctl-pre} \cong 0$), then the effect size will be approximate to SMDs calculated for RCTs.

Table S4. Quality assessment scores

Study	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	total		
Fitzhugh et al. (2019)	1	1	1	1	0	0	1	0	0	0	0	0	1	0	0	1	1	1	1	1	1	1	1	1	1	1	0	0	16	
Arnetz et al (2009)	1	1	0	1	0	1	1	0	1	1	0	0	1	0	0	1	1	1	1	1	1	1	1	1	0	0	1	0	17	
Chitra and Karunanidhi (2021)	1	1	1	1	2	1	1	0	1	1	0	0	1	0	1	1	1	1	0	1	1	1	1	1	1	1	1	0	22	
Christopher et al. (2018)	1	1	1	1	2	1	1	0	0	1	0	0	1	0	0	1	1	1	1	1	1	1	1	1	0	1	0	0	19	
Grupe et al. (2021)	1	1	1	1	2	0	0	0	1	1	0	0	1	0	0	1	1	1	1	1	1	1	1	1	0	1	0	0	18	
Horan (2017a)	1	1	0	1	2	1	1	0	1	0	0	0	1	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	17	
McCrafty et al. (1999)	1	1	0	1	1	1	1	0	1	0	0	0	1	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	16	
Rosmith(2013)	1	1	0	1	0	1	1	0	1	1	0	0	1	0	0	1	1	1	1	1	1	1	1	1	0	0	1	0	17	
Trombka et al (2021)	1	1	1	1	2	1	1	0	0	0	0	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	21
Brouzos et al. (2022)	1	1	0	1	2	1	1	0	1	0	0	0	1	0	0	1	1	1	1	1	1	1	1	0	0	0	1	0	17	
Romosiou et al. (2019)	1	1	0	1	2	1	1	0	1	0	0	0	1	0	0	1	1	1	1	1	1	1	0	0	0	0	1	0	16	
Navarrete et al. (2022)	1	1	1	1	2	1	1	0	0	1	0	0	1	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	17	
Meulen et al. (2019)	1	1	0	1	2	1	1	0	1	1	0	0	1	0	0	1	1	1	0	1	0	0	0	0	0	0	0	0	14	
Au et al. (2018)	1	1	0	1	0	1	1	0	1	0	0	0	1	0	0	1	0	1	1	1	1	1	1	0	0	0	1	0	14	
Horan (2017b)	1	1	0	1	2	1	1	0	0	0	0	0	1	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	14	

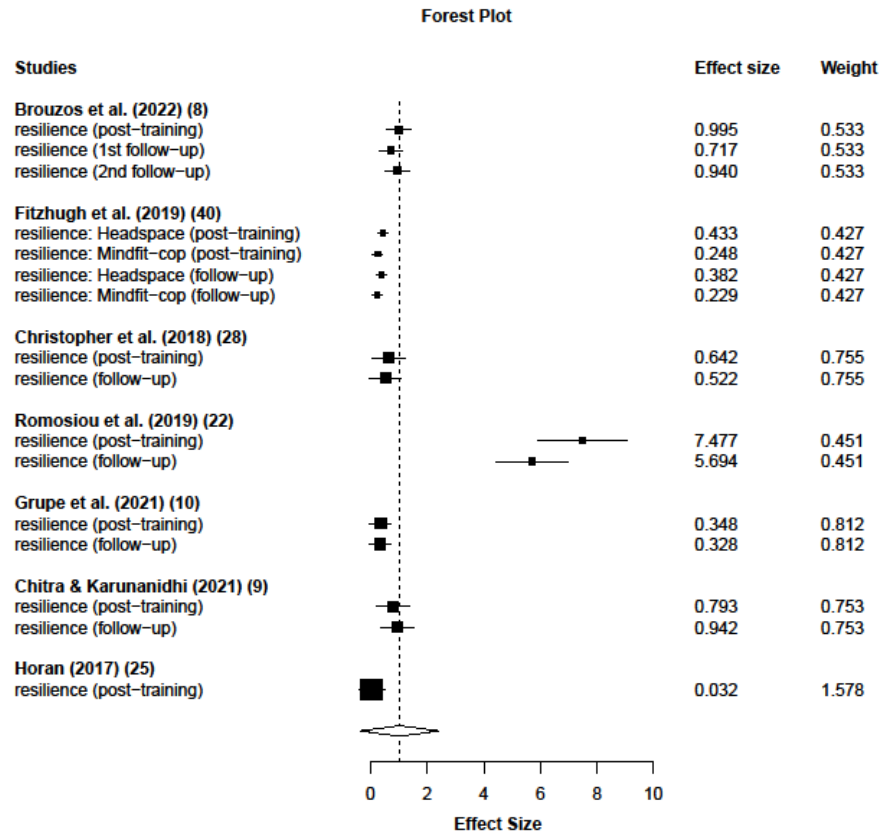


Figure S1. Forest plot of the effect of training programs on resilience

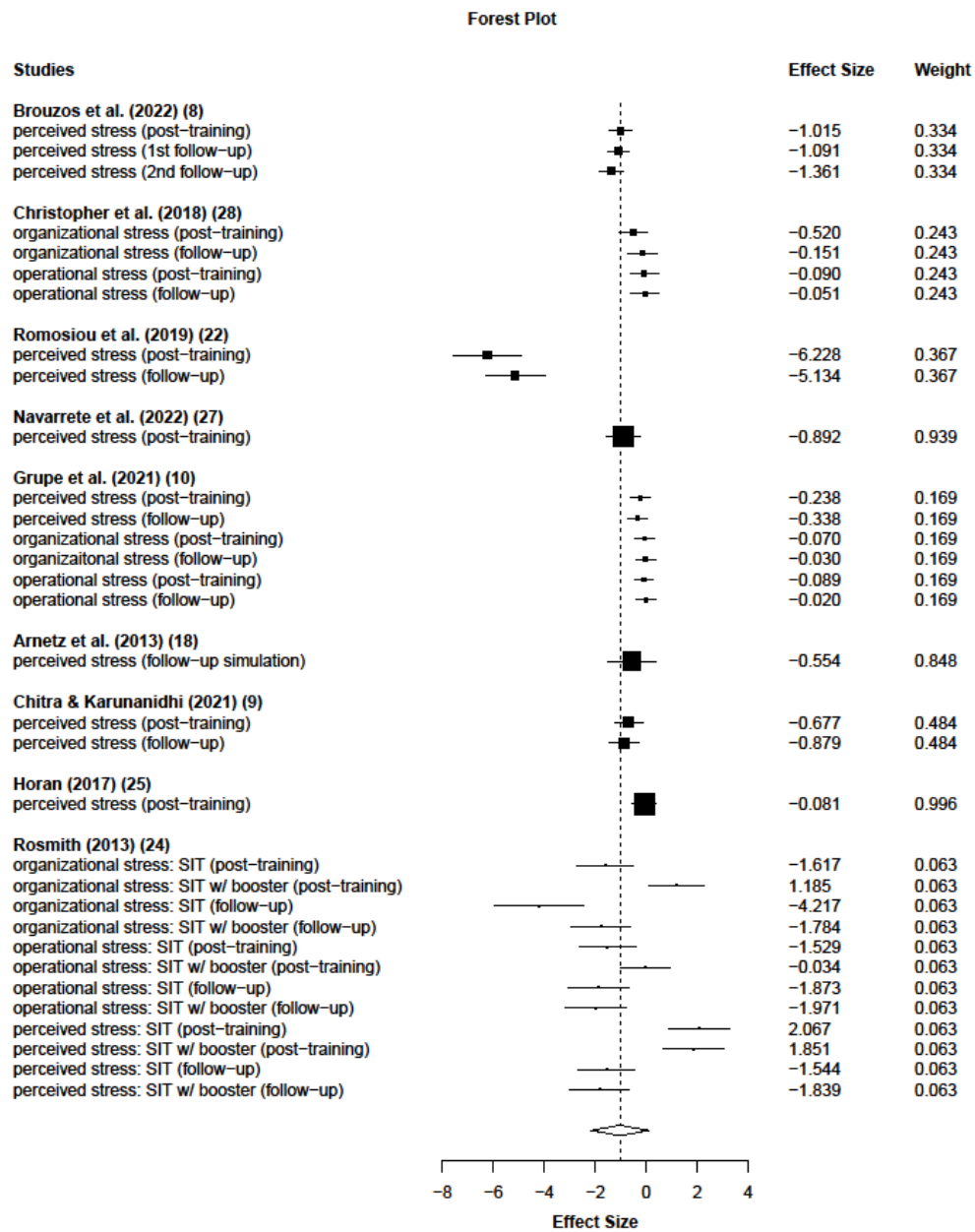


Figure S2. Forest plot of the effect of training programs on perceived stress

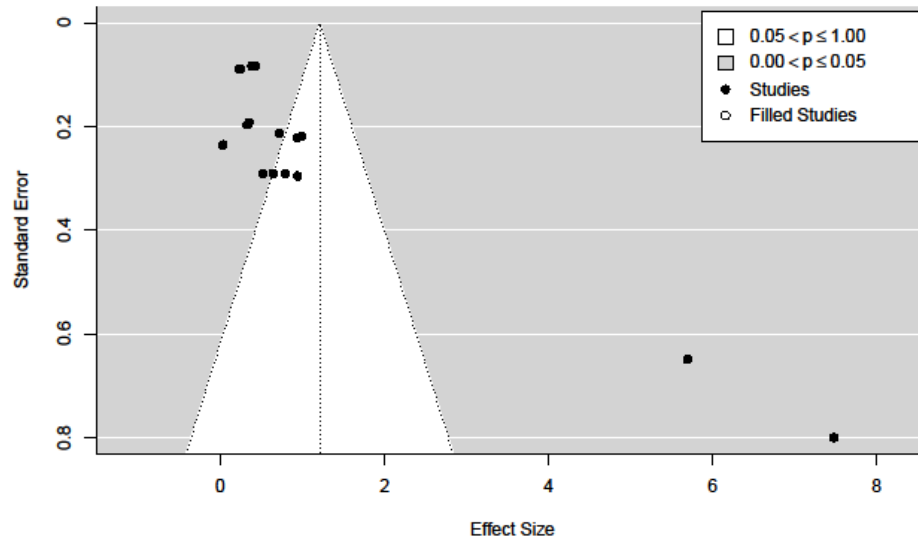


Figure S3. Funnel Plot of resilience

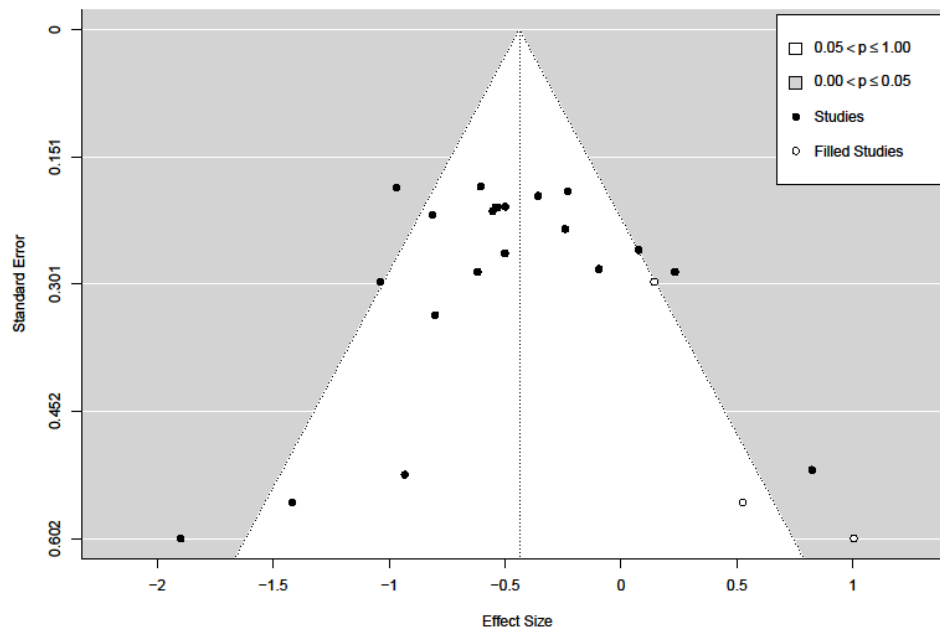


Figure S4. Funnel Plot of depression

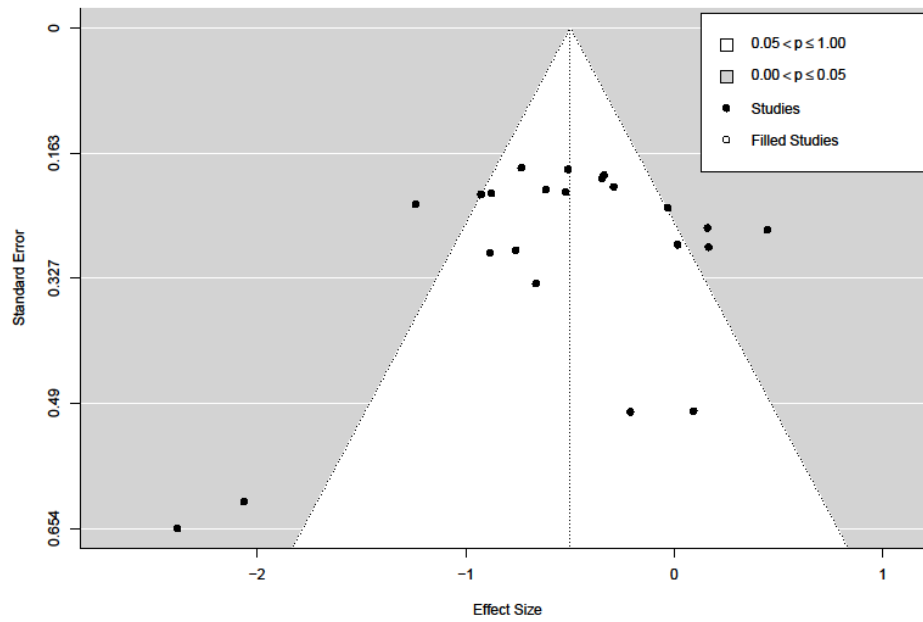


Figure S5. Funnel Plot of anxiety

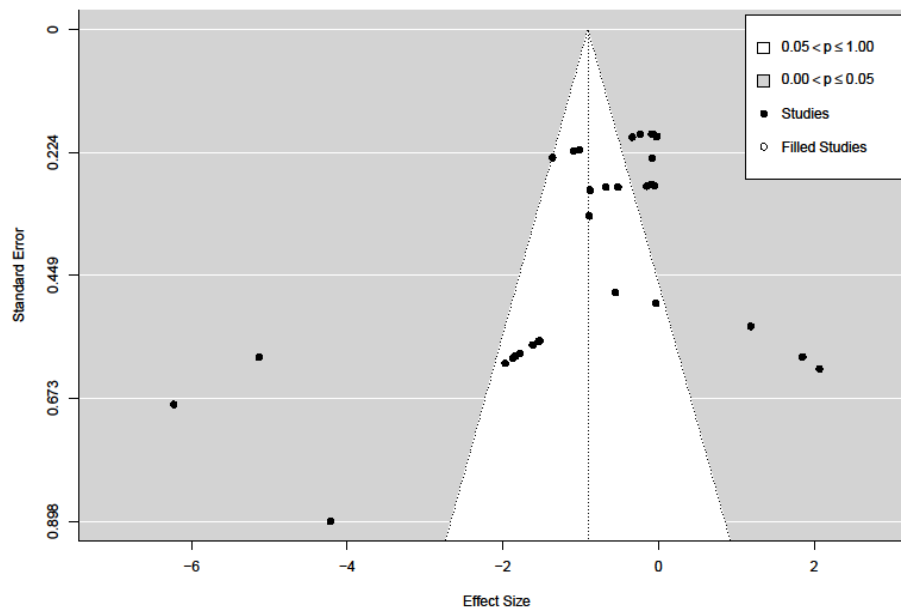


Figure S6. Funnel Plot of perceived stress

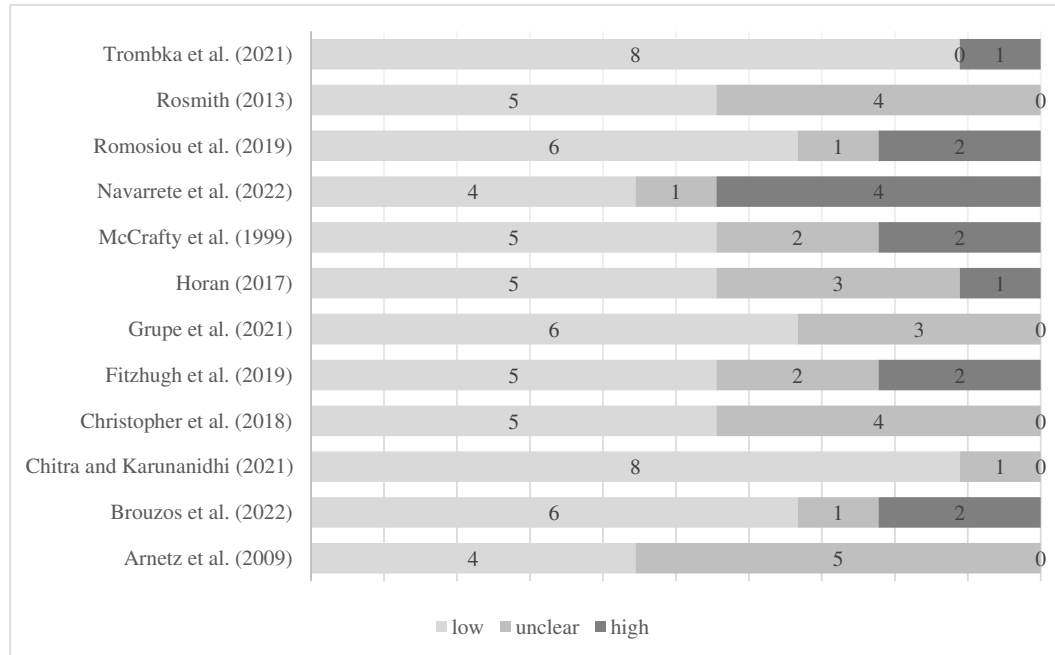


Figure S7. Rating of studies included in the meta-analysis on the 9 EPOC risk of bias criteria