Supplemental Online Content

Appendix A: Table 1. MOOSE checklist.

Item No	Recommendation	Reported on Page No
Reporting of background should include		
1	Problem definition	4
2	Hypothesis statement	4-5
3	Description of study outcome(s)	4-5
4	Type of exposure or intervention used	4-5
5	Type of study designs used	4-5
6	Study population	4-5
Reporting of search strategy should include		
7	Qualifications of searchers (eg, librarians and investigators)	5
8	Search strategy, including time period included in the synthesis and key words	5, eMethod
9	Effort to include all available studies, including contact with authors	5
10	Databases and registries searched	5
11	Search software used, name and version, including special features used (eg, explosion)	5-6, eMethod
12	Use of hand searching (eg, reference lists of obtained articles)	5-6
13	List of citations located and those excluded, including justification	eTable 3
14	Method of addressing articles published in languages other than English	5-6
15	Method of handling abstracts and unpublished studies	5-6
16	Description of any contact with authors	NA
Reporting of methods should include		
17	Description of relevance or appropriateness of studies assembled for assessing the hypothesis to be tested	6
18	Rationale for the selection and coding of data (eg, sound clinical principles or convenience)	6
19	Documentation of how data were classified and coded (eg, multiple raters, blinding and interrater reliability)	6-7, eTable 3
20	Assessment of confounding (eg, comparability of cases and controls in studies where appropriate)	6
21	Assessment of study quality, including blinding of quality assessors, stratification or regression on possible predictors of study results	6-7, eTable 4
22	Assessment of heterogeneity	6-7, eTable 6
23	Description of statistical methods (eg, complete description of fixed or random effects models, justification of whether the chosen models account for predictors of study results, dose-response models, or cumulative meta-analysis) in sufficient detail to be replicated	6-8

24	Provision of appropriate tables and graphics	Fig. 1-5, eTable 1-7, eFig. 1-6
Reporting of results should include		
25	Graphic summarizing individual study estimates and overall estimate	8-12, Fig. 2-5, eFig. 1-6
26	Table giving descriptive information for each study included	8-9, eTable 3
27	Results of sensitivity testing (eg, subgroup analysis)	9-12, Fig. 2-5, eFig. 1-6
28	Indication of statistical uncertainty of findings	12, e Fig. 5-6

Appendix B: Table 2. PRISMA 2020 checklist.

Section and Topic	Item #	Checklist item	Location where item is reported
TITLE			
Title	1	Identify the report as a systematic review.	1
ABSTRACT			
Abstract	2	See the PRISMA 2020 for Abstracts checklist.	2-3
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of existing knowledge.	4-5
Objectives	4	Provide an explicit statement of the objective(s) or question(s) the review addresses.	4-5
METHODS			
Eligibility criteria	5	Specify the inclusion and exclusion criteria for the review and how studies were grouped for the syntheses.	5-6
Information sources	6	Specify all databases, registers, websites, organisations, reference lists and other sources searched or consulted to identify studies. Specify the date when each source was last searched or consulted.	5-6, eMethod
Search strategy	7	Present the full search strategies for all databases, registers and websites, including any filters and limits used.	5-6, eMethod
Selection process	8	Specify the methods used to decide whether a study met the inclusion criteria of the review, including how many reviewers screened each record and each report retrieved, whether they worked independently, and if applicable, details of automation tools used in the process.	5-6, eTable 3

Section and Topic	Item #	Checklist item	Location where item is reported
Data collection process	9	Specify the methods used to collect data from reports, including how many reviewers collected data from each report, whether they worked independently, any processes for obtaining or confirming data from study investigators, and if applicable, details of automation tools used in the process.	6
Data items	10a	List and define all outcomes for which data were sought. Specify whether all results that were compatible with each outcome domain in each study were sought (e.g. for all measures, time points, analyses), and if not, the methods used to decide which results to collect.	6
	10b	List and define all other variables for which data were sought (e.g. participant and intervention characteristics, funding sources). Describe any assumptions made about any missing or unclear information.	6
Study risk of bias assessment	11	Specify the methods used to assess risk of bias in the included studies, including details of the tool(s) used, how many reviewers assessed each study and whether they worked independently, and if applicable, details of automation tools used in the process.	6, eTable 4
Effect measures	12	Specify for each outcome the effect measure(s) (e.g. risk ratio, mean difference) used in the synthesis or presentation of results.	6-8
Synthesis methods	13a	Describe the processes used to decide which studies were eligible for each synthesis (e.g. tabulating the study intervention characteristics and comparing against the planned groups for each synthesis (item #5)).	6-8
	13b	Describe any methods required to prepare the data for presentation or synthesis, such as handling of missing summary statistics, or data conversions.	6-8
	13c	Describe any methods used to tabulate or visually display results of individual studies and syntheses.	6-8
	13d	Describe any methods used to synthesize results and provide a rationale for the choice(s). If meta-analysis was performed, describe the model(s), method(s) to identify the presence and extent of statistical heterogeneity, and software package(s) used.	6-8

Section and Topic	Item #	Checklist item	Location where item is reported
	13e	Describe any methods used to explore possible causes of heterogeneity among study results (e.g. subgroup analysis, meta-regression).	6-8
	13f	Describe any sensitivity analyses conducted to assess robustness of the synthesized results.	7-8, eFig. 6
Reporting bias assessment	14	Describe any methods used to assess risk of bias due to missing results in a synthesis (arising from reporting biases).	7-8, eTable 7
Certainty assessment	15	Describe any methods used to assess certainty (or confidence) in the body of evidence for an outcome.	7-8
RESULTS			
Study selection	16a	Describe the results of the search and selection process, from the number of records identified in the search to the number of studies included in the review, ideally using a flow diagram.	8-9, Fig. 1, eTable 3
	16b	Cite studies that might appear to meet the inclusion criteria, but which were excluded, and explain why they were excluded.	8-9, Fig. 1
Study characteristics	17	Cite each included study and present its characteristics.	8-9, eTable3
Risk of bias in studies	18	Present assessments of risk of bias for each included study.	8-9, eTable4, e Fig. 5
Results of individual studies	19	For all outcomes, present, for each study: (a) summary statistics for each group (where appropriate) and (b) an effect estimate and its precision (e.g. confidence/credible interval), ideally using structured tables or plots.	8-12, Fig. 2, Fig. 5，eTable 3, eFig. 1，e.Fig. 4
Results of	20a	For each synthesis, briefly summarise the characteristics and risk of bias among contributing studies.	8-12, Fig. 3-4, eFig. 2-3

Section and Topic	Item #	Checklist item	Location where item is reported
Syntheses	20b	Present results of all statistical syntheses conducted. If meta-analysis was done, present for each the summary estimate and its precision (e.g. confidence/credible interval) and measures of statistical heterogeneity. If comparing groups, describe the direction of the effect.	8-12, eTable 6
	20c	Present results of all investigations of possible causes of heterogeneity among study results.	8-12
	20d	Present results of all sensitivity analyses conducted to assess the robustness of the synthesized results.	12, eFig. 6
Reporting biases	21	Present assessments of risk of bias due to missing results (arising from reporting biases) for each synthesis assessed.	12, eTable 7
Certainty of evidence	22	Present assessments of certainty (or confidence) in the body of evidence for each outcome assessed.	12, e Fig. 5-6
DISCUSSION			
Discussion	23a	Provide a general interpretation of the results in the context of other evidence.	13-14
	23b	Discuss any limitations of the evidence included in the review.	14-15
	23c	Discuss any limitations of the review processes used.	14-16
	23d	Discuss implications of the results for practice, policy, and future research.	16
OTHER INFORMATION			
Registration and protocol	24a	Provide registration information for the review, including register name and registration number, or state that the review was not registered.	5
	24b	Indicate where the review protocol can be accessed, or state that a protocol was not prepared.	5

Section and Topic	Item #	Checklist item	Location where item is reported
	24c	Describe and explain any amendments to information provided at registration or in the protocol.	5
Support	25	Describe sources of financial or non-financial support for the review, and the role of the funders or sponsors in the review.	18
Competing interests	26	Declare any competing interests of review authors.	18
Availability of data, code and other materials	27	Report which of the following are publicly available and where they can be found: template data collection forms; data extracted from included studies; data used for all analyses; analytic code; any other materials used in the review.	18

From: Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. BMJ 2021;372:n71. doi: 10.1136/bmj.n71

Appendix C: Method: Electronic search strategy.

Search date: March 11, 2025

1. Pubmed 3569

#1 "healthcare workers"[Title/Abstract] OR "medical staff"[Title/Abstract] OR "healthcare professionals"[Title/Abstract] OR "physician*"[Title/Abstract] OR "doctor*"[Title/Abstract] OR "interns"[Title/Abstract] OR "resident"[Title/Abstract] OR "residency"[Title/Abstract] OR (("faculty, medical"[MeSH Terms] OR ("faculty"[All Fields] AND "medical"[All Fields]) OR "medical faculty"[All Fields] OR "faculty medical"[All Fields]) OR "practicing physician"[Title/Abstract]) n=1587912

#2 Post-traumatic stress [Title/Abstract] OR Post-traumatic stress disorder [Title/Abstract] OR Post-traumatic stress symptoms [Title/Abstract] OR PTSD [Title/Abstract] OR PTSS [Title/Abstract]) n=48319

#1 and #2 3569

2. Web of Science 3600

#1 (TI=(healthcare workers OR medical staff OR healthcare professionals OR physician* OR doctor* OR interns OR resident OR residency OR faculty, medical/ practicing physician)) OR AB=(healthcare workers OR medical staff OR healthcare professionals OR physician* OR doctor* OR interns OR resident OR residency OR faculty, medical/ practicing physician) n=1980508

#2 (TI=(Post-traumatic stress Or Post-traumatic stress disorder OR Post-traumatic stress symptoms OR PTSD OR PTSS)) OR AB=(Post-traumatic stress Or Post-traumatic stress disorder OR Post-traumatic stress symptoms OR PTSD OR PTSS) n=87355

#3 #1 AND #2 n=3600

3. Embase 4313

#1 'healthcare workers':ab,ti OR 'medical staff':ab,ti OR 'healthcare professionals':ab,ti OR 'physician*':ab,ti OR 'doctor*':ab,ti OR 'residen?':ab,ti OR ('university hospital'/de OR 'hospitals, university'/de OR 'medical faculty'/exp OR ('faculty'/exp AND 'medical'/exp)) OR 'practicing physician':ab,ti n=1398696

#2 'posttraumatic stress disorder'/de OR 'Post-traumatic stress':ab,ti OR 'Post-traumatic stress disorder?':ab,ti OR 'Post-traumatic stress symptoms':ab,ti OR 'PTSD':ab,ti OR 'PTSS':ab,ti n=97831

#3 #1 AND #2 n=4313

4. PsycINFO 1624

S1 TI (healthcare workers healthcare workers OR medical staff OR healthcare professionals OR physician* OR doctor* OR interns OR resident OR residency OR faculty, medical/ practicing physician) OR AB (healthcare workers OR medical staff OR healthcare professionals OR physician* OR doctor* OR interns OR resident OR residency OR faculty, medical/ practicing physician) n=199462

S2 TI (Post-traumatic stress Or Post-traumatic stress disorder OR Post-traumatic stress symptoms OR PTSD OR PTSS) OR AB (Post-traumatic stress Or Post-traumatic stress disorder OR Post-traumatic stress symptoms OR PTSD OR PTSS) n=49426

S3 S1 AND S2 n=1624

5. Cochrane Library 450

#1 (healthcare workers healthcare workers OR medical staff OR healthcare professionals OR physician* OR doctor* OR interns OR resident OR residency OR faculty physician OR practicing physician):ti,ab,kw n=94169

#2 (Post-traumatic stress Or Post-traumatic stress disorder OR Post-traumatic stress symptoms OR PTSD OR PTSS):ti,ab,kw n=8664

#3 #1 AND #2 n=450

Appendix D: List of studies excluded at full-text screening stage, with brief reasons.

Full-text screening excluded (n=715):

-Not able to provide useful data (n=243)[1-243]

-Repeated observational studies (n=21)[244-264]

-Non-observational studies (n=241)[15,89,265-503]

-Not-including healthcare workers or PTSD (n=198)[105,107,165,504-698]

-No English text (n=12)[699-710]

1. Bidzan M, Bidzan-Bluma I, Szulman-Wardal A, Stueck M, Bidzan M. Does Self-Efficacy and Emotional Control Protect Hospital Staff From COVID-19 Anxiety and PTSD Symptoms? Psychological Functioning of Hospital Staff After the Announcement of COVID-19 Coronavirus Pandemic. *Front Psychol* 2020; **11**: 552583.

2. Shahrour G, Dardas LA. Acute stress disorder, coping self-efficacy and subsequent psychological distress among nurses amid COVID-19. *Journal of Nursing Management* 2020; **28**(7): 1686-95.

3. Healthcare staff well-being and use of support services during COVID-19: a UK perspective. *General Psychiatry* 2021; **34**(3): 143-53.

4. Psychological Impacts and Post-Traumatic Stress Disorder among People under COVID-19 Quarantine and Isolation: A Global Survey. *Int J Environ Res Public Health* 2021; **18**(11).

5. Almost 60% of frontline healthcare workers experienced mental health disorder during first lockdown. *Pharmaceutical Journal* 2021; **306**(7947).

6. Carmassi C, Malacarne P, Dell'oste V, et al. Post-traumatic stress disorder, burnout and their impact on global functioning in Italian emergency healthcare workers. *Minerva Anestesiologica* 2021; **87**(5): 556-66.

7. Kruper A, Domeyer-Klenske A, Treat R, Pilarski A, Kaljo K. Secondary Traumatic Stress in Ob-Gyn: A Mixed Methods Analysis Assessing Physician Impact and Needs. *Journal of Surgical Education* 2021; **78**(3): 1024-34.

8. Mohammadian Khonsari N, Shafiee G, Zandifar A, et al. Comparison of psychological symptoms between infected and non-infected COVID-19 health care workers. *BMC*

Psychiatry 2021; **21**.

9. Nam SH, Lee DW, Seo HY, et al. Empathy with patients and post-traumatic stress response in verbally abused healthcare workers. *Psychiatry Investigation* 2021; **18**(8): 770-8.

10. Post Traumatic Stress Disorder(PTSD) in Heath Care workers(HCWs) during Covid Pandemic-Case series. *Indian Journal of Psychiatry* 2022; **64**(SUPPL 3): S603.

11. Costantini A, Mazzotti E, Serpentini S, et al. COVID-19 pandemic distress among a sample of Italian psycho-oncologists: risk of isolation and loneliness. *Tumori* 2022; **108**(1): 77-85.

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13. Feingold JH, Hurtado A, Feder A, et al. Posttraumatic growth among health care workers on the frontlines of the COVID-19 pandemic. *Journal of Affective Disorders* 2022; **296**: 35-40.

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15. Lamb D, Gafoor R, Scott H, et al. Mental health of healthcare workers in England during the COVID-19 pandemic: a longitudinal cohort study. 2022.

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19. San Juan NV, Martin S, Badley A, et al. Frontline healthcare workers' mental health and wellbeing during the first year of the COVID-19 pandemic: Analysis of interviews and social media data. 2022.

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of the World Health Organization's Alert. *Int J Environ Res Public Health* 2022; **19**(4).

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Appendix E: Table 3. Study and participant characteristics of included studies.

Study	Publication year	Research	Study type	Specialty	Traumatic event	Sample size	Mean age (SD), year	Female (%)	Investing time	PTSD scale	Cutoff	Prevalence
Before COVID-19												
DeLucia[1]	2019	USA	cross-sectional study	pediatricians	emergency	526	21.7% aged <35 27.8% aged 36-42 18.1% aged 43-49 32.5% aged >50	43.7	2015.12-2016.4	PCL-C	NA	0.158
Gregory[2]	2019	France	cross-sectional study	resident physicians	Paris terrorist attacks	680	26.6 (2)	72.5	2016.1-2016.2	IES-R	≥33	0.124
Jackson[3]	2019	USA	cross-sectional study	surgeon	work-related	1026	22.7% aged 30-39 32.8% aged 40-49 25.0% aged 50-59 17.4% aged >60	38.4	2016.9-2017.5	PC-PTSD	≥3	0.157
Kannan[4]	2019	USA	cross-	HCW	work-	194	NA	NA	NA	PCL-5	≥33	0.052

Study	Publication year	Research	Study type	Specialty	Traumatic event	Sample size	Mean age (SD), year	Female (%)	Investing time	PTSD scale	Cutoff	Prevalence
			sectional study		related							
Rodríguez-Rey[5]	2019	Spain	cross-sectional study	pediatricians	work-related	298	40.2 (9.26)	82.6	2015.5-2015.8	TSQ	NA	0.201
van Steijn[6]	2019	Netherlands	cross-sectional study	pediatricians	work-related	410	30.9% aged 20-39 54.8% aged 40-59 14.1% aged >60	67.3	2016.10-2017.1	TSQ	≥6	0.022
Jones[7]	2020	UK	cross-sectional study	pediatricians	COVID-19	1656	NA	86	2018.5-2018.6	TSQ	≥6	0.260
Moallef[8]	2021	China	cross-sectional study	HCW	COVID-19	32	47.3 (8)	93.8	2004	PCL-C	> 30	0.781
Chang[9]	2022	USA	cohort study	emergency HCWs	COVID-19	31	NA	NA	2019.7-2020.1	PCL-5	>31	0.350
Jackson[10]	2022	USA	cross-sectional study	attending physicians	COVID-19	2216	NA	84.11	2016.9-2017.5	PC-PTSD	≥3	0.140
Mausz[11]	2022	Canada	cross-	nurse	COVID-19	589	34.6 (8.2)	60.1	2019.09.01	PCL-5	≥33	0.110

Study	Publication year	Research	Study type	Specialty	Traumatic event	Sample size	Mean age (SD), year	Female (%)	Investing time	PTSD scale	Cutoff	Prevalence
			sectional study						- 2020.02.29			
Zhu[12]	2022	China	cross-sectional study	nurse	COVID-19	273	29 (8.1)	98.2	2019.7.1-2019.8.31	PCL-C	≥38	0.172
Klamen[13]	1995	USA	cross-sectional study	HCW	COVID-19	212	30.1 (3.3)	40.7	NA	DSM III-R	NA	0.130
Chan[14]	2004	Singapore	cross-sectional study	FHCW	COVID-19	177	NA	NA	NA	IES-R	≥30	0.200
Ben-Ezra[15]	2007	Israel	cross-sectional study	HCW	COVID-19	80	35.1 (8.7)	70	2006.8.1-2006.8.20	IES-R	≥33	0.234
Lin[16]	2007	China	cross-sectional study	HCW	COVID-19	92	33.8 (6.5)	91.3	2003.8.5-2003.8.11	DTS-C	≥40	0.193
Lancee[17]	2008	Canada	cross-sectional study	HCW	work-related	139	45 (9.6)	87	2004.10.23-2005.9.30	CAPS	NA	0.030
Wang[18]	2010	China	cross-sectional study	HCW	COVID-19	343	32.6 (9.5)	69.4	2008.8.12-2008.9.12	IES-R	≥33	0.190

Study	Publication year	Research	Study type	Specialty	Traumatic event	Sample size	Mean age (SD), year	Female (%)	Investing time	PTSD scale	Cutoff	Prevalence
Roden-Foreman[19]	2017	USA	cross-sectional study	emergency HCWs	COVID-19	118	39.7 (8.9)	29.7	2015.7-2015.11	STSS	≥38	0.195
Tang[20]	2017	China	cross-sectional study	HCW	COVID-19	102	72.5% aged 20-30 18.6% aged 31-40 8.8% aged ≥41	66.7	2015.1-2015.5	PCL-C	≥38	0.206
Carmassi[21]	2018	Italy	cross-sectional study	emergency HCWs	COVID-19	42	52.4% aged ≤40 47.6% aged ≥41	69	NA	TALS-SR	NA	0.214
Lee[22]	2018	South Korea	cohort study	HCW	COVID-19	359	20.9% aged 20-29 50.7% aged 30-39 20.1% aged 40-49 7.5% aged 50-59 0.6% aged ≥60	81.9	NA	IES-R	≥25	0.515

Study	Publication year	Research	Study type	Specialty	Traumatic event	Sample size	Mean age (SD), year	Female (%)	Investing time	PTSD scale	Cutoff	Prevalence
Stefano[23]	2018	Italy	cross-sectional study	HCW	COVID-19	233	37.2 (12.5)	49.7	2015.12.9-2016.1.6	TSQ	≥6	0.120
Sato[24]	2023	Japan	cross-sectional study	nurse	COVID-19	118	37.1 (10.6)	96.6	2012.4	IES-R	≥25	0.263
After the onset of COVID-19												
Ali[25]	2020	Ireland	cohort study	HCW	COVID-19	472	40.7 (NA)	69.07	2020.6.8-2020.6.22	IES-R	≥24	0.413
Cai[26]	2020	China	cohort study	nurse	COVID-19	621	19.6% aged 18-25 35.4% aged 26-30 30.0% aged 31-40 15.0% aged >40	97.4	2020.1.29-2020.2.2	IES-R	≥34	0.193
Chen[27]	2020	China	cross-sectional study	HCW	COVID-19	94	33.2 (8)	74.5	NA	PCL-C	≥38	0.211
Chew[28]	2020	International	cross-sectional study	HCW	COVID-19	1146	31.7 (7.8)	65.1	2020.4.29-2020.6.4	IES-R	≥24	0.079

Study	Publication year	Research	Study type	Specialty	Traumatic event	Sample size	Mean age (SD), year	Female (%)	Investing time	PTSD scale	Cutoff	Prevalence
Demartini[29]	2020	Italy	cross-sectional study	HCW	COVID-19	123	36 (9.2)	78.9	2020.3.24-2020.3.31	IES-R	≥33	0.187
Di Tella[30]	2020	Italy	cross-sectional study	HCW	COVID-19	145	42.9 (11.2)	72.4	2020.3.19-2020.4.5	PCL-5	≥33	0.262
Dosil[31]	2020	Spain	cross-sectional study	HCW	COVID-19	973	4.3% aged 18-25 22.7% aged 26-35 51.7% aged 36-55 21.3% aged >55	82.9	NA	PCL-C	≥38	0.264
Haravuori[32]	2020	Finland	cohort study	HCW	COVID-19	4804	44.2 (11.4)	87.5	NA	PC-PTSD	≥3	0.146
Huang[33]	2020	China	cross-sectional study	HCW	COVID-19	246	32.6 (6.2)	81.3	2020.2.7-2020.2.14	PTSD-SS	≥50	0.274
Johnson[34]	2020	Norway	cross-sectional study	HCW	COVID-19	1773	73.0% aged <44 26.8% aged >45	84.7	2020.3.31-2020.4.7	PCL-5	NA	0.289

Study	Publication year	Research	Study type	Specialty	Traumatic event	Sample size	Mean age (SD), year	Female (%)	Investing time	PTSD scale	Cutoff	Prevalence
Lange[35]	2020	France	cross-sectional study	community pharmacists	COVID-19	135	47.9 (11.4)	59.1	2020.4.15	IES-R	≥33	0.170
Lu[36]	2020	China	cross-sectional study	HCW	COVID-19	387	3.10% aged 18-25 22.22% aged 26-30 33.59% aged 31-40 39.53% aged >40	60.98	2020.6.8-2020.6.18	PCL-C	≥50	0.172
Song[37]	2020	China	cross-sectional study	HCW	COVID-19	14825	34 (8.2)	64.3	2020.2.28-2020.3.18	PCL-5	≥33	0.091
Wang[38]	2020	China	cross-sectional study	HCW	COVID-19	1897	17.2% aged 18-25 30.4% aged 26-30 31.5% aged 31-40 21.1% aged >40	82.5	2020.1.29-2020.2.7	IES-R	NA	0.098
Yin[39]	2020	China	cross-	HCW	COVID-19	377	38.3%	61.5	2020.2.1-	PCL-5	≥33	0.038

Study	Publication year	Research	Study type	Specialty	Traumatic event	Sample size	Mean age (SD), year	Female (%)	Investing time	PTSD scale	Cutoff	Prevalence
			sectional study				aged 20-30 31.3% aged 31-40 30.5% aged >40		2020.2.5			
Zhang[40]	2020	China	cross-sectional study	HCW	COVID-19	642	42.7% aged <30 44.9% aged 30-40 12.5% aged >40	85.05	2020.6.6-2020.6.13	PCL-C	≥50	0.209
Zuniga[41]	2021	Argentina	cross-sectional study	HCW	COVID-19	1721	36.8 (9.1)	88.2	2020.5-2020.10	SPRINT-E scale	NA	0.239
Alonso[42]	2020	Spain	cross-sectional study	HCW	COVID-19	9138	10.8% aged 18-29 45.8% aged 30-49 43.4% aged ≥50	77.3	2020.5.5-2020.9.7	PCL-5	≥7	0.222
Alshehri[43]	2021	Saudi Arabia	cross-sectional study	HCW	COVID-19	404	36.9 (8.7)	54	NA	PCL-5	≥31	0.149

Study	Publication year	Research	Study type	Specialty	Traumatic event	Sample size	Mean age (SD), year	Female (%)	Investing time	PTSD scale	Cutoff	Prevalence
Altmayer[44]	2020	France	cross-sectional study	ICU HCW	COVID-19	69	33 (27.4)	78	2020.3.1-2020.4.30	PCL-5	≥31	0.160
Amsalem[45]	2021	USA	cohort study	HCW	COVID-19	350	34.8 (11.5)	74	2020.9-2020.10	PC-PTSD	≥3	0.350
Askari[46]	2021	Iran	cross-sectional study	HCW	COVID-19	200	34.89 (7.9)	61.5	NA	PCL-5	≥38	0.865
Asnakew[47]	2021	Ethiopia	cross-sectional study	HCW	COVID-19	396	3.0% aged <25 61.4% aged 25-30 16.4% aged 31-40 13.9% aged 41-50 5.3% aged >50	30.8	2020.4.1-2020.5.1	IES-R	≥24	0.551
Ayalew[48]	2021	Ethiopia	cross-sectional study	HCW	COVID-19	387	28.9% aged <25 60.2% aged 26-35 10.9%	41.3	2020.9.25-2020.10.25	IES-R	≥24	0.568

Study	Publication year	Research	Study type	Specialty	Traumatic event	Sample size	Mean age (SD), year	Female (%)	Investing time	PTSD scale	Cutoff	Prevalence
							aged ≥36					
Bahadirli[49]	2021	Istanbul	cross-sectional study	emergency HCWs	COVID-19	783	29 (5.9)	46.6	2020.12.30-2021.3.31	PCL-5	≥47	0.192
Bates[50]	2021	UK	cross-sectional study	ICU HCW	COVID-19	114	42% aged 20-30 28% aged 31-40 19% aged 41-50 9% aged 51-60 1% aged >60	77	2020.4.3-2020.4.18	PCL-5	≥31	0.140
Bulut[51]	2021	Türkiye	cross-sectional study	HCW	COVID-19	348	31 (9)	50.6	NA	IES-R	≥26	0.385
Carmassi[52]	2021	Italy	cross-sectional study	HCW	COVID-19	74	39.3 (12.2)	63.5	2020.4.1-2020.5.31	IES-R	≥24	0.595
Chatzittofis[53]	2021	Cyprus	cross-sectional study	HCW	COVID-19	424	38.8 (11.4)	58.5	2020.5.3-2020.5.27	IES-R	≥33	0.150

Study	Publication year	Research	Study type	Specialty	Traumatic event	Sample size	Mean age (SD), year	Female (%)	Investing time	PTSD scale	Cutoff	Prevalence
Chen[54]	2021	China	cross-sectional study	HCW	COVID-19	597	68.7% aged ≤35 23.9% aged 36-45 7.4% aged ≥46	87.94	NA	IES-R	≥20	0.452
Cheng[55]	2021	China	cross-sectional study	HCW	COVID-19	671	1.3% aged <18 10.3% aged 18-25 14.0% aged 26-30 27.1% aged 31-40 30.1% aged 41-50 17.1% aged 51-60	53.9	2020.2.27-2020.3.1	PC-PTSD	≥31	0.201
Conti[56]	2021	Italy	cross-sectional study	HCW	COVID-19	933	41.8 (12.1)	76.5	2020.3.1-2020.5.1	IES-R	≥33	0.550
Cyr[57]	2021	Canada	cross-sectional	HCW	COVID-19	467	39 (9)	89.4	2020.5.21-2020.6.5	PCL-5	≥31	0.243

Study	Publication year	Research	Study type	Specialty	Traumatic event	Sample size	Mean age (SD), year	Female (%)	Investing time	PTSD scale	Cutoff	Prevalence
			study									
Das[58]	2021	India	cross-sectional study	HCW	COVID-19	321	27.3 (4.7)	47.7	2020.8.15-2020.9.15	IES-R	≥29	0.607
Dehon[59]	2021	USA	cross-sectional study	emergency HCWs	COVID-19	259	52% aged 30-40 30% aged 41-50 12% aged 51-60 6% aged >60	37	2020.10.6-2020.12.29	PCL-5	NA	0.075
Dobson[60]	2021	Australia	cross-sectional study	HCW	COVID-19	320	23.7% aged 19–29 31.6% aged 30–39 21.8% aged 40–49 22.8% aged ≥50	78.5	2020.4.16-2020.5.13	IES-R	≥26	0.290

Study	Publication year	Research	Study type	Specialty	Traumatic event	Sample size	Mean age (SD), year	Female (%)	Investing time	PTSD scale	Cutoff	Prevalence
Emre[61]	2021	Türkiye	cross-sectional study	physicians	COVID-19	225	28.1 (3)	54.2	2020.5.1-2020.7.1	PCL-5	≥47	0.178
Engelbrecht[62]	2021	South Africa	cross-sectional study	nurse	COVID-19	286	44.6 (11.6)	86.7	2020.12.5-2021.3.3	IES-R	≥32	0.444
Fattori[63]	2021	Italy	cohort study	HCW	COVID-19	550	45 (11)	46	2020.8.1-2020.12.31	IES-R	≥33	0.218
Feingold[64]	2021	USA	cross-sectional study	FHCW	COVID-19	2579	54.5% aged <35 45.5% aged ≥35	73.6	2020.4.14-2020.5.11	PCL-5-4	≥8	0.233
Flateau[65]	2021	France	cross-sectional study	HCW	COVID-19	353	4% aged <25 years 21% aged 25 to 35 years 31% aged 36 to 45 years 31% aged 46 to 55 years	89	2020.6.15-2020.6.26	IES-R	≥40	0.160

Study	Publication year	Research	Study type	Specialty	Traumatic event	Sample size	Mean age (SD), year	Female (%)	Investing time	PTSD scale	Cutoff	Prevalence
							9% aged >55 years					
Geng[66]	2021	China	cross-sectional study	HCW	COVID-19	317	70.0% aged ≤35 30.0% aged >35	70	2020.6.4-2020.6.18	PCL-5	≥33	0.107
Ghio[67]	2021	Italy	cross-sectional study	HCW	COVID-19	731	48.5 (9.8)	76	2020.7.30-2020.9.30	IES-R	≥33	0.340
Gilleen[68]	2021	UK	cohort study	HCW	COVID-19	2773	3.68% aged < 25 22.72% aged 25-34 24.52% aged 35-44 29.32% aged 45-54 18.32% aged 55-64 1.30% aged ≥65 0.14% Not	85.29	2020.4.22-2020.5.10	IES-R	≥26	0.146

Study	Publication year	Research	Study type	Specialty	Traumatic event	Sample size	Mean age (SD), year	Female (%)	Investing time	PTSD scale	Cutoff	Prevalence
							reported					
Gramaglia[69]	2021	Italy	cross-sectional study	HCW	COVID-19	653	35.5 (8.1)	67.8	2020.6-2020.8	IES	≥26	0.360
Greenberg[70]	2021	UK	cross-sectional study	ICU HCW	COVID-19	709	NA	NA	2020.6-2020.7	PCL-6	≥14	0.400
Greene[71]	2021	UK	cross-sectional study	FHCW	COVID-19	1194	21.27% aged 18-29 31.08% aged 30-44 34.08% aged 45-59 3.43% aged ≥60 6.37% Missing	92.38	2020.5.27-2020.7.23	ITQ	≥2 and at least one functional impairment items	0.220
Guo[72]	2021	China	cross-sectional study	FHCW	COVID-19	1091	10% aged < 25 72% aged 25-45 18% aged ≥46	67	2020.5.15-2020.5.31	PCL-C	> 37	0.110

Study	Publication year	Research	Study type	Specialty	Traumatic event	Sample size	Mean age (SD), year	Female (%)	Investing time	PTSD scale	Cutoff	Prevalence
Hennein[73]	2021	USA	cross-sectional study	HCW	COVID-19	1092	40.4 (11.5)	72	2020.5-2020.12	PC-PTSD	≥3	0.220
Hou[74]	2021	China	cross-sectional study	HCW	SARS	507	34.8 (9.5)	65.1	2020.5.1-2020.5.7	PCL-C	≥38	0.235
Ilias[75]	2021	Greece	cross-sectional study	HCW	COVID-19	162	39 (9)	77	2020.6.1-2020.6.7	IES-R	≥ 33	0.350
Jordan[76]	2021	Ireland	cohort study	HCW	COVID-19	3834	43.6 (10.5)	82.4	2020.11-2021.2	IES-R	≥26	0.300
Kader[77]	2021	Qatar	cross-sectional study	ICU HCW	COVID-19	124	33.5 (11.42)	42.8	2020.8-2020.9	PDS-5	≥28	0.177
Kheradmand[78]	2021	Iran	cross-sectional study	HCW	COVID-19	222	29.2% aged < 30 34.5% aged 30-40 27.9% aged 40-50 8.4% aged ≥50	65.8	NA	IES-R	> 44	0.270
Kwobah[79]	2021	Kenya	cross-	HCW	COVID-19	1259	37.4 (10.2)	54.5	NA	PC-PTSD	NA	0.647

Study	Publication year	Research	Study type	Specialty	Traumatic event	Sample size	Mean age (SD), year	Female (%)	Investing time	PTSD scale	Cutoff	Prevalence
			sectional study									
Lamb[80]	2021	UK	cross-sectional study	HCW	COVID-19	4378	41 (12)	74.8	2020.4-2020.6	PCL-6	≥14	0.302
Lamiani[81]	2021	Italy	cross-sectional study	HCW	COVID-19	308	45.1 (11.3)	80	2020.7.14-10.13	PCL-5	≥31	0.100
Lasalvia[82]	2021	Italy	cross-sectional study	HCW	COVID-19	335	33.1% aged < 36 49.9% aged 36-55 17.0% aged ≥55	78.8	2020.4-2020.5	IES-R	≥24	0.722
Li[83]	2021	China	cross-sectional study	nurse	COVID-19	356	31.3 (6.4)	86.2	2020.1-2020.3	PCL-5	≥33	0.618
Lu[84]	2021	China	cross-sectional study	HCW	COVID-19	500	33 (8)	91.6	2020.9.24-2020.11.21	IES-6	≥1.75	0.154
Lum[85]	2021	Singapore	cross-sectional study	HCW	COVID-19	257	41.9 (12.1)	43.58	2020.4-2020.9	IES-R	≥24	0.089

Study	Publication year	Research	Study type	Specialty	Traumatic event	Sample size	Mean age (SD), year	Female (%)	Investing time	PTSD scale	Cutoff	Prevalence
Luo[86]	2021	China	cross-sectional study	eneral public, frontline, and non-frontline healthcare providers	COVID-19	915	50.8% aged 18-30 32.2% aged 31-40 16.9% aged ≥41	80.7	2020.1.29-2020.2.11	IES-R	> 44	0.148
Marcomini[87]	2021	Italy	cross-sectional study	nurse	COVID-19	173	46.8% aged 20-40 52.6% aged 41-60 0.6% aged ≥61	76.3	2020.7-2020.9	IES-R	≥26	0.399
Martínez-Caballero[88]	2021	Spain	cross-sectional study	emergency HCWs	COVID-19	317	NA	46.4	2020.5.20-2020.7.26	DTS-8	≥12	0.309
Mediavilla[89]	2021	Spain	cohort study	HCW	COVID-19	749	42 (11)	81	2020.4.24-2020.6.22	PC-PTSD	≥2	0.520
Mei[90]	2021	China	cross-sectional study	FHCW	COVID-19	516	37.4 (8.9)	80.42	NA	PCL-C	≥38	0.105
Mosheva[91]	2021	Israel	cross-sectional	HCW	COVID-19	828	41.7 (11.1)	67.2	2020.4.19-2020.4.23	PC-PTSD	≥3	0.139

Study	Publication year	Research	Study type	Specialty	Traumatic event	Sample size	Mean age (SD), year	Female (%)	Investing time	PTSD scale	Cutoff	Prevalence
			study									
Murata[92]	2021	USA	cross-sectional study	HCW	work-related	1672	45.8 (13.4)	88	2020.4.27-2020.7.13	PC-PTSD	≥3	0.300
TG COVID[93]	2021	International	cross-sectional study	HCW	COVID-19	315	29.8 (9.6)	51.1	2020.5-2020.6	IES-R	≥24	0.733
Osório[94]	2021	Brazil	cross-sectional study	HCW	COVID-19	916	35.2 (9.2)	79.7	2020.5.19-2020.8.23	PCL-5	≥ 21	0.360
Pan[95]	2021	China	cross-sectional study	HCW	COVID-19	659	58.0% aged ≤30 33.8% aged 31-40 18.2% aged ≥41	90.6	2020.11-2020.12	PCL-5	≥ 33	0.137
Pappa[96]	2021	Greece	cross-sectional study	HCW	COVID-19	464	41.4 (11)	68.75	2020.5-2020.6	IES-R	≥24	0.450
Erazo[97]	2021	Ecuador	cross-sectional study	HCW	COVID-19	1028	4.5% aged 18-25 31.5% aged 26-30	68.3	2020.3.20-2020.4.22	IES-R	≥26	0.438

Study	Publication year	Research	Study type	Specialty	Traumatic event	Sample size	Mean age (SD), year	Female (%)	Investing time	PTSD scale	Cutoff	Prevalence
							45.1% aged 31-40 19.1% aged ≥40					
Plouffe[98]	2021	Canada	cross-sectional study	HCW	COVID-19	1362	2.6% aged ≤25 29.1% aged 26-40 35.3% aged 41-60 4.3% aged ≥61 0.3% Prefer not to answer 18.0% Missing	71.5	2020.6.26-2020.12.29	PCL-5	≥ 33	0.466
Qutishat[99]	2021	Jordan	cross-sectional study	HCW	COVID-19	259	8.5% aged <25 53.1% aged 25-34 16.9% aged 35-44 12.7%	47.9	2020.5.1-2020.6.1	PCL-5	≥ 33	0.363

Study	Publication year	Research	Study type	Specialty	Traumatic event	Sample size	Mean age (SD), year	Female (%)	Investing time	PTSD scale	Cutoff	Prevalence
							aged 45-54 8.5% aged ≥55					
Robles[100]	2021	Mexico	cross-sectional study	HCW	COVID-19	5938	39.7 (11.9)	74.4	2020.4.17-2020.5.7	PCL-5	NA	0.294
Sarapultseva[101]	2021	Russian Federation	cross-sectional study	HCW	COVID-19	128	38.6 (13.9)	78.9	2020.9.1-2020.9.20	PSS-SR	≥14	0.297
Shechter[102]	2021	USA	cross-sectional study	HCW	COVID-19	230	36 (12.6)	79.6	2020.4.9-2020.4.23	PC-PTSD	≥ 3	0.552
Smith[103]	2021	USA	cross-sectional study	HCW	COVID-19	2246	39.4 (11.8)	75.5	2020.4.21-2021.5.21	PC-PTSD	≥ 3	0.525
Sonis[104]	2021	USA	cross-sectional study	HCW	COVID-19	810	55.3% aged 25-44 44.7% aged ≥45	40.2	2020.9.15-2020.10.8	PCL-5	≥ 6	0.128
Styra[105]	2021	Canada	cross-sectional study	HCW	COVID-19	3852	6.2% aged 18-25 31.5% aged 26-35	84.2	.14-2020.7.13	IES-R	≥24	0.502

Study	Publication year	Research	Study type	Specialty	Traumatic event	Sample size	Mean age (SD), year	Female (%)	Investing time	PTSD scale	Cutoff	Prevalence
							26.1% aged 36-45 22.2% aged 46-55 14.0% aged ≥55					
Tomicevic[106]	2021	Croatia	cross-sectional study	HCW	COVID-19	534	39.1% aged 18-44 60.9% aged ≥45	84.5	2020.5.1-2020.5.15	IES-R	≥24	0.330
Vancappel[107]	2021	France	cross-sectional study	HCW	work-related	1010	39.2 (11.1)	83.0	2020.3.24-2020.6.28	IES-6	≥10.5	0.578
Vance[108]	2021	Spain	cohort study	intern physician	COVID-19	1134	27.5 (2.5)	58.6	NA	PC-PTSD	≥ 3	0.436
Villalba-Arias[109]	2021	Paraguayan	cross-sectional study	HCW	COVID-19	432	32 (8.14)	71.06	2020.6.1-2020.8.30	PCL-C	≥50	0.058
Villarreal-Zegarra[110]	2021	Peru	cross-sectional study	HCW	COVID-19	190	33.9 (11.2)	64.2	2020.4.17-2020.4.23	IES-R	≥33	0.149
Voorspoels[111]	2021	Belgium	cross-sectional	HCW	COVID-19	6409	42.91 (NA)	72.4	2020.4.13-2020.7.13	PCL-5	≥ 5	0.057

Study	Publication year	Research	Study type	Specialty	Traumatic event	Sample size	Mean age (SD), year	Female (%)	Investing time	PTSD scale	Cutoff	Prevalence
			study									
Wright[112]	2021	USA	cross-sectional study	HCW	COVID-19	98	42.9 (11)	19	2020.4.1-2020.5.7	PCL-5	≥ 33	0.150
Xiong[113]	2021	China	cross-sectional study	HCW	COVID-19	333	37.1 (8.6)	81.4	NA	ETI	NA	0.199
Yang[114]	2021	China	cross-sectional study	HCW	COVID-19	19379	6.0% aged <25 45.8% aged 25-34 27.0% aged 35-44 17.3% aged 45-54 3.6% aged 55-59 0.3% aged ≥60	80	2020.3.2-2020.4.2	PCL-5	≥31	0.052
Yeo[115]	2021	South Korea	cross-sectional study	HCW	COVID-19	520	33.5 (8.1)	63.8	2020.11.16 - 2020.11.25	PC-PTSD	≥2	0.396
Zara[116]	2021	Italy	cross-	HCW	COVID-19	4550	49.1 (9.9)	77.8	2020.5.14-	IES-R	NA	0.368

Study	Publication year	Research	Study type	Specialty	Traumatic event	Sample size	Mean age (SD), year	Female (%)	Investing time	PTSD scale	Cutoff	Prevalence
			sectional study						2020.6.21			
Zhang[117]	2021	China	cross-sectional study	HCW	COVID-19	401	30.9% aged ≤30 44.9% aged 31-40 24.2% aged ≥41	69.1	2020.1.30-2020.3.2	IES-R	≥ 33	0.132
Alam[118]	2022	Bangladesh	cross-sectional study	HCW	COVID-19	2038	40.5% aged 18-29 30.0% aged 30-39 20.0% aged 40-49 9.5% aged ≥50	46.8	2021.3-2021.8	PC-PTSD	≥3	0.267
Aljaberi[119]	2022	International	cross-sectional study	HCW	COVID-19	53	NA	NA	2020.1.4-2020.5.16	IES-R	≥24	0.170
Issa[120]	2022	Saudi Arabia	cross-sectional study	the frontline nurses	COVID-19	370	36.1 (5.7)	84.1	2020.11-2021.1	PDS	≥28	0.362
Bayazit[121]	2022	Türkiye	cross-	HCW	COVID-19	1833	32.7 (7)	56.6	2020.9.15-	PCL-5	>48	0.399

Study	Publication year	Research	Study type	Specialty	Traumatic event	Sample size	Mean age (SD), year	Female (%)	Investing time	PTSD scale	Cutoff	Prevalence
			sectional study						2020.10.15			
Bizri[122]	2022	Lebanon	cross-sectional study	HCW	COVID-19	150	57.7% aged <30 18.8% aged 30-35 12.8% aged 36-50 10.7% aged ≥51	56	2020.4-2020.5	IES-R	≥24	0.300
Bock[123]	2022	Germany	cross-sectional study	physicians	COVID-19	145	0.7% aged ≤25 46.2% aged 26-35 33.1% aged 36-45 13.1% aged 46-55 4.1% aged ≥56	38.6	NA	PTBS-13	NA	0.152
Bonzini[124]	2022	Italy	cross-sectional study	HCW	COVID-19	990	14.0% aged 20-29 28.0%	70	2020.7-2021.7	IES-R	≥33	0.194

Study	Publication year	Research	Study type	Specialty	Traumatic event	Sample size	Mean age (SD), year	Female (%)	Investing time	PTSD scale	Cutoff	Prevalence
							aged 30-39 24.5% aged 40-49 33.5% aged ≥50					
Brady[125]	2022	Ireland	cross-sectional study	nursing home staff	COVID-19	390	21.8% aged ≤30 47.9% aged 31-50 30.3% aged ≥51	86.4	2020.11.20-2021.1.4	IES-R	≥26	0.039
Burhanullah[126]	2022	USA	cross-sectional study	HCW	COVID-19	486	NA	NA	2020.11.1-2020.12.1	IES-R	≥26	0.500
Carvalho-Alves[127]	2022	Brazil	cross-sectional study	HCW	COVID-19	1000	21.1% aged 18-29 34.3% aged 30-39 25.2% aged 40-49 19.4% aged ≥50	83.9	2020.7-2020.8	IES-R	≥26	0.468
Chinvarar	2022	Thailand	cross-	HCW	COVID-19	986	34.9 (11.1)	89.1	2021.5.22-	Adapted	All criteria	0.022

Study	Publication year	Research	Study type	Specialty	Traumatic event	Sample size	Mean age (SD), year	Female (%)	Investing time	PTSD scale	Cutoff	Prevalence
ak[128]			sectional study						2021.6.30	DSM-5 PTSD questionnaire	must be met	
Cleper[129]	2022	Israel	cross-sectional study	HCW	COVID-19	832	41.7 (11.1)	67	2020.4.19-2020.4.23	PC-PTSD	≥3	0.138
Costantini[130]	2022	Romania	cross-sectional study	HCW	COVID-19	324	44.3 (11.2)	78.09	2020.5-2020.10	IES-R	≥ 33	0.411
Couper[131]	2022	UK	cohort study	nursing and midwifery workforce	COVID-19	7840	13.0% aged 16-30 19.9% aged 31-40 29.4% aged 41-50 30.7% aged 51-60 7.0% aged ≥61	91.6	2020.4.2-2020.4.14	IES-R	≥33	0.446
Cui[132]	2022	China	cross-sectional study	HCW	COVID-19	443	75.6% aged ≤35 24.4%	86	2022.5.15-2022.5.30	PCL-C	≥38	0.144

Study	Publication year	Research	Study type	Specialty	Traumatic event	Sample size	Mean age (SD), year	Female (%)	Investing time	PTSD scale	Cutoff	Prevalence
							aged ≥36					
Czepiel[133]	2022	Netherlands	cross-sectional study	HCW	work-related	994	46 (15.6)	81.6	2021.2-2021.5	PC-PTSD	≥3	0.200
d'Ussel[134]	2022	France	cross-sectional study	HCW	COVID-19	780	55.0% aged ≤41 45.0% aged ≥42	81.8	2020.7.15-2020.10.01	PCL-C	> 44	0.140
Da'she[135]	2022	Jordan	cross-sectional study	nurse	COVID-19	364	63.7% aged <30 36.3% aged ≥30	62.4	2021.8.15-2021.10.02	IES-R	≥26	0.195
Diaz[136]	2022	USA	cross-sectional study	HCW	COVID-19	813	2.7% aged 18-24 47.6% aged 25-34 23.5% aged 35-44 15.0% aged 45-54 10.2% aged 55-64 0.7% aged	80.6	2020.4.9-2020.5.11	PC-PTSD	≥3	0.579

Study	Publication year	Research	Study type	Specialty	Traumatic event	Sample size	Mean age (SD), year	Female (%)	Investing time	PTSD scale	Cutoff	Prevalence
							65-74 0.3% aged ≥75					
Dykes[137]	2022	UK	cross-sectional study	ICU HCW	COVID-19	131	3.8% aged 15-24 39.7% aged 25-34 25.2% aged 35-44 22.1% aged 45-54 7.6% aged 55-64 1.5% aged ≥65	74	2020.6.17-2020.07.08	IES-R	≥33	0.282
Fournier[138]	2022	France	cross-sectional study	HCW	COVID-19	3203	10.7% aged 18-29 44.6% aged 30-44 41.5% aged 45-60 3.2% aged ≥61	81.7	2020.06.04-2020.9.22	IES-R	≥ 33	0.212

Study	Publication year	Research	Study type	Specialty	Traumatic event	Sample size	Mean age (SD), year	Female (%)	Investing time	PTSD scale	Cutoff	Prevalence
Fukushima[139]	2022	Japan	cross-sectional study	HCW	COVID-19	951	32.8% aged 20-29 25.7% aged 30-39 23.5% aged 40-49 13.6% aged 50-59 4.6% aged ≥60	67.3	2020.4.16-2020.6.8	IES-R	≥25	0.167
Gagliardi[140]	2022	Italy	cross-sectional study	HCW	COVID-19	314	NA	89.5	2020.10-2021.3	IES	> 33	0.290
Mendez[141]	2022	China	cross-sectional study	HCW	COVID-19	1263	59.9% aged <35 40.1% aged ≥35	77.4	2020.12.26-2021.3.29	PC-PTSD	≥3	0.101
Guillen-Burgos[142]	2022	Colombia	cross-sectional study	HCW	COVID-19	257	24.9% aged 18-25 70.4% aged 26-49 4.7% aged ≥50	77.43	2021.7.1-2021.7.31	PCL-5	≥33	0.187

Study	Publication year	Research	Study type	Specialty	Traumatic event	Sample size	Mean age (SD), year	Female (%)	Investing time	PTSD scale	Cutoff	Prevalence
Gündoğmuş[143]	2022	Türkiye	cross-sectional study	HCW	COVID-19	678	33 (8)	55.4	2020.5-2020.6	IES-R	≥33	0.240
Gustafson[144]	2022	USA	cross-sectional study	emergency HCWs	COVID-19	247	38.2 (10.8)	47.8	2020.9.8-2020.12.31	PCL-5	≥32	0.163
Hall[145]	2022	UK	cross-sectional study	ICU HCW	COVID-19	6080	NA	72.02	2020.11.19 - 2020.12.17	PCL-6	> 17	0.465
Holzinger[146]	2022	International	cross-sectional study	HCW	COVID-19	15292	41.6 (16.6)	64.05	2020.5-2020.8	PCL-2	≥4	0.467
İlhan[147]	2022	Türkiye	cross-sectional study	emergency HCWs	COVID-19	363	NA	59.8	2021.4.1-2021.5.1	STSS	≥38	0.719
James[148]	2022	USA	cross-sectional study	HCW	COVID-19	393	NA	39.44	2020.9.28-2021.1.4	PCL-6	≥14	0.163
Johns[149]	2022	UK	cross-sectional study	physicians	COVID-19	346	NA	75	2020.9.27-2021.1.31	PCL-5	≥31	0.118
Jovarauskaite[150]	2022	Lithuania	cross-sectional	nurse	COVID-19	206	42.3 (11.7)	97.1	2021.4-2021.5	ITQ	≥2	0.092

Study	Publication year	Research	Study type	Specialty	Traumatic event	Sample size	Mean age (SD), year	Female (%)	Investing time	PTSD scale	Cutoff	Prevalence
			study									
Korkut[151]	2022	Türkiye	cross-sectional study	HCW	COVID-19	300	NA	56.7	2020.7.15-2020.10.15	PCL-C	31-50	0.216
Kosydar-Bochenek[152]	2022	Poland	cross-sectional study	HCW	Mental Disorder Symptoms	184	NA	71	2021.5.1-2021.7.31	COVID-19-PTSD	≥26	0.320
Lasalvia[153]	2022	Italy	cross-sectional study	HCW	COVID-19	215	18.2% aged <45 34.1% aged 45-60 47.7% aged ≥61	50.5	2020.5.11-2020.5.27	IES-R	≥24	0.359
Latsou[154]	2022	Greece	cross-sectional study	HCW	COVID-19	186	41.5 (10.1)	75.3	2020.10-2020.12	ProQoL	NA	0.506
Laurent[155]	2022	France	cross-sectional study	HCW	COVID-19	2153	49.3% aged 20-34 40.9% aged 35-49 9.6% aged 50-65	74.97	2020.04.22 - 2020.05.13	IES-R	≥33	0.206

Study	Publication year	Research	Study type	Specialty	Traumatic event	Sample size	Mean age (SD), year	Female (%)	Investing time	PTSD scale	Cutoff	Prevalence
							0.2% aged ≥66					
Lee[156]	2022	China	cross-sectional study	HCW	COVID-19	354	20.9% aged <29 42.4% aged 30-39 26.5% aged 40-49 10.2% aged ≥50	82.8	2020.07.15 - 2021.07.03	IES-R	≥33	0.178
Lekka[157]	2022	Greece	cross-sectional study	HCW	COVID-19	400	41.3 (10.4)	74.5	2021.05.01 - 2021.07.31	PCL-C	≥45	0.135
Rojas[158]	2022	Mexico	cross-sectional study	HCW	COVID-19	303	37.1 (7.3)	100	2020.05.01 - 2020.07.31	PCL-5	≥33	0.194
Lei Li[159]	2022	China	cross-sectional study	HCW	COVID-19	211	34.7 (6.9)	63.98	2020.03.09 - 2020.03.14	PC-PTSD	≥2	0.242
Minjie Li[160]	2022	China	cross-sectional study	HCW	COVID-19	938	31.1 (5.8)	93.71	2021.12.01 -2022.2.28	PCL-C	≥44	0.149
Yang	2022	China	cross-	HCW	COVID-19	1795	31.8%	86.02	2021.12.01	PCL-5	≥33	0.164

Study	Publication year	Research	Study type	Specialty	Traumatic event	Sample size	Mean age (SD), year	Female (%)	Investing time	PTSD scale	Cutoff	Prevalence
Liu[161]			sectional study				aged 18-29 50.8% aged 30-39 17.4% aged ≥40		- 2021.12.28			
Liu[162]	2022	China	cross-sectional study	HCW	COVID-19	2067	56.2% aged ≤25 31.1% aged 26-35 8.6% aged 36-45 4.1% aged ≥46	77.3	2020.03.01 - 2020.03.15	PCL-C	≥38	0.178
Marsden[163]	2022	Australia	cohort study	nurses and midwives	COVID-19	676	5.2% aged 18-25 7.4% aged 26-30 20.1% aged 31-40 21.0% aged 41-50 34.7% aged 51-60 11.4% aged	87.9	2020.04.01 - 2021.04.30	IES-R	≥33	0.162

Study	Publication year	Research	Study type	Specialty	Traumatic event	Sample size	Mean age (SD), year	Female (%)	Investing time	PTSD scale	Cutoff	Prevalence
							61-70 0.3% aged ≥71					
Martin-Rodriguez[164]	2022	Spain	cross-sectional study	nurse	COVID-19	800	40.36 (11.6)	93.2	2021.04.21-2021.5.15	IES	≥26	0.380
McGuinness[165]	2022	Australia	cohort study	HCW	work-related	984	50.7% aged <45 49.3% aged ≥45	72.6	2021.05.07 - 2021.07.18	IES-6	≥9	0.204
Meena[166]	2022	India	cohort study	HCW	COVID-19	100	29.9 (4.9)	92	2021.03.01 - 2021.06.30	IES-R	≥24	0.020
Mennicken[167]	2022	Belgium	cross-sectional study	HCW	COVID-19	542	6% aged <25 14% aged 25-30 26% aged 31-40 23% aged 41-50 31% aged ≥51	80	2020.06.23 - 2020.07.30	IES-R	≥24	0.470

Study	Publication year	Research	Study type	Specialty	Traumatic event	Sample size	Mean age (SD), year	Female (%)	Investing time	PTSD scale	Cutoff	Prevalence
Metz[168]	2022	USA	cross-sectional study	HCW	COVID-19	149	29.9 (4.9)	57	2020.09.01 - 2021.04.30	PCL-5	≥31	0.174
Minelli[169]	2022	Italy	cross-sectional study	HCW	the BeirutBlast	271	45.4 (10.9)	73.1	2020.06.28 - 2020.08.10	IES-R	≥33	0.192
Irene Ng[170]	2022	Australia	cohort study	HCW	COVID-19	193	15% aged 20-30 34% aged 31-40 28% aged 41-50 17% aged 51-60 5% aged 61-70 1% aged ≥71	60	2020.05.26 - 2020.11.17	IES-R	≥24	0.350
Ng[171]	2022	Australia	cross-sectional study	HCW	COVID-19	2355	16.1% aged 20-30 33.7% aged 31-40 27.0%	66.5	2020.08.27 - 2020.10.23	IES-6	≥9	0.360

Study	Publication year	Research	Study type	Specialty	Traumatic event	Sample size	Mean age (SD), year	Female (%)	Investing time	PTSD scale	Cutoff	Prevalence
							aged 41-50 23.1% aged ≥51 0.4% aged 61-70 0.1% aged ≥71					
O'Higgins[172]	2022	Spain	cross-sectional study	HCW	COVID-19	115	42 (21)	65.2	2021.09.20 - 2021.11.18	DSM-5	NA	0.217
Ouyang[173]	2022	China	cohort study	HCW	COVID-19	403	32 (8.9)	69.7	2020.05.01 - 2020.06.30	PCL-5	≥33	0.107
Pascoe[174]	2022	Australia	cross-sectional study	HCW	COVID-19	1966	18.8% aged 20-30 33.8% aged 31-40 26.5% aged 41-50 21.2% aged ≥51 0.5% aged 61-70	63.6	2020.08.27 - 2020.10.23	IES-6	NA	0.033

Study	Publication year	Research	Study type	Specialty	Traumatic event	Sample size	Mean age (SD), year	Female (%)	Investing time	PTSD scale	Cutoff	Prevalence
							0.1% aged ≥71					
Piacentini[175]	2022	Italy	cross-sectional study	HCW	COVID-19	4487	10.7% aged 18-30 50.9% aged 31-50 37.0% aged 51-65 1.4% aged 66-75 0.1% aged ≥76	71.67	2020.04.14 - 2020.04.24	PCL-5	NA	0.116
Qi[176]	2022	China	cross-sectional study	HCW	COVID-19	676	33.0% aged 20-30 43.5% aged 31-40 23.5% aged ≥41	72.3	2020.2.18-2020.3.4	PTSD-SS	≥50	0.581
Rantanen[177]	2022	Finland	cross-sectional study	HCW	COVID-19	727	42.7 (11)	88.6	2020.6.12-2020.7.15	ICD-10	NA	0.106
Reid[178]	2022	Norway	cross-sectional	HCW	COVID-19	161	44.8 (7.1)	10	2021.5.5-2021.7.5	PTSS-10	≥35	0.030

Study	Publication year	Research	Study type	Specialty	Traumatic event	Sample size	Mean age (SD), year	Female (%)	Investing time	PTSD scale	Cutoff	Prevalence
			study									
Robles[179]	2022	Mexico	cross-sectional study	FHCW	COVID-19	2216	36.6 (10.1)	74.4	2020.5.8-2020.8.18	PCL-5	≥3	0.339
Rodríguez-Rey[180]	2022	Spain	cohort study	HCW	COVID-19	58	41.1 (11.5)	89.7	2020.3-2020.6	IES-R	≥33	0.638
Sachdeva[181]	2021	India	cross-sectional study	HCW	COVID-19	150	36.6 (14.2)	36	NA	IES-R	≥24	0.630
Sanayeh[182]	2022	Lebanon	cross-sectional study	HCW	COVID-19	519	73% aged ≤30 27% aged ≥31	57	2020.12.1-2020.12.31	PCL-5	≥33	0.440
Sar-El[183]	2022	Israel	cross-sectional study	HCW	COVID-19	134	30.4 (3)	49.3	2021.4.1-2022.5.31	PCL-5	≥32	0.096
Schou-Bredal[184]	2022	Norway	cross-sectional study	HCW	COVID-19	1453	19.5% aged 18-29 23.7% aged 30-39 20.2% aged 40-49 22.0%	89.3	2020.4.8-2021.5.20	PCL-5	≥33	0.136

Study	Publication year	Research	Study type	Specialty	Traumatic event	Sample size	Mean age (SD), year	Female (%)	Investing time	PTSD scale	Cutoff	Prevalence
							aged 50-59 8.4% aged 60-69 0.9% aged ≥70					
Schwartz[185]	2022	USA	cross-sectional study	physicians	COVID-19	620	46.5 (13.3)	48.8	2020.6.21-2021.8.21	PC-PTSD	≥3	0.410
Shahsavarinia[186]	2022	Iran	cross-sectional study	emergency HCWs	COVID-19	222	31.2 (6.9)	53.2	2020.10.1-2021.6.1	PCL-5	≥47	0.088
Sangrà[187]	2021	Spain	cross-sectional study	HCW	COVID-19	184	37.5 (11)	84.8	2020.7.1-2020.10.1	PCL-5	≥30	0.234
Stafseth[188]	2022	Norway	cross-sectional study	HCW	COVID-19	484	44.8 (10)	77.9	2020.5.6-2020.7.14	PCL-5	≥31	0.064
Tebbeb[189]	2022	France	cross-sectional study	nursing home staff	COVID-19	373	41.7 (11.7)	82	2021.3.26-2021.5.31	PCL-5	≥38	0.072
Th'ng[190]	2022	Singapore	cohort study	HCW	work-related	327	47.2% aged 21-30 37.0%	72.2	2020.6.1-2020.6.30	IES-R	≥24	0.162

Study	Publication year	Research	Study type	Specialty	Traumatic event	Sample size	Mean age (SD), year	Female (%)	Investing time	PTSD scale	Cutoff	Prevalence
							aged 31-40 15.9% aged ≥41					
Tham[191]	2022	Australia	cross-sectional study	HCW	Environments related to burns	7846	17.8% aged 20-30 25.1% aged 31-40 21.6% aged 41-50 35.5% aged ≥51	80.85	2020.8.27-2020.10.23	IES-6	> 9	0.402
Tong[192]	2022	China	cross-sectional study	HCW	COVID-19	439	42.0% aged ≤35 49.0% aged 36-59 9.1% aged ≥60	82	2021.6.1-2022.3.31	PCL-5	NA	0.128
Tucker[193]	2022	USA	cross-sectional study	HCW	COVID-19	693	19.0% aged 18-30 36.9% aged 31-45 43.4% aged ≥46	85	2020.9.16-2021.2.1	PC-PTSD	≥3	0.140

Study	Publication year	Research	Study type	Specialty	Traumatic event	Sample size	Mean age (SD), year	Female (%)	Investing time	PTSD scale	Cutoff	Prevalence
Vadi[194]	2022	India	cross-sectional study	ICU and ER frontline	COVID-19	153	31.1% aged 21-24 23.2% aged 25-30 29.8% aged 31-35 17.2% aged ≥41	58.2	2020.12.1-2021.1.1	ASDS	NA	0.216
Van Steenkiste[195]	2022	Belgium	cohort study	nurse	COVID-19	39	34 (28.9)	79	2020.4.1-2020.6.30	IES-R	≥27	0.512
Van Wert[196]	2022	USA	cross-sectional study	HCW	COVID-19	605	23.2% aged 19-29 28.3% aged 30-39 20.7% aged 40-49 26.3% aged ≥50 2.3% Not reported	78.5	2020.9.9-2020.11.26	IES-R	≥22	0.223
Wild[197]	2021	UK	cross-sectional	HCW	work-related	103	41.3 (8.1)	55	2020.7.1-2021.3.1	PCL-5	≥31	0.440

Study	Publication year	Research	Study type	Specialty	Traumatic event	Sample size	Mean age (SD), year	Female (%)	Investing time	PTSD scale	Cutoff	Prevalence
			study									
Yang[198]	2022	China	cross-sectional study	HCW	COVID-19	1993	26.0% aged 20-30 43.3% aged 31-40 22.9% aged 41-50 7.7% aged 51-60 0.2% aged ≥61	83.1	2020.3.1-2020.5.1	PCL-5	≥31	0.092
Yao[199]	2022	China	cross-sectional study	HCW	COVID-19	108	11.9% aged ≤25 46.5% aged 26-30 26.7% aged 31-35 14.9% aged ≥36	86.1	2020.4.1-2020.12.1	PCL-C	≥50	0.109
Young[200]	2022	USA	cross-sectional study	HCW	COVID-19	8494	84.0% aged <60 16.0% aged ≥60	83.4	2020.5.15-2020.6.26	PC-PTSD	≥4	0.130

Study	Publication year	Research	Study type	Specialty	Traumatic event	Sample size	Mean age (SD), year	Female (%)	Investing time	PTSD scale	Cutoff	Prevalence
Yu[201]	2022	USA	cross-sectional study	HCW	COVID-19	889	23.9% aged <35 23.3% aged 35-44 24.9% aged 45-54 22.9% aged 55-64 5.1% aged ≥65	71	2020.7.1-2020.7.31	PC-PTSD	≥3	0.130
Zhang[202]	2022	China	cross-sectional study	HCW	COVID-19	2109	35.6% aged 20-29 62.1% aged 30-49 2.3% aged ≥50	85	2020.3.26-2020.4.15	IES-R	≥24	0.460
Zhong[203]	2022	China	cross-sectional study	HCW	COVID-19	965	NA	74.2	2020.1.16-2020.2.6	PCL-C	≥38	0.256
Adams[204]	2023	Canada	cohort study	physicians	COVID-19	117	22.8% aged 25-34 25.7% aged 35-44	48	2020.11.1-2020.1.31	PCL-5	≥31	0.029

Study	Publication year	Research	Study type	Specialty	Traumatic event	Sample size	Mean age (SD), year	Female (%)	Investing time	PTSD scale	Cutoff	Prevalence
							21.8% aged 45-54 23.8% aged 55-64 5.9% aged ≥65					
Alshehri[205]	2023	Saudi Arabia	cross-sectional study	emergency HCWs	COVID-19	519	NA	48.6	2023.2.1-2023.6.30	PCL-5	≥38	0.141
Banakar[206]	2023	Iran	cross-sectional study	dental care providers	COVID-19	638	30.76 (18)	39.8	2022.8.1-2022.9.30	GPS	NA	0.434
Bouaddi[207]	2023	Morocco	cross-sectional study	HCW	COVID-19	211	1.4% aged ≤20 95.7% aged 21-50 2.8% aged ≥51	56.4	2020.6.1-2020.7.31	IES-R	≥24	0.725
Brady[208]	2023	Ireland	cross-sectional study	HCW	work-related	377	24.1% aged ≤30 53.1% aged 31-50 22.8%	76.7	2021.1.29-2021.3.16	IES-R	≥26	0.451

Study	Publication year	Research	Study type	Specialty	Traumatic event	Sample size	Mean age (SD), year	Female (%)	Investing time	PTSD scale	Cutoff	Prevalence
							aged ≥51					
Brunelli[209]	2023	Italy	cross-sectional study	HCW	COVID-19	200	46.7 (11.5)	72	2022.3.18-2022.4.27	IES-R	NA	0.165
Cabrolier[210]	2023	France	cross-sectional study	NSHW	COVID-19	1200	39.4 (11.8)	78.2	2020.6.15-2020.9.15	IES-R	≥36	0.117
Conejero[211]	2023	France	cross-sectional study	HCW	COVID-19	537	NA	NA	2021.4.1-2021.10.11	PCL-5	≥32	0.214
Costa[212]	2023	Portugal	cohort study	HCW	COVID-19	2027	11.1% aged 18-29 28.5% aged 30-39 28.6% aged 40-49 22.5% aged 50-59 9.3% aged ≥60	83.4	2020.5.1-2020.7.31	PCL-5-4	≥7	0.227
D'Alessandro-Lowe[213]	2023	Canada	cross-sectional study	RT	COVID-19	218	24.3% aged 20-29 33.9%	84.9	2022.2.1-2022.6.30	PCL-5	≥33	0.330

Study	Publication year	Research	Study type	Specialty	Traumatic event	Sample size	Mean age (SD), year	Female (%)	Investing time	PTSD scale	Cutoff	Prevalence
							aged 30-39 23.9% aged 40-49 18.0% aged ≥50					
Danson[214]	2023	UK	cohort study	HCW	COVID-19	1174	43.76 (16.21)	83.34	2020.6.2-2020.6.12	ITQ	≥2	0.061
Dong[215]	2023	China	cohort study	HCW	COVID-19	6709	35.1 (8.9)	76.9	2020.2.13-2020.3.3	PCL-C	≥44	0.439
Doukas[216]	2023	USA	cross-sectional study	infected HCW	COVID-19	347	38.3 (10.8)	78.1	2020.7.1-2022.4.25	PCL-5	≥31	0.190
Gaber[217]	2023	Egypt	cross-sectional study	infected HCW	COVID-19	150	36.9 (10.6)	54	2021.2.1-2021.4.30	PCL-5	≥33	0.113
Gambaro[218]	2023	Italy	cross-sectional study	HCW	COVID-19	688	12% aged 18-29 53% aged 30-49 35% aged ≥50	68	2021.6.1-2021.8.31	IES-R	≥9	0.290
Gesi[219]	2023	Italy	cross-sectional	HCW	COVID-19	930	45.1 (11.8)	63.7	2020.4.4-2020.5.13	IES-R	≥33	0.276

Study	Publication year	Research	Study type	Specialty	Traumatic event	Sample size	Mean age (SD), year	Female (%)	Investing time	PTSD scale	Cutoff	Prevalence
			study									
He[220]	2023	USA	cross-sectional study	FHCW	COVID-19	1437	NA	74.7	2020.11.19-2021.1.11	PCL-5	≥33	0.143
Hennein[221]	2023	USA	cohort study	HCW	COVID-19	786	59.0% aged <35 41.0% aged ≥35	72.6	2020.4.14-2020.5.11	PCL-5-4	≥8	0.037
Hruska[222]	2023	USA	cross-sectional study	emergency HCWs	COVID-19	852	38.3 (12.5)	63.1	2021.1.8-2021.2.12	PCL-5-4	≥11	0.055
Huang[223]	2023	China	cross-sectional study	SRPT residents	COVID-19	835	43.4% aged 20-25 49.6% aged 26-30 7.1% aged ≥31	41.0	2021.12.17-2022.1.7	PCL-5	≥33	0.333
Human[224]	2023	South Africa	cross-sectional study	MHCW	COVID-19	120	33.8 (9.8)	84	2021.7-2022.6	PCL-5	≥31	0.117
Hwang[225]	2023	South Korea	cross-sectional study	HCW	COVID-19	1425	40.7% aged 20-29 39.6%	64.8	2020.12.1-2021.1.29	PC-PTSD	≥2	0.330

Study	Publication year	Research	Study type	Specialty	Traumatic event	Sample size	Mean age (SD), year	Female (%)	Investing time	PTSD scale	Cutoff	Prevalence
							aged 30-39 12.1% aged 40-49 6.3% aged 50-59 1.1% aged ≥61					
Jordan[226]	2023	UK	cohort study	HCW	COVID-19	585	43.6 (10.7)	83	2020.11.9-2020.11.22	IES-R	≥26	0.159
Kobelski[227]	2023	Poland	cross-sectional study	HCW	COVID-19	245	40.2 (10.1)	77.14	2022.4.4-2022.5.4	PDI-12	≥14	0.824
Li[228]	2023	China	cross-sectional study	HCW	COVID-19	425	26.8% aged ≤30 39.5% aged 31-40 33.6% aged ≥41	62.6	2020.3.15-2020.3.22	IES-R	≥33	0.433
Liang[229]	2023	Iran	cross-sectional study	nurse	COVID-19	334	34.3 (7.2)	82.9	2021.10-2022.2	IES-R	≥33	0.572
Yifang Liu[230]	2023	China	cross-sectional	HCW	COVID-19	3455	33 (6.9)	83.1	2022.1.15-2022.3.31	PCL-5	≥33	0.199

Study	Publication year	Research	Study type	Specialty	Traumatic event	Sample size	Mean age (SD), year	Female (%)	Investing time	PTSD scale	Cutoff	Prevalence
			study									
Lopez-Salinas[231]	2023	Mexico	cross-sectional study	FHCW	COVID-19	131	33.9 (8.2)	63	2020.8.28-2020.11.30	IES-R	≥ 33	0.229
Lowry[232]	2023	Ireland	cross-sectional study	HCW	COVID-19	1898	39 (10.3)	81	2020.9	IES-R	≥34	0.280
Machado[233]	2023	Brazil	cross-sectional study	HCW	COVID-19	941	39 (11.9)	76.3	2020.6-2020.9	PCL-5	≥36	0.258
Mao[234]	2023	China	cross-sectional study	nurse	COVID-19	784	30.4 (6.6)	94.4	2022.1	IES-R	≥26	0.264
Negri[235]	2023	Italy	cohort study	HCW	COVID-19	226	41.9 (12.1)	77.4	2020.4.15-2020.5.15	PCL-5	≥33	0.398
Newnham[236]	2023	Australia	cross-sectional study	HCW	COVID-19	431	42.4 (11.9)	81	2021.11.30-2022.3.7	PC-PTSD	≥4	0.223
Pahrol[237]	2023	Malaysia	cross-sectional study	HCW	COVID-19	907	33.7 (6.7)	62.6	2020.5-2020.8	IES-R	≥15	0.186
Patel[238]	2023	Canada	cross-sectional	HCW	awareness of systemic	299	40.8 (11.2)	91.6	2021.6-2022.1	PCL-5	≥33	0.280

Study	Publication year	Research	Study type	Specialty	Traumatic event	Sample size	Mean age (SD), year	Female (%)	Investing time	PTSD scale	Cutoff	Prevalence
			study		racism							
Ferreira[239]	2023	Portugal	cross-sectional study	HCW	COVID-19	226	NA	84.5	2021.6.16-2021.9.26	PCL-5	≥33	0.350
Portillo-Van Diest[240]	2023	Spain	cohort study	HCW	COVID-19	4809	11.0% aged 18-29 45.5% aged 30-49 43.5% aged ≥50	77.6	2020.5.5-2020.9.7	PCL-5-4	≥ 28	0.221
Ptak[241]	2023	USA	cohort study	resident physicians	COVID-19	1957	27.6 (2.6)	48.2	2020.3-2020.6	PC-PTSD	≥ 3	0.092
Rapisarda[242]	2023	Canada	cohort study	HCW	COVID-19	382	40.6 (9.8)	87.4	2020.3.8-2021.1.24	PCL-5-8	≥ 13	0.340
Renzi[243]	2023	Italy	cross-sectional study	nurse	the stresses of internship.	400	34.3 (11.8)	78.5	2020.12-2021.4	IES-R	≥33	0.568
Riaz[244]	2023	Bangladesh	cross-sectional study	HCW	SARS	1394	34.2 (7.2)	62.9	2021.7-2021.12	PCL-5	≥31	0.235
Rice[245]	2023	Spain	cross-sectional study	HCW	war	2038	40 (13.3)	81.9	2022.4-2022.5	Adapted DSM-5 PTSD	≥3	0.114

Study	Publication year	Research	Study type	Specialty	Traumatic event	Sample size	Mean age (SD), year	Female (%)	Investing time	PTSD scale	Cutoff	Prevalence
										questionnaire		
Scott[246]	2023	UK	cross-sectional study	HCW	SARS	94	17.0% aged ≤30 18.1% aged 31-40 28.7% aged 41-50 31.9% aged 51-60 3.2% aged ≥61	84.04	2021.3.1-2021.8.27	PCL-6	≥14	0.383
Abdeen[247]	2023	Egypt	cross-sectional study	HCW	SARS	124	62.1% aged <34 37.9% aged ≥34	64.5	2020.5-2020.7	PCL-C	≥28	0.379
Shah[248]	2023	USA	cross-sectional study	ICU HCW	earthquake	50	33.9 (9.6)	50	2022.6-2022.9	PCL-5	≥31	0.110
Tabano[249]	2023	Italy	cross-sectional study	HCW	work-related	68	38.1 (10.2)	60.3	NA	IES-R	≥33	0.157
Tong[250]	2023	USA	cross-	HCW	H7N9	2001	48.7%	75.2	2020.11.19	PCL-5-4	≥8	0.142

Study	Publication year	Research	Study type	Specialty	Traumatic event	Sample size	Mean age (SD), year	Female (%)	Investing time	PTSD scale	Cutoff	Prevalence
			sectional study				aged <35 51.3% aged ≥35		-2021.1.11			
Touhami[251]	2023	Morocco	cross-sectional study	HCW	work-related	1267	31 (6.7)	59.3	2020.5.15-2020.6.15	PCL-5	≥33	0.217
Tran[252]	2023	Vietnam	cross-sectional study	HCW	MERS	542	30 (3)	49.2	2021.7.15-2021.9.25	IES-R	≥24	0.212
Yilmaz-Karaman[253]	2023	Türkiye	cohort study	HCW	terrorist attacks	66	34 (8.3)	63.6	2020.5.8-2020.7.6	IES-R	≥24	0.288
Yin[254]	2023	China	cross-sectional study	HCW	COVID-19	443	35 (9.4)	67.72	NA	IES-R	≥22	0.454
AlJaberi[255]	2024	United Arab Emirates	cross-sectional study	FHCW	COVID-19	992	36.6 (8.1)	62.7	2020.12-2021.2	IES-R	≥25	0.249
Azoulay[256]	2024	France	cross-sectional study	ICU HCW	COVID-19	950	37 (11.1)	65	2021.10.30-2021.12.1	IES-R	≥22	0.357
Cardinalli[257]	2024	USA	cross-sectional	MHCW	COVID-19	69	NA	69	2020.7-2020.9	PCL-5	≥ 33	0.480

Study	Publication year	Research	Study type	Specialty	Traumatic event	Sample size	Mean age (SD), year	Female (%)	Investing time	PTSD scale	Cutoff	Prevalence
			study									
Chen[258]	2023	China	cross-sectional study	MHCW	COVID-19	10647	34.9 (8.4)	82	2023.1.22-2023.2.10	PCL-C	≥38	0.067
D'Alessandro-Lowe[259]	2024	Canada	cross-sectional study	HCW	COVID-19	613	39.5 (11.1)	88.9	2021.02-2021.12	DSM-5	33	0.261
de Souza Junior[260]	2024	Brazil	cohort study	HCW	COVID-19	1001	16.6% aged 18-29 35.3% aged 30-39 26.4% aged 40-49 17.9% aged 50-59 3.9% aged ≥60	76.4	2020.06.12 - 2020.09.19	PCL-5	36	0.338
Dempsey[261]	2024	UK	cross-sectional study	HCW	COVID-19	24137	21.3% aged ≤30 25.0% aged 31-40 22.0% aged 41-50	74.1	2020.04-2023.05	PCL-6	14	0.126

Study	Publication year	Research	Study type	Specialty	Traumatic event	Sample size	Mean age (SD), year	Female (%)	Investing time	PTSD scale	Cutoff	Prevalence
							20.7% aged 51-60 6.5% aged ≥61					
Douplat[262]	2024	France	cross-sectional study	HCW	COVID-19	211	37.4 (9.6)	71.1	2020.04.20 - 2020.05.29	PCL-5	40	0.109
Dufour[263]	2021	Canada	cross-sectional study	HCW	COVID-19	373	38.7 (9.7)	87.5	2020.05.08 - 2020.09.04	PCL-5	13	0.148
Echeverria[264]	2023	Spain	cross-sectional study	HCW	patient death	47	43.8 (11.8)	70.2	2020.04-2020.05	ETEA-PT	NA	0.426
El Kinany[265]	2024	Morocco	cross-sectional study	HCW	COVID-19	96	26.8 (NA)	67.7	2022.10-2022.12	IES-R	22	0.542
Fournier[266]	2025	France	cross-sectional study	ICU HCW	COVID-19	1108	46.1% aged 20-34 44.8% aged 35-49 8.9% aged 50-65 0.2% aged	75.18	2021.6.21-2021.7.19	IES-R	> 33	0.195

Study	Publication year	Research	Study type	Specialty	Traumatic event	Sample size	Mean age (SD), year	Female (%)	Investing time	PTSD scale	Cutoff	Prevalence
							≥66					
Gascon-Santos[267]	2024	Spain	cross-sectional study	primary care health professionals	COVID-19	207	48.8 (9.5)	60.9	2022.9-2022.12	PCL-5	> 33	0.218
Ghafoori[268]	2024	Greece	cross-sectional study	HCW	work-related	112	31.8 (7.4)	75	2020.3-2020.5	PCL-5	≥33	0.179
Giménez-Díez[269]	2024	Spain	cross-sectional study	nurse	COVID-19	1050	42.7 (10.9)	87.5	2022.11-2023.12	IES-R	NA	0.426
Gu[270]	2022	China	cross-sectional study	HCW	COVID-19	522	88.9% aged <40 11.1% aged ≥40	405	2020.2.21-2020.2.28	IES-R	≥33	0.253
Guimarães[271]	2025	Brazil	cross-sectional study	HCW	work-related	167	38.3 (10.7)	73.7	2020.7.1-2020.9.1	IES-R	≥33	0.357
Guzzon[272]	2024	Italy	cross-sectional study	midwives	war	286	69.8% aged <40 29.8% aged ≥40	100	2022.6.30-2022.9.30	IES-R	≥33	0.486
Hamdan-	2025	Palestine	cross-	HCW	COVID-19	150	32.9 (8.1)	52.7	2024.8.1-	PC-PTSD-	≥4	0.973

Study	Publication year	Research	Study type	Specialty	Traumatic event	Sample size	Mean age (SD), year	Female (%)	Investing time	PTSD scale	Cutoff	Prevalence
Mansour[273]			sectional study						2024.9.1	5		
Hovland[274]	2023	Norway	cohort study	HCW	war	287	45.6 (9.1)	77	2020.5.6-2020.7.15	PCL-5	≥31	0.063
Hussein[275]	2025	Sudan	cross-sectional study	HCW	COVID-19	1022	31.4 (12.5)	63.4	2024.4.1-2024.6.30	PCL-5	≥31	0.569
Isiek[276]	2024	Nigeria	cross-sectional study	nurse	COVID-19	250	38.7 (10.5)	82	2021.3.1-2021.11.1	IES-R	≥ 33	0.276
Jing[277]	2025	China	cross-sectional study	HCW	COVID-19	6552	37.6 (8.82)	76.65	2023.1.5-2023.2.9	IES-6	≥10	0.375
Kambulandu[278]	2024	Lesotho	cross-sectional study	HCW	COVID-19	101	NA	55.4	2022.7-2022.8	PCL-C	≥50	0.316
Li[279]	2024	China	cross-sectional study	HCW	COVID-19	4246	37.8 (9.24)	80.8	2022.7.31-2022.8.12	PCL-5	≥33	0.069
Li[280]	2025	China	cross-sectional study	HCW	COVID-19	2192	NA	72.5	2022.4.17-2022.5.10	IES-R	NA	0.756
Huan	2023	China	cross-	HCW	COVID-19	955	29.6 (6.13)	81.4	2023.1.15-	PC-PTSD-	≥3	0.243

Study	Publication year	Research	Study type	Specialty	Traumatic event	Sample size	Mean age (SD), year	Female (%)	Investing time	PTSD scale	Cutoff	Prevalence
Liu[281]			sectional study						2023.1.16	5		
Lo Moro[282]	2024	Italy	cohort study	HCW	COVID-19	451	30 (2.2)	64.33	2021.2	PC-PTSD-5	≥3	NA
Loureiro[283]	2023	Brazil	cross-sectional study	HCW	COVID-19	146	39.8 (9.6)	84.2	2020.5-2020.9	PCL-5	≥14	0.406
Malakoutikhah[284]	2024	Iran	cross-sectional study	HCW	COVID-19	455	33.4 (7.1)	80.7	2021.9.1-2022.1	IES-R	≥ 33	0.557
Maliwichi[285]	2024	Malawi	cross-sectional study	FHCW	COVID-19	109	33 (7.9)	57	2021.5-2021.6	PC-PTSD	≥ 3	0.250
Mani[286]	2023	Iran	cross-sectional study	HCW	COVID-19	503	33.9 (8.3)	50.1	2022.2.1-2022.2.20	GPS	NA	0.710
Mao[287]	2025	China	cross-sectional study	HCW	COVID-19	253	31.8 (6.5)	71.5	2022.5	IES-R	≥26	0.178
McEvoy[288]	2024	Australia	cross-sectional study	HCW	COVID-19	1313	44.9 (12.8)	80.5	2020.11.30-2021.5.31	IES-6	> 9	NA
Melander[2]	2024	Sweden	cross-	nurse	ICU	1923	NA	89.3	2021.9	PCL-5	> 30	0.039

Study	Publication year	Research	Study type	Specialty	Traumatic event	Sample size	Mean age (SD), year	Female (%)	Investing time	PTSD scale	Cutoff	Prevalence
[89]			sectional study									
Mersin[290]	2025	Türkiye	cross-sectional study	ICU HCW	COVID-19	341	27 (8.2)	68	2022.5-2022.9	PTSD-SS	≥24	0.120
Molina[291]	2024	Spain	cross-sectional study	HCW	CPR	870	43.7 (11.4)	78.1	2020.5-2020.6	PCL-5-4	≥ 28	0.272
Namgung[292]	2025	Korea	cross-sectional study	HCW	COVID-19	286	NA	NA	NA	TSQ	≥ 6	0.112
Ntalouka[293]	2024	Greece	cross-sectional study	HCW	COVID-19	100	46 (13.7)	72	NA	PCL-5	≥31	0.200
Rao[294]	2023	Singapore	cross-sectional study	HCW	COVID-19	327	NA	71.9	2020.6.1-2020.6.9	IES-R	≥24	0.162
Rigas[295]	2025	Greece	cross-sectional study	NA	COVID-19	445	NA	NA	2021.10-2022.6	PCL-5	NA	0.252
Ripoll[296]	2024	Spain	cross-sectional study	HCWs	COVID-19	336	46.8 (11.5)	0.792	2020.4-2020.6	DTS	NA	0.279

Study	Publication year	Research	Study type	Specialty	Traumatic event	Sample size	Mean age (SD), year	Female (%)	Investing time	PTSD scale	Cutoff	Prevalence
Rodríguez-Rey[297]	2024	Spain	cross-sectional study	HCWs	COVID-19	786	44.5 (11.1)	0.781	2021.11-2021.12	DSM-5	≥3	0.364
Roger[298]	2024	International	cross-sectional study	emergency HCWs	COVID-19	525	NA	0.7219	2021.2.25-2022.6.8	PCL-5	≥32	0.168
Rollin[299]	2024	France	cross-sectional study	physicians	war	307	2.5% aged <30 42.1% aged 30-39 22.6% aged 40-49 21.7% aged 50-59 11.0% aged 60-69	0.6025	NA	PCLS	≥44	0.176
Rzońca[300]	2024	Ukrainian	cross-sectional study	HCW	COVID-19	435	34.5 (9.9)	0.402	2022.8-2022.10	PCL-5	≥38	0.145
Sahin[301]	2024	Türkiye	cross-sectional study	HCW	earthquake	1013	9.4% aged ≤25 60.4% aged 26-40	68.5	2021.10.15 - 2021.11.15	PTSD-SS	≥24	0.120

Study	Publication year	Research	Study type	Specialty	Traumatic event	Sample size	Mean age (SD), year	Female (%)	Investing time	PTSD scale	Cutoff	Prevalence
							30.2% aged ≥41					
Satilmis[302]	2024	Türkiye	cross-sectional study	HCW	earthquake and nuclear accident	79	30 (22.96)	37.3	2023.4	PCL-5	≥47	0.379
Sehlikoğlu[303]	2024	Türkiye	cross-sectional study	HCW	earthquake	175	37.3 (7.6)	49.1	NA	PCL-5	≥47	0.394
Shirish[304]	2024	Nepal	cross-sectional study	ICU HCW	COVID-19	100	NA	NA	2021.5.20-2021.10.2	PCL-5	≥ 33	0.460
Wang[305]	2024	China	cross-sectional study	HCW	COVID-19	2610	36.6 (8.2)	76.8	2020.10-2020.11	IES-R	≥33	0.319
Wojnar-Gruszka[306]	2025	Poland	case-control study	ICU HCW	COVID-19	148	37.2 (9.9)	71.62	2022.3-2022.5	IES-R	> 1.5	0.466
Wu[307]	2024	China	cross-sectional study	HCW	COVID-19	6522	37.6 (8.8)	76.65	2023.1.5-2023.2.9	IES-6	≥10	0.375
Xu[308]	2024	China	cross-sectional	HCW in specialized	COVID-19	242	34.7 (6.6)	77.3	2022.1-2022.4	PTSD-7	≥4	0.203

Study	Publication year	Research	Study type	Specialty	Traumatic event	Sample size	Mean age (SD), year	Female (%)	Investing time	PTSD scale	Cutoff	Prevalence
			study	COVID-19 hospitals								

Abbreviations of PTSD scales

ASDS: Acute Stress Disorder Scale

CAPS: the Clinician-Administered PTSD Scale

DSM III-R: Diagnostic and Statistical Manual of Mental Disorders, Third Edition, Revised

DSM-5: Diagnostic and Statistical Manual of Mental Disorders

DTS-C: Davidson Trauma Scale-Chinese version

ETEA-PT: Evaluation of Traumatic Exposure and Posttraumatic Symptoms

ETI: Essen Trauma Inventory

GPS: the Global Psychotrauma Screening questionnaire

ICD-10: International Classification of Diseases-11

IES: Impact of Event Scale

IES-R: Impact of Event Scale-revised

ITQ: the International Trauma Questionnaire

PC-PTSD: Primary Care-PTSD

PCL: Posttraumatic Stress Disorder Checklist

PCL-C: Posttraumatic Stress Disorder Checklist-Civilian Version

PDI-12: Peritraumatic Distress Inventory questionnaire.

PDS: the Posttraumatic Diagnostic Scale

ProQoL: Professional Quality of Life Scale

PSS-SR: the PTSD Symptom Scale-Self-Report

PTBS-13: Freiburger Screening Fragebogen to identify patients at risk for the development of a post-traumatic stress disorder in the group of severely injured patients

PTSD-SS: Post-Traumatic Stress Disorder Self- Rating Scale

PTSS-10: the posttraumatic symptom scale 10

SPRINT-E: the short posttraumatic stress disorder rating interview

STSS: Secondary traumatic stress scale

TALS-SR: the Trauma and Loss Spectrum-Self-Report

TSQ: the Trauma Screening Questionnaire

Abbreviations of population

EMS: Emergency Medical Service

ED: Emergency Departments

HCW: healthcare workers

FHCW: frontline healthcare workers

MHCW: mental healthcare workers

NSHW: night shift healthcare workers

RT: respiratory therapists

SRPT residents: residents in the standardized residency training programs

Abbreviation: NA, not available.

Appendix F: Table 4. Quality assessment of included studies?(AHRQ).

Author	Publication year	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Total
DeLucia	2019	1	1	1	1	1	0	0	0	1	0	1	7
Gregory	2019	1	1	1	1	1	0	1	0	1	1	1	9
Jackson	2019	1	1	1	1	1	0	1	0	1	1	1	9
Kannan	2019	1	1	0	1	1	0	0	0	1	0	1	6
Rodríguez-Rey	2019	1	1	1	1	1	0	0	0	1	0	1	7
van Steijn	2019	1	1	1	1	1	0	1	0	1	1	1	9
Jones	2020	1	1	1	1	1	0	1	0	1	1	1	9
Moallef	2021	1	1	0	1	1	0	1	0	0	1	1	7
Chang	2022	1	1	1	1	1	0	0	0	0	0	0	5
Jackson	2022	1	1	1	1	1	0	0	0	0	1	0	6
Mausz	2022	1	0	1	1	1	0	0	1	0	1	0	6
Zhu	2022	1	0	1	1	1	0	1	1	0	1	0	7
Klamen	1995	1	1	0	1	1	0	0	0	0	0	0	4
Chan	2004	1	0	1	1	1	0	0	0	0	0	0	4
Ben-Ezra	2007	0	0	1	1	0	0	0	1	1	1	0	5
Lin	2007	1	1	1	1	1	0	0	0	0	1	0	6
Lancee	2008	1	1	1	1	0	0	0	0	0	0	0	4
Wang	2010	1	0	1	1	1	0	0	0	0	0	0	4
Roden-Foreman	2017	1	1	1	1	0	0	1	1	1	1	0	8

Author	Publication year	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Total
Tang	2017	1	1	1	1	1	0	1	0	0	1	0	7
Carmassi	2018	1	1	0	1	1	1	1	1	0	0	0	7
Lee	2018	1	1	0	1	1	1	0	1	0	1	1	8
Stefano	2018	1	1	1	1	1	1	0	1	0	1	0	8
Ali	2020	1	1	1	1	1	0	0	0	1	1	1	8
Cai	2020	1	1	1	1	1	0	1	0	1	1	1	9
Chen	2020	1	1	0	1	1	0	0	0	1	0	1	6
Chew	2020	1	1	1	1	1	0	0	0	1	0	1	7
Demartini	2020	1	1	1	1	1	0	0	0	1	0	1	7
Di Tella	2020	1	1	1	1	1	0	0	0	0	0	1	6
Dosil	2020	1	1	0	1	1	0	0	0	1	0	1	6
Haravuori	2020	1	1	0	1	1	0	1	0	0	1	1	7
Huang	2020	1	1	1	1	1	0	1	0	1	1	1	9
Johnson	2020	1	1	1	1	1	0	1	1	0	1	1	9
Lange	2020	1	1	0	1	1	0	0	0	0	0	1	5
Lu	2020	1	1	1	1	1	0	0	0	0	0	1	6
Song	2020	1	0	1	1	1	0	0	1	0	0	0	5
Wang	2020	1	1	1	1	1	1	1	1	1	1	0	10
Yin	2020	1	1	1	1	1	1	1	0	1	1	0	9
Zhang	2020	1	1	1	1	1	1	1	0	0	1	0	8
Zuniga	2021	1	1	1	0	1	1	0	1	0	0	0	6

Author	Publication year	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Total
Alonso	2020	1	1	1	0	1	1	1	1	1	0	0	7
Alshehri	2021	1	1	0	0	1	1	0	0	0	0	0	4
Altmayer	2020	1	1	1	0	1	0	0	0	0	0	0	4
Amsalem	2021	1	0	1	1	1	0	0	0	0	1	0	4
Askari	2021	1	1	0	1	1	1	1	1	0	1	0	8
Asnakew	2021	1	1	0	1	1	1	1	1	0	1	0	8
Ayalew	2021	1	1	1	1	1	1	1	1	0	1	0	9
Bahadirli	2021	1	1	1	1	1	1	1	1	0	1	0	9
Bates	2021	1	1	1	1	1	0	0	1	0	1	0	7
Bulut	2021	1	1	1	1	1	0	1	1	0	1	0	8
Carmassi	2021	1	1	1	1	1	0	1	1	0	1	0	7
Chatzittofis	2021	1	1	1	1	1	0	0	1	0	1	0	6
Chen	2021	1	1	1	1	1	0	1	1	0	0	0	7
Cheng	2021	1	1	0	1	1	0	0	1	0	1	0	6
Conti	2021	1	1	1	1	1	0	1	1	0	1	0	8
Cyr	2021	1	0	0	1	1	0	0	1	0	1	0	5
Das	2021	1	1	1	1	1	0	1	1	0	1	0	8
Dehon	2021	1	1	1	1	1	0	1	1	0	1	0	8
Dobson	2021	1	1	1	1	1	0	1	1	0	1	0	8
Emre	2021	1	1	1	1	1	0	0	1	0	0	0	6
Engelbrecht	2021	1	1	1	1	1	0	1	1	0	1	0	8

Author	Publication year	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Total
Fattori	2021	1	1	1	1	1	0	0	1	0	1	1	8
Feingold	2021	1	1	1	1	1	0	1	1	1	1	0	9
Flateau	2021	1	1	1	1	1	0	1	1	1	1	0	9
Geng	2021	1	1	1	1	1	0	1	1	1	1	0	9
Ghio	2021	1	1	1	1	1	0	1	1	0	1	0	8
Gilleen	2021	1	0	0	1	1	0	0	1	1	1	0	6
Gramaglia	2021	1	0	1	1	1	0	1	0	0	1	1	7
Greenberg	2021	1	0	1	1	1	0	0	0	0	0	1	5
Greene	2021	1	0	1	1	1	0	1	0	0	1	1	7
Guo	2021	1	1	1	1	1	0	1	0	0	1	1	8
Hennein	2021	1	0	1	1	1	0	1	0	0	1	1	7
Hou	2021	1	1	1	1	1	0	1	0	0	1	1	8
Ilias	2021	1	1	1	1	1	0	0	0	0	0	1	6
Jordan	2021	1	1	1	1	1	0	1	0	0	1	1	8
Kader	2021	1	0	1	1	1	0	1	0	0	1	1	7
Kheradmand	2021	1	1	0	1	1	0	0	0	0	0	1	5
Kwobah	2021	1	1	0	1	1	0	1	0	0	1	1	7
Lamb	2021	1	1	1	1	1	0	1	0	0	1	1	8
Lamiani	2021	1	1	1	1	1	0	1	0	0	0	1	7
Lasalvia	2021	1	1	1	1	1	0	1	0	0	1	0	7
Li	2021	1	1	1	1	1	0	1	0	0	1	1	8

Author	Publication year	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Total
Lu	2021	1	1	1	1	1	0	0	0	0	0	1	6
Lum	2021	1	1	1	1	1	0	0	0	0	0	1	6
Luo	2021	1	1	1	1	1	0	0	0	0	0	1	6
Marcomini	2021	1	1	1	1	1	0	1	0	0	1	1	8
Martínez-Caballero	2021	1	1	1	1	1	0	0	0	0	1	1	7
Mediavilla	2021	1	1	1	0	1	0	1	0	0	1	1	7
Mei	2021	1	1	0	1	1	0	1	0	1	1	1	8
Mosheva	2021	1	1	1	1	1	0	0	0	0	0	1	6
Murata	2021	1	1	1	1	1	0	0	0	0	1	1	7
TG COVID	2021	1	1	1	1	1	1	1	1	0	1	0	8
Osório	2021	1	1	1	1	1	1	1	0	0	1	0	7
Pan	2021	1	1	1	1	1	0	1	1	1	1	0	7
Pappa	2021	1	1	1	1	1	0	0	0	0	1	0	5
Erazo	2021	1	1	1	1	1	0	0	1	0	1	0	5
Plouffe	2021	1	1	1	1	1	0	1	1	1	1	1	9
Qutishat	2021	1	1	1	1	1	0	0	0	0	1	0	5
Robles	2021	1	1	1	1	1	0	0	1	0	1	0	6
Sarapultseva	2021	1	1	1	1	1	0	1	0	0	1	0	6
Shechter	2021	1	1	1	1	1	0	1	0	1	1	1	8
Smith	2021	1	1	1	1	1	0	1	0	1	1	0	7
Sonis	2021	1	1	1	1	1	0	1	0	0	1	0	6

Author	Publication year	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Total
Styra	2021	1	1	1	1	1	0	1	1	1	1	0	8
Tomicevic	2021	1	1	1	1	1	0	0	0	0	1	0	5
Vancappel	2021	1	1	1	1	1	0	0	1	0	1	0	6
Vance	2021	1	1	1	1	1	0	0	0	0	1	1	6
Villalba-Arias	2021	1	1	0	1	1	0	0	0	0	1	0	4
Villarreal-Zegarra	2021	1	1	1	1	1	0	0	0	0	1	0	5
Voorspoels	2021	1	1	1	1	1	0	1	1	1	1	0	8
Wright	2021	1	1	1	1	1	0	1	1	1	1	0	8
Xiong	2021	1	1	0	0	1	0	1	1	0	1	0	6
Yang	2021	1	1	1	1	0	0	1	1	0	1	0	7
Yeo	2021	1	1	1	0	0	0	0	0	0	1	0	4
Zara	2021	1	1	1	1	0	0	0	0	0	0	0	4
Zhang	2021	1	1	1	0	1	0	1	0	0	1	0	6
Alam	2022	1	1	1	0	1	1	1	0	0	0	0	6
Aljaberi	2022	1	1	1	0	1	0	0	0	0	0	0	4
Issa	2022	1	1	1	0	1	0	0	0	0	0	0	4
Bayazit	2022	1	1	1	0	1	0	1	0	0	1	0	6
Bizri	2022	1	1	1	0	1	0	1	0	0	1	0	6
Bock	2022	1	1	0	0	1	1	0	0	0	1	0	5
Bonzini	2022	1	1	1	0	1	0	0	0	0	0	0	4
Brady	2022	1	1	1	0	1	0	0	0	0	1	0	5

Author	Publication year	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Total
Burhanullah	2022	1	1	1	0	1	1	1	0	0	1	0	7
Carvalho-Alves	2022	1	1	1	0	1	1	0	0	0	0	0	5
Chinvararak	2022	1	1	1	1	1	1	0	0	0	1	0	7
Cleper	2022	1	0	1	1	1	1	0	0	0	1	0	6
Costantini	2022	1	1	1	1	1	1	1	0	0	1	0	8
Couper	2022	1	1	1	0	1	1	0	0	0	1	0	6
Cui	2022	1	1	1	0	1	1	0	0	0	0	0	5
Czepiel	2022	1	1	1	0	1	0	1	0	0	0	0	5
d'Ussel	2022	1	1	1	1	1	0	0	1	0	1	0	7
Da'she	2022	1	1	1	1	1	1	0	1	0	1	0	8
Diaz	2022	1	1	1	1	1	0	0	1	0	1	0	7
Dykes	2022	1	1	1	1	1	1	0	0	0	1	0	7
Fournier	2022	1	1	1	1	1	1	0	0	0	1	0	7
Fukushima	2022	1	1	1	1	1	0	1	1	1	1	0	9
Gagliardi	2022	1	1	1	1	1	0	0	0	0	1	0	6
Mendez	2022	1	1	1	1	1	1	1	0	0	1	0	8
Guillen-Burgos	2022	1	1	1	1	1	1	1	1	1	1	0	10
Gündoğmuş	2022	1	1	1	1	1	1	0	1	0	1	0	8
Gustafson	2022	1	1	1	0	1	0	1	0	0	0	0	5
Hall	2022	1	0	1	0	1	0	0	1	0	0	0	4
Holzinger	2022	1	0	1	0	1	1	0	0	1	0	0	5

Author	Publication year	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Total
İlhan	2022	1	1	1	1	1	0	0	0	0	1	0	6
James	2022	1	1	1	1	1	0	0	1	0	1	0	7
Johns	2022	1	0	1	0	1	1	0	0	0	0	0	4
Jovarauskaite	2022	1	1	1	1	1	0	0	0	0	1	0	6
Korkut	2022	1	1	1	1	1	1	0	1	0	1	0	8
Kosydar-Bochenek	2022	1	0	0	0	1	1	0	0	0	1	0	4
Lasalvia	2022	1	1	1	0	1	0	0	0	0	0	0	4
Latsou	2022	1	1	1	1	1	0	0	1	0	1	0	7
Laurent	2022	1	0	1	1	1	0	0	1	0	0	1	6
Lee	2022	1	0	1	1	1	0	1	1	0	1	0	7
Lekka	2022	1	0	1	1	1	0	0	1	0	0	0	5
Rojas	2022	1	1	1	1	1	0	1	1	0	0	0	7
Lei Li	2022	1	0	1	1	1	0	0	1	0	0	0	5
Minjie Li	2022	1	1	1	1	1	0	1	1	0	1	0	8
Yifang Liu	2022	1	1	1	1	1	1	1	1	0	1	0	9
Yang Liu	2022	1	1	1	1	1	1	1	1	1	1	0	10
Marsden	2022	1	0	1	1	1	0	0	1	1	1	0	7
Martin-Rodriguez	2022	1	1	1	1	1	0	1	1	0	1	0	8
McGuinness	2022	1	0	1	1	1	0	0	1	0	1	1	7
Meena	2022	1	1	1	1	1	0	1	1	0	0	0	7
Mennicken	2022	1	1	1	1	1	0	0	1	0	1	0	7

Author	Publication year	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Total
Metz	2022	1	0	1	1	1	0	0	1	0	1	0	6
Minelli	2022	1	1	1	1	1	0	1	1	1	1	0	9
Irene Ng	2022	1	1	1	1	1	1	0	1	0	1	0	8
Ng	2022	1	0	1	1	1	0	0	1	0	1	0	6
O'Higgins	2022	1	0	1	1	1	0	0	1	0	0	0	5
Ouyang	2022	1	1	1	1	1	0	1	1	0	1	0	8
Pascoe	2022	1	0	1	1	1	0	0	1	0	1	0	6
Piacentini	2022	1	0	1	1	1	0	0	1	0	1	0	6
Qi	2022	1	1	1	1	1	0	1	1	0	1	0	8
Rantanen	2022	1	1	1	1	1	1	0	0	0	1	0	7
Reid	2022	1	1	1	1	1	0	1	0	1	1	0	8
Robles	2022	1	0	1	1	1	0	0	0	0	0	0	4
Rodríguez-Rey	2022	1	0	1	1	1	1	1	1	0	1	1	9
Sachdeva	2021	1	1	0	0	1	1	1	1	0	1	0	7
Sanayeh	2022	1	1	1	1	1	1	1	1	0	1	0	9
Sar-El	2022	1	1	1	1	1	1	1	1	0	1	0	9
Schou-Bredal	2022	1	1	1	1	1	1	0	1	0	1	0	8
Schwartz	2022	1	1	1	1	1	1	1	1	0	1	0	9
Shahsavarinia	2022	1	1	1	1	1	1	1	1	0	1	0	9
Sangrà	2021	1	1	1	1	1	1	0	1	0	1	0	8
Stafseth	2022	1	1	1	1	1	1	0	1	0	1	0	8

Author	Publication year	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Total
Tebbeb	2022	1	1	1	1	1	1	1	1	0	1	0	9
Th'ng	2022	1	1	1	1	1	1	1	1	0	1	1	10
Tham	2022	1	1	1	1	1	1	0	1	0	1	0	8
Tong	2022	1	1	1	1	1	1	0	1	0	1	0	8
Tucker	2022	1	1	1	1	1	1	0	1	0	1	0	8
Vadi	2022	1	1	1	1	1	1	0	1	0	1	0	8
Van Steenkiste	2022	1	1	1	1	1	1	1	1	0	1	0	9
Van Wert	2022	1	1	1	1	1	1	0	1	0	1	0	8
Wild	2021	1	1	1	1	1	1	1	1	0	1	0	9
Yang	2022	1	1	1	1	1	1	1	1	0	1	0	9
Yao	2022	1	1	1	1	1	1	1	1	0	1	0	9
Young	2022	1	1	1	1	1	1	0	1	0	1	0	8
Yu	2022	1	1	1	1	1	1	1	1	0	1	0	9
Zhang	2022	1	1	1	1	1	1	1	1	0	1	0	9
Zhong	2022	1	0	1	1	1	0	0	1	0	1	0	6
Adams	2023	1	0	1	1	1	0	0	1	0	1	0	6
Alshehri	2023	1	0	1	1	1	0	0	1	0	0	0	5
Banakar	2023	1	1	1	1	1	0	1	1	0	0	0	7
Bouaddi	2023	1	1	1	1	1	0	0	1	0	0	0	6
Brady	2023	1	1	1	1	1	0	1	1	0	1	0	8
Brunelli	2023	1	1	1	1	1	0	1	1	0	1	0	8

Author	Publication year	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Total
Cabrolier	2023	1	1	1	1	1	0	1	1	0	1	0	8
Conejero	2023	1	1	1	1	1	0	1	1	0	1	0	8
Costa	2023	1	1	1	1	1	0	1	1	0	1	0	8
D'Alessandro-Lowe	2023	1	1	1	1	1	0	1	1	1	1	0	9
Danson	2023	1	1	1	1	1	0	1	1	1	1	0	9
Dong	2023	1	1	1	1	1	1	1	1	0	0	1	9
Doukas	2023	1	0	1	1	1	0	0	1	0	1	0	6
Gaber	2023	1	1	1	1	1	0	1	1	0	0	0	7
Gambaro	2023	1	0	1	1	1	0	0	1	0	1	0	6
Gesi	2023	1	1	1	1	1	0	1	1	0	1	0	8
He	2023	1	0	1	1	1	0	0	1	0	1	0	6
Hennein	2023	1	1	1	1	1	1	1	1	0	1	1	10
Hruska	2023	1	0	1	1	1	1	0	1	0	1	0	7
Huang	2023	1	1	1	1	1	1	1	1	0	1	0	9
Human	2023	1	1	1	1	1	1	1	1	0	1	0	9
Hwang	2023	1	1	1	1	1	1	0	1	0	1	0	8
Jordan	2023	1	0	1	1	1	1	0	1	1	1	1	9
Kobelski	2023	1	0	1	1	1	1	0	1	0	0	0	6
Li	2023	1	1	1	1	1	1	1	1	0	1	0	9
Liang	2023	1	1	1	1	1	1	1	1	0	1	0	9
Yifang Liu	2023	1	1	1	1	1	1	0	1	0	1	0	8

Author	Publication year	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Total
Lopez-Salinas	2023	1	1	1	1	1	1	1	1	0	1	0	9
Lowry	2023	1	1	1	0	1	0	0	1	0	1	0	6
Machado	2023	1	1	1	1	1	1	1	1	0	1	0	9
Mao	2023	1	1	1	1	1	1	1	1	0	0	0	8
Negri	2023	1	1	1	1	1	1	1	1	0	1	1	10
Newnham	2023	1	0	1	1	1	1	0	1	1	1	0	8
Pahrol	2023	1	1	1	1	1	1	0	1	0	1	0	8
Patel	2023	1	1	1	1	1	1	1	1	1	1	0	10
Ferreira	2023	1	1	1	1	1	1	1	1	0	1	0	9
Portillo-Van Diest	2023	1	1	1	1	1	1	0	1	1	1	1	10
Ptak	2023	1	0	1	1	1	1	0	1	1	1	1	9
Rapisarda	2023	1	1	1	1	1	1	1	1	1	1	1	11
Renzi	2023	1	0	1	1	1	1	0	1	0	0	0	6
Riaz	2023	1	1	1	1	1	1	1	1	1	1	0	10
Rice	2023	1	1	1	1	1	0	1	0	0	1	0	7
Scott	2023	1	1	1	1	1	1	1	1	1	1	0	10
Abdeen	2023	1	0	1	1	1	0	0	0	0	0	0	4
Shah	2023	1	1	1	1	1	1	1	1	1	0	1	10
Tabano	2023	1	1	1	1	1	0	1	0	0	0	0	6
Tong	2023	1	1	1	1	1	1	1	1	1	1	0	10
Touhami	2023	1	1	1	1	1	1	1	1	0	1	0	9

Author	Publication year	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Total
Tran	2023	1	1	1	1	1	1	1	1	0	1	0	9
Yilmaz-Karaman	2023	1	1	1	1	1	1	1	0	1	1	1	10
Yin	2023	1	1	0	1	1	0	1	0	1	1	0	7
AlJaberi	2024	1	1	1	1	1	1	1	0	0	0	0	7
Azoulay	2024	1	0	1	1	1	1	0	0	0	1	0	6
Cardinalli	2024	1	1	1	1	1	0	0	0	0	0	0	5
Chen	2023	1	1	1	1	1	1	1	1	0	1	0	9
D'Alessandro-Lowe	2024	1	1	1	0	1	0	1	1	0	1	0	7
de Souza Junior	2024	1	1	1	0	1	0	1	1	0	1	1	8
Dempsey	2024	1	1	1	0	1	1	1	1	0	1	1	9
Douplat	2024	1	1	1	0	1	0	1	1	0	1	1	8
Dufour	2021	1	1	1	0	1	1	1	1	0	1	1	9
Echeverria	2023	1	1	1	0	1	0	1	1	0	1	0	7
El Kinany	2024	1	1	1	0	1	0	1	1	1	1	0	8
Fournier	2025	1	1	1	1	1	0	0	1	0	1	0	7
Gascon-Santos	2024	1	1	1	1	1	0	1	1	0	1	0	8
Ghafoori	2024	1	1	1	1	1	1	1	1	0	1	0	9
Giménez-Díez	2024	1	1	1	1	1	0	0	1	1	0	0	7
Gu	2022	1	1	1	0	1	1	1	1	0	1	0	8
Guimarães	2025	1	1	1	0	1	1	0	1	0	1	0	7
Guzzon	2024	1	1	1	0	1	1	0	0	0	1	0	6

Author	Publication year	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Total
Hamdan-Mansour	2025	1	1	1	0	1	1	0	0	0	1	0	6
Hovland	2023	1	1	1	0	1	1	1	0	0	1	1	8
Hussein	2025	1	1	1	0	1	1	1	0	1	1	0	8
Isiek	2024	1	1	1	0	1	1	1	1	1	1	0	9
Jing	2025	1	1	1	1	1	0	1	1	0	1	0	8
Kambulandu	2024	1	1	1	1	1	1	1	1	1	1	0	10
Li	2024	1	1	1	0	1	1	1	1	1	1	0	9
Li	2025	1	1	1	1	1	1	1	1	0	1	0	9
Huan Liu	2023	1	1	1	1	1	1	1	1	0	1	0	9
Lo Moro	2024	1	1	1	1	1	0	1	1	1	0	1	9
Loureiro	2023	1	1	1	1	1	0	1	0	0	1	0	8
Malakoutikhah	2024	1	1	1	1	1	1	1	1	1	1	0	9
Maliwichi	2024	1	1	1	1	1	1	1	1	0	1	0	8
Mani	2023	1	1	1	1	1	1	1	1	1	1	0	9
Mao	2025	1	1	1	1	1	1	1	0	0	1	0	8
McEvoy	2024	1	1	1	1	1	1	1	1	1	1	1	10
Melander	2024	1	1	1	1	1	1	1	0	1	1	0	9
Mersin	2025	1	1	1	1	1	1	1	1	0	1	0	8
Molina	2024	1	1	1	0	1	1	1	0	0	1	0	7
Namgung	2025	1	0	0	0	0	1	1	0	0	0	0	3
Ntalouka	2024	1	0	0	0	0	1	1	1	0	1	0	5

Author	Publication year	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Total
Rao	2023	1	1	0	0	1	1	1	0	0	1	0	6
Rigas	2025	1	0	1	0	0	1	0	1	0	1	0	5
Ripoll	2024	1	1	1	0	1	1	0	1	0	1	0	6
Rodríguez-Rey	2024	1	1	1	0	1	1	1	1	0	1	0	7
Roger	2024	1	1	1	0	1	1	1	1	0	1	0	7
Rollin	2024	1	1	1	0	1	1	1	1	0	1	0	7
Rzońca	2024	1	1	1	0	1	1	1	0	0	1	0	6
Sahin	2024	1	1	1	1	1	0	0	0	1	0	1	7
Satilmis	2024	1	1	0	1	1	0	1	0	1	1	1	8
Sato	2023	1	1	0	1	1	0	1	0	1	1	1	8
Sehlikoğlu	2024	1	1	0	1	1	0	0	0	1	1	1	7
Shirish	2024	1	1	1	1	1	0	0	0	1	1	1	8
Wang	2024	1	1	1	0	1	0	1	1	0	1	0	7
Wojnar-Gruszka	2025	1	1	1	1	1	0	0	0	0	0	0	5
Wu	2024	1	1	1	0	1	0	1	1	0	1	0	7
Xu	2024	1	1	1	1	1	0	1	1	0	0	0	7

Q1: Define the source of information (survey, record review)

Q2: List inclusion and exclusion criteria for exposed and unexposed subjects (cases and controls) or refer to previous publications.

Q3: Indicate time period used for identifying patients.

Q4: Indicate whether or not subjects were consecutive if not population-based.

Q5: Indicate if evaluators of subjective components of study were masked to other aspects of the participants.

Q6: Describe any assessments undertaken for quality assurance purposes (e.g.,test/retest of primary outcome measurements).

Q7: Explain any patient exclusions from analysis.

Q8: Describe how confounding was assessed and/or controlled.

Q9: If applicable, explain how missing data were handled in the analysis.

Q10: Summarize patient response rates and completeness of data collection

Q11: Clarify what follow-up, if any, was expected and the percentage of patients for which incomplete data or follow-up was obtained.

Appendix G: Table 5. Definitions.

Healthcare Worker	Healthcare workers are defined as individuals engaged in specialized services in the health and medical field, categorized into physicians, nurses, and others. The "others" category can encompass medical technicians, psychologists, pharmacists, and all other healthcare personnel who are not classified as physicians or nurses.
PTSD Prevalence and Cutoff Values	If the article provides the prevalence rate of PTSD among medical staff, use that information; otherwise, calculate it by dividing the number of people diagnosed with PTSD by the total number of people. The cutoff values should be based on the article. If the article gives mild, moderate, and severe PTSD prevalence rates, combine these rates.
Before COVID-19	Research conducted before January 1, 2020 is classified as “before COVID-19”.
After the Onset of COVID-19	Research conducted on January 1, 2020 and onward is classified as “after the onset of COVID-19”.
Traumatic Event: Epidemic	The "epidemic" before COVID-19 include SARS, H7N9, and MERS, while the "epidemic" after the onset of COVID-19 refers to COVID-19 itself.
Traumatic Event: Work-Related	Workplace-related stressors, including workplace violence and interpersonal pressure, are also counted among them.
Traumatic Event: Mass Casualty Incidents	Including war, terrorist attacks, explosions, earthquakes, and fires.
PTSD Assessment: Self-Report Measures	[a] Standardized questionnaires or scales completed by individuals to assess their own PTSD symptoms. Including ASDS, COVID-19-PTSD, DTS, DTS-8, DTS-C, ETI, GPS, IES, IES-6, IES-R, ITQ, PC-PTSD, PC-PTSD-5, PCL-2, PCL-5, PCL-5-4, PCL-5-8, PCL-6, PCL-C, PCLS, PDI-12, PDS, PDS-5, ProQoL, PSS-SR, PTBS-13, PTSD-7, PTSD-SS, PTSS-10, STSS, TALS-SR, TSQ.
PTSD Assessment: Clinician-Administered Measures	[a] Structured interviews or assessments conducted by trained professionals to diagnose and evaluate PTSD symptoms. Including Adapted DSM-5 PTSD questionnaire, CAPS, DSM III-R, DSM-5, ETEA-PT, ICD-10, SPRINT-E scale.
Country Income Level	The Country income levels in this study are defined based on the World Bank Group's country classification by income level for 2024-2025. To facilitate statistical analysis given the substantial disparity in the number of studies across different income levels, we categorized high-income economies as the high-income group, while upper-middle-income, lower-middle-income, and low-income economies were collectively classified as the low- and middle-income group. Multi-country studies were not included.

Continent	Multi-country studies were not included.
Age	Age was categorized as ≥ 40 years and < 40 years, based on the criteria of classification of age in most included studies.
Education Level	Education level was categorized as below or equal to high school, graduate, post-graduate.
Marital Status	Marital status was categorized as married and not married. Not married category including single, separate, divorced, and widowed participants. In a solid relationship was also included in married category
Parental Status	Parental status was categorized as yes and no.
Average Weekly Working Hours	Average weekly working hours worked was categorized as ≥40 and <40. Defining a work week as 5 days, the average weekly working hours = average daily working hours * 5.
Years of Practice	Years of practice was categorized as ≥ 10 and <10.
Income	Income was categorized as high and low based on the original study's classification. If the original study grouped income into an odd number of categories, the upper half was considered the high-income group and the lower half the low-income group, with the middle group excluded. If the original study grouped income into an even number of categories, the upper half was considered the high-income group and the lower half the low-income group.
Smoking	Smoking was categorized as yes and no.
Drinking	Drinking was categorized as yes and no.
Physical Activity	Physical activity was categorized as yes and no.
History of Physical Disorder	History of physical disorder was categorized as "yes" or "no". This includes whether the subject had any pre-existing physical conditions, such as chronic diseases or physical disabilities, prior to the pandemic.
History of Mental Disorder	History of mental disorder was categorized as "yes" or "no". This includes whether the subject had any pre-existing mental health conditions, such as anxiety, depression, or stress, prior to the pandemic.
COVID-19 Infection Status	The COVID-19 infection status was categorized into "yes" and "no". "Yes" was determined by the original study's criteria for individuals who had contracted COVID-19 but have since recovered. "No" includes those who were not infected with COVID-19.
Quarantine	Quarantine was categorized as yes and no.
Frontline worker	Frontline worker was categorized as yes and no.
Direct Contact with COVID-19	Direct contact with COVID-19 was categorized as yes and no.
Personal Protective Equipment	Personal protective equipment was categorized as good and poor.
Symptomatic COVID-	Symptomatic COVID-19-positive family members/friends was

19-Positive Family Members/Friends	categorized as yes and no.

[a] **Abbreviations of PTSD scales**

ASDS: Acute Stress Disorder Scale

CAPS: the Clinician-Administered PTSD Scale

DSM III-R: Diagnostic and Statistical Manual of Mental Disorders, Third Edition, Revised

DSM-5: Diagnostic and Statistical Manual of Mental Disorders

DTS-C: Davidson Trauma Scale-Chinese version

ETEA-PT: Evaluation of Traumatic Exposure and Posttraumatic Symptoms

ETI: Essen Trauma Inventory

GPS: the Global Psychotrauma Screening questionnaire

ICD-10: International Classification of Diseases-11

IES: Impact of Event Scale

IES-R: Impact of Event Scale-revised

ITQ: the International Trauma Questionnaire

PC-PTSD: Primary Care-PTSD

PCL: Posttraumatic Stress Disorder Checklist

PCL-C: Posttraumatic Stress Disorder Checklist-Civilian Version

PDI-12: Peritraumatic Distress Inventory questionnaire.

PDS: the Posttraumatic Diagnostic Scale

ProQoL: Professional Quality of Life Scale

PSS-SR: the PTSD Symptom Scale-Self-Report

PTBS-13: Freiburger Screening Fragebogen to identify patients at risk for the development of a post-traumatic stress disorder in the group of severely injured patients

PTSD-SS: Post-Traumatic Stress Disorder Self- Rating Scale

PTSS-10: the posttraumatic symptom scale 10

SPRINT-E: the short posttraumatic stress disorder rating interview

STSS: Secondary traumatic stress scale

TALS-SR: the Trauma and Loss Spectrum-Self-Report

TSQ: the Trauma Screening Questionnaire

Appendix H:Table 6. Multivariable Meta-regression Analysis of PTSD Prevalence Among Healthcare Workers.

Covariates in the multivariate model	exp(b)	95% CI (exp(b))	P-value	I^2 (%)	τ^2	(%)
Proportion of females	1.0071	[0.8865, 1.1440]	0.913			
Investigation time (year)	1.0122	[1.0029, 1.0217]	0.010			
Continent	1.0123	[0.9961, 1.0286]	0.136	99.52	0.027	2.63
PTSD assessment	0.9398	[0.8400, 1.0515]	0.277			

Appendix I: Table 7. Summary of publication bias.

(a) Publication bias of studies that investigated prevalence of PTSD in healthcare workers (overall, before and after the onset of COVID-19).

	Overall	Before COVID-19	After the onset of COVID-19
Total	<0.001	0.018	<0.001
Sex			
Female	<0.001	0.709	<0.001
Male	<0.001	0.361	<0.001
Age			
<40	0.016	NA	0.014
≥40	0.017	NA	0.017
Marriage			
Married	<0.001	NA	<0.001
Unmarried	<0.001	NA	<0.001
[a] **Parental Status**			
Yes	<0.001	NA	<0.001
No	0.006	NA	0.006
Occupation			
Physician	<0.001	0.937	<0.001
Nurse	<0.001	0.048	<0.001
Other Occupations	<0.001	NA	<0.001
Education Level			
Below or Equal to High School	0.001	NA	0.001
Graduate	0.092	NA	0.090
Post-Graduate	0.763	NA	0.841
Years of Practice			
≥10	0.780	NA	0.814
<10	0.956	NA	0.931
[a] **Income**			
High Income	0.014	NA	0.014
Low Income	0.886	NA	0.886
Traumatic Event			
Epidemic	<0.001	0.132	<0.001
Work-Related	0.086	0.388	0.661
Mass Casualty Incident	0.492	0.038	0.443
PTSD Assessment			
Self-Report Measures	<0.001	0.015	<0.001
Clinician-Administered Measures	0.048	NA	0.037
Country Income Level			

High-income	<0.001	0.085	<0.001
Low- and middle-income	<0.001	0.122	<0.001
Continent			
Asia	<0.001	0.371	<0.001
Europe	<0.001	0.402	<0.001
North America	0.136	0.939	0.086
South America	0.397	NA	0.397
Africa	0.894	NA	0.894
Australia	0.439	NA	0.439

[a] Note: The overall and post-pandemic funnel plots are identical due to absence of pre-pandemic data.

Abbreviation: NA, not available.

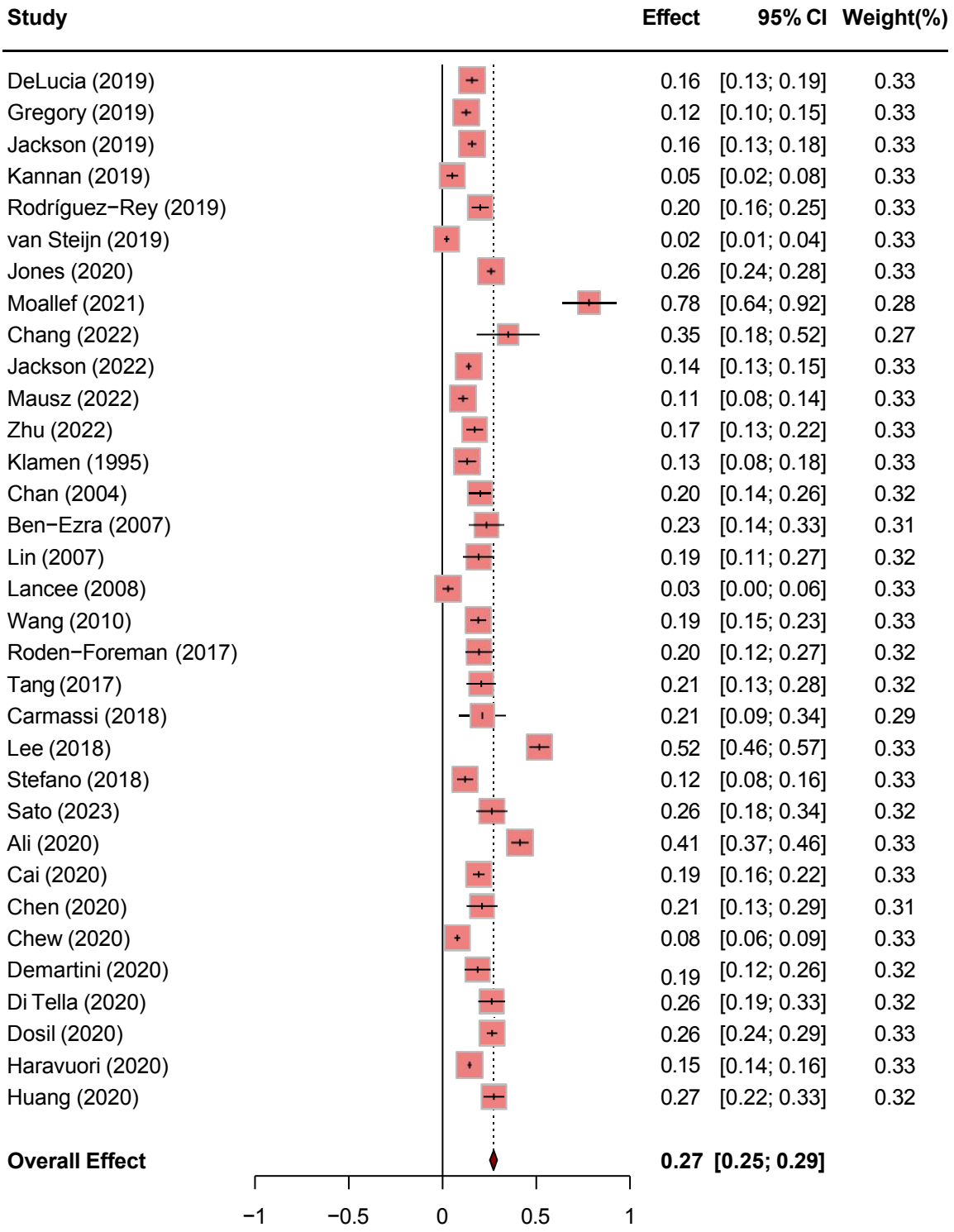
(b) **Publication bias of studies that investigated risk of factors for PTSD in healthcare workers (overall, before and after the onset of COVID-19).**

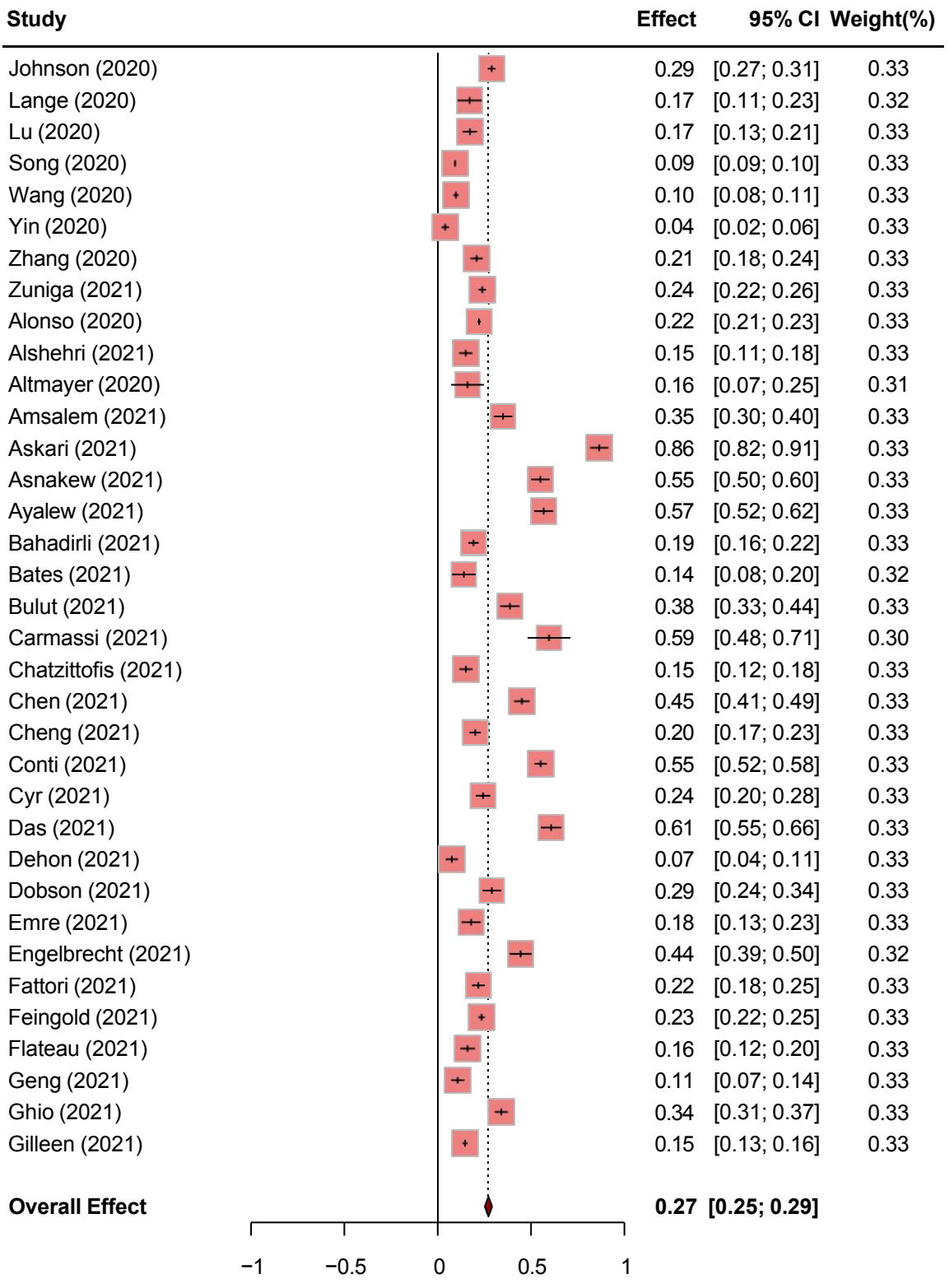
	Overall	Before COVID-19	After the onset of COVID-19
Female (Ref: Male)	0.622	0.889	0.686
Age：≥40 Years (Ref: <40 Years)	0.146	NA	0.218
Married (Ref: Unmarried)	0.015	NA	0.011
[a] Having Children (Ref: No)	0.996	NA	0.996
Nurse (Ref: Physician)	0.210	0.098	0.197
Other Occupations (Ref: Physician)	0.012	NA	0.014
Below or Equal to High School (Ref: Graduate)	<0.001	NA	<0.001
Post-Graduate (Ref: Graduate)	0.157	NA	0.200
[a] Average Weekly Working Hours: ≥40 (Ref: <40)	0.686	NA	0.686
Years of practice: ≥10 (Ref: <10)	0.115	NA	0.110
[a] High Income (Ref: Low)	0.673	NA	0.673
[a] Smoking (Ref: No)	0.062	NA	0.062
[a] Drinking (Ref: No)	0.418	NA	0.418
[a] Physical activity (Ref: No)	NA	NA	NA
[a] History of Physical Disorder (Ref: No)	0.363	NA	0.363
[a] History of Mental Disorder (Ref: No)	0.980	NA	0.980
[a] COVID-19 Infection Status (Ref: No)	0.011	NA	0.011
[a] Being Quarantined (Ref: No)	0.505	NA	0.505
[a] Frontline Workers (Ref: No)	0.074	NA	0.074
[a] Direct Contact with COVID-19 (Ref: No)	0.453	NA	0.453
[a] Poor Personal Protective Equipment (Ref: Good)	0.310	NA	0.310
[a] Symptomatic Covid-19-Positive Family Members/Friends (Ref: No)	0.001	NA	0.001

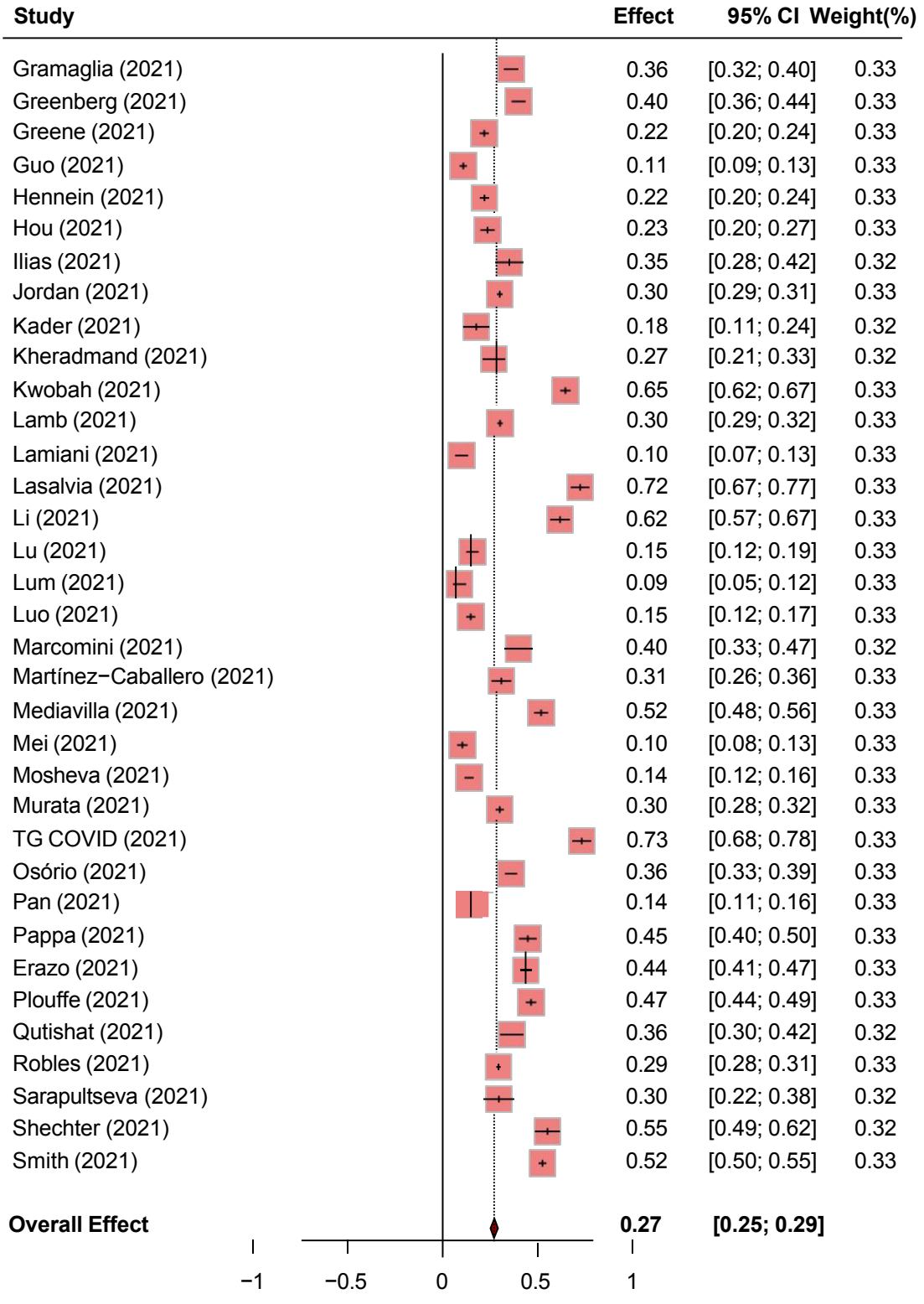
[a] Note: The overall and post-pandemic funnel plots are identical due to absence of pre-pandemic data.

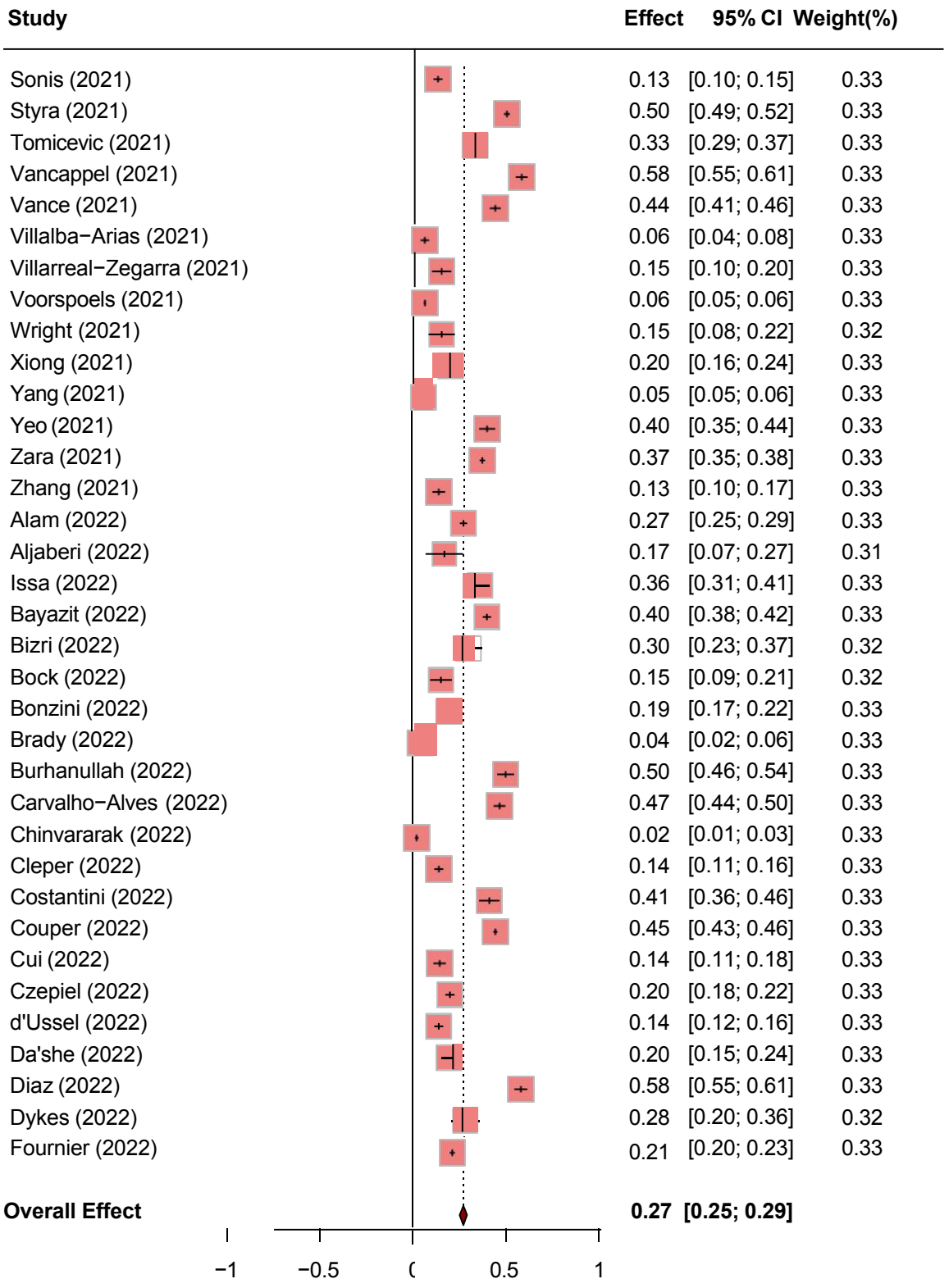
Abbreviation: NA, not available.

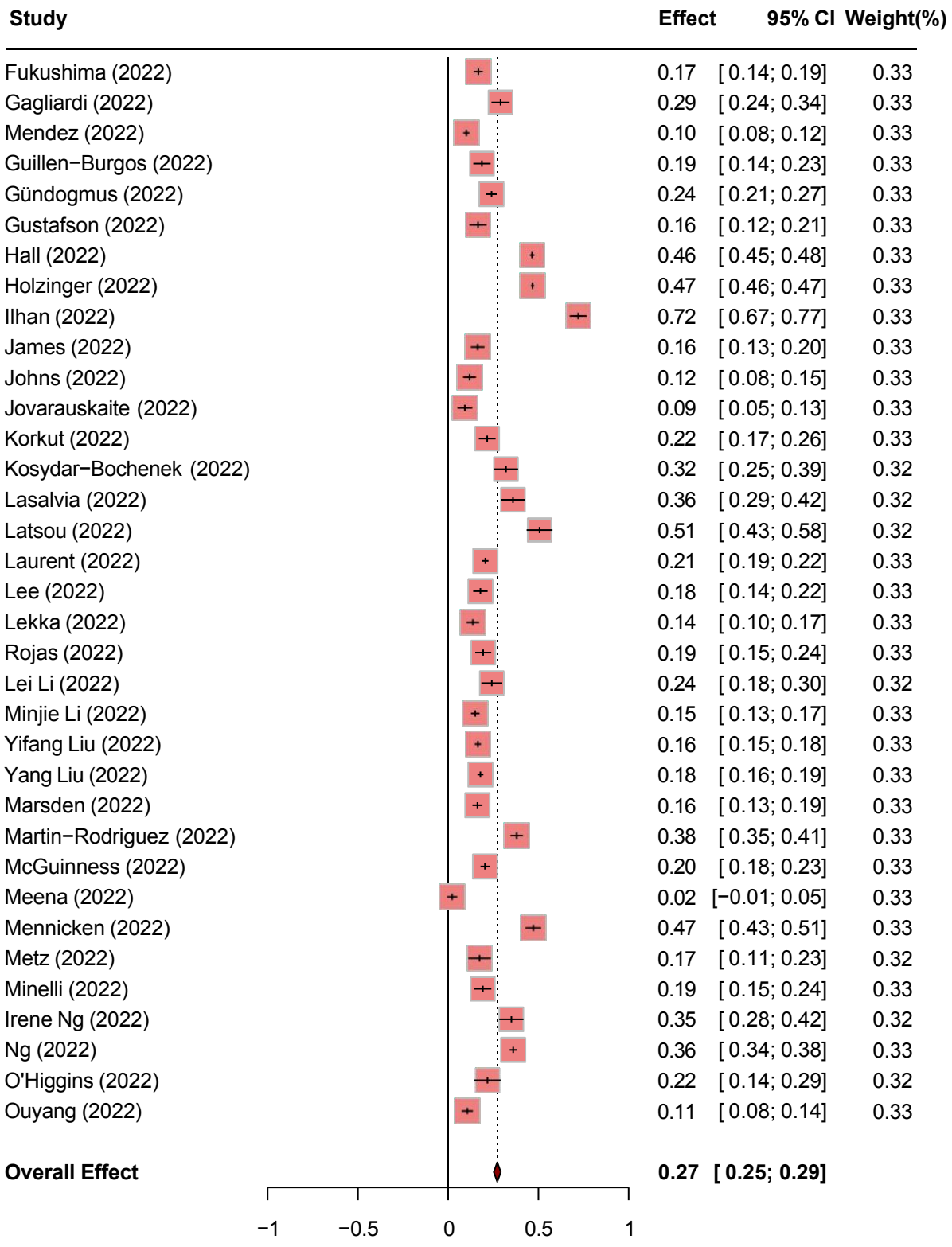
Appendix J:Figure 1. The forest plots of PTSD prevalence among healthcare workers.
(a) Prevalence of PTSD in total.

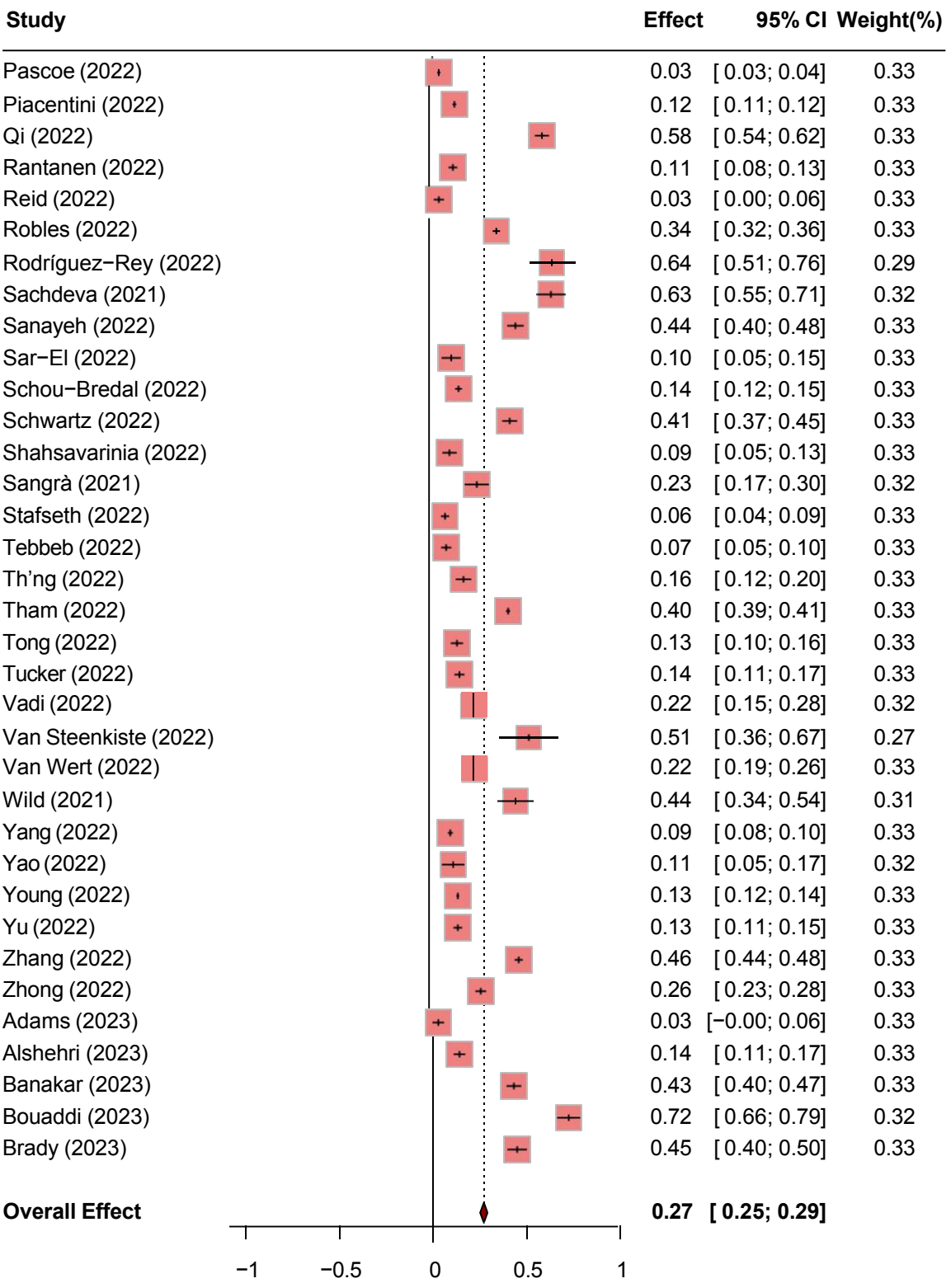


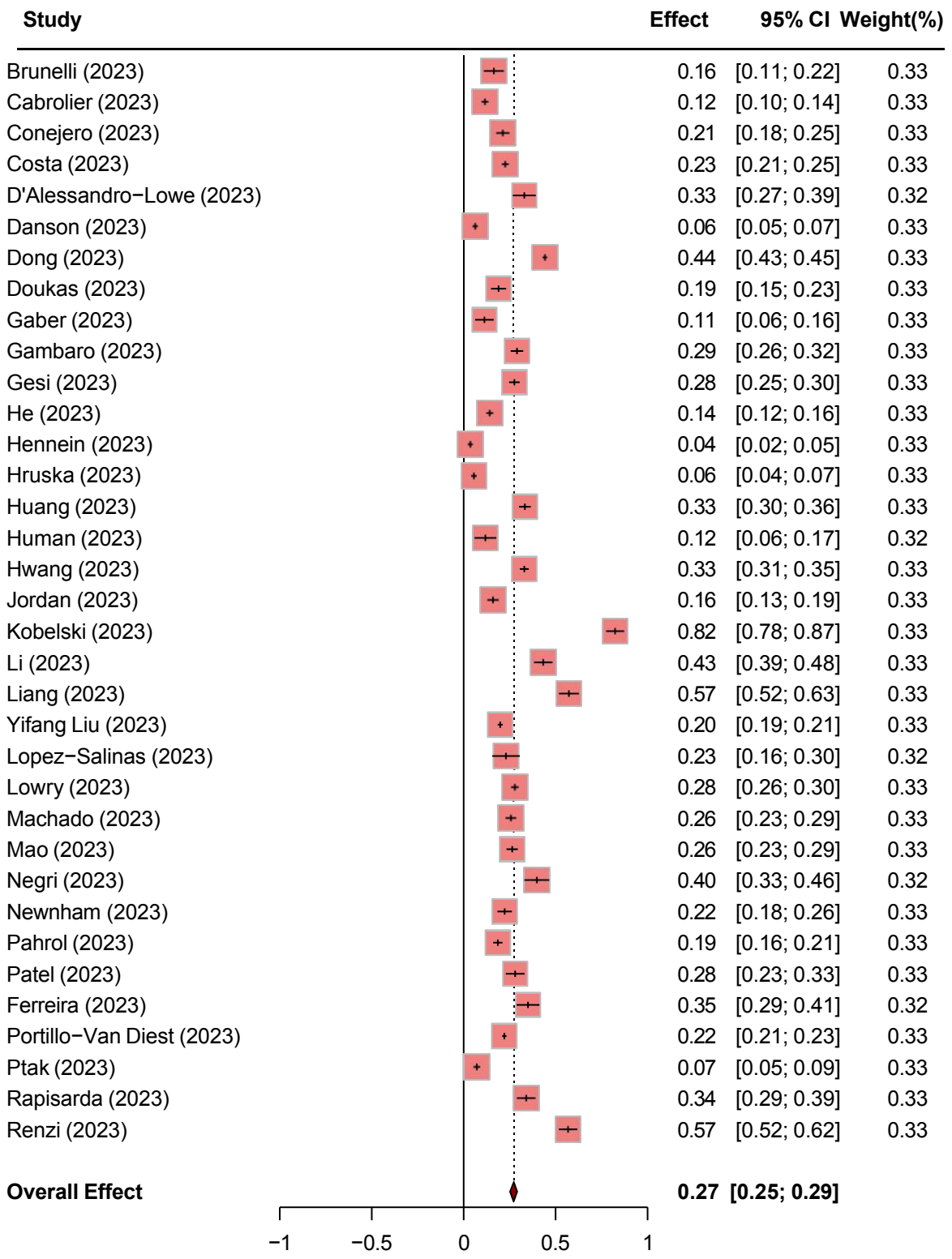

Study
Effect
95% CI
Weight(%)
Johnson (2020) 0.29 [0.27; 0.31] 0.33
Lange (2020) 0.17 [0.11; 0.23] 0.32
Lu (2020) 0.17 [0.13; 0.21] 0.33
Song (2020) 0.09 [0.09; 0.10] 0.33
Wang (2020) 0.10 [0.08; 0.11] 0.33
Yin (2020) 0.04 [0.02; 0.06] 0.33
Zhang (2020) 0.21 [0.18; 0.24] 0.33
Zuniga (2021) 0.24 [0.22; 0.26] 0.33
Alonso (2020) 0.22 [0.21; 0.23] 0.33
Alshehri (2021) 0.15 [0.11; 0.18] 0.33
Altmayer (2020) 0.16 [0.07; 0.25] 0.31
Amsalem (2021) 0.35 [0.30; 0.40] 0.33
Askari (2021) 0.86 [0.82; 0.91] 0.33
Asnakew (2021) 0.55 [0.50; 0.60] 0.33
Ayalew (2021) 0.57 [0.52; 0.62] 0.33
Bahadirli (2021) 0.19 [0.16; 0.22] 0.33
Bates (2021) 0.14 [0.08; 0.20] 0.32
Bulut (2021) 0.38 [0.33; 0.44] 0.33
Carmassi (2021) 0.59 [0.48; 0.71] 0.30
Chatzittofis (2021) 0.15 [0.12; 0.18] 0.33
Chen (2021) 0.45 [0.41; 0.49] 0.33
Cheng (2021) 0.20 [0.17; 0.23] 0.33
Conti (2021) 0.55 [0.52; 0.58] 0.33
Cyr (2021) 0.24 [0.20; 0.28] 0.33
Das (2021) 0.61 [0.55; 0.66] 0.33
Dehon (2021) 0.07 [0.04; 0.11] 0.33
Dobson (2021) 0.29 [0.24; 0.34] 0.33
Emre (2021) 0.18 [0.13; 0.23] 0.33
Engelbrecht (2021) 0.44 [0.39; 0.50] 0.32
Fattori (2021) 0.22 [0.18; 0.25] 0.33
Feingold (2021) 0.23 [0.22; 0.25] 0.33
Flateau (2021) 0.16 [0.12; 0.20] 0.33
Geng (2021) 0.11 [0.07; 0.14] 0.33
Ghio (2021) 0.34 [0.31; 0.37] 0.33
Gilleen (2021) 0.15 [0.13; 0.16] 0.33
Overall Effect 0.27 [0.25; 0.29]
−1
−0.5
0
0.5
1

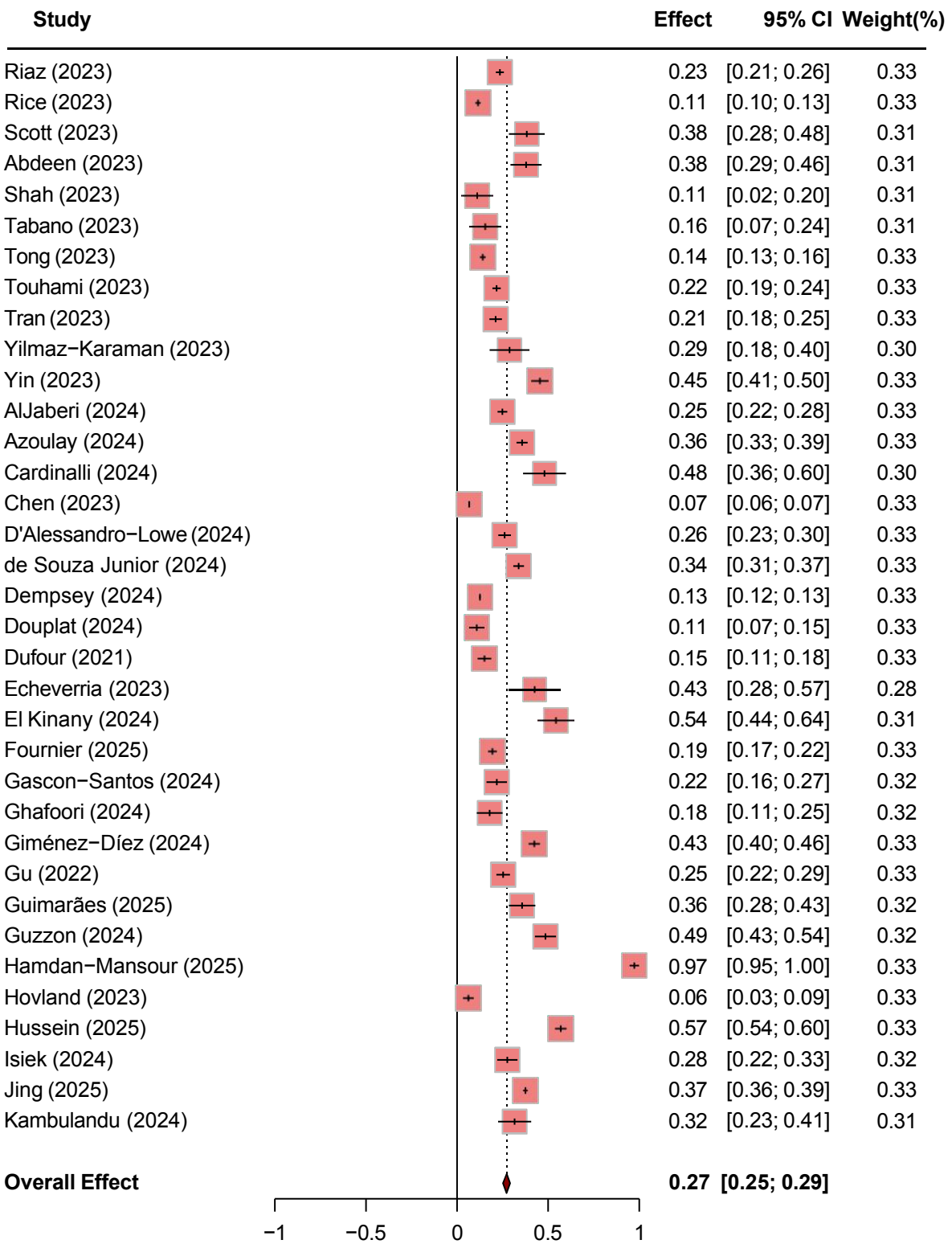

Study
Effect
95% CI
Weight(%)
Gramaglia (2021) 0.36 [0.32; 0.40] 0.33
Greenberg (2021) 0.40 [0.36; 0.44] 0.33
Greene (2021) 0.22 [0.20; 0.24] 0.33
Guo (2021) 0.11 [0.09; 0.13] 0.33
Hennein (2021) 0.22 [0.20; 0.24] 0.33
Hou (2021) 0.23 [0.20; 0.27] 0.33
Ilias (2021) 0.35 [0.28; 0.42] 0.32
Jordan (2021) 0.30 [0.29; 0.31] 0.33
Kader (2021) 0.18 [0.11; 0.24] 0.32
Kheradmand (2021) 0.27 [0.21; 0.33] 0.32
Kwobah (2021) 0.65 [0.62; 0.67] 0.33
Lamb (2021) 0.30 [0.29; 0.32] 0.33
Lamiani (2021) 0.10 [0.07; 0.13] 0.33
Lasalvia (2021) 0.72 [0.67; 0.77] 0.33
Li (2021) 0.62 [0.57; 0.67] 0.33
Lu (2021) 0.15 [0.12; 0.19] 0.33
Lum (2021) 0.09 [0.05; 0.12] 0.33
Luo (2021) 0.15 [0.12; 0.17] 0.33
Marcomini (2021) 0.40 [0.33; 0.47] 0.32
Martínez−Caballero (2021) 0.31 [0.26; 0.36] 0.33
Mediavilla (2021) 0.52 [0.48; 0.56] 0.33
Mei (2021) 0.10 [0.08; 0.13] 0.33
Mosheva (2021) 0.14 [0.12; 0.16] 0.33
Murata (2021) 0.30 [0.28; 0.32] 0.33
TG COVID (2021) 0.73 [0.68; 0.78] 0.33
Osório (2021) 0.36 [0.33; 0.39] 0.33
Pan (2021) 0.14 [0.11; 0.16] 0.33
Pappa (2021) 0.45 [0.40; 0.50] 0.33
Erazo (2021) 0.44 [0.41; 0.47] 0.33
Plouffe (2021) 0.47 [0.44; 0.49] 0.33
Qutishat (2021) 0.36 [0.30; 0.42] 0.32
Robles (2021) 0.29 [0.28; 0.31] 0.33
Sarapultseva (2021) 0.30 [0.22; 0.38] 0.32
Shechter (2021) 0.55 [0.49; 0.62] 0.32
Smith (2021) 0.52 [0.50; 0.55] 0.33
Overall Effect 0.27 [0.25; 0.29]
−1
−0.5
0
0.5
1

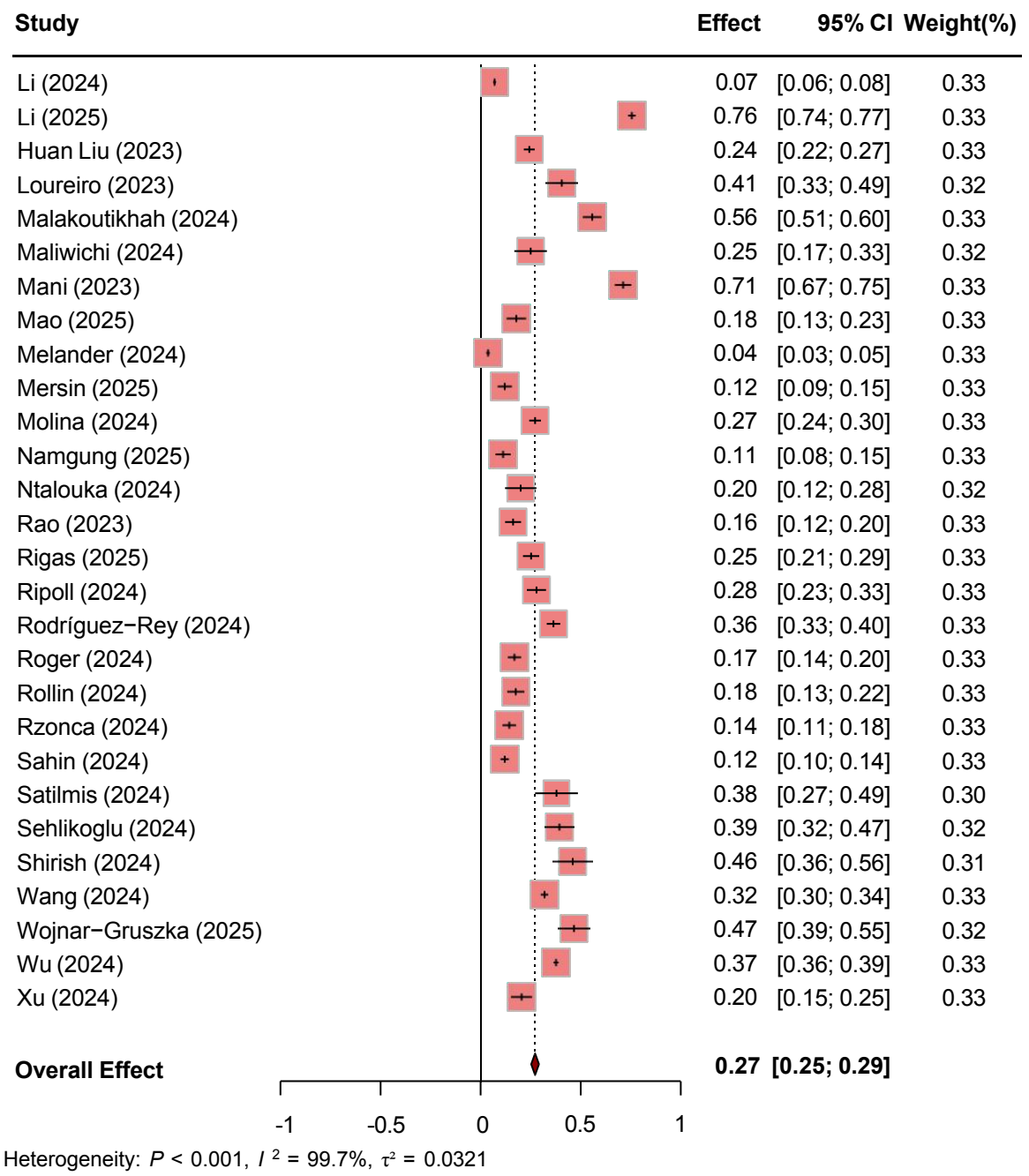

Study
Effect
95% CI
Weight(%)
Sonis (2021) 0.13 [0.10; 0.15] 0.33
Styra (2021) 0.50 [0.49; 0.52] 0.33
Tomicevic (2021) 0.33 [0.29; 0.37] 0.33
Vancappel (2021) 0.58 [0.55; 0.61] 0.33
Vance (2021) 0.44 [0.41; 0.46] 0.33
Villalba−Arias (2021) 0.06 [0.04; 0.08] 0.33
Villarreal−Zegarra (2021) 0.15 [0.10; 0.20] 0.33
Voorspoels (2021) 0.06 [0.05; 0.06] 0.33
Wright (2021) 0.15 [0.08; 0.22] 0.32
Xiong (2021) 0.20 [0.16; 0.24] 0.33
Yang (2021) 0.05 [0.05; 0.06] 0.33
Yeo (2021) 0.40 [0.35; 0.44] 0.33
Zara (2021) 0.37 [0.35; 0.38] 0.33
Zhang (2021) 0.13 [0.10; 0.17] 0.33
Alam (2022) 0.27 [0.25; 0.29] 0.33
Aljaberi (2022) 0.17 [0.07; 0.27] 0.31
Issa (2022) 0.36 [0.31; 0.41] 0.33
Bayazit (2022) 0.40 [0.38; 0.42] 0.33
Bizri (2022) 0.30 [0.23; 0.37] 0.32
Bock (2022) 0.15 [0.09; 0.21] 0.32
Bonzini (2022) 0.19 [0.17; 0.22] 0.33
Brady (2022) 0.04 [0.02; 0.06] 0.33
Burhanullah (2022) 0.50 [0.46; 0.54] 0.33
Carvalho−Alves (2022) 0.47 [0.44; 0.50] 0.33
Chinvararak (2022) 0.02 [0.01; 0.03] 0.33
Cleper (2022) 0.14 [0.11; 0.16] 0.33
Costantini (2022) 0.41 [0.36; 0.46] 0.33
Couper (2022) 0.45 [0.43; 0.46] 0.33
Cui (2022) 0.14 [0.11; 0.18] 0.33
Czepiel (2022) 0.20 [0.18; 0.22] 0.33
d'Ussel (2022) 0.14 [0.12; 0.16] 0.33
Da'she (2022) 0.20 [0.15; 0.24] 0.33
Diaz (2022) 0.58 [0.55; 0.61] 0.33
Dykes (2022) 0.28 [0.20; 0.36] 0.32
Fournier (2022) 0.21 [0.20; 0.23] 0.33
Overall Effect 0.27 [0.25; 0.29]
−1
−0.5
0
0.5
1


Study
Effect
95% CI
Weight(%)
Fukushima (2022) 0.17 [0.14; 0.19] 0.33
Gagliardi (2022) 0.29 [0.24; 0.34] 0.33
Mendez (2022) 0.10 [0.08; 0.12] 0.33
Guillen−Burgos (2022) 0.19 [0.14; 0.23] 0.33
Gündogmus (2022) 0.24 [0.21; 0.27] 0.33
Gustafson (2022) 0.16 [0.12; 0.21] 0.33
Hall (2022) 0.46 [0.45; 0.48] 0.33
Holzinger (2022) 0.47 [0.46; 0.47] 0.33
Ilhan (2022) 0.72 [0.67; 0.77] 0.33
James (2022) 0.16 [0.13; 0.20] 0.33
Johns (2022) 0.12 [0.08; 0.15] 0.33
Jovarauskaite (2022) 0.09 [0.05; 0.13] 0.33
Korkut (2022) 0.22 [0.17; 0.26] 0.33
Kosydar−Bochenek (2022) 0.32 [0.25; 0.39] 0.32
Lasalvia (2022) 0.36 [0.29; 0.42] 0.32
Latsou (2022) 0.51 [0.43; 0.58] 0.32
Laurent (2022) 0.21 [0.19; 0.22] 0.33
Lee (2022) 0.18 [0.14; 0.22] 0.33
Lekka (2022) 0.14 [0.10; 0.17] 0.33
Rojas (2022) 0.19 [0.15; 0.24] 0.33
Lei Li (2022) 0.24 [0.18; 0.30] 0.32
Minjie Li (2022) 0.15 [0.13; 0.17] 0.33
Yifang Liu (2022) 0.16 [0.15; 0.18] 0.33
Yang Liu (2022) 0.18 [0.16; 0.19] 0.33
Marsden (2022) 0.16 [0.13; 0.19] 0.33
Martin−Rodriguez (2022) 0.38 [0.35; 0.41] 0.33
McGuinness (2022) 0.20 [0.18; 0.23] 0.33
Meena (2022) 0.02 [−0.01; 0.05] 0.33
Mennicken (2022) 0.47 [0.43; 0.51] 0.33
Metz (2022) 0.17 [0.11; 0.23] 0.32
Minelli (2022) 0.19 [0.15; 0.24] 0.33
Irene Ng (2022) 0.35 [0.28; 0.42] 0.32
Ng (2022) 0.36 [0.34; 0.38] 0.33
O'Higgins (2022) 0.22 [0.14; 0.29] 0.32
Ouyang (2022) 0.11 [0.08; 0.14] 0.33
Overall Effect 0.27 [0.25; 0.29]
−1
−0.5
0
0.5
1


Study
Effect
95% CI
Weight(%)
Pascoe (2022) 0.03 [0.03; 0.04] 0.33
Piacentini (2022) 0.12 [0.11; 0.12] 0.33
Qi (2022) 0.58 [0.54; 0.62] 0.33
Rantanen (2022) 0.11 [0.08; 0.13] 0.33
Reid (2022) 0.03 [0.00; 0.06] 0.33
Robles (2022) 0.34 [0.32; 0.36] 0.33
Rodríguez−Rey (2022) 0.64 [0.51; 0.76] 0.29
Sachdeva (2021) 0.63 [0.55; 0.71] 0.32
Sanayeh (2022) 0.44 [0.40; 0.48] 0.33
Sar−El (2022) 0.10 [0.05; 0.15] 0.33
Schou−Bredal (2022) 0.14 [0.12; 0.15] 0.33
Schwartz (2022) 0.41 [0.37; 0.45] 0.33
Shahsavarinia (2022) 0.09 [0.05; 0.13] 0.33
Sangrà (2021) 0.23 [0.17; 0.30] 0.32
Stafseth (2022) 0.06 [0.04; 0.09] 0.33
Tebbeb (2022) 0.07 [0.05; 0.10] 0.33
Th'ng (2022) 0.16 [0.12; 0.20] 0.33
Tham (2022) 0.40 [0.39; 0.41] 0.33
Tong (2022) 0.13 [0.10; 0.16] 0.33
Tucker (2022) 0.14 [0.11; 0.17] 0.33
Vadi (2022) 0.22 [0.15; 0.28] 0.32
Van Steenkiste (2022) 0.51 [0.36; 0.67] 0.27
Van Wert (2022) 0.22 [0.19; 0.26] 0.33
Wild (2021) 0.44 [0.34; 0.54] 0.31
Yang (2022) 0.09 [0.08; 0.10] 0.33
Yao (2022) 0.11 [0.05; 0.17] 0.32
Young (2022) 0.13 [0.12; 0.14] 0.33
Yu (2022) 0.13 [0.11; 0.15] 0.33
Zhang (2022) 0.46 [0.44; 0.48] 0.33
Zhong (2022) 0.26 [0.23; 0.28] 0.33
Adams (2023) 0.03 [−0.00; 0.06] 0.33
Alshehri (2023) 0.14 [0.11; 0.17] 0.33
Banakar (2023) 0.43 [0.40; 0.47] 0.33
Bouaddi (2023) 0.72 [0.66; 0.79] 0.32
Brady (2023) 0.45 [0.40; 0.50] 0.33
Overall Effect 0.27 [0.25; 0.29]
−1
−0.5
0
0.5
1


Study
Effect
95% CI
Weight(%)
Brunelli (2023) 0.16 [0.11; 0.22] 0.33
Cabrolier (2023) 0.12 [0.10; 0.14] 0.33
Conejero (2023) 0.21 [0.18; 0.25] 0.33
Costa (2023) 0.23 [0.21; 0.25] 0.33
D'Alessandro−Lowe (2023) 0.33 [0.27; 0.39] 0.32
Danson (2023) 0.06 [0.05; 0.07] 0.33
Dong (2023) 0.44 [0.43; 0.45] 0.33
Doukas (2023) 0.19 [0.15; 0.23] 0.33
Gaber (2023) 0.11 [0.06; 0.16] 0.33
Gambaro (2023) 0.29 [0.26; 0.32] 0.33
Gesi (2023) 0.28 [0.25; 0.30] 0.33
He (2023) 0.14 [0.12; 0.16] 0.33
Hennein (2023) 0.04 [0.02; 0.05] 0.33
Hruska (2023) 0.06 [0.04; 0.07] 0.33
Huang (2023) 0.33 [0.30; 0.36] 0.33
Human (2023) 0.12 [0.06; 0.17] 0.32
Hwang (2023) 0.33 [0.31; 0.35] 0.33
Jordan (2023) 0.16 [0.13; 0.19] 0.33
Kobelski (2023) 0.82 [0.78; 0.87] 0.33
Li (2023) 0.43 [0.39; 0.48] 0.33
Liang (2023) 0.57 [0.52; 0.63] 0.33
Yifang Liu (2023) 0.20 [0.19; 0.21] 0.33
Lopez−Salinas (2023) 0.23 [0.16; 0.30] 0.32
Lowry (2023) 0.28 [0.26; 0.30] 0.33
Machado (2023) 0.26 [0.23; 0.29] 0.33
Mao (2023) 0.26 [0.23; 0.29] 0.33
Negri (2023) 0.40 [0.33; 0.46] 0.32
Newnham (2023) 0.22 [0.18; 0.26] 0.33
Pahrol (2023) 0.19 [0.16; 0.21] 0.33
Patel (2023) 0.28 [0.23; 0.33] 0.33
Ferreira (2023) 0.35 [0.29; 0.41] 0.32
Portillo−Van Diest (2023) 0.22 [0.21; 0.23] 0.33
Ptak (2023) 0.07 [0.05; 0.09] 0.33
Rapisarda (2023) 0.34 [0.29; 0.39] 0.33
Renzi (2023) 0.57 [0.52; 0.62] 0.33
Overall Effect 0.27 [0.25; 0.29]
−1
−0.5
0
0.5
1

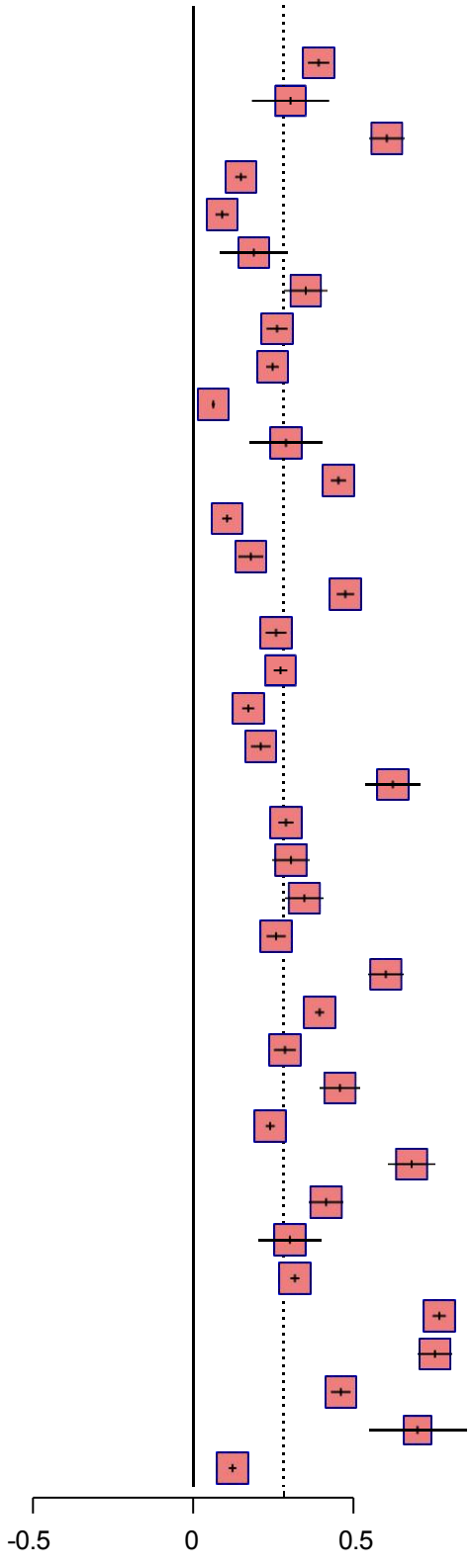

Study
Effect
95% CI
Weight(%)
Riaz (2023) 0.23 [0.21; 0.26] 0.33
Rice (2023) 0.11 [0.10; 0.13] 0.33
Scott (2023) 0.38 [0.28; 0.48] 0.31
Abdeen (2023) 0.38 [0.29; 0.46] 0.31
Shah (2023) 0.11 [0.02; 0.20] 0.31
Tabano (2023) 0.16 [0.07; 0.24] 0.31
Tong (2023) 0.14 [0.13; 0.16] 0.33
Touhami (2023) 0.22 [0.19; 0.24] 0.33
Tran (2023) 0.21 [0.18; 0.25] 0.33
Yilmaz−Karaman (2023) 0.29 [0.18; 0.40] 0.30
Yin (2023) 0.45 [0.41; 0.50] 0.33
AlJaberi (2024) 0.25 [0.22; 0.28] 0.33
Azoulay (2024) 0.36 [0.33; 0.39] 0.33
Cardinalli (2024) 0.48 [0.36; 0.60] 0.30
Chen (2023) 0.07 [0.06; 0.07] 0.33
D'Alessandro−Lowe (2024) 0.26 [0.23; 0.30] 0.33
de Souza Junior (2024) 0.34 [0.31; 0.37] 0.33
Dempsey (2024) 0.13 [0.12; 0.13] 0.33
Douplat (2024) 0.11 [0.07; 0.15] 0.33
Dufour (2021) 0.15 [0.11; 0.18] 0.33
Echeverria (2023) 0.43 [0.28; 0.57] 0.28
El Kinany (2024) 0.54 [0.44; 0.64] 0.31
Fournier (2025) 0.19 [0.17; 0.22] 0.33
Gascon−Santos (2024) 0.22 [0.16; 0.27] 0.32
Ghafoori (2024) 0.18 [0.11; 0.25] 0.32
Giménez−Díez (2024) 0.43 [0.40; 0.46] 0.33
Gu (2022) 0.25 [0.22; 0.29] 0.33
Guimarães (2025) 0.36 [0.28; 0.43] 0.32
Guzzon (2024) 0.49 [0.43; 0.54] 0.32
Hamdan−Mansour (2025) 0.97 [0.95; 1.00] 0.33
Hovland (2023) 0.06 [0.03; 0.09] 0.33
Hussein (2025) 0.57 [0.54; 0.60] 0.33
Isiek (2024) 0.28 [0.22; 0.33] 0.32
Jing (2025) 0.37 [0.36; 0.39] 0.33
Kambulandu (2024) 0.32 [0.23; 0.41] 0.31
Overall Effect 0.27 [0.25; 0.29]
−1
−0.5
0
0.5
1



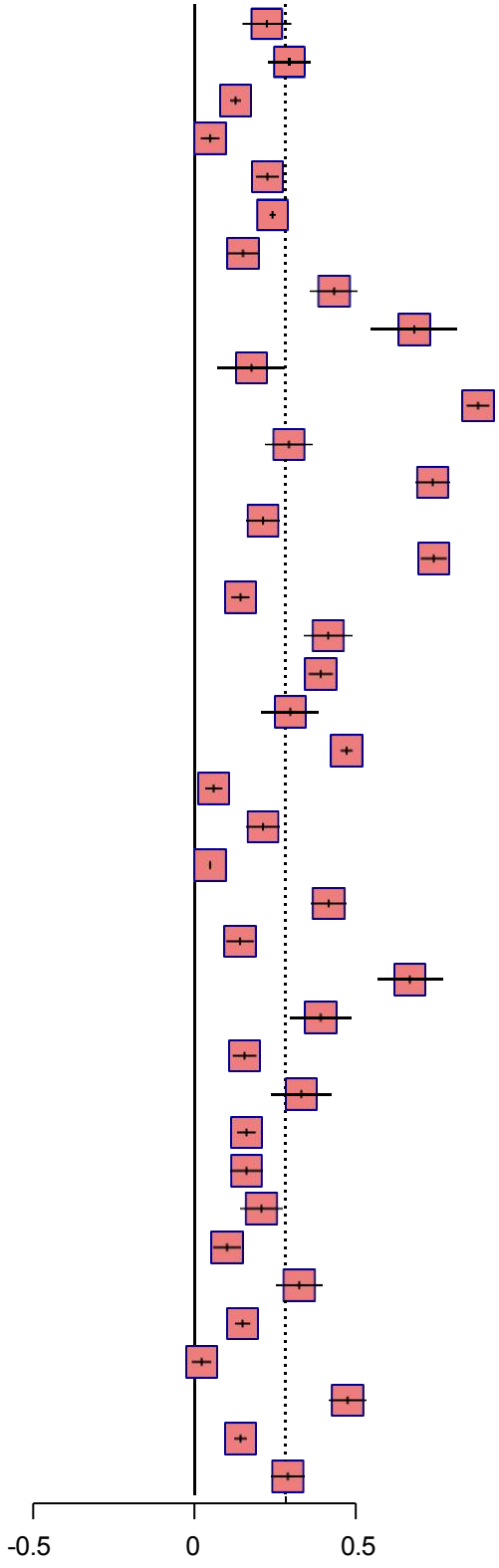
Heterogeneity: $P < 0.001$, $I^2 = 99.7\%$, $\tau^2 = 0.0321$

(b) Prevalence of PTSD by sex.

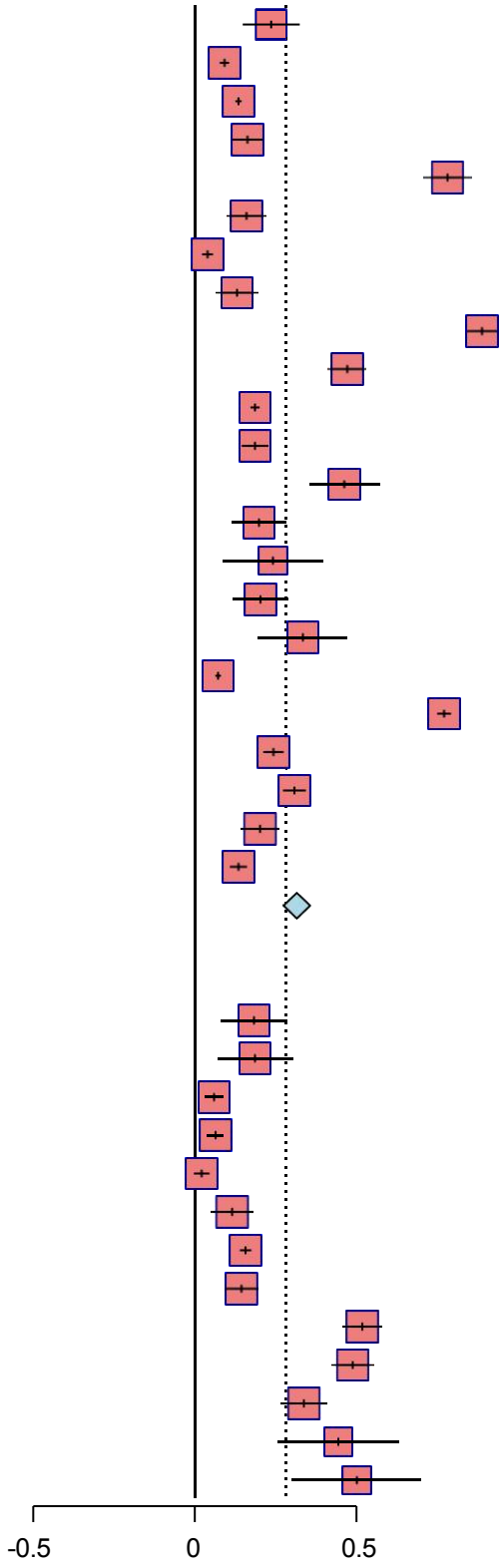
Study	(95% CI)
Female	
Chinvararak (2022)	0.39 [0.36; 0.42]
Kambulandu (2024)	0.30 [0.18; 0.42]
Li (2021)	0.60 [0.55; 0.66]
Yifang Liu (2022)	0.15 [0.13; 0.17]
Guo (2021)	0.09 [0.07; 0.11]
Kader (2022)	0.19 [0.08; 0.29]
Ferreira (2023)	0.35 [0.28; 0.42]
Mao (2023)	0.26 [0.23; 0.29]
Feingold (2021)	0.25 [0.23; 0.27]
Chen (2023)	0.06 [0.06; 0.07]
Maliwichi (2024)	0.29 [0.18; 0.40]
Zhang (2022)	0.45 [0.43; 0.48]
Wang (2020)	0.10 [0.09; 0.12]
Roger (2024)	0.18 [0.14; 0.22]
Mediavilla (2022)	0.47 [0.45; 0.50]
Touhami (2023)	0.26 [0.23; 0.29]
Costa (2023)	0.27 [0.25; 0.29]
Rice (2023)	0.17 [0.15; 0.19]
Bonzini (2022)	0.21 [0.18; 0.24]
Asnakew (2021)	0.62 [0.54; 0.71]
Lowry (2023)	0.29 [0.27; 0.31]
Ripoll (2024)	0.30 [0.25; 0.36]
Banakar (2023)	0.35 [0.29; 0.40]
Riaz (2023)	0.26 [0.23; 0.29]
Renzi (2023)	0.60 [0.55; 0.65]
Wu (2024)	0.39 [0.38; 0.41]
Machado (2023)	0.29 [0.25; 0.32]
Costantini (2022)	0.46 [0.40; 0.52]
Portillo−Van Diest (2023)	0.24 [0.23; 0.25]
Ayalew (2021)	0.68 [0.61; 0.75]
Huang (2023)	0.41 [0.36; 0.47]
Lopez−Salinas (2023)	0.30 [0.20; 0.40]
Robles (2021)	0.32 [0.30; 0.33]
Robles (2022)	0.77 [0.75; 0.79]
Mani (2023)	0.75 [0.70; 0.81]
Bayazit (2022)	0.46 [0.43; 0.49]
Satilmis (2024)	0.70 [0.55; 0.85]
Piacentini (2022)	0.12 [0.11; 0.13]



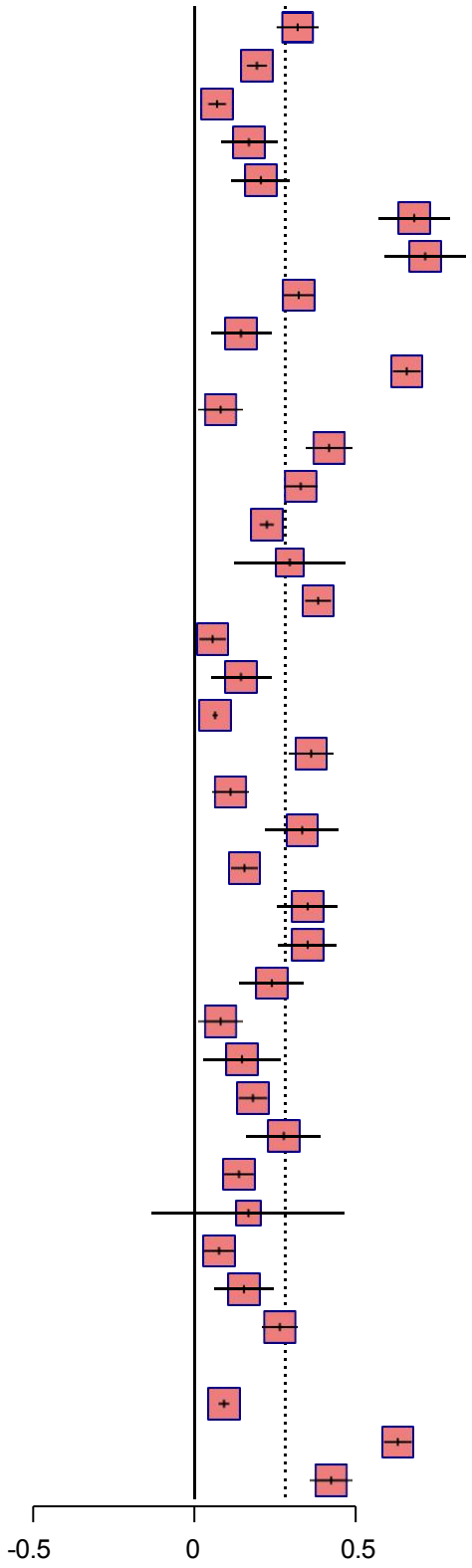
Study	(95% CI)
Dosil (2020)	0.22 [0.15; 0.30]
Huang (2020)	0.29 [0.23; 0.36]
Johnson (2020)	0.13 [0.11; 0.14]
Yin (2020)	0.05 [0.02; 0.08]
Zhang (2020)	0.23 [0.19; 0.26]
Alonso (2020)	0.24 [0.23; 0.25]
Alshehri (2021)	0.15 [0.10; 0.20]
Bulut (2021)	0.43 [0.36; 0.51]
Carmassi (2021)	0.68 [0.55; 0.81]
Dobson (2021)	0.18 [0.07; 0.28]
Fattori (2021)	0.88 [0.85; 0.91]
Kheradmand (2022)	0.29 [0.22; 0.37]
Lasalvia (2021)	0.74 [0.69; 0.79]
Moallef (2021)	0.21 [0.16; 0.26]
TG COVID (2021)	0.74 [0.70; 0.78]
Osório (2021)	0.14 [0.11; 0.17]
Pappa (2021)	0.41 [0.34; 0.49]
Erazo (2021)	0.39 [0.35; 0.43]
Sarapultseva (2021)	0.30 [0.21; 0.39]
Styra (2021)	0.47 [0.45; 0.49]
Villalba−Arias (2021)	0.06 [0.03; 0.08]
Xiong (2021)	0.21 [0.16; 0.26]
Yang (2021)	0.05 [0.04; 0.05]
Yeo (2021)	0.42 [0.36; 0.47]
Zhang (2021)	0.14 [0.10; 0.18]
Bizri (2022)	0.67 [0.57; 0.77]
Cenat (2022)	0.39 [0.30; 0.49]
Jing (2022)	0.15 [0.12; 0.19]
Dykes (2022)	0.33 [0.24; 0.42]
Fukushima (2022)	0.16 [0.13; 0.19]
Guillen−Burgos (2022)	0.16 [0.11; 0.21]
James (2022)	0.21 [0.14; 0.27]
Jovarauskaite (2022)	0.10 [0.06; 0.14]
Korkut (2022)	0.32 [0.25; 0.39]
Minjie Li (2022)	0.15 [0.13; 0.17]
Meena (2022)	0.02 [−0.01; 0.05]
Sanayeh (2022)	0.47 [0.42; 0.53]
Schou−Bredal (2022)	0.14 [0.12; 0.16]
Schwartz (2022)	0.29 [0.24; 0.34]



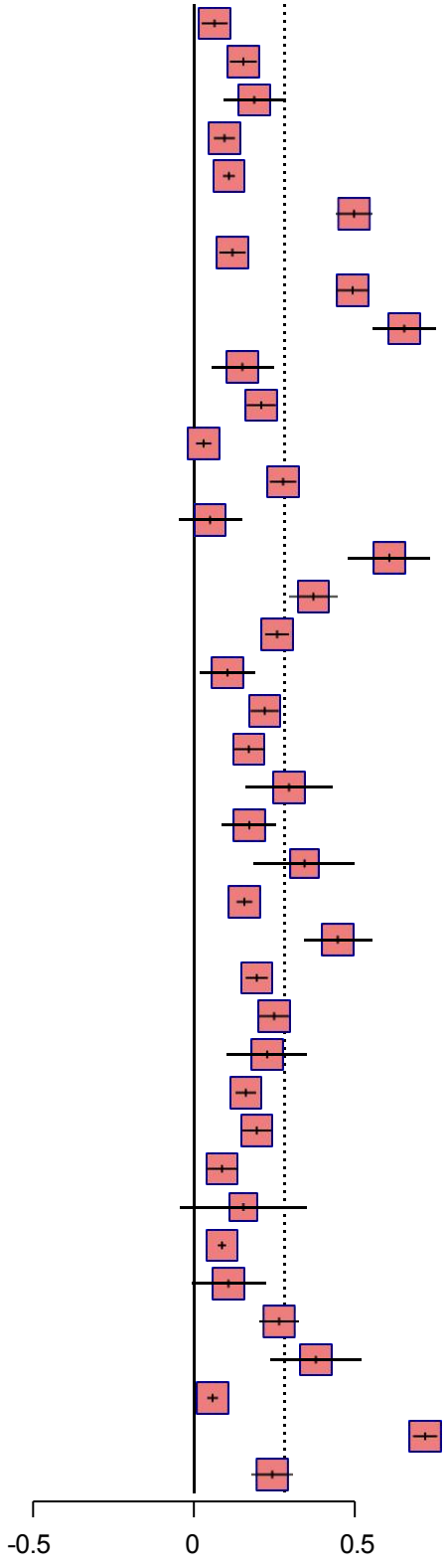
Study	(95% CI)
Vadi (2022)	0.24 [0.15; 0.32]
Yang (2022)	0.09 [0.08; 0.11]
Young (2022)	0.13 [0.12; 0.14]
Alshehri (2023)	0.16 [0.12; 0.21]
Bouaddi (2023)	0.78 [0.71; 0.86]
Brunelli (2023)	0.16 [0.10; 0.22]
Hennein (2023)	0.04 [0.02; 0.06]
Human (2023)	0.13 [0.06; 0.20]
Kobelski (2023)	0.89 [0.84; 0.93]
Li (2023)	0.47 [0.41; 0.53]
Yifang Liu (2023)	0.19 [0.17; 0.20]
Newnham (2023)	0.19 [0.14; 0.23]
Abdeen (2023)	0.46 [0.35; 0.57]
Klamen (1995)	0.20 [0.11; 0.28]
Carmassi (2018)	0.24 [0.09; 0.40]
Ghafoori (2024)	0.20 [0.12; 0.29]
Isiek (2024)	0.33 [0.20; 0.47]
Li (2024)	0.07 [0.06; 0.08]
Li (2025)	0.77 [0.75; 0.79]
Huan Liu (2023)	0.24 [0.21; 0.27]
Molina (2024)	0.31 [0.27; 0.34]
Rollin (2024)	0.20 [0.14; 0.26]
Sahin (2024)	0.14 [0.11; 0.16]
Total	0.32 [0.27; 0.36]
Heterogeneity: $P < .001$, $I^2 = 99.6\%$, $\tau^2 = 0.0424$	
Male	
Dosil (2020)	0.18 [0.08; 0.28]
Huang (2020)	0.19 [0.07; 0.30]
Johnson (2020)	0.06 [0.03; 0.09]
Wang (2020)	0.06 [0.04; 0.09]
Yin (2020)	0.02 [−0.00; 0.04]
Zhang (2020)	0.11 [0.05; 0.18]
Alonso (2020)	0.16 [0.14; 0.17]
Alshehri (2021)	0.14 [0.09; 0.20]
Asnakew (2021)	0.52 [0.46; 0.58]
Ayalew (2021)	0.49 [0.42; 0.55]
Bulut (2021)	0.34 [0.27; 0.41]
Carmassi (2021)	0.44 [0.26; 0.63]
Dobson (2021)	0.50 [0.30; 0.70]



Study	(95% CI)
Fattori (2021)	0.32 [0.25; 0.39]
Feingold (2021)	0.19 [0.16; 0.22]
Guo (2021)	0.07 [0.04; 0.10]
Kader (2021)	0.17 [0.08; 0.26]
Kheradmand (2021)	0.20 [0.12; 0.29]
Lasalvia (2021)	0.68 [0.57; 0.79]
Li (2021)	0.71 [0.59; 0.84]
Mediavilla (2022)	0.32 [0.28; 0.37]
Moallef (2021)	0.14 [0.05; 0.24]
TG COVID (2021)	0.66 [0.62; 0.70]
Osório (2021)	0.08 [0.01; 0.15]
Pappa (2021)	0.42 [0.35; 0.49]
Erazo (2021)	0.33 [0.28; 0.38]
Robles (2021)	0.22 [0.20; 0.24]
Sarapultseva (2021)	0.30 [0.12; 0.47]
Styra (2021)	0.38 [0.34; 0.42]
Villalba−Arias (2021)	0.06 [0.02; 0.10]
Xiong (2021)	0.14 [0.05; 0.24]
Yang (2021)	0.06 [0.06; 0.07]
Yeo (2021)	0.36 [0.29; 0.43]
Zhang (2021)	0.11 [0.06; 0.17]
Bizri (2022)	0.33 [0.22; 0.45]
Bonzini (2022)	0.15 [0.11; 0.20]
Cenat (2022)	0.35 [0.26; 0.45]
Chinvararak (2022)	0.35 [0.26; 0.44]
Costantini (2022)	0.24 [0.14; 0.34]
Jing (2022)	0.08 [0.01; 0.15]
Dykes (2022)	0.15 [0.03; 0.27]
Fukushima (2022)	0.18 [0.14; 0.22]
Guillen−Burgos (2022)	0.28 [0.16; 0.39]
James (2022)	0.14 [0.09; 0.18]
Jovarauskaite (2022)	0.17 [−0.13; 0.47]
Korkut (2022)	0.08 [0.03; 0.12]
Minjie Li (2022)	0.15 [0.06; 0.24]
Yifang Liu (2022)	0.26 [0.21; 0.32]
Meena (2022)	0.00
Piacentini (2022)	0.09 [0.08; 0.11]
Robles (2022)	0.63 [0.59; 0.67]
Sanayeh (2022)	0.42 [0.36; 0.49]



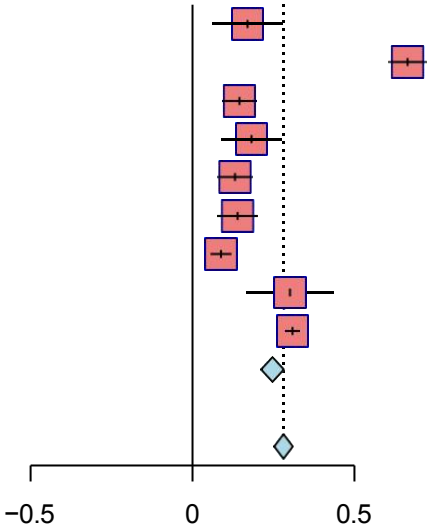
Study	(95% CI)
Schou−Bredal (2022)	0.06 [0.03; 0.10]
Schwartz (2022)	0.15 [0.11; 0.19]
Vadi (2022)	0.19 [0.09; 0.28]
Yang (2022)	0.09 [0.06; 0.13]
Young (2022)	0.11 [0.09; 0.13]
Zhang (2022)	0.50 [0.44; 0.55]
Alshehri (2023)	0.12 [0.08; 0.16]
Banakar (2023)	0.49 [0.44; 0.54]
Bouaddi (2023)	0.65 [0.55; 0.75]
Brunelli (2023)	0.15 [0.05; 0.25]
Costa (2023)	0.21 [0.16; 0.25]
Hennein (2023)	0.03 [0.01; 0.05]
Huang (2023)	0.28 [0.24; 0.32]
Human (2023)	0.05 [−0.05; 0.15]
Kobelski (2023)	0.61 [0.48; 0.74]
Li (2023)	0.37 [0.30; 0.45]
Yifang Liu (2023)	0.26 [0.22; 0.29]
Lopez−Salinas (2023)	0.10 [0.02; 0.19]
Lowry (2023)	0.22 [0.18; 0.26]
Machado (2023)	0.17 [0.12; 0.22]
Mao (2023)	0.30 [0.16; 0.43]
Newnham (2023)	0.17 [0.09; 0.26]
Ferreira (2023)	0.34 [0.19; 0.50]
Portillo−Van Diest (2023)	0.16 [0.13; 0.18]
Renzi (2023)	0.45 [0.34; 0.55]
Riaz (2023)	0.20 [0.16; 0.23]
Rice (2023)	0.25 [0.20; 0.29]
Abdeen (2023)	0.23 [0.10; 0.35]
Touhami (2023)	0.16 [0.13; 0.19]
Tran (2023)	0.19 [0.15; 0.24]
Klamen (1995)	0.09 [0.04; 0.14]
Carmassi (2018)	0.15 [−0.04; 0.35]
Chen (2023)	0.09 [0.07; 0.10]
Ghafoori (2024)	0.11 [−0.01; 0.22]
Isiek (2024)	0.26 [0.20; 0.32]
Kambulandu (2024)	0.38 [0.24; 0.52]
Li (2024)	0.06 [0.04; 0.07]
Li (2025)	0.72 [0.68; 0.75]
Huan Liu (2023)	0.24 [0.18; 0.30]



Study	(95% CI)
Maliwichi (2024)	0.17 [0.06; 0.28]
Mani (2023)	0.66 [0.61; 0.72]
Molina (2024)	0.15 [0.09; 0.20]
Ripoll (2024)	0.18 [0.09; 0.27]
Roger (2024)	0.13 [0.08; 0.18]
Rollin (2024)	0.14 [0.08; 0.20]
Sahin (2024)	0.09 [0.06; 0.12]
Satilmis (2024)	0.30 [0.16; 0.44]
Wu (2024)	0.31 [0.29; 0.33]
Total	0.25 [0.21; 0.28]
Heterogeneity: $P < .001$, $I^2 = 98.2\%$, $\tau^2 = 0.0282$	
Total	0.28 [0.25; 0.31]

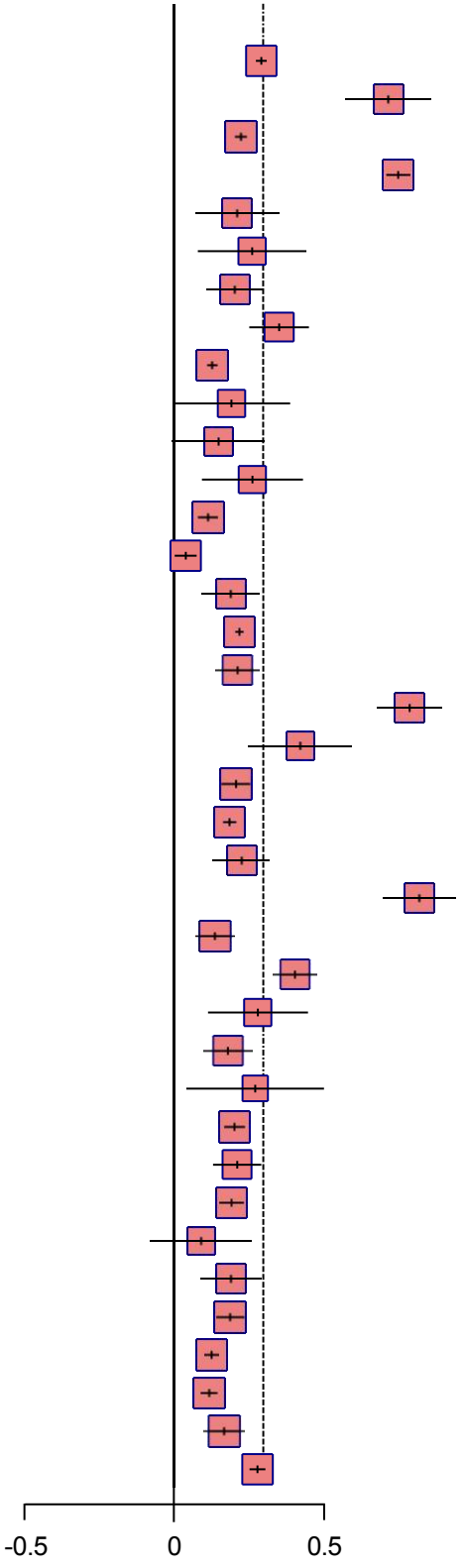
Heterogeneity: $P < .001$, $I^2 = 99.4\%$, $\tau^2 = 0.0365$

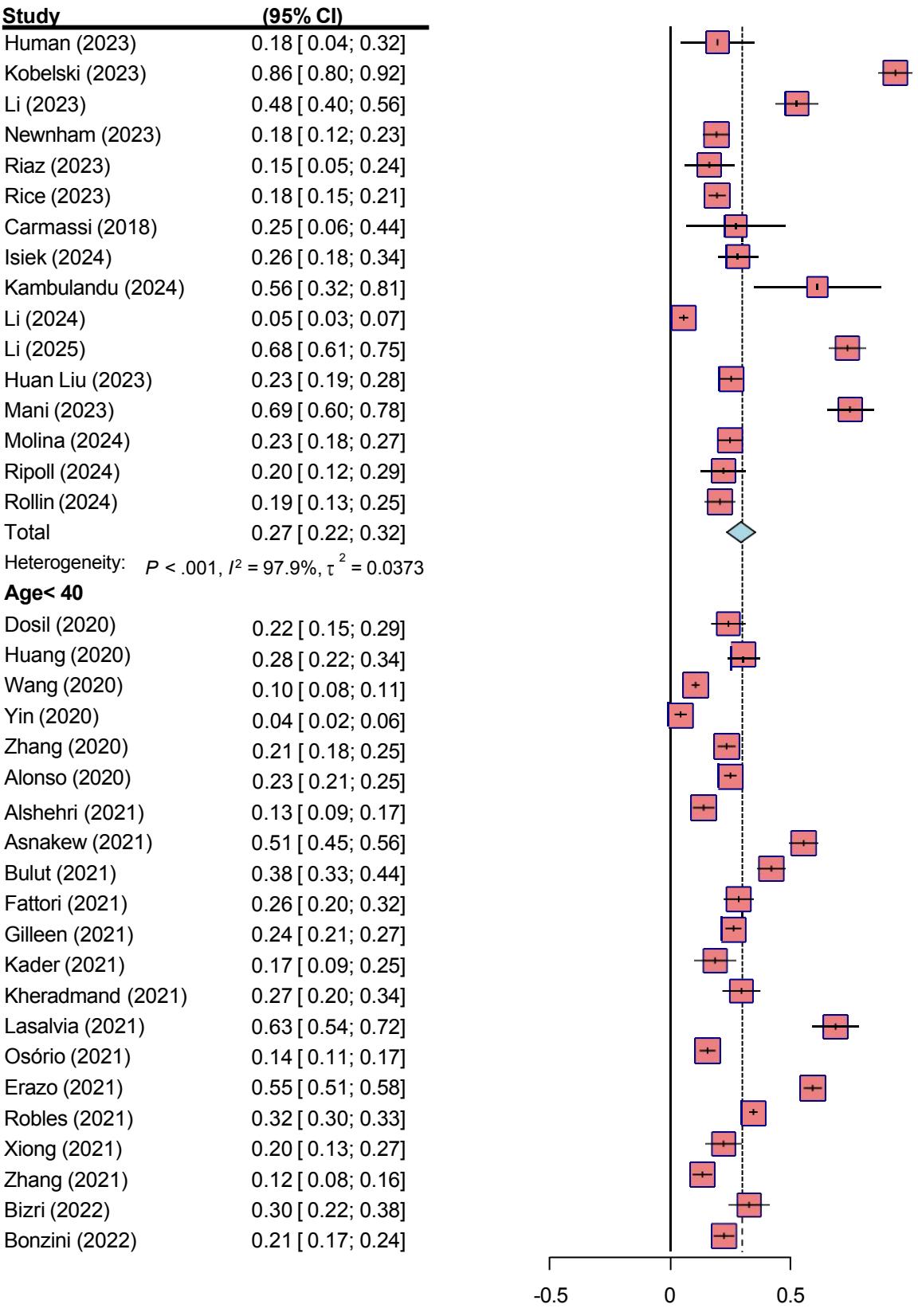
Heterogeneity between groups: $P = .012$

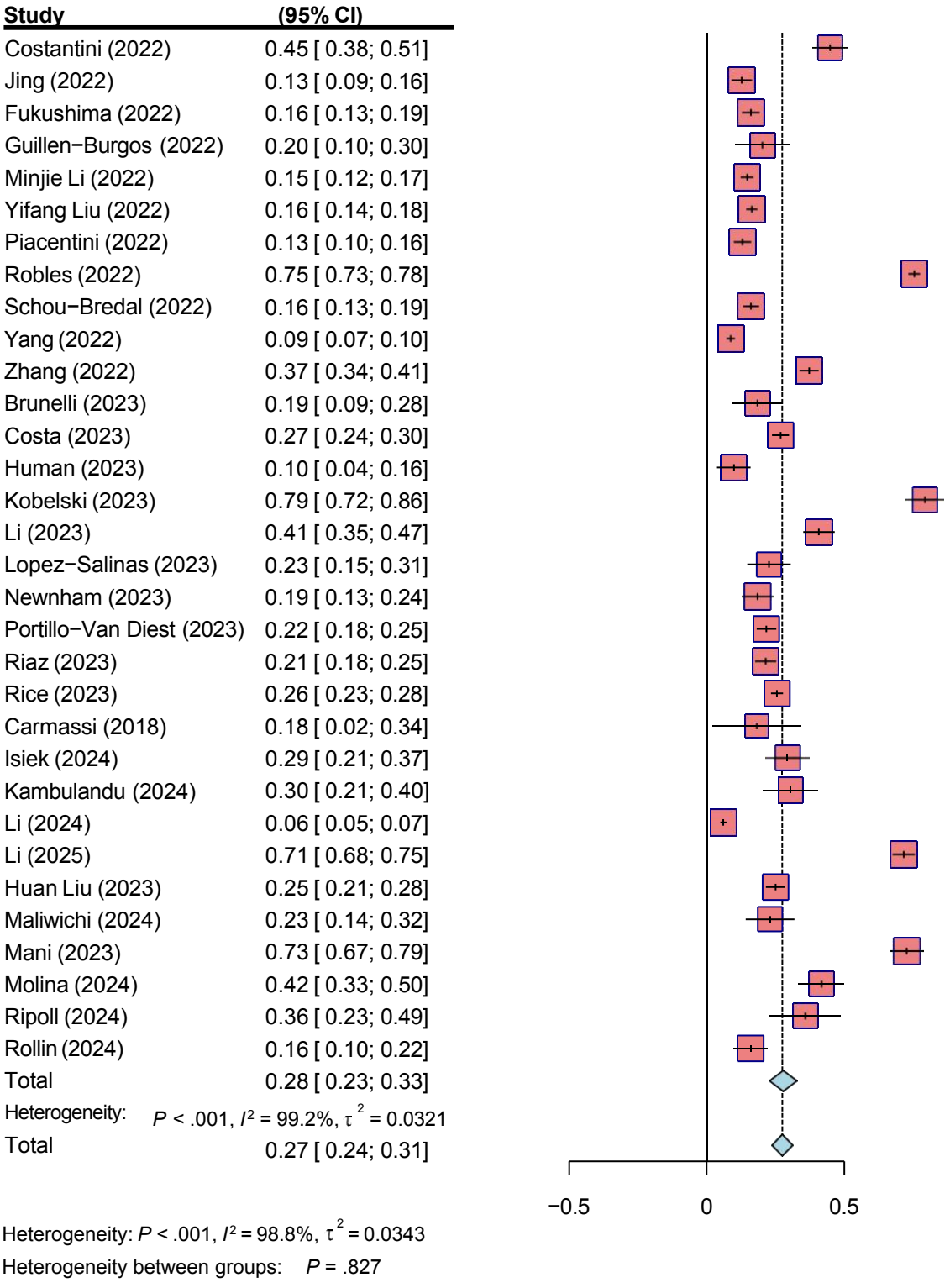


(c) Prevalence of PTSD by age.

Study	(95% CI)
Age≥ 40	
Robles (2021)	0.27 [0.25; 0.28]
Zhang (2022)	0.66 [0.53; 0.79]
Portillo−Van Diest (2023)	0.21 [0.19; 0.22]
Robles (2022)	0.69 [0.65; 0.73]
Kader (2021)	0.19 [0.06; 0.32]
Lopez−Salinas (2023)	0.24 [0.07; 0.41]
Tran (2023)	0.19 [0.10; 0.27]
Costantini (2022)	0.32 [0.23; 0.42]
Piacentini (2022)	0.12 [0.10; 0.13]
Maliwichi (2024)	0.18 [−0.00; 0.36]
Dosil (2020)	0.14 [−0.01; 0.28]
Huang (2020)	0.24 [0.09; 0.40]
Wang (2020)	0.10 [0.07; 0.13]
Yin (2020)	0.04 [0.00; 0.07]
Zhang (2020)	0.17 [0.08; 0.26]
Alonso (2020)	0.20 [0.19; 0.21]
Alshehri (2021)	0.19 [0.13; 0.26]
Asnakew (2021)	0.72 [0.62; 0.82]
Bulut (2021)	0.39 [0.23; 0.55]
Fattori (2021)	0.19 [0.15; 0.23]
Gilleen (2021)	0.17 [0.15; 0.19]
Kheradmand (2021)	0.21 [0.12; 0.29]
Lasalvia (2021)	0.75 [0.64; 0.87]
Osório (2021)	0.12 [0.07; 0.18]
Erazo (2021)	0.37 [0.30; 0.44]
Xiong (2021)	0.26 [0.10; 0.41]
Zhang (2021)	0.16 [0.09; 0.24]
Bizri (2022)	0.25 [0.04; 0.46]
Bonzini (2022)	0.19 [0.15; 0.22]
Jing (2022)	0.19 [0.12; 0.27]
Fukushima (2022)	0.18 [0.14; 0.21]
Guillen−Burgos (2022)	0.08 [−0.07; 0.24]
Minjie Li (2022)	0.17 [0.08; 0.27]
Yifang Liu (2022)	0.17 [0.13; 0.22]
Schou−Bredal (2022)	0.12 [0.09; 0.14]
Yang (2022)	0.11 [0.08; 0.13]
Brunelli (2023)	0.15 [0.09; 0.22]
Costa (2023)	0.26 [0.23; 0.28]




Study
(95% CI)
Human (2023) 0.18 [0.04; 0.32]
Kobelski (2023) 0.86 [0.80; 0.92]
Li (2023) 0.48 [0.40; 0.56]
Newnham (2023) 0.18 [0.12; 0.23]
Riaz (2023) 0.15 [0.05; 0.24]
Rice (2023) 0.18 [0.15; 0.21]
Carmassi (2018) 0.25 [0.06; 0.44]
Isiek (2024) 0.26 [0.18; 0.34]
Kambulandu (2024) 0.56 [0.32; 0.81]
Li (2024) 0.05 [0.03; 0.07]
Li (2025) 0.68 [0.61; 0.75]
Huan Liu (2023) 0.23 [0.19; 0.28]
Mani (2023) 0.69 [0.60; 0.78]
Molina (2024) 0.23 [0.18; 0.27]
Ripoll (2024) 0.20 [0.12; 0.29]
Rollin (2024) 0.19 [0.13; 0.25]
Total 0.27 [0.22; 0.32]
Heterogeneity: P < .001, I² = 97.9%, τ² = 0.0373
Age< 40
Dosil (2020) 0.22 [0.15; 0.29]
Huang (2020) 0.28 [0.22; 0.34]
Wang (2020) 0.10 [0.08; 0.11]
Yin (2020) 0.04 [0.02; 0.06]
Zhang (2020) 0.21 [0.18; 0.25]
Alonso (2020) 0.23 [0.21; 0.25]
Alshehri (2021) 0.13 [0.09; 0.17]
Asnakew (2021) 0.51 [0.45; 0.56]
Bulut (2021) 0.38 [0.33; 0.44]
Fattori (2021) 0.26 [0.20; 0.32]
Gilleen (2021) 0.24 [0.21; 0.27]
Kader (2021) 0.17 [0.09; 0.25]
Kheradmand (2021) 0.27 [0.20; 0.34]
Lasalvia (2021) 0.63 [0.54; 0.72]
Osório (2021) 0.14 [0.11; 0.17]
Erazo (2021) 0.55 [0.51; 0.58]
Robles (2021) 0.32 [0.30; 0.33]
Xiong (2021) 0.20 [0.13; 0.27]
Zhang (2021) 0.12 [0.08; 0.16]
Bizri (2022) 0.30 [0.22; 0.38]
Bonzini (2022) 0.21 [0.17; 0.24]
-0.5
0
0.5

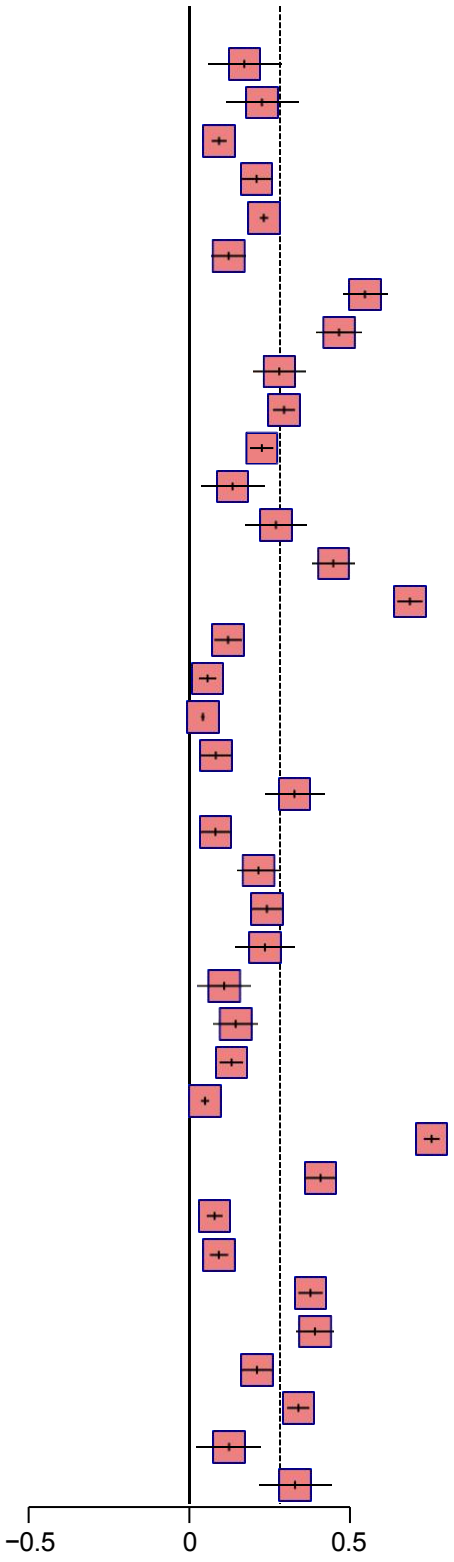


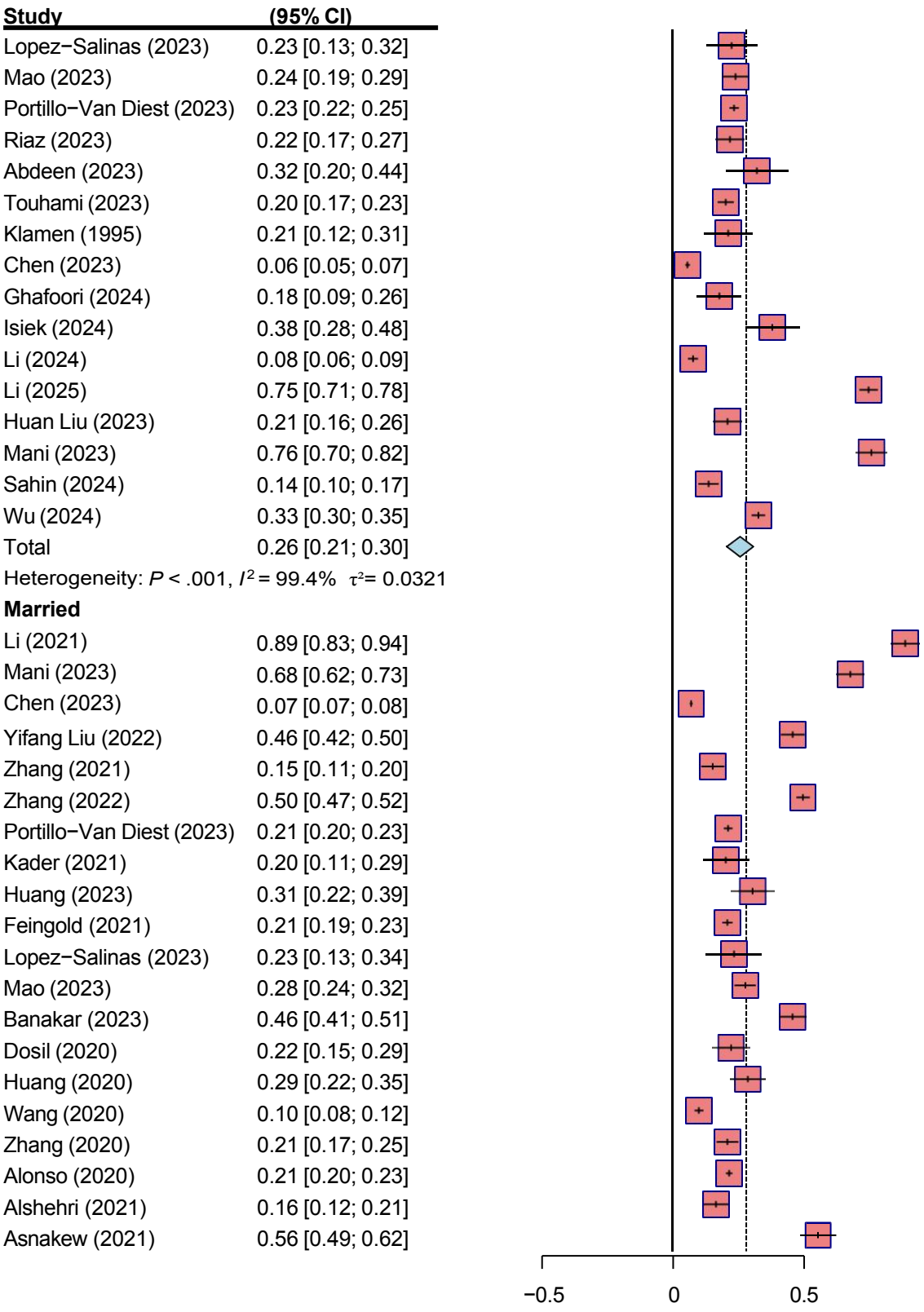
Heterogeneity: P < .001, I^2 = 98.8%, τ^2 = 0.0343

Heterogeneity between groups: P = .827

(d) Prevalence of PTSD by marital status.

Study	(95% CI)
Unmarried	
Dosil (2020)	0.17 [0.06; 0.29]
Huang (2020)	0.23 [0.11; 0.34]
Wang (2020)	0.09 [0.07; 0.11]
Zhang (2020)	0.21 [0.16; 0.26]
Alonso (2020)	0.23 [0.22; 0.24]
Alshehri (2021)	0.12 [0.07; 0.17]
Asnakew (2021)	0.55 [0.48; 0.62]
Ayalew (2021)	0.46 [0.39; 0.53]
Bulut (2021)	0.28 [0.20; 0.36]
Feingold (2021)	0.29 [0.26; 0.33]
Gilleen (2021)	0.22 [0.19; 0.26]
Kader (2022)	0.13 [0.03; 0.23]
Kheradmand (2022)	0.27 [0.17; 0.36]
Li (2021)	0.45 [0.38; 0.51]
TG COVID (2021)	0.69 [0.65; 0.72]
Osório (2021)	0.12 [0.08; 0.16]
Villalba−Arias (2021)	0.06 [0.03; 0.08]
Yang (2021)	0.04 [0.03; 0.05]
Zhang (2021)	0.08 [0.03; 0.13]
Bizri (2022)	0.33 [0.23; 0.42]
Jing (2022)	0.08 [0.03; 0.13]
Guillen−Burgos (2022)	0.21 [0.15; 0.28]
Gündogmus (2022)	0.24 [0.19; 0.29]
James (2022)	0.23 [0.14; 0.33]
Jovarauskaite (2022)	0.11 [0.03; 0.19]
Korkut (2022)	0.14 [0.08; 0.21]
Lei Li (2022)	0.13 [0.09; 0.17]
Yifang Liu (2022)	0.05 [0.04; 0.06]
Robles (2022)	0.75 [0.73; 0.78]
Sanayeh (2022)	0.41 [0.36; 0.46]
Schwartz (2022)	0.08 [0.05; 0.10]
Yang (2022)	0.09 [0.06; 0.12]
Zhang (2022)	0.38 [0.34; 0.41]
Banakar (2023)	0.39 [0.33; 0.45]
Gambaro (2023)	0.21 [0.16; 0.26]
Huang (2023)	0.34 [0.30; 0.37]
Human (2023)	0.12 [0.02; 0.22]
Li (2023)	0.33 [0.22; 0.44]

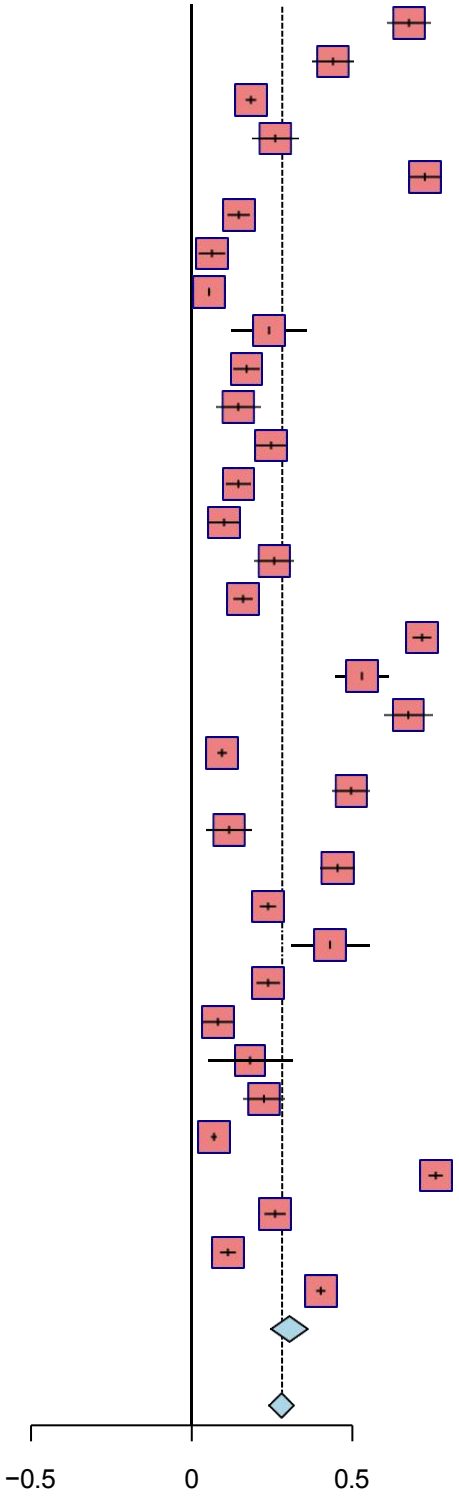



Study (95% CI)
Lopez−Salinas (2023) 0.23 [0.13; 0.32]
Mao (2023) 0.24 [0.19; 0.29]
Portillo−Van Diest (2023) 0.23 [0.22; 0.25]
Riaz (2023) 0.22 [0.17; 0.27]
Abdeen (2023) 0.32 [0.20; 0.44]
Touhami (2023) 0.20 [0.17; 0.23]
Klamen (1995) 0.21 [0.12; 0.31]
Chen (2023) 0.06 [0.05; 0.07]
Ghafoori (2024) 0.18 [0.09; 0.26]
Isiek (2024) 0.38 [0.28; 0.48]
Li (2024) 0.08 [0.06; 0.09]
Li (2025) 0.75 [0.71; 0.78]
Huan Liu (2023) 0.21 [0.16; 0.26]
Mani (2023) 0.76 [0.70; 0.82]
Sahin (2024) 0.14 [0.10; 0.17]
Wu (2024) 0.33 [0.30; 0.35]
Total 0.26 [0.21; 0.30]
Heterogeneity: P < .001, I² = 99.4% τ²= 0.0321
Married
Li (2021) 0.89 [0.83; 0.94]
Mani (2023) 0.68 [0.62; 0.73]
Chen (2023) 0.07 [0.07; 0.08]
Yifang Liu (2022) 0.46 [0.42; 0.50]
Zhang (2021) 0.15 [0.11; 0.20]
Zhang (2022) 0.50 [0.47; 0.52]
Portillo−Van Diest (2023) 0.21 [0.20; 0.23]
Kader (2021) 0.20 [0.11; 0.29]
Huang (2023) 0.31 [0.22; 0.39]
Feingold (2021) 0.21 [0.19; 0.23]
Lopez−Salinas (2023) 0.23 [0.13; 0.34]
Mao (2023) 0.28 [0.24; 0.32]
Banakar (2023) 0.46 [0.41; 0.51]
Dosil (2020) 0.22 [0.15; 0.29]
Huang (2020) 0.29 [0.22; 0.35]
Wang (2020) 0.10 [0.08; 0.12]
Zhang (2020) 0.21 [0.17; 0.25]
Alonso (2020) 0.21 [0.20; 0.23]
Alshehri (2021) 0.16 [0.12; 0.21]
Asnakew (2021) 0.56 [0.49; 0.62]
−0.5
0
0.5

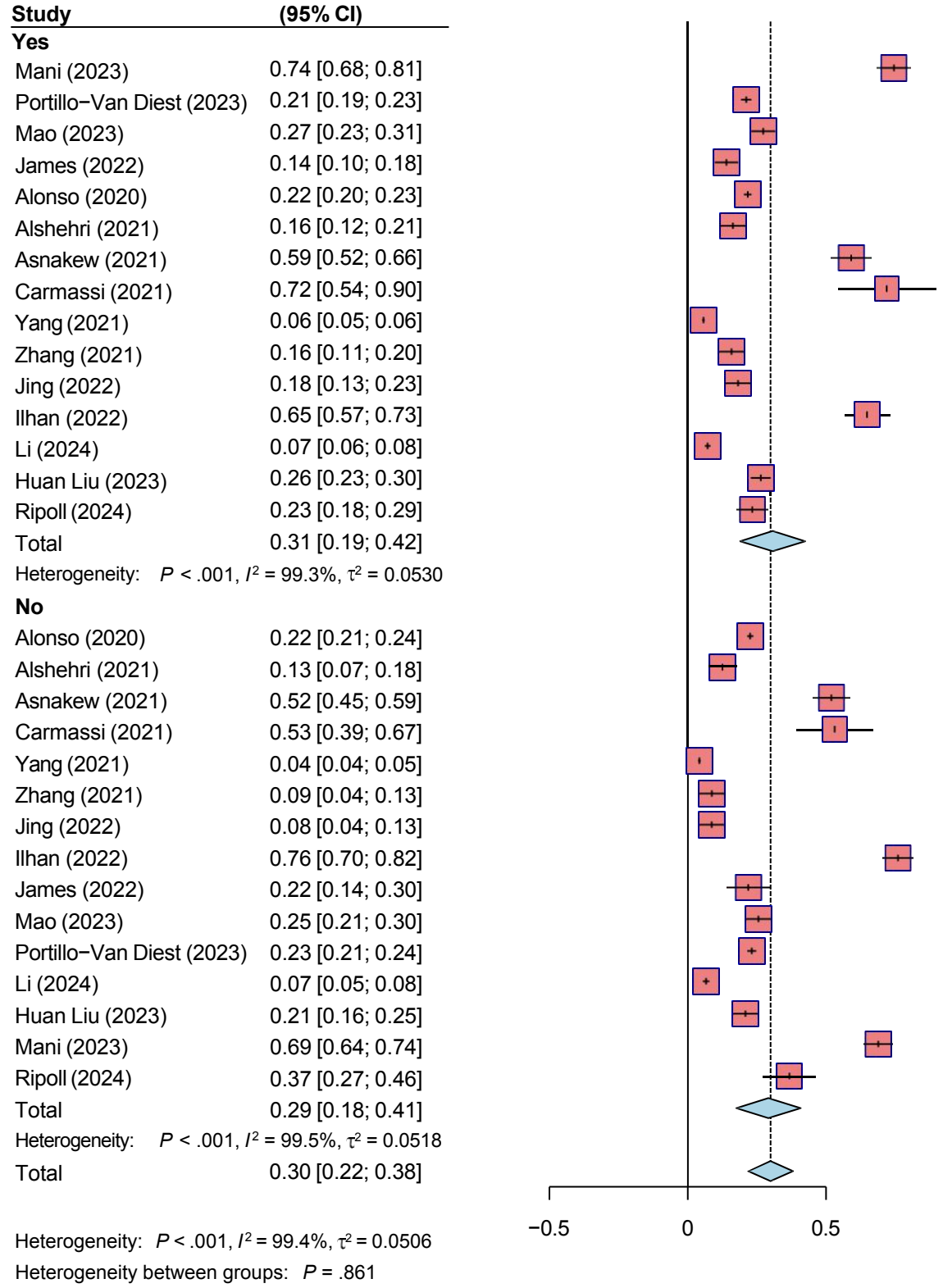
Study	(95% CI)
Ayalew (2021)	0.68 [0.61; 0.74]
Bulut (2021)	0.44 [0.37; 0.50]
Gilleen (2021)	0.19 [0.17; 0.20]
Kheradmand (2022)	0.26 [0.19; 0.33]
TG COVID (2021)	0.72 [0.68; 0.77]
Osório (2021)	0.15 [0.11; 0.18]
Villalba−Arias (2021)	0.06 [0.02; 0.10]
Yang (2021)	0.05 [0.05; 0.06]
Bizri (2022)	0.24 [0.12; 0.36]
Jing (2022)	0.17 [0.13; 0.21]
Guillen−Burgos (2022)	0.15 [0.08; 0.21]
Gündogmus (2022)	0.25 [0.20; 0.29]
James (2022)	0.14 [0.11; 0.18]
Jovarauskaite (2022)	0.10 [0.05; 0.15]
Korkut (2022)	0.26 [0.20; 0.32]
Lei Li (2022)	0.16 [0.13; 0.19]
Robles (2022)	0.72 [0.69; 0.74]
Sanayeh (2022)	0.53 [0.45; 0.61]
Schwartz (2022)	0.67 [0.60; 0.75]
Yang (2022)	0.09 [0.08; 0.11]
Gambaro (2023)	0.49 [0.44; 0.55]
Human (2023)	0.11 [0.04; 0.18]
Li (2023)	0.45 [0.40; 0.50]
Riaz (2023)	0.24 [0.21; 0.26]
Abdeen (2023)	0.43 [0.31; 0.55]
Touhami (2023)	0.24 [0.20; 0.27]
Klamen (1995)	0.08 [0.04; 0.13]
Ghafoori (2024)	0.18 [0.05; 0.31]
Isiek (2024)	0.22 [0.16; 0.29]
Li (2024)	0.07 [0.06; 0.08]
Li (2025)	0.76 [0.74; 0.78]
Huan Liu (2023)	0.26 [0.23; 0.29]
Sahin (2024)	0.11 [0.09; 0.14]
Wu (2024)	0.40 [0.39; 0.41]
Total	0.30 [0.25; 0.36]
Heterogeneity:	$P < .001$, $I^2 = 99.6\%$, $\tau^2 = 0.0440$
Total	0.28 [0.24; 0.32]

Heterogeneity: $P < .001$, $I^2 = 99.5\%$, $\tau^2 = 0.0383$

Heterogeneity between groups: $P = .198$

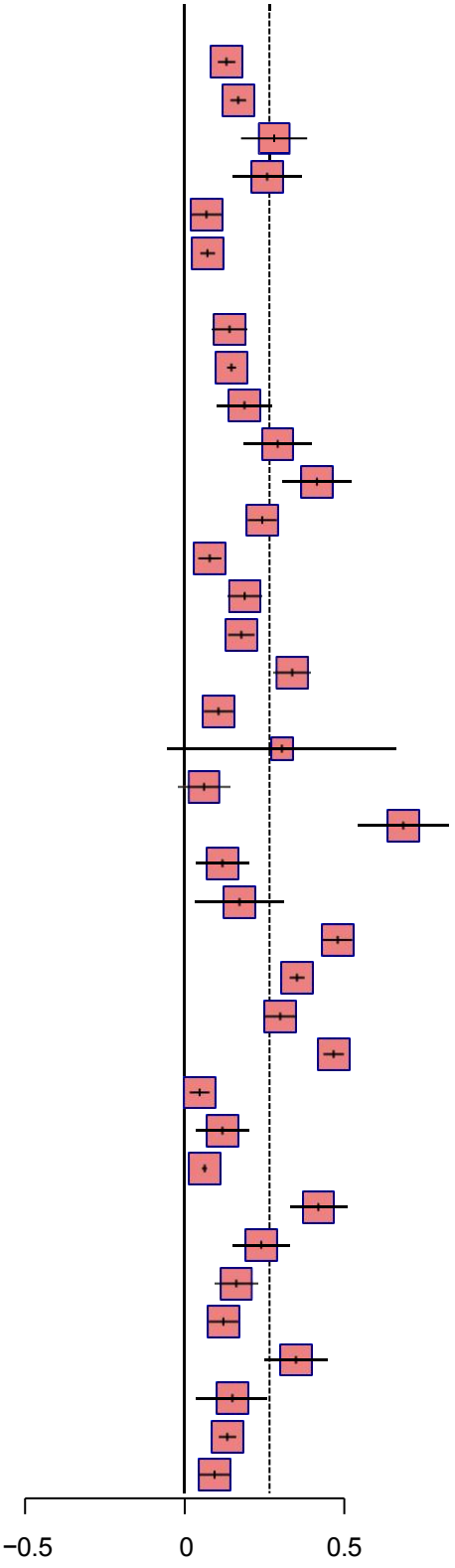


(e) Prevalence of PTSD by parental status.

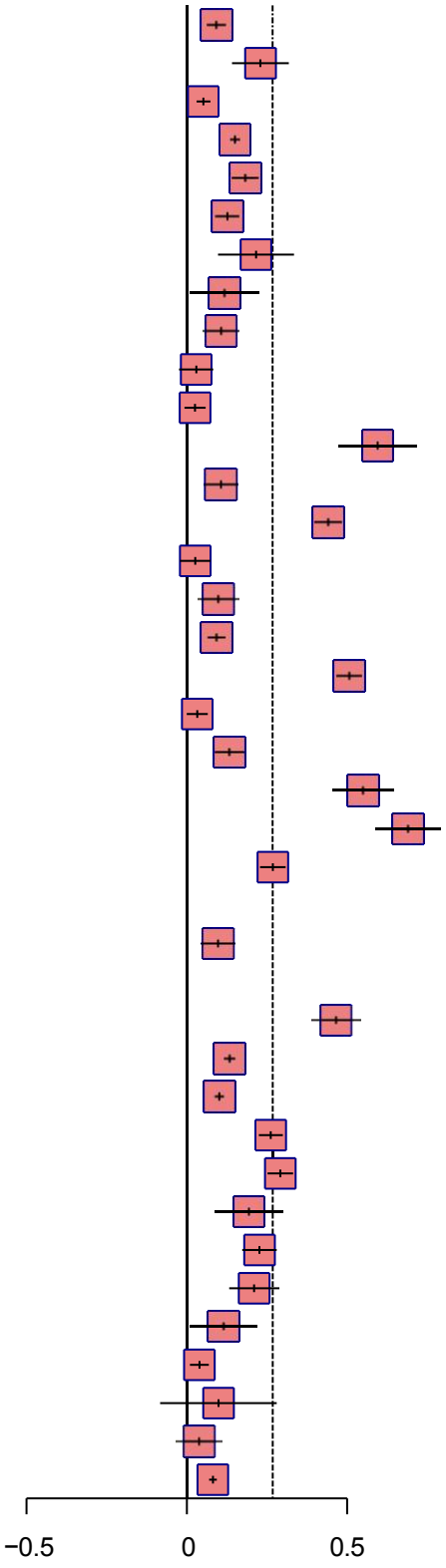


(f) Prevalence of PTSD by occupation.

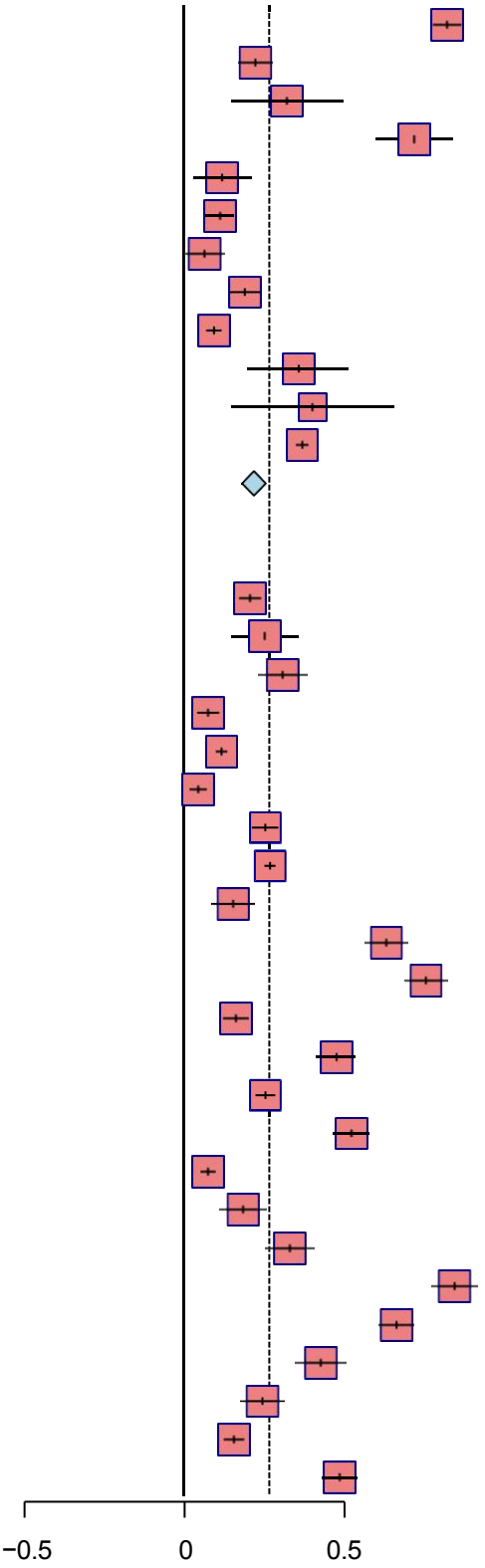
Study	(95% CI)
Physician	
Gregory (2019)	0.12 [0.10; 0.15]
Jackson (2019)	0.16 [0.13; 0.18]
Dosil (2020)	0.26 [0.17; 0.36]
Huang (2020)	0.24 [0.14; 0.34]
Lu (2020)	0.06 [0.02; 0.11]
Wang (2020)	0.07 [0.05; 0.09]
Yin (2020)	0.00
Zhang (2020)	0.13 [0.08; 0.18]
Alonso (2020)	0.14 [0.13; 0.15]
Alshehri (2021)	0.17 [0.09; 0.25]
Asnakew (2021)	0.27 [0.17; 0.37]
Ayalew (2021)	0.39 [0.28; 0.49]
Bahadirli (2021)	0.23 [0.19; 0.27]
Dehon (2021)	0.07 [0.04; 0.11]
Emre (2021)	0.18 [0.13; 0.23]
Gilleen (2021)	0.17 [0.13; 0.20]
Greenberg (2021)	0.32 [0.26; 0.37]
Guo (2021)	0.10 [0.06; 0.14]
Kader (2021)	0.29 [−0.05; 0.62]
Kheradmand (2021)	0.06 [−0.02; 0.13]
Lasalvia (2021)	0.64 [0.51; 0.77]
Moallef (2021)	0.11 [0.03; 0.19]
Osório (2021)	0.16 [0.03; 0.29]
Erazo (2021)	0.45 [0.41; 0.49]
Robles (2021)	0.33 [0.31; 0.35]
Styra (2021)	0.28 [0.23; 0.33]
Vance (2021)	0.44 [0.41; 0.46]
Villalba−Arias (2021)	0.05 [0.02; 0.07]
Xiong (2021)	0.11 [0.03; 0.19]
Yang (2021)	0.06 [0.05; 0.06]
Yeo (2021)	0.39 [0.31; 0.48]
Bizri (2022)	0.22 [0.14; 0.31]
Bock (2022)	0.15 [0.09; 0.21]
Bonzini (2022)	0.12 [0.07; 0.16]
Costantini (2022)	0.33 [0.24; 0.42]
Dykes (2022)	0.14 [0.04; 0.24]
Fournier (2022)	0.12 [0.10; 0.15]
Fukushima (2022)	0.09 [0.04; 0.13]



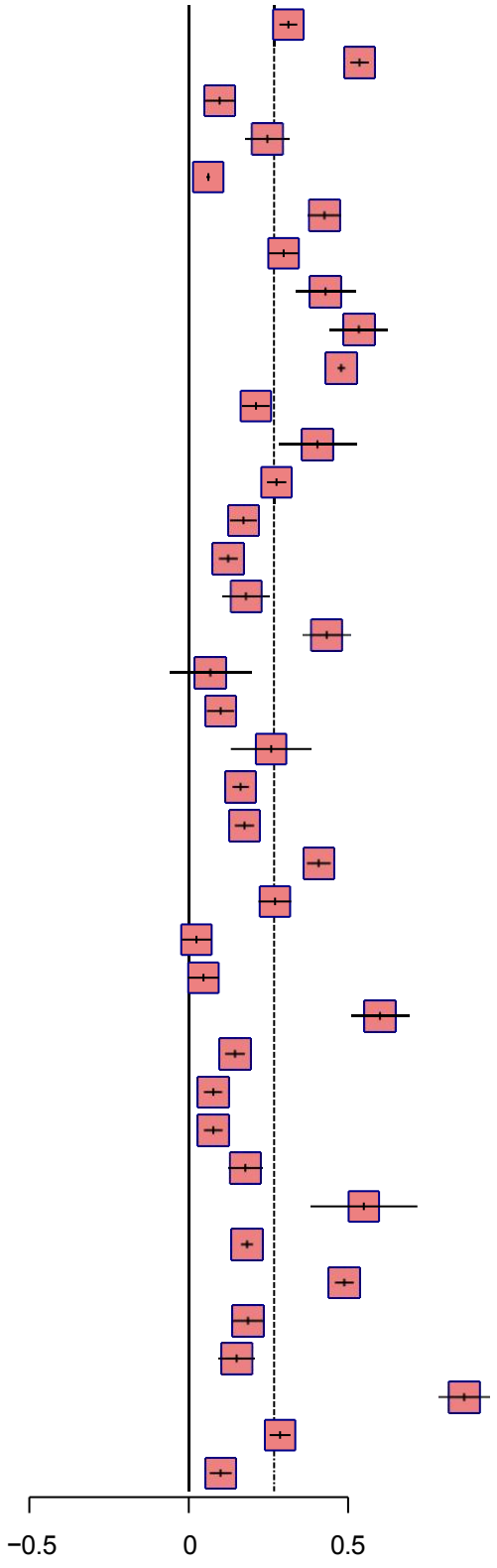
Study	(95% CI)
Mendez (2022)	0.08 [0.06; 0.11]
Guillen−Burgos (2022)	0.21 [0.13; 0.30]
Gündogmus (2022)	0.05 [0.03; 0.07]
Jackson (2022)	0.14 [0.13; 0.15]
James (2022)	0.17 [0.13; 0.21]
Johns (2022)	0.12 [0.08; 0.15]
Korkut (2022)	0.20 [0.09; 0.31]
Minjie Li (2022)	0.11 [0.01; 0.21]
McGuinness (2022)	0.10 [0.05; 0.15]
Meena (2022)	0.03 [−0.02; 0.08]
Reid (2022)	0.02 [−0.01; 0.05]
Sanayeh (2022)	0.55 [0.44; 0.67]
Schou−Bredal (2022)	0.10 [0.05; 0.15]
Schwartz (2022)	0.41 [0.37; 0.45]
Stafseth (2022)	0.02 [−0.02; 0.07]
Th'ng (2022)	0.09 [0.03; 0.15]
Young (2022)	0.08 [0.06; 0.11]
Zhang (2022)	0.47 [0.44; 0.51]
Adams (2023)	0.03 [−0.00; 0.06]
Alshehri (2023)	0.12 [0.08; 0.16]
Banakar (2023)	0.51 [0.42; 0.60]
Bouaddi (2023)	0.64 [0.55; 0.74]
Costa (2023)	0.25 [0.21; 0.29]
Danson (2023)	0.00
Hruska (2023)	0.09 [0.04; 0.14]
Human (2023)	0.00
Li (2023)	0.43 [0.36; 0.50]
Portillo−Van Diest (2023)	0.12 [0.11; 0.14]
Ptak (2023)	0.09 [0.08; 0.10]
Riaz (2023)	0.24 [0.21; 0.28]
Rice (2023)	0.27 [0.23; 0.31]
Rice (2023)	0.18 [0.08; 0.28]
Tran (2023)	0.21 [0.16; 0.26]
Chan (2004)	0.19 [0.12; 0.27]
Ben−Ezra (2007)	0.11 [0.01; 0.20]
Fournier (2025)	0.04 [0.01; 0.06]
Ghafoori (2024)	0.09 [−0.08; 0.26]
Hovland (2023)	0.04 [−0.03; 0.10]
Li (2024)	0.07 [0.06; 0.09]

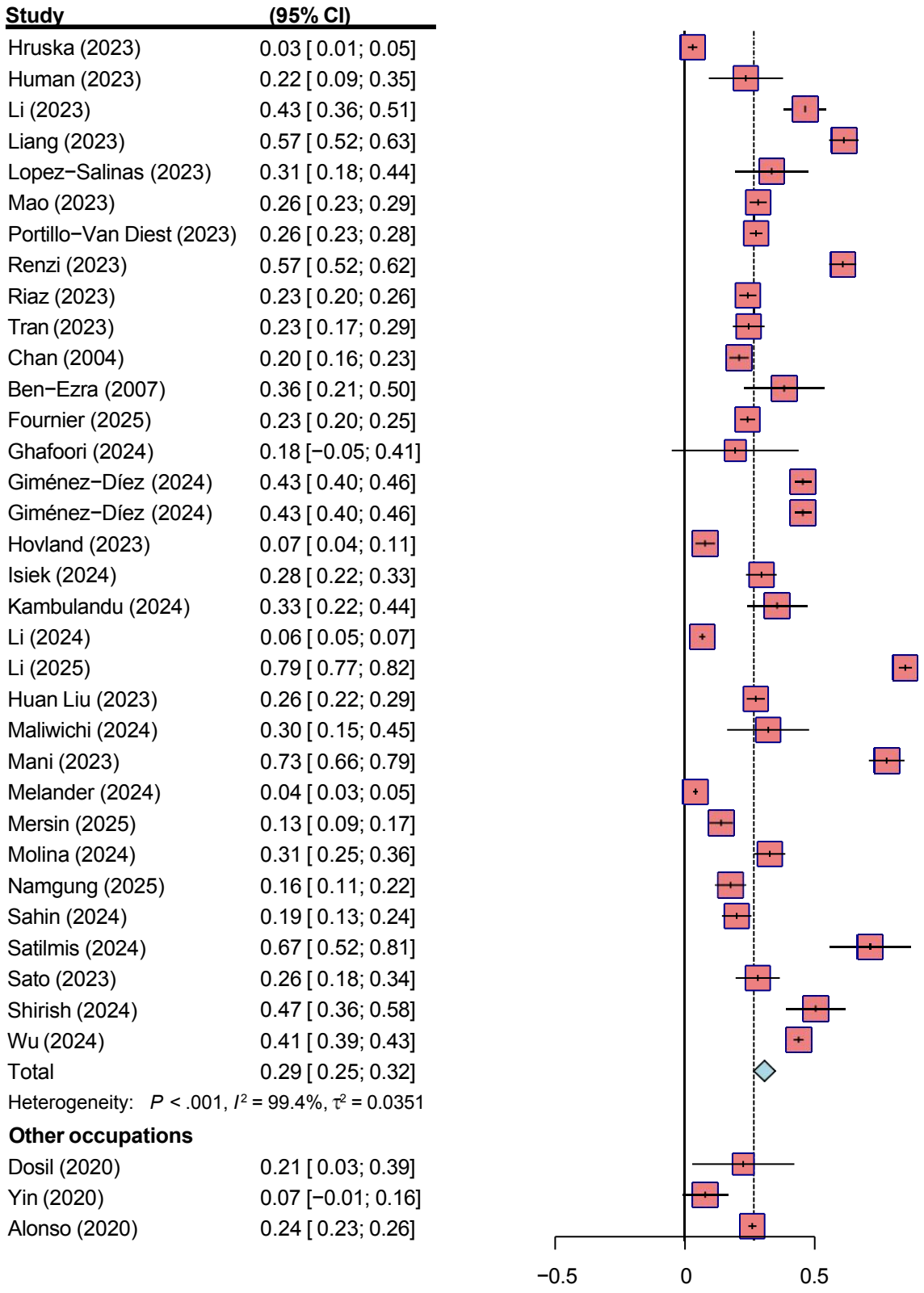


Study	(95% CI)
Li (2025)	0.77 [0.73; 0.81]
Huan Liu (2023)	0.21 [0.16; 0.26]
Maliwichi (2024)	0.30 [0.14; 0.46]
Mani (2023)	0.67 [0.56; 0.78]
Mersin (2025)	0.11 [0.03; 0.20]
Molina (2024)	0.10 [0.06; 0.15]
Namgung (2025)	0.06 [0.00; 0.12]
Rollin (2024)	0.18 [0.13; 0.22]
Sahin (2024)	0.09 [0.07; 0.11]
Satilmis (2024)	0.33 [0.19; 0.48]
Shirish (2024)	0.38 [0.14; 0.61]
Wu (2024)	0.35 [0.33; 0.36]
Total	0.20 [0.17; 0.24]
Heterogeneity: $P < .001$, $I^2 = 98.3\%$, $\tau^2 = 0.0248$	
Nurse	
Cai (2020)	0.19 [0.16; 0.22]
Dosil (2020)	0.24 [0.14; 0.33]
Huang (2020)	0.29 [0.22; 0.36]
Lu (2020)	0.07 [0.04; 0.10]
Wang (2020)	0.11 [0.09; 0.13]
Yin (2020)	0.04 [0.02; 0.07]
Zhang (2020)	0.24 [0.20; 0.28]
Alonso (2020)	0.25 [0.23; 0.27]
Alshehri (2021)	0.14 [0.08; 0.21]
Asnakew (2021)	0.59 [0.53; 0.65]
Ayalew (2021)	0.71 [0.64; 0.77]
Bahadirli (2021)	0.15 [0.11; 0.19]
Engelbrecht (2021)	0.44 [0.39; 0.50]
Gilleen (2021)	0.24 [0.21; 0.27]
Greenberg (2021)	0.49 [0.44; 0.54]
Guo (2021)	0.07 [0.05; 0.09]
Kader (2022)	0.17 [0.10; 0.24]
Kheradmand (2022)	0.31 [0.24; 0.38]
Lasalvia (2021)	0.79 [0.72; 0.85]
Li (2021)	0.62 [0.57; 0.67]
Marcomini (2021)	0.40 [0.33; 0.47]
Moallef (2021)	0.23 [0.17; 0.29]
Osório (2021)	0.14 [0.12; 0.17]
Erazo (2021)	0.45 [0.40; 0.50]

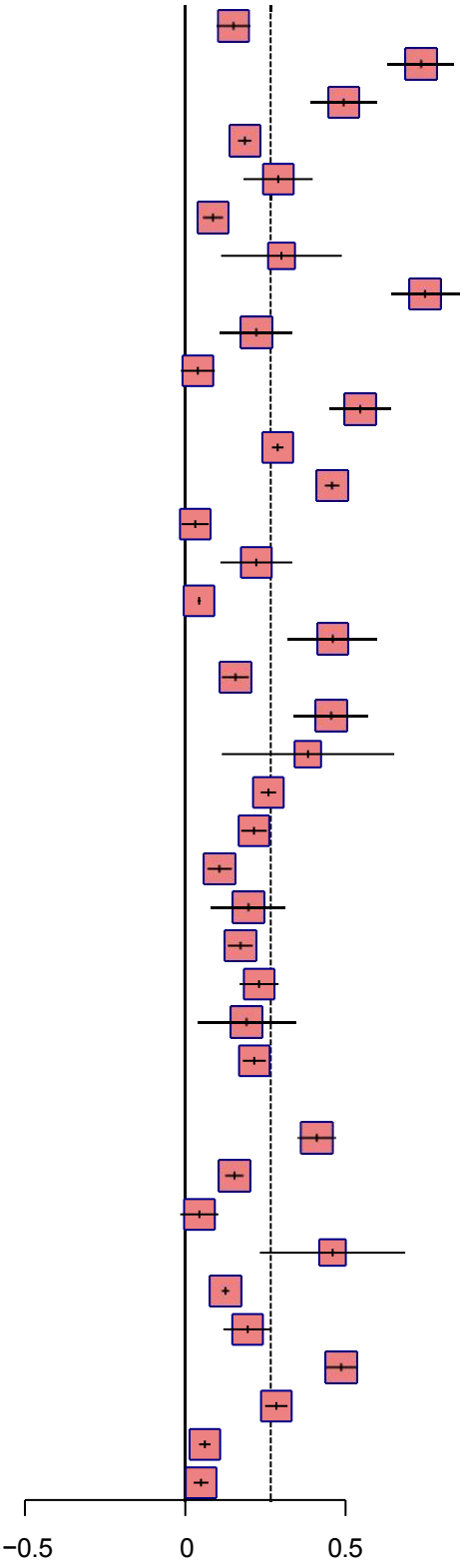


Study	(95% CI)
Robles (2021)	0.29 [0.26; 0.32]
Styra (2021)	0.50 [0.47; 0.53]
Villalba−Arias (2021)	0.09 [0.04; 0.14]
Xiong (2021)	0.23 [0.17; 0.29]
Yang (2021)	0.06 [0.05; 0.06]
Yeo (2021)	0.40 [0.35; 0.45]
Bonzini (2022)	0.28 [0.23; 0.32]
Brady (2022)	0.40 [0.31; 0.49]
Costantini (2022)	0.50 [0.41; 0.58]
Couper (2022)	0.45 [0.43; 0.46]
Da'she (2022)	0.20 [0.15; 0.24]
Dykes (2022)	0.38 [0.26; 0.49]
Fournier (2022)	0.26 [0.23; 0.28]
Fukushima (2022)	0.16 [0.12; 0.20]
Mendez (2022)	0.12 [0.09; 0.14]
Guillen−Burgos (2022)	0.17 [0.10; 0.24]
Gündogmus (2022)	0.40 [0.33; 0.47]
James (2022)	0.06 [−0.06; 0.18]
Jovarauskaite (2022)	0.09 [0.05; 0.13]
Korkut (2022)	0.24 [0.12; 0.36]
Minjie Li (2022)	0.15 [0.13; 0.17]
Marsden (2022)	0.16 [0.13; 0.19]
Martin−Rodriguez (2022)	0.38 [0.35; 0.41]
McGuinness (2022)	0.25 [0.20; 0.30]
Meena (2022)	0.02 [−0.02; 0.06]
Reid (2022)	0.04 [−0.00; 0.09]
Sanayeh (2022)	0.56 [0.48; 0.64]
Schou−Bredal (2022)	0.13 [0.11; 0.16]
Stafseth (2022)	0.07 [0.05; 0.10]
Tebbeb (2022)	0.07 [0.05; 0.10]
Th'ng (2022)	0.17 [0.12; 0.22]
Van Steenkiste (2022)	0.51 [0.36; 0.67]
Young (2022)	0.17 [0.15; 0.19]
Zhang (2022)	0.45 [0.43; 0.48]
Zhu (2022)	0.17 [0.13; 0.22]
Alshehri (2023)	0.14 [0.09; 0.19]
Bouaddi (2023)	0.81 [0.73; 0.88]
Costa (2023)	0.27 [0.24; 0.30]
Danson (2023)	0.09 [0.06; 0.12]




Study
(95% CI)
Hruska (2023) 0.03 [0.01; 0.05]
Human (2023) 0.22 [0.09; 0.35]
Li (2023) 0.43 [0.36; 0.51]
Liang (2023) 0.57 [0.52; 0.63]
Lopez−Salinas (2023) 0.31 [0.18; 0.44]
Mao (2023) 0.26 [0.23; 0.29]
Portillo−Van Diest (2023) 0.26 [0.23; 0.28]
Renzi (2023) 0.57 [0.52; 0.62]
Riaz (2023) 0.23 [0.20; 0.26]
Tran (2023) 0.23 [0.17; 0.29]
Chan (2004) 0.20 [0.16; 0.23]
Ben−Ezra (2007) 0.36 [0.21; 0.50]
Fournier (2025) 0.23 [0.20; 0.25]
Ghafoori (2024) 0.18 [−0.05; 0.41]
Giménez−Díez (2024) 0.43 [0.40; 0.46]
Giménez−Díez (2024) 0.43 [0.40; 0.46]
Hovland (2023) 0.07 [0.04; 0.11]
Isiek (2024) 0.28 [0.22; 0.33]
Kambulandu (2024) 0.33 [0.22; 0.44]
Li (2024) 0.06 [0.05; 0.07]
Li (2025) 0.79 [0.77; 0.82]
Huan Liu (2023) 0.26 [0.22; 0.29]
Maliwichi (2024) 0.30 [0.15; 0.45]
Mani (2023) 0.73 [0.66; 0.79]
Melander (2024) 0.04 [0.03; 0.05]
Mersin (2025) 0.13 [0.09; 0.17]
Molina (2024) 0.31 [0.25; 0.36]
Namgung (2025) 0.16 [0.11; 0.22]
Sahin (2024) 0.19 [0.13; 0.24]
Satilmis (2024) 0.67 [0.52; 0.81]
Sato (2023) 0.26 [0.18; 0.34]
Shirish (2024) 0.47 [0.36; 0.58]
Wu (2024) 0.41 [0.39; 0.43]
Total 0.29 [0.25; 0.32]
Heterogeneity: P < .001, I² = 99.4%, τ² = 0.0351
Other occupations
Dosil (2020) 0.21 [0.03; 0.39]
Yin (2020) 0.07 [−0.01; 0.16]
Alonso (2020) 0.24 [0.23; 0.26]
−0.5
0
0.5

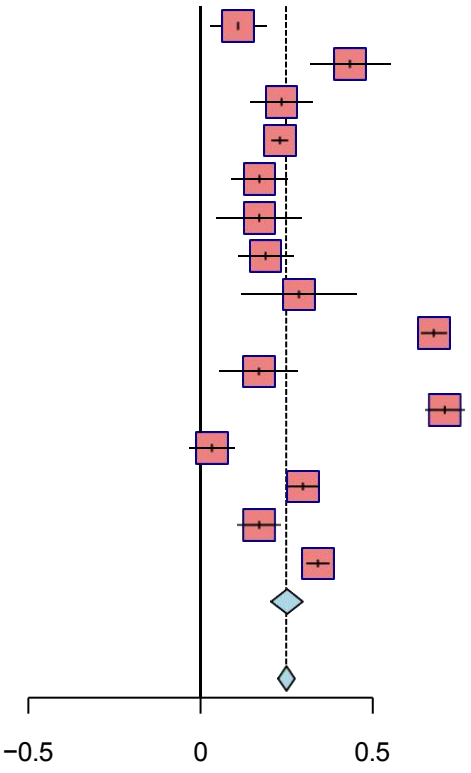
Study	(95% CI)
Alshehri (2021)	0.14 [0.09; 0.19]
Asnakew (2021)	0.68 [0.59; 0.78]
Ayalew (2021)	0.46 [0.36; 0.56]
Gilleen (2021)	0.17 [0.15; 0.19]
Greenberg (2021)	0.27 [0.17; 0.37]
Guo (2021)	0.08 [0.05; 0.11]
Kheradmand (2022)	0.28 [0.10; 0.46]
Lasalvia (2021)	0.70 [0.60; 0.80]
Moallef (2021)	0.21 [0.10; 0.31]
Osório (2021)	0.04 [−0.01; 0.09]
Erazo (2021)	0.51 [0.42; 0.60]
Robles (2021)	0.27 [0.25; 0.29]
Styra (2021)	0.43 [0.41; 0.45]
Villalba−Arias (2021)	0.03 [−0.01; 0.07]
Xiong (2021)	0.21 [0.10; 0.31]
Yang (2021)	0.04 [0.04; 0.05]
Bizri (2022)	0.43 [0.30; 0.56]
Bonzini (2022)	0.15 [0.11; 0.18]
Costantini (2022)	0.42 [0.32; 0.53]
Dykes (2022)	0.36 [0.11; 0.61]
Fournier (2022)	0.24 [0.22; 0.26]
Fukushima (2022)	0.20 [0.16; 0.24]
Mendez (2022)	0.10 [0.06; 0.13]
Guillen−Burgos (2022)	0.18 [0.08; 0.29]
Gündogmus (2022)	0.16 [0.13; 0.19]
Korkut (2022)	0.21 [0.16; 0.27]
Minjie Li (2022)	0.18 [0.04; 0.32]
McGuinness (2022)	0.20 [0.17; 0.23]
Meena (2022)	0.00
Sanayeh (2022)	0.38 [0.33; 0.44]
Schou−Bredal (2022)	0.14 [0.12; 0.17]
Stafseth (2022)	0.04 [−0.01; 0.10]
Th'ng (2022)	0.43 [0.22; 0.64]
Young (2022)	0.12 [0.11; 0.13]
Alshehri (2023)	0.18 [0.11; 0.25]
Banakar (2023)	0.45 [0.41; 0.50]
Costa (2023)	0.27 [0.23; 0.30]
Danson (2023)	0.06 [0.04; 0.07]
Hruska (2023)	0.05 [0.02; 0.07]



Study	(95% CI)
Human (2023)	0.11 [0.03; 0.19]
Li (2023)	0.43 [0.32; 0.55]
Riaz (2023)	0.24 [0.15; 0.33]
Rice (2023)	0.23 [0.21; 0.25]
Tran (2023)	0.17 [0.09; 0.25]
Fournier (2025)	0.17 [0.05; 0.30]
Ghafoori (2024)	0.19 [0.11; 0.27]
Kambulandu (2024)	0.29 [0.12; 0.45]
Li (2025)	0.68 [0.64; 0.71]
Maliwichi (2024)	0.17 [0.06; 0.28]
Mani (2023)	0.71 [0.65; 0.76]
Mersin (2025)	0.03 [−0.03; 0.10]
Molina (2024)	0.30 [0.25; 0.34]
Sahin (2024)	0.17 [0.11; 0.23]
Wu (2024)	0.34 [0.31; 0.37]
Total	0.25 [0.20; 0.30]
Heterogeneity: $P < .001$, $I^2 = 99.0\%$, $\tau^2 = 0.0292$	
Total	0.25 [0.23; 0.27]

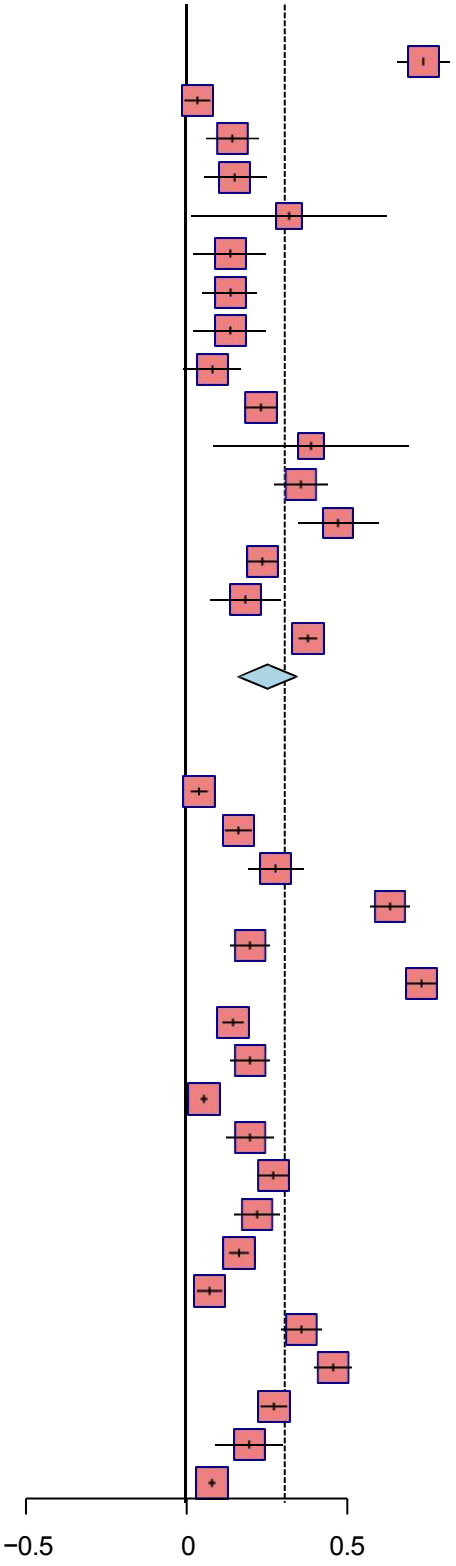
Heterogeneity: $P < .001$, $I^2 = 99.1\%$, $\tau^2 = 0.0311$

Heterogeneity between groups: $P = .006$



(g) Prevalence of PTSD by education level.

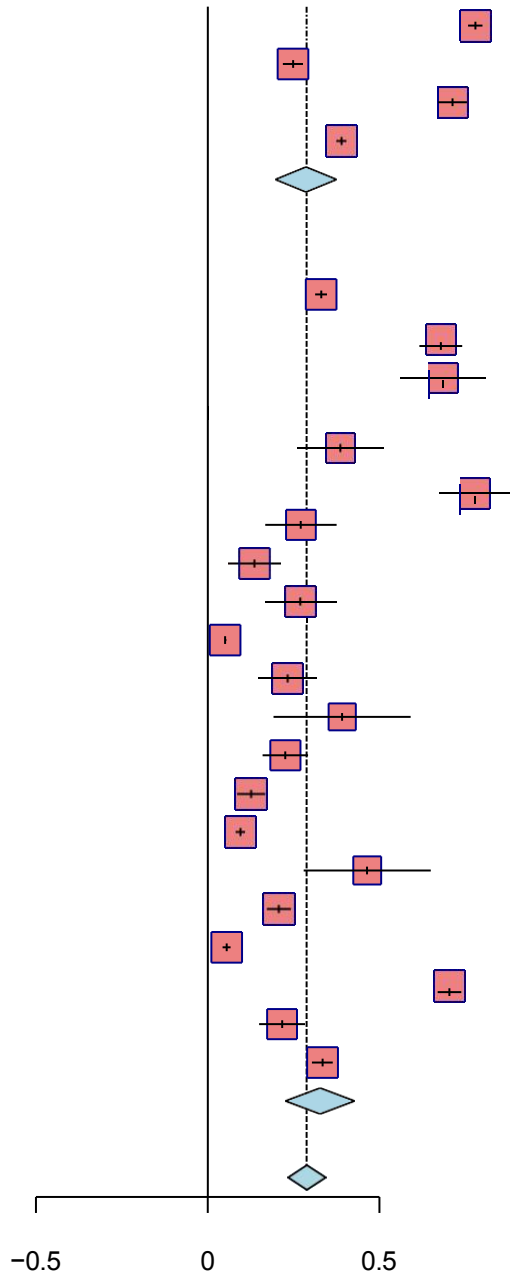
Study	(95% CI)
Post−graduate	
TG COVID (2021)	0.69 [0.62; 0.77]
Yin (2020)	0.03 [−0.00; 0.07]
Alshehri (2021)	0.14 [0.06; 0.21]
Kheradmand (2022)	0.14 [0.05; 0.23]
Li (2021)	0.30 [0.02; 0.58]
Moallef (2021)	0.13 [0.02; 0.23]
Osório (2021)	0.13 [0.05; 0.21]
Xiong (2021)	0.13 [0.02; 0.23]
Guillen−Burgos (2022)	0.08 [−0.01; 0.16]
Gündogmus (2022)	0.22 [0.17; 0.27]
Minjie Li (2022)	0.36 [0.08; 0.65]
Huang (2023)	0.34 [0.26; 0.41]
Li (2023)	0.44 [0.33; 0.56]
Riaz (2023)	0.22 [0.18; 0.27]
Ghafoori (2024)	0.17 [0.07; 0.28]
Wu (2024)	0.36 [0.33; 0.38]
Total	0.24 [0.15; 0.32]
Heterogeneity: $P < .001$, $I^2 = 96.2\%$, $\tau^2 = 0.0270$	
Graduate	
Yin (2020)	0.04 [0.02; 0.06]
Alshehri (2021)	0.15 [0.11; 0.19]
Kheradmand (2022)	0.26 [0.18; 0.34]
Li (2021)	0.59 [0.54; 0.65]
Moallef (2021)	0.19 [0.13; 0.24]
TG COVID (2021)	0.69 [0.64; 0.73]
Osório (2021)	0.14 [0.11; 0.17]
Xiong (2021)	0.19 [0.13; 0.24]
Yang (2021)	0.05 [0.04; 0.06]
Guillen−Burgos (2022)	0.19 [0.12; 0.26]
Gündogmus (2022)	0.25 [0.21; 0.30]
Korkut (2022)	0.21 [0.14; 0.27]
Minjie Li (2022)	0.16 [0.13; 0.18]
Yang (2022)	0.07 [0.03; 0.11]
Huang (2023)	0.34 [0.28; 0.39]
Li (2023)	0.43 [0.37; 0.48]
Riaz (2023)	0.26 [0.22; 0.29]
Ghafoori (2024)	0.18 [0.09; 0.28]
Li (2024)	0.08 [0.07; 0.09]



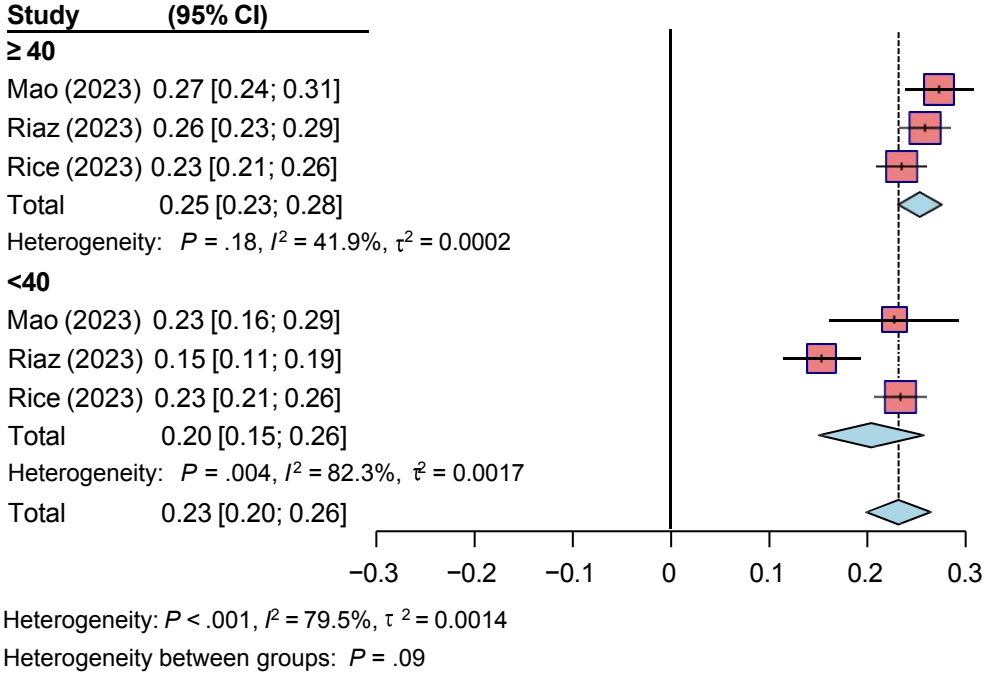
Study	(95% CI)
Li (2025)	0.78 [0.76; 0.80]
Huan Liu (2023)	0.25 [0.22; 0.28]
Mani (2023)	0.71 [0.67; 0.75]
Wu (2024)	0.39 [0.37; 0.40]
Total	0.29 [0.20; 0.37]
Heterogeneity: $P < .001$, $I^2 = 99.7\%$, $\tau^2 = 0.0465$	
Below or equal to high school	
Huang (2023)	0.33 [0.31; 0.35]
TG COVID (2021)	0.68 [0.62; 0.74]
Mani (2023)	0.68 [0.56; 0.81]
Yin (2020)	0.00
Kheradmand (2021)	0.39 [0.26; 0.51]
Li (2021)	0.78 [0.68; 0.88]
Moallef (2021)	0.27 [0.17; 0.38]
Osório (2021)	0.14 [0.06; 0.21]
Xiong (2021)	0.27 [0.17; 0.38]
Yang (2021)	0.05 [0.05; 0.05]
Guillen−Burgos (2022)	0.23 [0.15; 0.32]
Gündogmus (2022)	0.39 [0.19; 0.59]
Korkut (2022)	0.23 [0.16; 0.29]
Minjie Li (2022)	0.12 [0.09; 0.16]
Yang (2022)	0.10 [0.08; 0.11]
Li (2023)	0.46 [0.28; 0.65]
Riaz (2023)	0.21 [0.17; 0.24]
Li (2024)	0.06 [0.04; 0.07]
Li (2025)	0.70 [0.67; 0.74]
Huan Liu (2023)	0.22 [0.15; 0.28]
Wu (2024)	0.33 [0.30; 0.36]
Total	0.33 [0.23; 0.43]
Heterogeneity: $P < .001$, $I^2 = 99.5\%$, $\tau^2 = 0.0492$	
Total	0.29 [0.23; 0.34]

Heterogeneity: $P < .001$, $I^2 = 99.5\%$, $\tau^2 = 0.0420$

Heterogeneity between groups: $P = .390$



(h) Prevalence of PTSD by average weekly working hours.

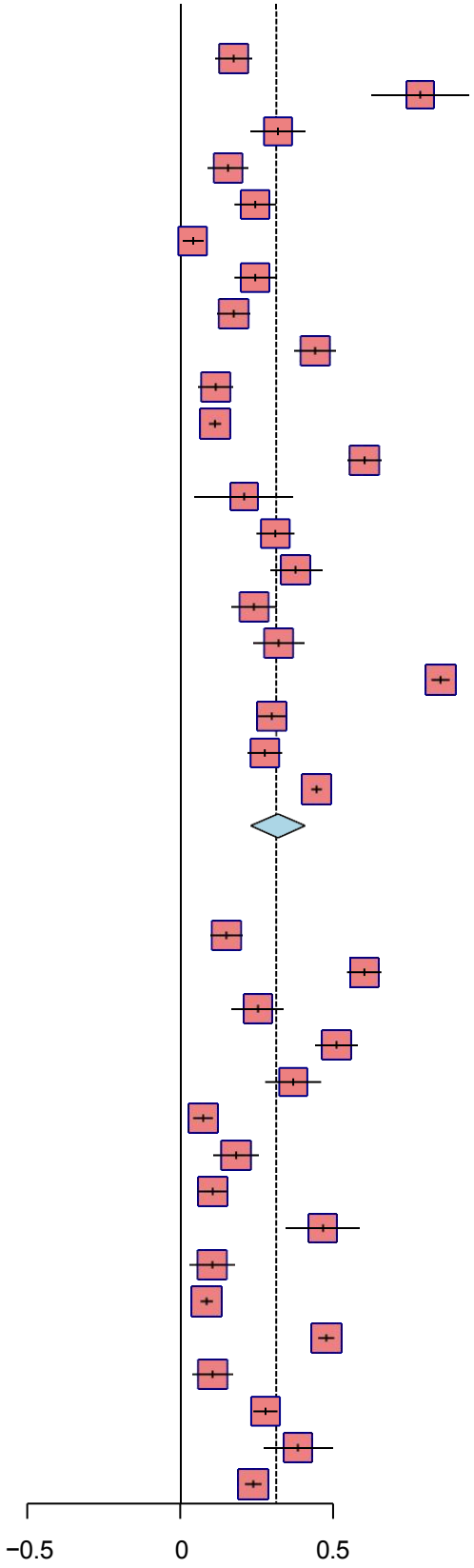


Heterogeneity: $P < .001$, $I^2 = 79.5\%$, $\tau^2 = 0.0014$

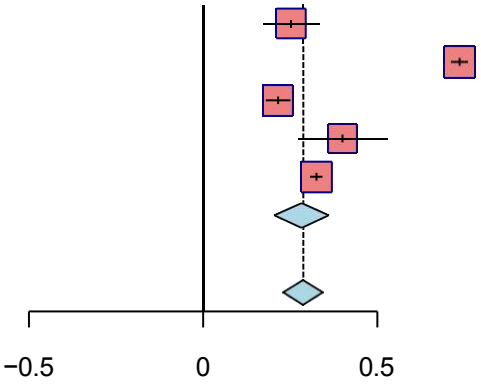
Heterogeneity between groups: $P = .09$

(i) Prevalence of PTSD by years of practice

Study	(95% CI)
≥10	
Alshehri (2021)	0.16 [0.10; 0.21]
Ayalew (2021)	0.72 [0.58; 0.87]
Kheradmand (2022)	0.29 [0.21; 0.38]
Li (2021)	0.14 [0.08; 0.20]
Moallef (2021)	0.22 [0.16; 0.29]
Villalba−Arias (2021)	0.04 [0.00; 0.07]
Xiong (2021)	0.22 [0.16; 0.29]
Zhang (2021)	0.16 [0.11; 0.21]
Costantini (2022)	0.40 [0.34; 0.47]
Jovarauskaite (2022)	0.11 [0.05; 0.16]
Yang (2022)	0.10 [0.09; 0.12]
Zhang (2023)	0.55 [0.51; 0.60]
Human (2023)	0.19 [0.04; 0.34]
Mao (2023)	0.29 [0.23; 0.34]
Ferreira (2023)	0.35 [0.27; 0.42]
Touhami (2023)	0.22 [0.15; 0.29]
Isiek (2024)	0.29 [0.22; 0.37]
Li (2025)	0.78 [0.76; 0.81]
Huan Liu (2023)	0.27 [0.23; 0.32]
Ripoll (2024)	0.25 [0.20; 0.31]
Wu (2024)	0.41 [0.39; 0.42]
Total	0.29 [0.21; 0.38]
Heterogeneity: $P < .001$, $I^2 = 99.2\%$, $\tau^2 = 0.0353$	
<10	
Alshehri (2021)	0.14 [0.09; 0.19]
Ayalew (2021)	0.55 [0.50; 0.61]
Kheradmand (2022)	0.23 [0.15; 0.31]
Li (2021)	0.47 [0.41; 0.53]
Moallef (2021)	0.34 [0.25; 0.42]
Villalba−Arias (2021)	0.07 [0.04; 0.10]
Xiong (2021)	0.17 [0.10; 0.23]
Zhang (2021)	0.10 [0.05; 0.14]
Costantini (2022)	0.43 [0.32; 0.54]
Jovarauskaite (2022)	0.10 [0.03; 0.16]
Yang (2022)	0.08 [0.06; 0.10]
Zhang (2023)	0.44 [0.42; 0.46]
Human (2023)	0.10 [0.04; 0.16]
Mao (2023)	0.26 [0.22; 0.29]
Ferreira (2023)	0.35 [0.25; 0.46]
Touhami (2023)	0.22 [0.19; 0.24]



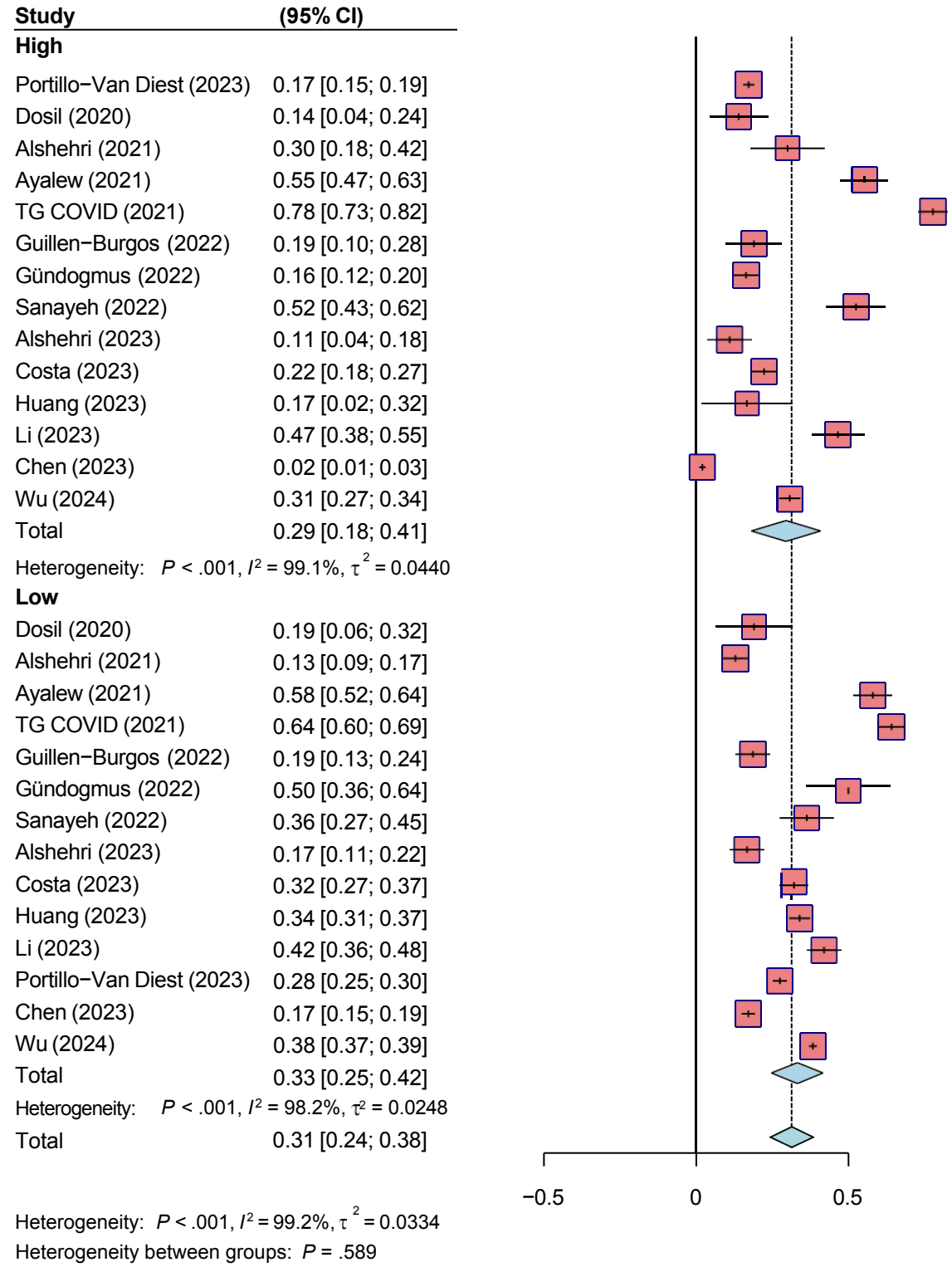
Study	(95% CI)
Isiek (2024)	0.25 [0.17; 0.33]
Li (2025)	0.74 [0.71; 0.76]
Huan Liu (2023)	0.22 [0.18; 0.25]
Ripoll (2024)	0.40 [0.27; 0.53]
Wu (2024)	0.32 [0.31; 0.34]
Total	0.28 [0.21; 0.36]
Heterogeneity: $P < .001$, $I^2 = 99.2\%$, $\tau^2 = 0.0310$	
Total	0.29 [0.23; 0.34]



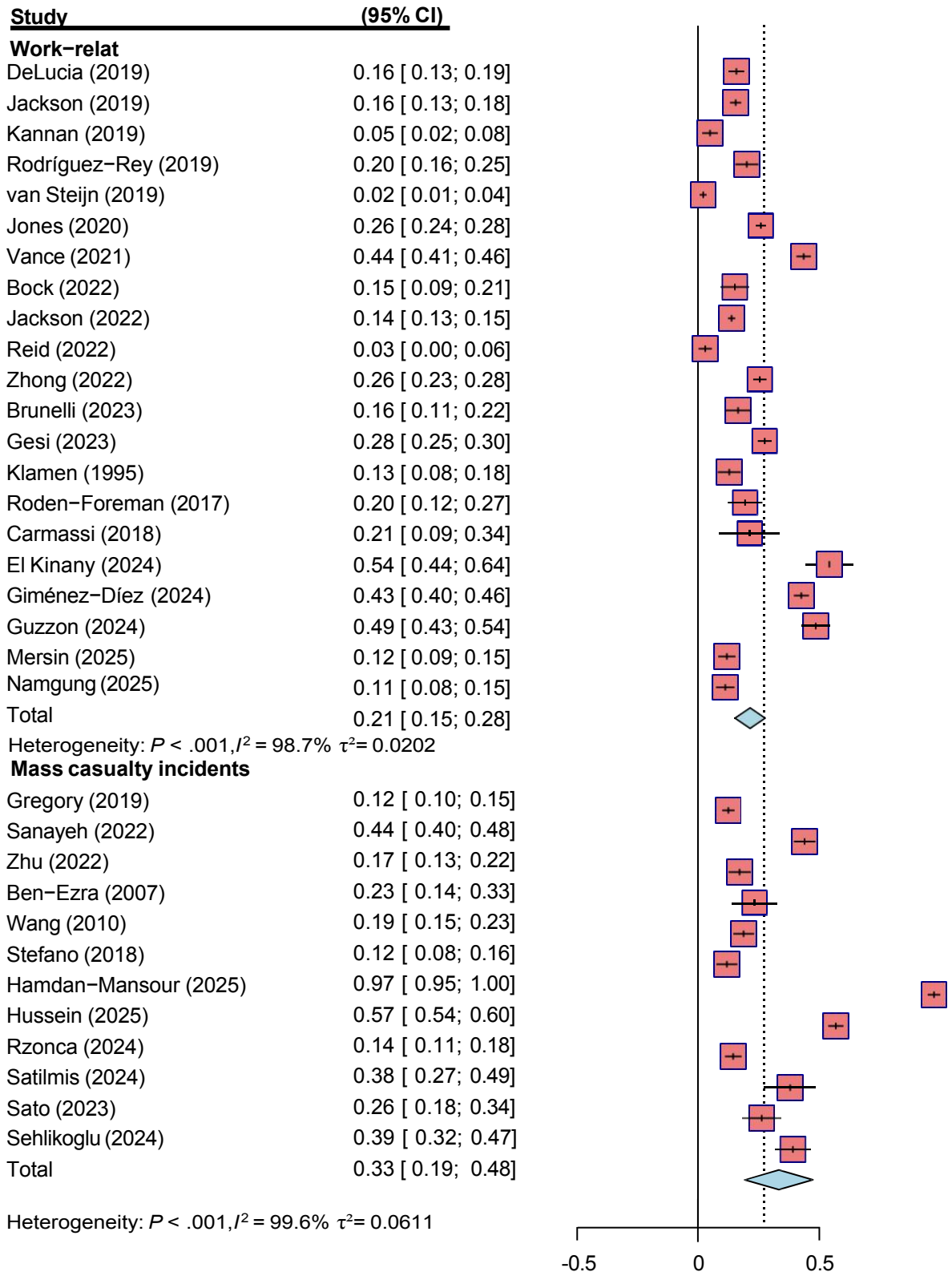
Heterogeneity: $P < .001$, $I^2 = 99.2\%$, $\tau^2 = 0.0323$

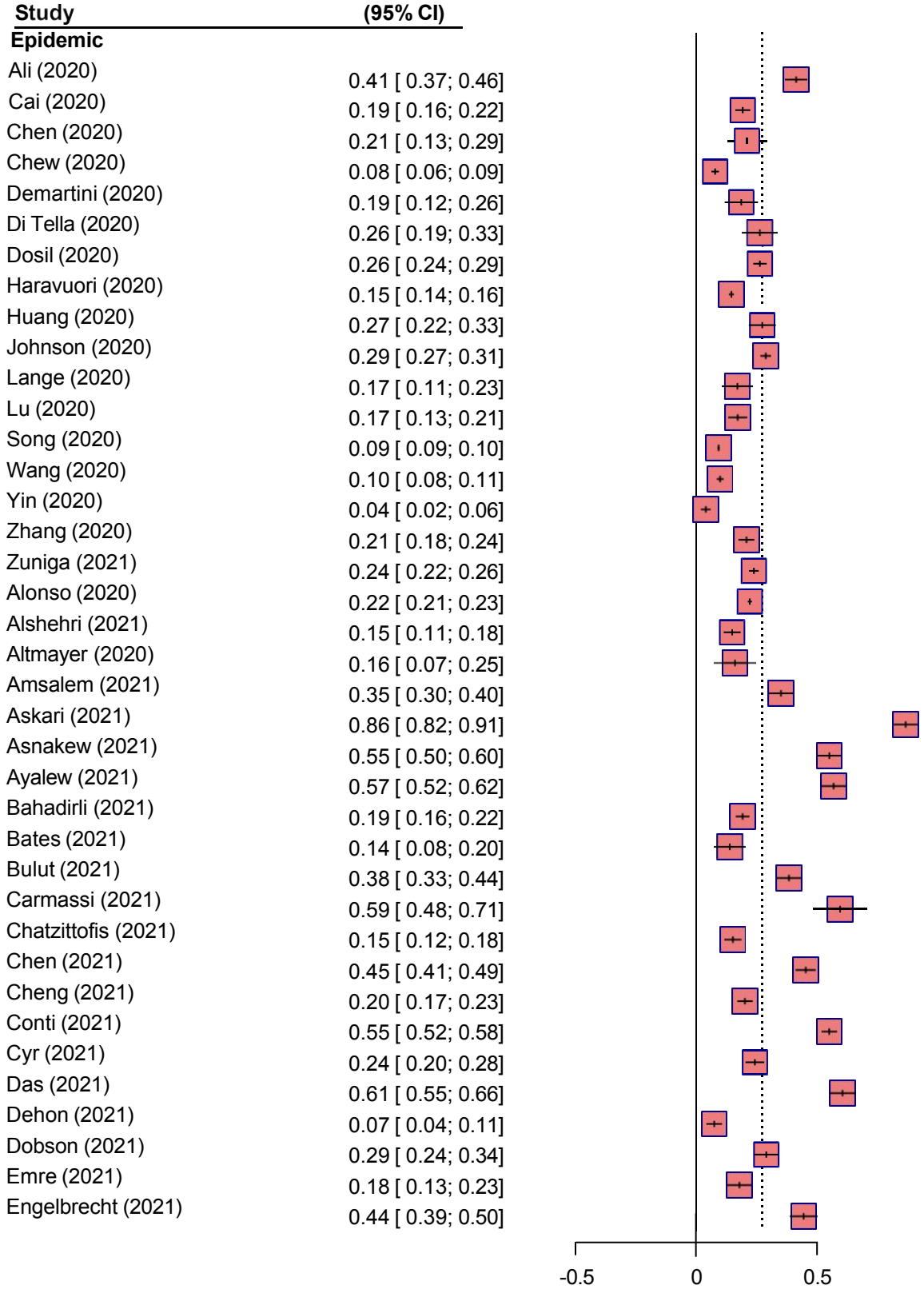
Heterogeneity between groups: $P = .855$

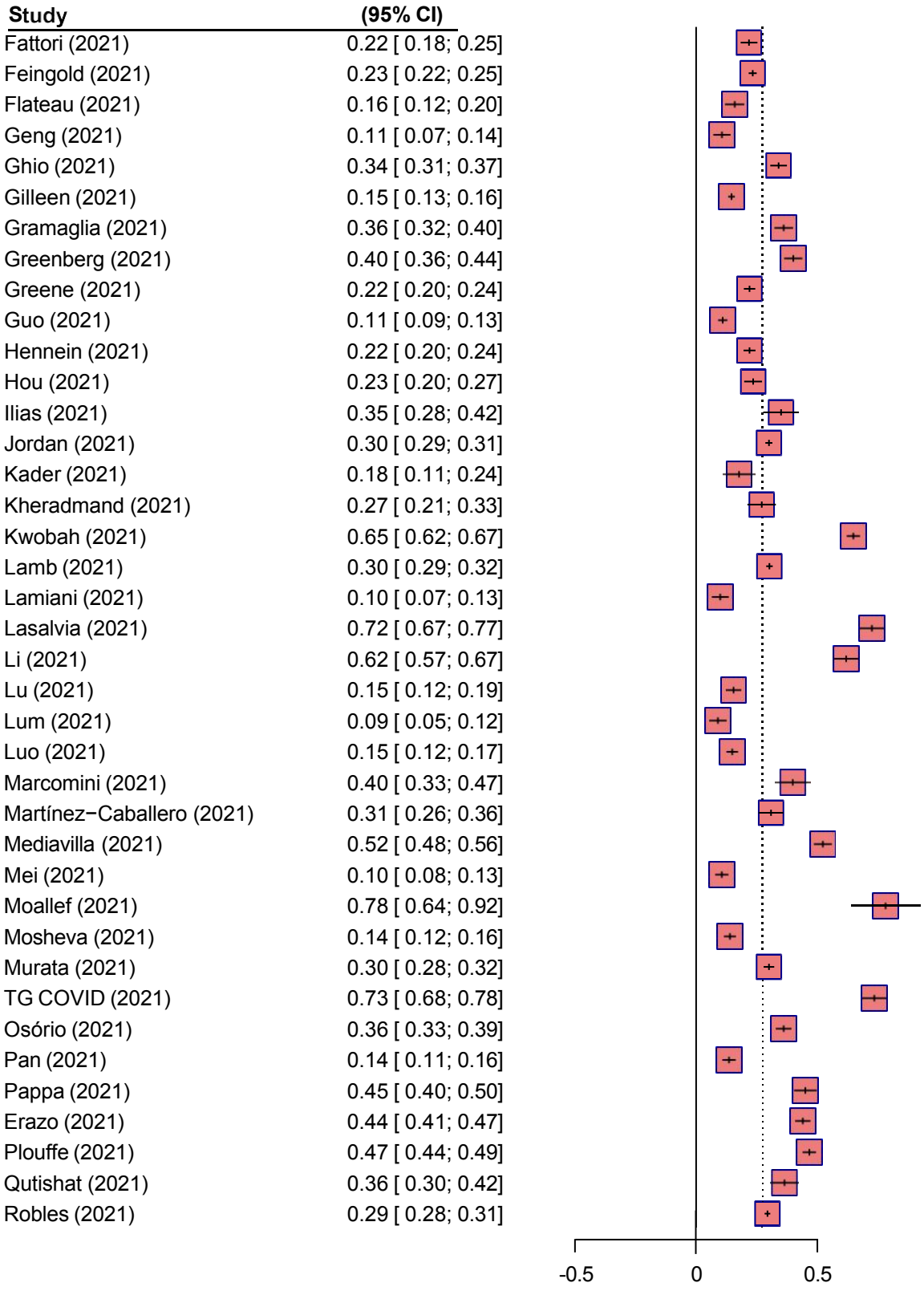
(j) Prevalence of PTSD by income.

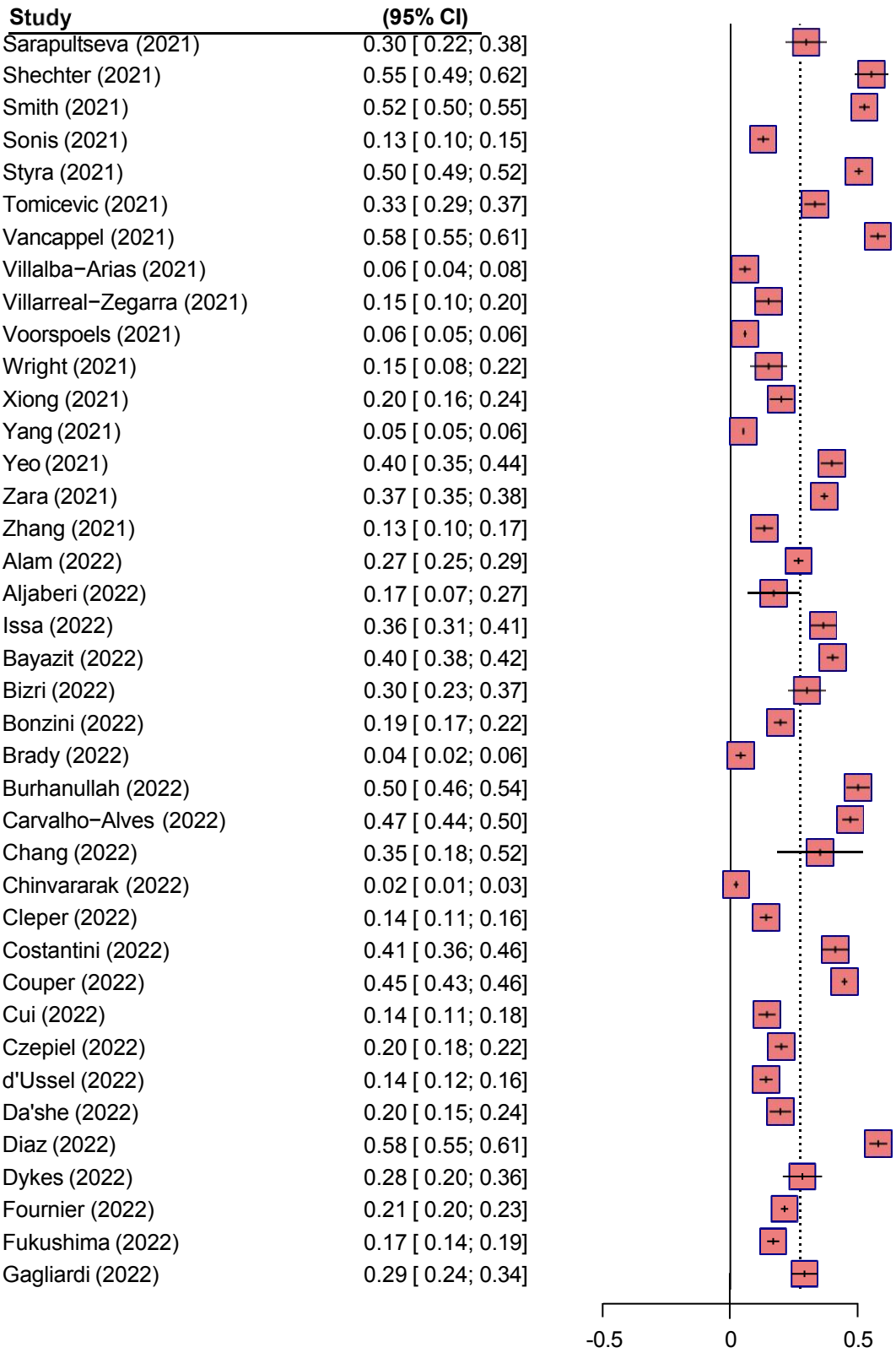


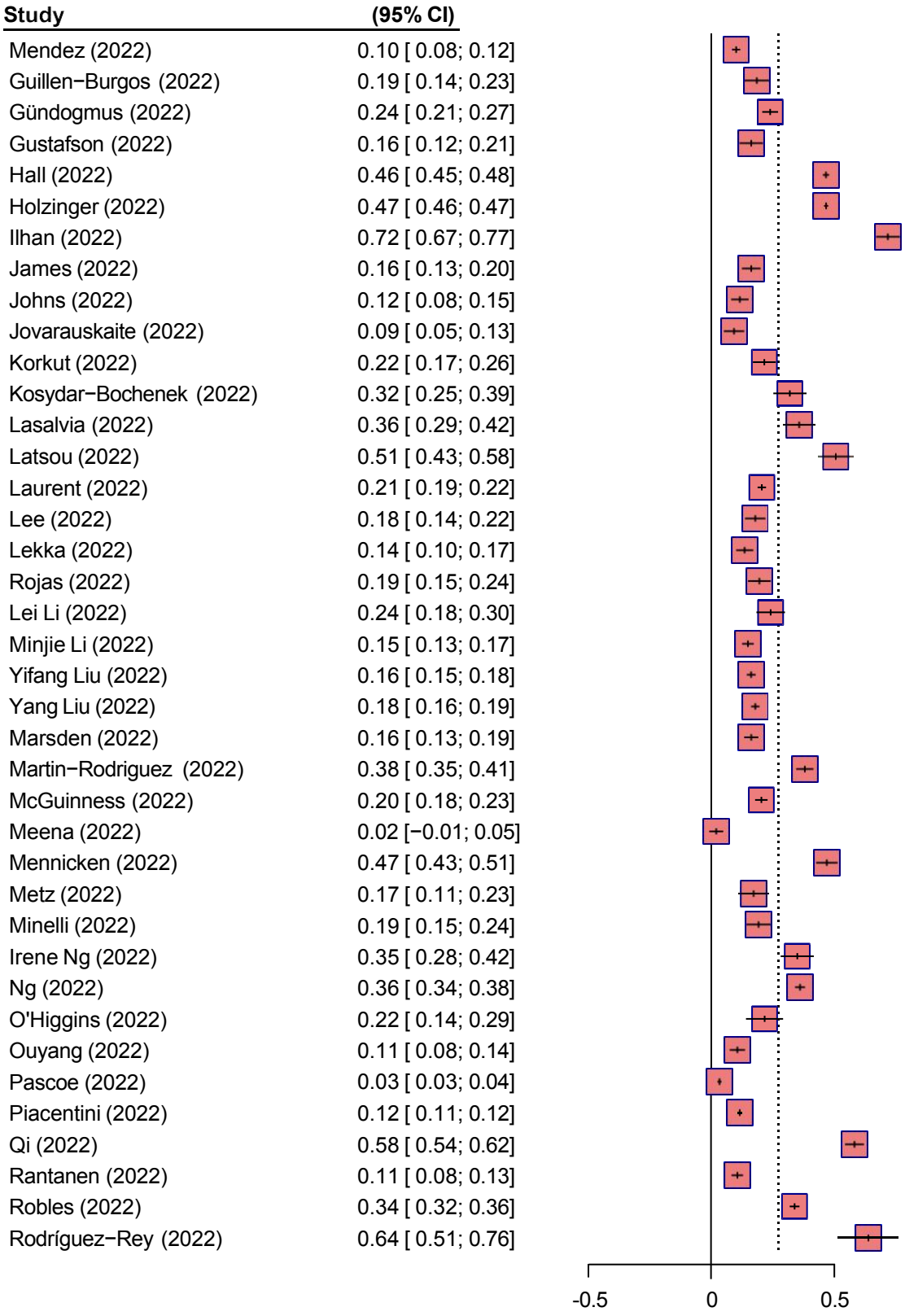
(k) Prevalence of PTSD by traumatic event.



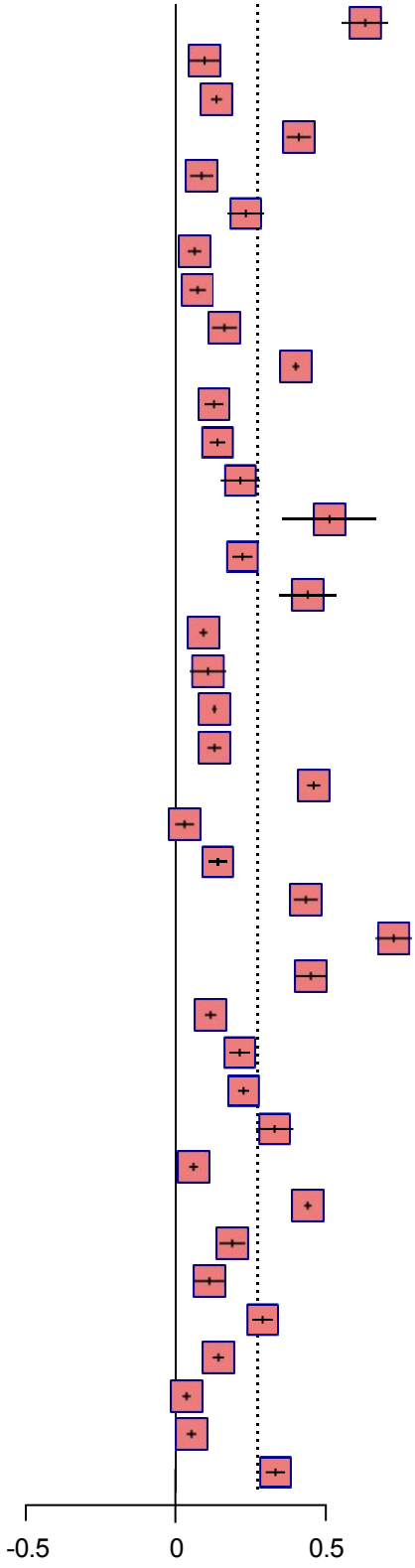

Study
(95% CI)
Epidemic
Ali (2020)
0.41 [0.37; 0.46]
Cai (2020)
0.19 [0.16; 0.22]
Chen (2020)
0.21 [0.13; 0.29]
Chew (2020)
0.08 [0.06; 0.09]
Demartini (2020)
0.19 [0.12; 0.26]
Di Tella (2020)
0.26 [0.19; 0.33]
Dosil (2020)
0.26 [0.24; 0.29]
Haravuori (2020)
0.15 [0.14; 0.16]
Huang (2020)
0.27 [0.22; 0.33]
Johnson (2020)
0.29 [0.27; 0.31]
Lange (2020)
0.17 [0.11; 0.23]
Lu (2020)
0.17 [0.13; 0.21]
Song (2020)
0.09 [0.09; 0.10]
Wang (2020)
0.10 [0.08; 0.11]
Yin (2020)
0.04 [0.02; 0.06]
Zhang (2020)
0.21 [0.18; 0.24]
Zuniga (2021)
0.24 [0.22; 0.26]
Alonso (2020)
0.22 [0.21; 0.23]
Alshehri (2021)
0.15 [0.11; 0.18]
Altmayer (2020)
0.16 [0.07; 0.25]
Amsalem (2021)
0.35 [0.30; 0.40]
Askari (2021)
0.86 [0.82; 0.91]
Asnakew (2021)
0.55 [0.50; 0.60]
Ayalew (2021)
0.57 [0.52; 0.62]
Bahadirli (2021)
0.19 [0.16; 0.22]
Bates (2021)
0.14 [0.08; 0.20]
Bulut (2021)
0.38 [0.33; 0.44]
Carmassi (2021)
0.59 [0.48; 0.71]
Chatzittofis (2021)
0.15 [0.12; 0.18]
Chen (2021)
0.45 [0.41; 0.49]
Cheng (2021)
0.20 [0.17; 0.23]
Conti (2021)
0.55 [0.52; 0.58]
Cyr (2021)
0.24 [0.20; 0.28]
Das (2021)
0.61 [0.55; 0.66]
Dehon (2021)
0.07 [0.04; 0.11]
Dobson (2021)
0.29 [0.24; 0.34]
Emre (2021)
0.18 [0.13; 0.23]
Engelbrecht (2021)
0.44 [0.39; 0.50]
-0.5
0
0.5

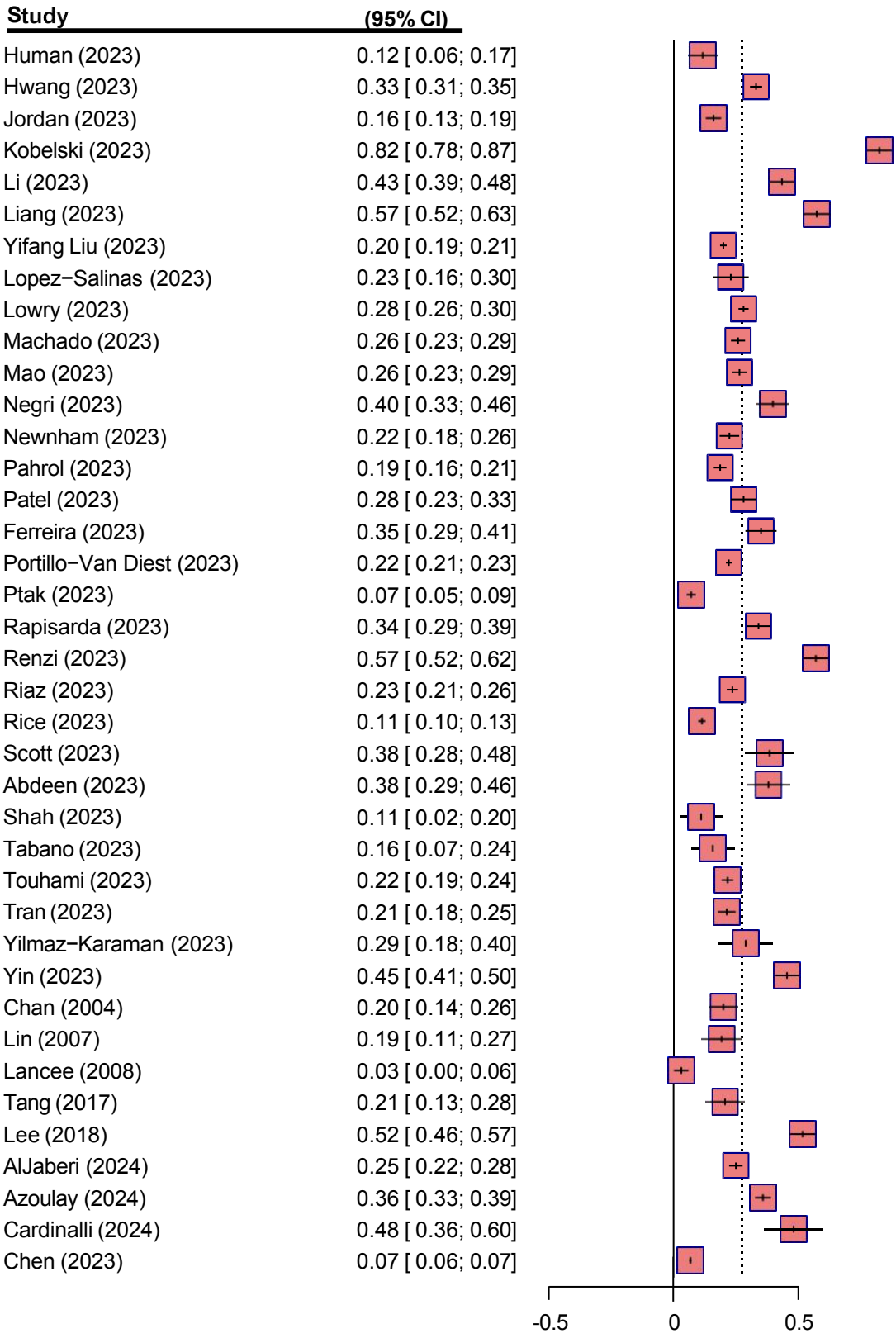

Study
(95% CI)
Fattori (2021) 0.22 [0.18; 0.25]
Feingold (2021) 0.23 [0.22; 0.25]
Flateau (2021) 0.16 [0.12; 0.20]
Geng (2021) 0.11 [0.07; 0.14]
Ghio (2021) 0.34 [0.31; 0.37]
Gilleen (2021) 0.15 [0.13; 0.16]
Gramaglia (2021) 0.36 [0.32; 0.40]
Greenberg (2021) 0.40 [0.36; 0.44]
Greene (2021) 0.22 [0.20; 0.24]
Guo (2021) 0.11 [0.09; 0.13]
Hennein (2021) 0.22 [0.20; 0.24]
Hou (2021) 0.23 [0.20; 0.27]
Ilias (2021) 0.35 [0.28; 0.42]
Jordan (2021) 0.30 [0.29; 0.31]
Kader (2021) 0.18 [0.11; 0.24]
Kheradmand (2021) 0.27 [0.21; 0.33]
Kwobah (2021) 0.65 [0.62; 0.67]
Lamb (2021) 0.30 [0.29; 0.32]
Lamiani (2021) 0.10 [0.07; 0.13]
Lasalvia (2021) 0.72 [0.67; 0.77]
Li (2021) 0.62 [0.57; 0.67]
Lu (2021) 0.15 [0.12; 0.19]
Lum (2021) 0.09 [0.05; 0.12]
Luo (2021) 0.15 [0.12; 0.17]
Marcomini (2021) 0.40 [0.33; 0.47]
Martínez−Caballero (2021) 0.31 [0.26; 0.36]
Mediavilla (2021) 0.52 [0.48; 0.56]
Mei (2021) 0.10 [0.08; 0.13]
Moallef (2021) 0.78 [0.64; 0.92]
Mosheva (2021) 0.14 [0.12; 0.16]
Murata (2021) 0.30 [0.28; 0.32]
TG COVID (2021) 0.73 [0.68; 0.78]
Osório (2021) 0.36 [0.33; 0.39]
Pan (2021) 0.14 [0.11; 0.16]
Pappa (2021) 0.45 [0.40; 0.50]
Erazo (2021) 0.44 [0.41; 0.47]
Plouffe (2021) 0.47 [0.44; 0.49]
Qutishat (2021) 0.36 [0.30; 0.42]
Robles (2021) 0.29 [0.28; 0.31]
-0.5
0
0.5

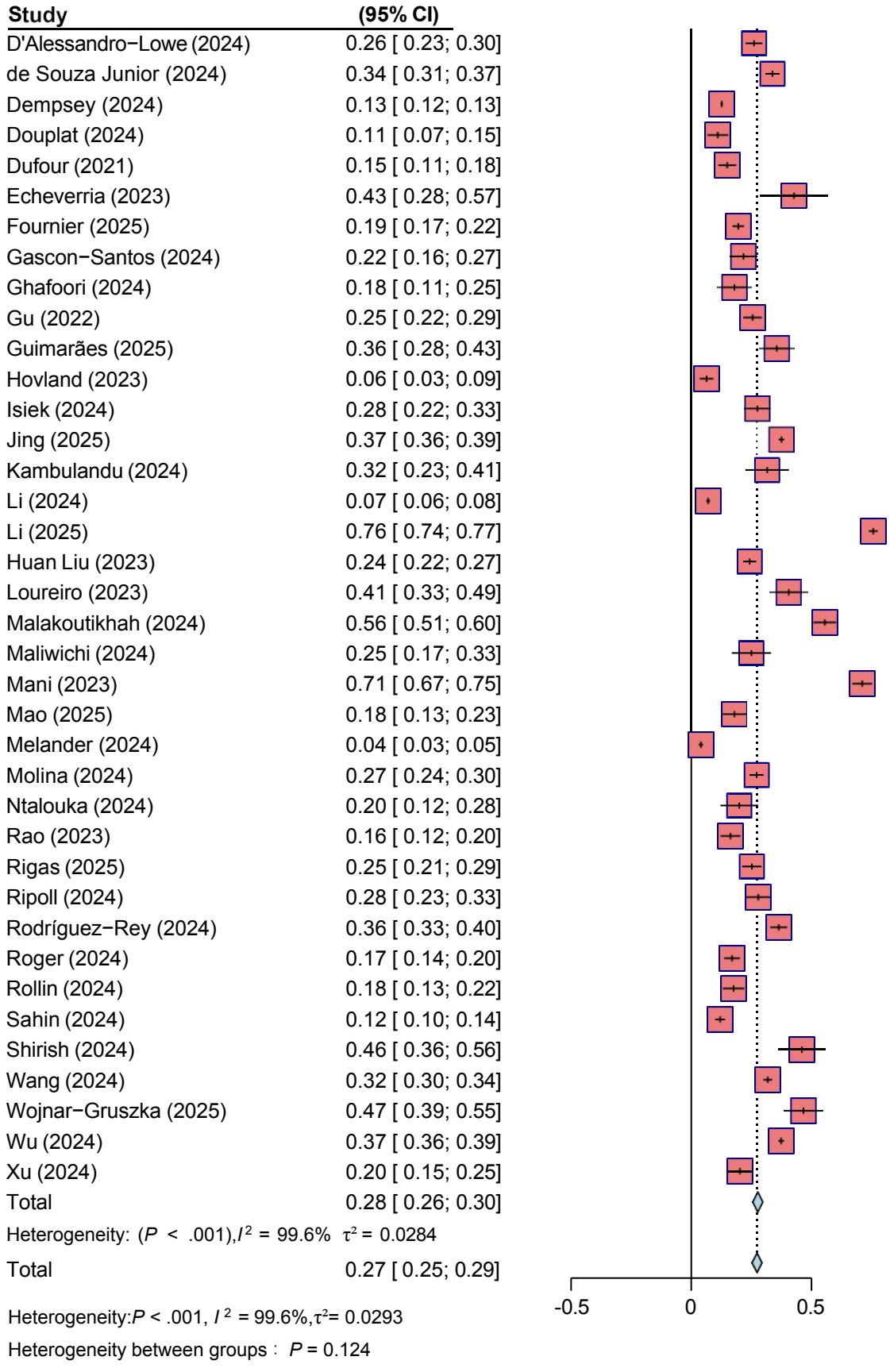

Study
(95% CI)
Sarapultseva (2021) 0.30 [0.22; 0.38]
Shechter (2021) 0.55 [0.49; 0.62]
Smith (2021) 0.52 [0.50; 0.55]
Sonis (2021) 0.13 [0.10; 0.15]
Styra (2021) 0.50 [0.49; 0.52]
Tomicevic (2021) 0.33 [0.29; 0.37]
Vancappel (2021) 0.58 [0.55; 0.61]
Villalba−Arias (2021) 0.06 [0.04; 0.08]
Villarreal−Zegarra (2021) 0.15 [0.10; 0.20]
Voorspoels (2021) 0.06 [0.05; 0.06]
Wright (2021) 0.15 [0.08; 0.22]
Xiong (2021) 0.20 [0.16; 0.24]
Yang (2021) 0.05 [0.05; 0.06]
Yeo (2021) 0.40 [0.35; 0.44]
Zara (2021) 0.37 [0.35; 0.38]
Zhang (2021) 0.13 [0.10; 0.17]
Alam (2022) 0.27 [0.25; 0.29]
Aljaberi (2022) 0.17 [0.07; 0.27]
Issa (2022) 0.36 [0.31; 0.41]
Bayazit (2022) 0.40 [0.38; 0.42]
Bizri (2022) 0.30 [0.23; 0.37]
Bonzini (2022) 0.19 [0.17; 0.22]
Brady (2022) 0.04 [0.02; 0.06]
Burhanullah (2022) 0.50 [0.46; 0.54]
Carvalho−Alves (2022) 0.47 [0.44; 0.50]
Chang (2022) 0.35 [0.18; 0.52]
Chinvararak (2022) 0.02 [0.01; 0.03]
Cleper (2022) 0.14 [0.11; 0.16]
Costantini (2022) 0.41 [0.36; 0.46]
Couper (2022) 0.45 [0.43; 0.46]
Cui (2022) 0.14 [0.11; 0.18]
Czepiel (2022) 0.20 [0.18; 0.22]
d'Ussel (2022) 0.14 [0.12; 0.16]
Da'she (2022) 0.20 [0.15; 0.24]
Diaz (2022) 0.58 [0.55; 0.61]
Dykes (2022) 0.28 [0.20; 0.36]
Fournier (2022) 0.21 [0.20; 0.23]
Fukushima (2022) 0.17 [0.14; 0.19]
Gagliardi (2022) 0.29 [0.24; 0.34]
-0.5
0
0.5


Study
(95% CI)
Mendez (2022) 0.10 [0.08; 0.12]
Guillen−Burgos (2022) 0.19 [0.14; 0.23]
Gündogmus (2022) 0.24 [0.21; 0.27]
Gustafson (2022) 0.16 [0.12; 0.21]
Hall (2022) 0.46 [0.45; 0.48]
Holzinger (2022) 0.47 [0.46; 0.47]
Ilhan (2022) 0.72 [0.67; 0.77]
James (2022) 0.16 [0.13; 0.20]
Johns (2022) 0.12 [0.08; 0.15]
Jovarauskaite (2022) 0.09 [0.05; 0.13]
Korkut (2022) 0.22 [0.17; 0.26]
Kosydar−Bochenek (2022) 0.32 [0.25; 0.39]
Lasalvia (2022) 0.36 [0.29; 0.42]
Latsou (2022) 0.51 [0.43; 0.58]
Laurent (2022) 0.21 [0.19; 0.22]
Lee (2022) 0.18 [0.14; 0.22]
Lekka (2022) 0.14 [0.10; 0.17]
Rojas (2022) 0.19 [0.15; 0.24]
Lei Li (2022) 0.24 [0.18; 0.30]
Minjie Li (2022) 0.15 [0.13; 0.17]
Yifang Liu (2022) 0.16 [0.15; 0.18]
Yang Liu (2022) 0.18 [0.16; 0.19]
Marsden (2022) 0.16 [0.13; 0.19]
Martin−Rodriguez (2022) 0.38 [0.35; 0.41]
McGuinness (2022) 0.20 [0.18; 0.23]
Meena (2022) 0.02 [−0.01; 0.05]
Mennicken (2022) 0.47 [0.43; 0.51]
Metz (2022) 0.17 [0.11; 0.23]
Minelli (2022) 0.19 [0.15; 0.24]
Irene Ng (2022) 0.35 [0.28; 0.42]
Ng (2022) 0.36 [0.34; 0.38]
O'Higgins (2022) 0.22 [0.14; 0.29]
Ouyang (2022) 0.11 [0.08; 0.14]
Pascoe (2022) 0.03 [0.03; 0.04]
Piacentini (2022) 0.12 [0.11; 0.12]
Qi (2022) 0.58 [0.54; 0.62]
Rantanen (2022) 0.11 [0.08; 0.13]
Robles (2022) 0.34 [0.32; 0.36]
Rodríguez−Rey (2022) 0.64 [0.51; 0.76]
-0.5
0
0.5

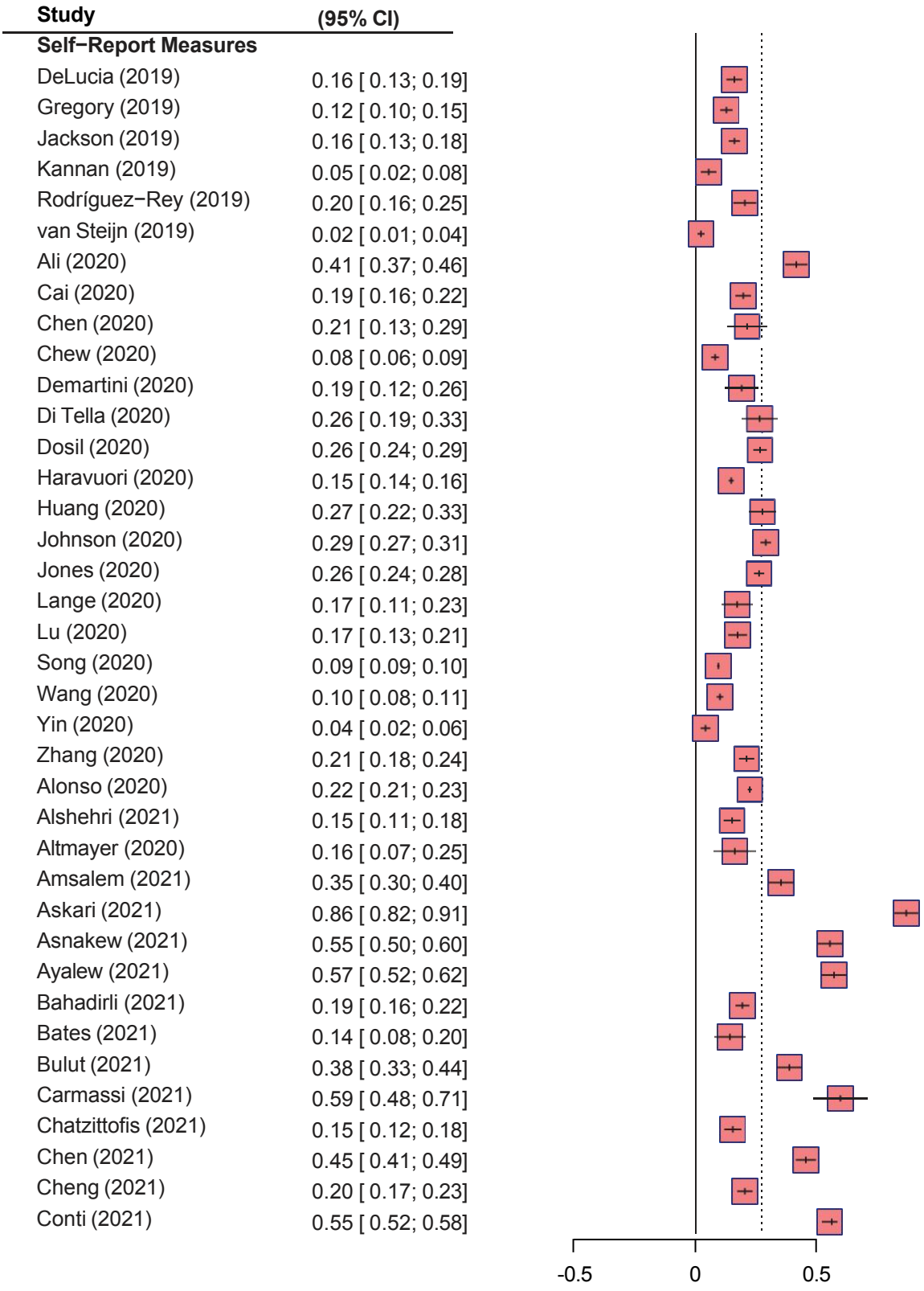
Study	(95% CI)
Sachdeva (2021)	0.63 [0.55; 0.71]
Sar−El (2022)	0.10 [0.05; 0.15]
Schou−Bredal (2022)	0.14 [0.12; 0.15]
Schwartz (2022)	0.41 [0.37; 0.45]
Shahsavarinia (2022)	0.09 [0.05; 0.13]
Sangrà (2021)	0.23 [0.17; 0.30]
Stafseth (2022)	0.06 [0.04; 0.09]
Tebbeb (2022)	0.07 [0.05; 0.10]
Th'ng (2022)	0.16 [0.12; 0.20]
Tham (2022)	0.40 [0.39; 0.41]
Tong (2022)	0.13 [0.10; 0.16]
Tucker (2022)	0.14 [0.11; 0.17]
Vadi (2022)	0.22 [0.15; 0.28]
Van Steenkiste (2022)	0.51 [0.36; 0.67]
Van Wert (2022)	0.22 [0.19; 0.26]
Wild (2021)	0.44 [0.34; 0.54]
Yang (2022)	0.09 [0.08; 0.10]
Yao (2022)	0.11 [0.05; 0.17]
Young (2022)	0.13 [0.12; 0.14]
Yu (2022)	0.13 [0.11; 0.15]
Zhang (2022)	0.46 [0.44; 0.48]
Adams (2023)	0.03 [−0.00; 0.06]
Alshehri (2023)	0.14 [0.11; 0.17]
Banakar (2023)	0.43 [0.40; 0.47]
Bouaddi (2023)	0.72 [0.66; 0.79]
Brady (2023)	0.45 [0.40; 0.50]
Cabrolier (2023)	0.12 [0.10; 0.14]
Conejero (2023)	0.21 [0.18; 0.25]
Costa (2023)	0.23 [0.21; 0.25]
D'Alessandro−Lowe (2023)	0.33 [0.27; 0.39]
Danson (2023)	0.06 [0.05; 0.07]
Dong (2023)	0.44 [0.43; 0.45]
Doukas (2023)	0.19 [0.15; 0.23]
Gaber (2023)	0.11 [0.06; 0.16]
Gambaro (2023)	0.29 [0.26; 0.32]
He (2023)	0.14 [0.12; 0.16]
Hennein (2023)	0.04 [0.02; 0.05]
Hruska (2023)	0.06 [0.04; 0.07]
Huang (2023)	0.33 [0.30; 0.36]



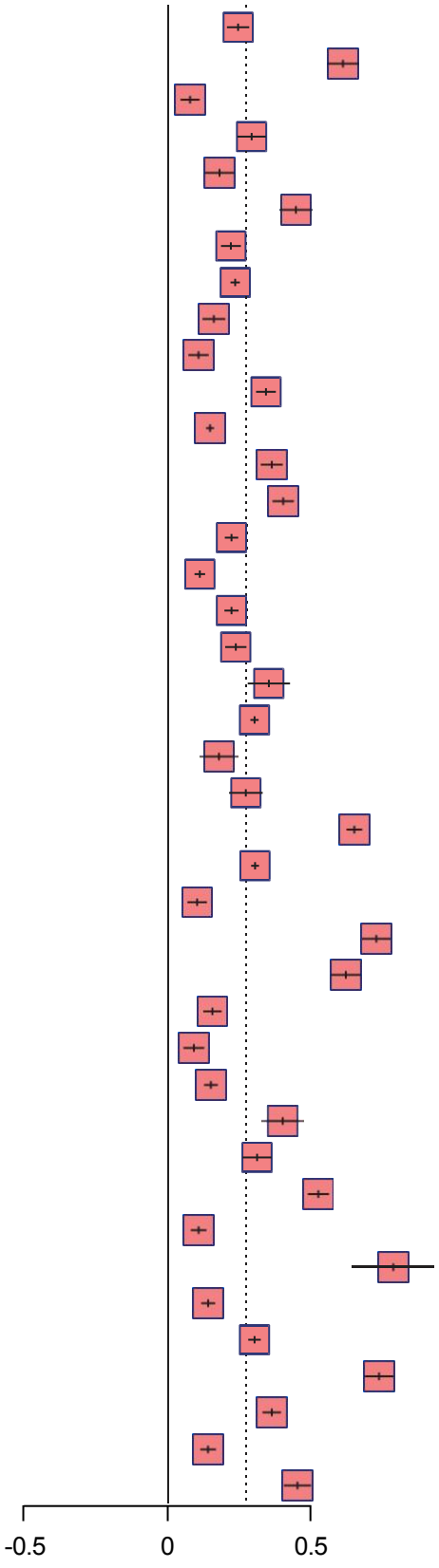

Study
(95% CI)
Human (2023) 0.12 [0.06; 0.17]
Hwang (2023) 0.33 [0.31; 0.35]
Jordan (2023) 0.16 [0.13; 0.19]
Kobelski (2023) 0.82 [0.78; 0.87]
Li (2023) 0.43 [0.39; 0.48]
Liang (2023) 0.57 [0.52; 0.63]
Yifang Liu (2023) 0.20 [0.19; 0.21]
Lopez−Salinas (2023) 0.23 [0.16; 0.30]
Lowry (2023) 0.28 [0.26; 0.30]
Machado (2023) 0.26 [0.23; 0.29]
Mao (2023) 0.26 [0.23; 0.29]
Negri (2023) 0.40 [0.33; 0.46]
Newnham (2023) 0.22 [0.18; 0.26]
Pahrol (2023) 0.19 [0.16; 0.21]
Patel (2023) 0.28 [0.23; 0.33]
Ferreira (2023) 0.35 [0.29; 0.41]
Portillo−Van Diest (2023) 0.22 [0.21; 0.23]
Ptak (2023) 0.07 [0.05; 0.09]
Rapisarda (2023) 0.34 [0.29; 0.39]
Renzi (2023) 0.57 [0.52; 0.62]
Riaz (2023) 0.23 [0.21; 0.26]
Rice (2023) 0.11 [0.10; 0.13]
Scott (2023) 0.38 [0.28; 0.48]
Abdeen (2023) 0.38 [0.29; 0.46]
Shah (2023) 0.11 [0.02; 0.20]
Tabano (2023) 0.16 [0.07; 0.24]
Touhami (2023) 0.22 [0.19; 0.24]
Tran (2023) 0.21 [0.18; 0.25]
Yilmaz−Karaman (2023) 0.29 [0.18; 0.40]
Yin (2023) 0.45 [0.41; 0.50]
Chan (2004) 0.20 [0.14; 0.26]
Lin (2007) 0.19 [0.11; 0.27]
Lancee (2008) 0.03 [0.00; 0.06]
Tang (2017) 0.21 [0.13; 0.28]
Lee (2018) 0.52 [0.46; 0.57]
AlJaberi (2024) 0.25 [0.22; 0.28]
Azoulay (2024) 0.36 [0.33; 0.39]
Cardinalli (2024) 0.48 [0.36; 0.60]
Chen (2023) 0.07 [0.06; 0.07]
-0.5
0
0.5


Study
(95% CI)
D'Alessandro−Lowe (2024) 0.26 [0.23; 0.30]
de Souza Junior (2024) 0.34 [0.31; 0.37]
Dempsey (2024) 0.13 [0.12; 0.13]
Douplat (2024) 0.11 [0.07; 0.15]
Dufour (2021) 0.15 [0.11; 0.18]
Echeverria (2023) 0.43 [0.28; 0.57]
Fournier (2025) 0.19 [0.17; 0.22]
Gascon−Santos (2024) 0.22 [0.16; 0.27]
Ghafoori (2024) 0.18 [0.11; 0.25]
Gu (2022) 0.25 [0.22; 0.29]
Guimarães (2025) 0.36 [0.28; 0.43]
Hovland (2023) 0.06 [0.03; 0.09]
Isiek (2024) 0.28 [0.22; 0.33]
Jing (2025) 0.37 [0.36; 0.39]
Kambulandu (2024) 0.32 [0.23; 0.41]
Li (2024) 0.07 [0.06; 0.08]
Li (2025) 0.76 [0.74; 0.77]
Huan Liu (2023) 0.24 [0.22; 0.27]
Loureiro (2023) 0.41 [0.33; 0.49]
Malakoutikhah (2024) 0.56 [0.51; 0.60]
Maliwichi (2024) 0.25 [0.17; 0.33]
Mani (2023) 0.71 [0.67; 0.75]
Mao (2025) 0.18 [0.13; 0.23]
Melander (2024) 0.04 [0.03; 0.05]
Molina (2024) 0.27 [0.24; 0.30]
Ntalouka (2024) 0.20 [0.12; 0.28]
Rao (2023) 0.16 [0.12; 0.20]
Rigas (2025) 0.25 [0.21; 0.29]
Ripoll (2024) 0.28 [0.23; 0.33]
Rodríguez−Rey (2024) 0.36 [0.33; 0.40]
Roger (2024) 0.17 [0.14; 0.20]
Rollin (2024) 0.18 [0.13; 0.22]
Sahin (2024) 0.12 [0.10; 0.14]
Shirish (2024) 0.46 [0.36; 0.56]
Wang (2024) 0.32 [0.30; 0.34]
Wojnar−Gruszka (2025) 0.47 [0.39; 0.55]
Wu (2024) 0.37 [0.36; 0.39]
Xu (2024) 0.20 [0.15; 0.25]
Total 0.28 [0.26; 0.30]
Heterogeneity: (P < .001), I² = 99.6% τ² = 0.0284
Total 0.27 [0.25; 0.29]
Heterogeneity: P < .001, I² = 99.6%, τ² = 0.0293
Heterogeneity between groups : P = 0.124
-0.5
0
0.5

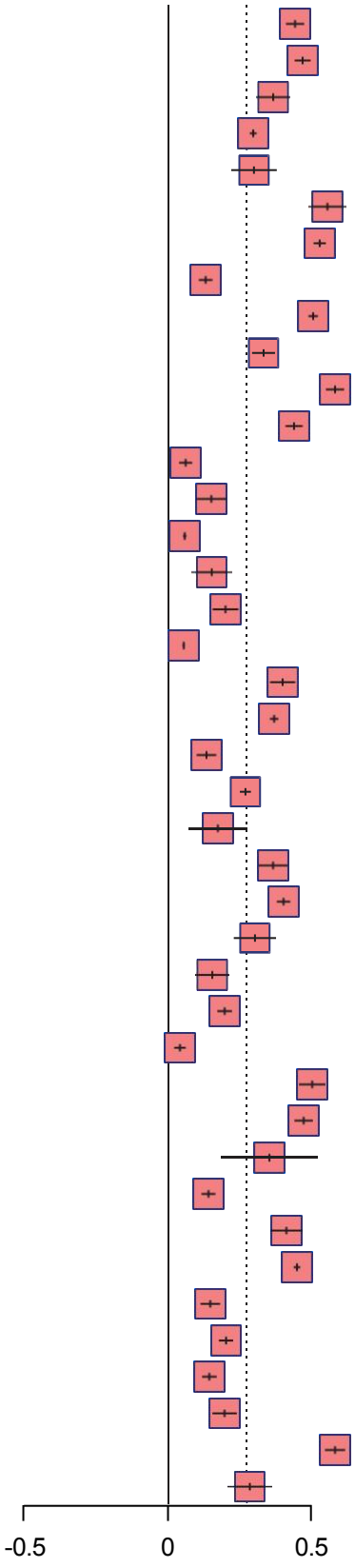
(I) Prevalence of PTSD by PTSD assessment.



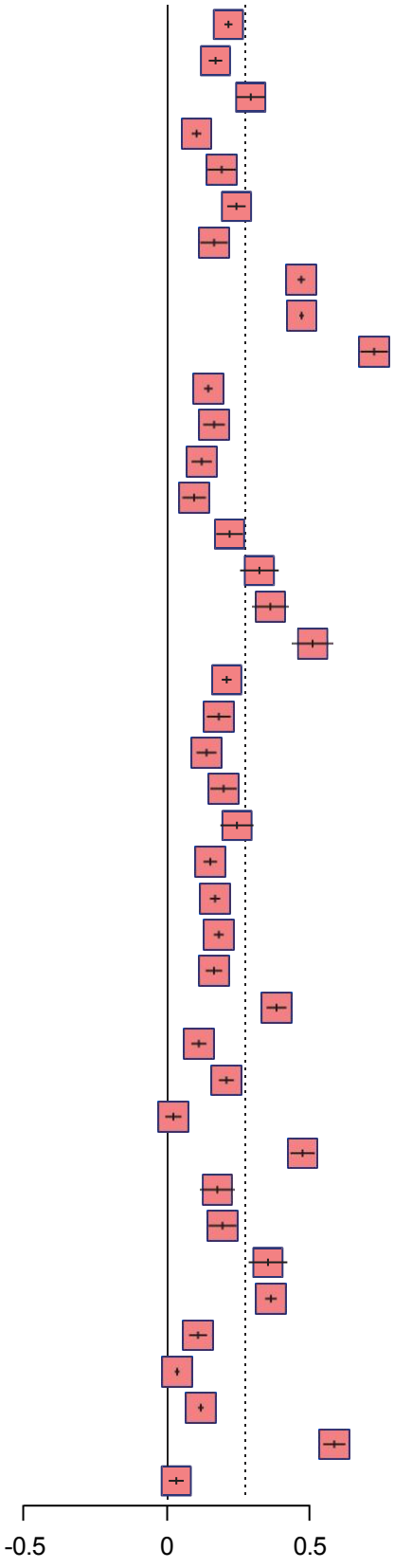
Study	(95% CI)
Cyr (2021)	0.24 [0.20; 0.28]
Das (2021)	0.61 [0.55; 0.66]
Dehon (2021)	0.07 [0.04; 0.11]
Dobson (2021)	0.29 [0.24; 0.34]
Emre (2021)	0.18 [0.13; 0.23]
Engelbrecht (2021)	0.44 [0.39; 0.50]
Fattori (2021)	0.22 [0.18; 0.25]
Feingold (2021)	0.23 [0.22; 0.25]
Flateau (2021)	0.16 [0.12; 0.20]
Geng (2021)	0.11 [0.07; 0.14]
Ghio (2021)	0.34 [0.31; 0.37]
Gilleen (2021)	0.15 [0.13; 0.16]
Gramaglia (2021)	0.36 [0.32; 0.40]
Greenberg (2021)	0.40 [0.36; 0.44]
Greene (2021)	0.22 [0.20; 0.24]
Guo (2021)	0.11 [0.09; 0.13]
Hennein (2021)	0.22 [0.20; 0.24]
Hou (2021)	0.23 [0.20; 0.27]
Ilias (2021)	0.35 [0.28; 0.42]
Jordan (2021)	0.30 [0.29; 0.31]
Kader (2021)	0.18 [0.11; 0.24]
Kheradmand (2021)	0.27 [0.21; 0.33]
Kwobah (2021)	0.65 [0.62; 0.67]
Lamb (2021)	0.30 [0.29; 0.32]
Lamiani (2021)	0.10 [0.07; 0.13]
Lasalvia (2021)	0.72 [0.67; 0.77]
Li (2021)	0.62 [0.57; 0.67]
Lu (2021)	0.15 [0.12; 0.19]
Lum (2021)	0.09 [0.05; 0.12]
Luo (2021)	0.15 [0.12; 0.17]
Marcomini (2021)	0.40 [0.33; 0.47]
Martínez−Caballero (2021)	0.31 [0.26; 0.36]
Mediavilla (2021)	0.52 [0.48; 0.56]
Mei (2021)	0.10 [0.08; 0.13]
Moallef (2021)	0.78 [0.64; 0.92]
Mosheva (2021)	0.14 [0.12; 0.16]
Murata (2021)	0.30 [0.28; 0.32]
TG COVID (2021)	0.73 [0.68; 0.78]
Osório (2021)	0.36 [0.33; 0.39]
Pan (2021)	0.14 [0.11; 0.16]
Pappa (2021)	0.45 [0.40; 0.50]



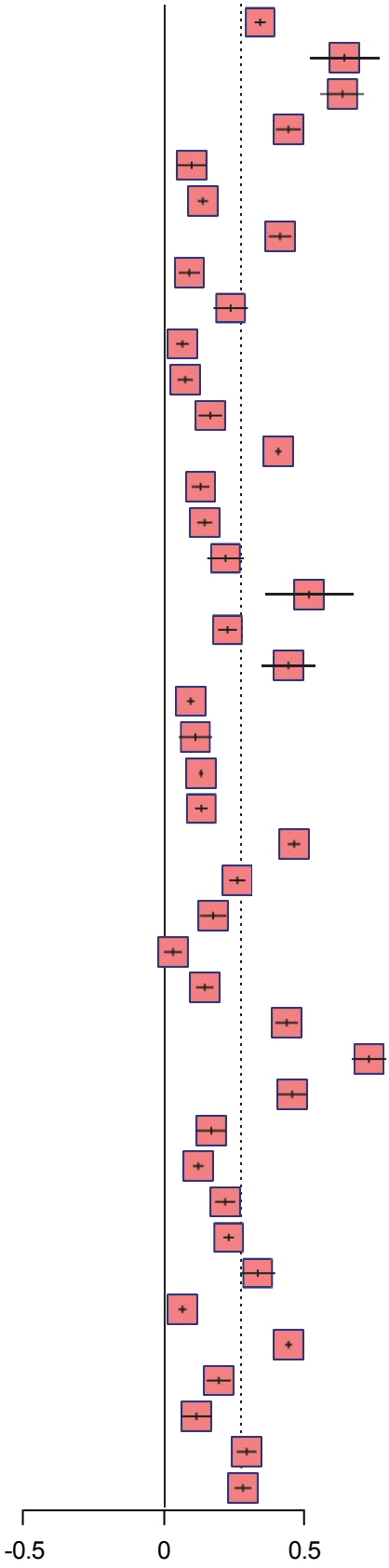
Study	(95% CI)
Erazo (2021)	0.44 [0.41; 0.47]
Plouffe (2021)	0.47 [0.44; 0.49]
Qutishat (2021)	0.36 [0.30; 0.42]
Robles (2021)	0.29 [0.28; 0.31]
Sarapultseva (2021)	0.30 [0.22; 0.38]
Shechter (2021)	0.55 [0.49; 0.62]
Smith (2021)	0.52 [0.50; 0.55]
Sonis (2021)	0.13 [0.10; 0.15]
Styra (2021)	0.50 [0.49; 0.52]
Tomicevic (2021)	0.33 [0.29; 0.37]
Vancappel (2021)	0.58 [0.55; 0.61]
Vance (2021)	0.44 [0.41; 0.46]
Villalba−Arias (2021)	0.06 [0.04; 0.08]
Villarreal−Zegarra (2021)	0.15 [0.10; 0.20]
Voorspoels (2021)	0.06 [0.05; 0.06]
Wright (2021)	0.15 [0.08; 0.22]
Xiong (2021)	0.20 [0.16; 0.24]
Yang (2021)	0.05 [0.05; 0.06]
Yeo (2021)	0.40 [0.35; 0.44]
Zara (2021)	0.37 [0.35; 0.38]
Zhang (2021)	0.13 [0.10; 0.17]
Alam (2022)	0.27 [0.25; 0.29]
Aljaberi (2022)	0.17 [0.07; 0.27]
Issa (2022)	0.36 [0.31; 0.41]
Bayazit (2022)	0.40 [0.38; 0.42]
Bizri (2022)	0.30 [0.23; 0.37]
Bock (2022)	0.15 [0.09; 0.21]
Bonzini (2022)	0.19 [0.17; 0.22]
Brady (2022)	0.04 [0.02; 0.06]
Burhanullah (2022)	0.50 [0.46; 0.54]
Carvalho−Alves (2022)	0.47 [0.44; 0.50]
Chang (2022)	0.35 [0.18; 0.52]
Cleper (2022)	0.14 [0.11; 0.16]
Costantini (2022)	0.41 [0.36; 0.46]
Couper (2022)	0.45 [0.43; 0.46]
Cui (2022)	0.14 [0.11; 0.18]
Czepiel (2022)	0.20 [0.18; 0.22]
d'Ussel (2022)	0.14 [0.12; 0.16]
Da'she (2022)	0.20 [0.15; 0.24]
Diaz (2022)	0.58 [0.55; 0.61]
Dykes (2022)	0.28 [0.20; 0.36]

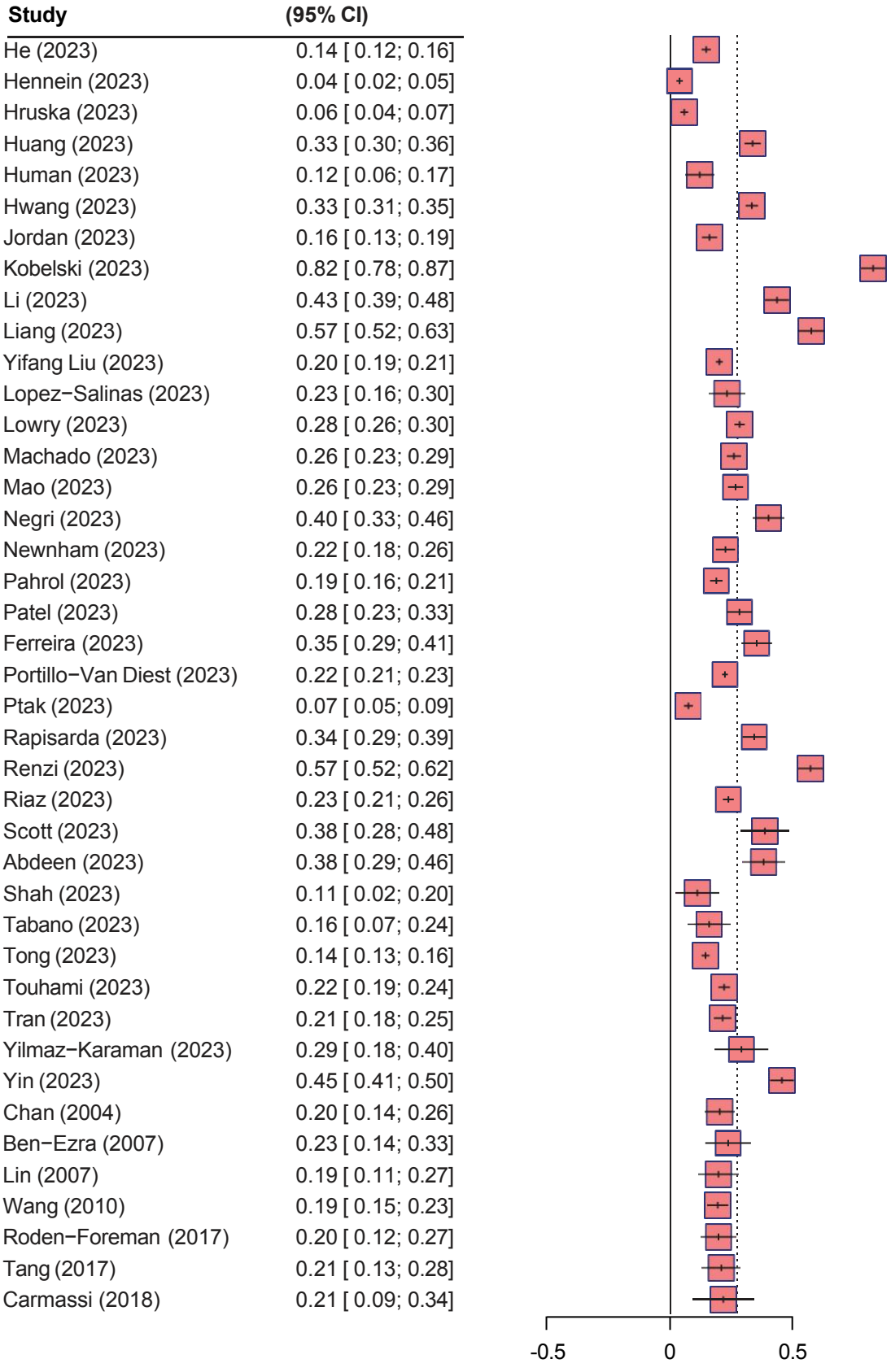


Study	(95% CI)
Fournier (2022)	0.21 [0.20; 0.23]
Fukushima (2022)	0.17 [0.14; 0.19]
Gagliardi (2022)	0.29 [0.24; 0.34]
Mendez (2022)	0.10 [0.08; 0.12]
Guillen−Burgos (2022)	0.19 [0.14; 0.23]
Gündogmus (2022)	0.24 [0.21; 0.27]
Gustafson (2022)	0.16 [0.12; 0.21]
Hall (2022)	0.46 [0.45; 0.48]
Holzinger (2022)	0.47 [0.46; 0.47]
Ilhan (2022)	0.72 [0.67; 0.77]
Jackson (2022)	0.14 [0.13; 0.15]
James (2022)	0.16 [0.13; 0.20]
Johns (2022)	0.12 [0.08; 0.15]
Jovarauskaite (2022)	0.09 [0.05; 0.13]
Korkut (2022)	0.22 [0.17; 0.26]
Kosydar−Bochenek(2022)	0.32 [0.25; 0.39]
Lasalvia (2022)	0.36 [0.29; 0.42]
Latsou (2022)	0.51 [0.43; 0.58]
Laurent (2022)	0.21 [0.19; 0.22]
Lee (2022)	0.18 [0.14; 0.22]
Lekka (2022)	0.14 [0.10; 0.17]
Rojas (2022)	0.19 [0.15; 0.24]
Lei Li (2022)	0.24 [0.18; 0.30]
Minjie Li (2022)	0.15 [0.13; 0.17]
Yifang Liu (2022)	0.16 [0.15; 0.18]
Yang Liu (2022)	0.18 [0.16; 0.19]
Marsden (2022)	0.16 [0.13; 0.19]
Martin−Rodriguez(2022)	0.38 [0.35; 0.41]
Mausz (2022)	0.11 [0.08; 0.14]
McGuinness (2022)	0.20 [0.18; 0.23]
Meena (2022)	0.02 [−0.01; 0.05]
Mennicken (2022)	0.47 [0.43; 0.51]
Metz (2022)	0.17 [0.11; 0.23]
Minelli (2022)	0.19 [0.15; 0.24]
Irene Ng (2022)	0.35 [0.28; 0.42]
Ng (2022)	0.36 [0.34; 0.38]
Ouyang (2022)	0.11 [0.08; 0.14]
Pascoe (2022)	0.03 [0.03; 0.04]
Piacentini (2022)	0.12 [0.11; 0.12]
Qi (2022)	0.58 [0.54; 0.62]
Reid (2022)	0.03 [0.00; 0.06]

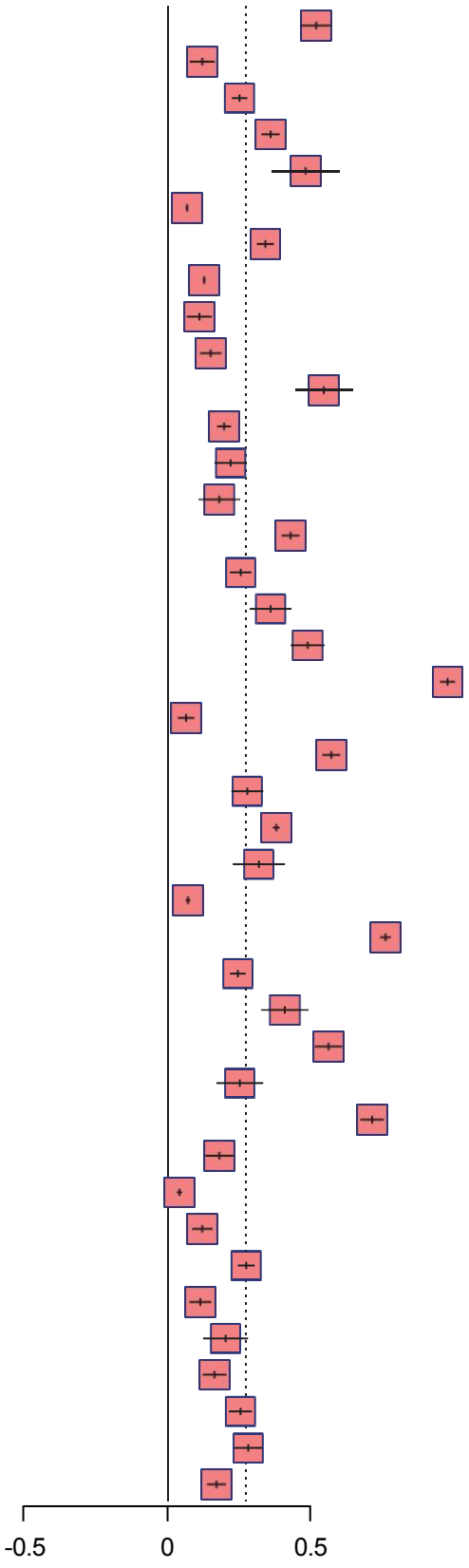


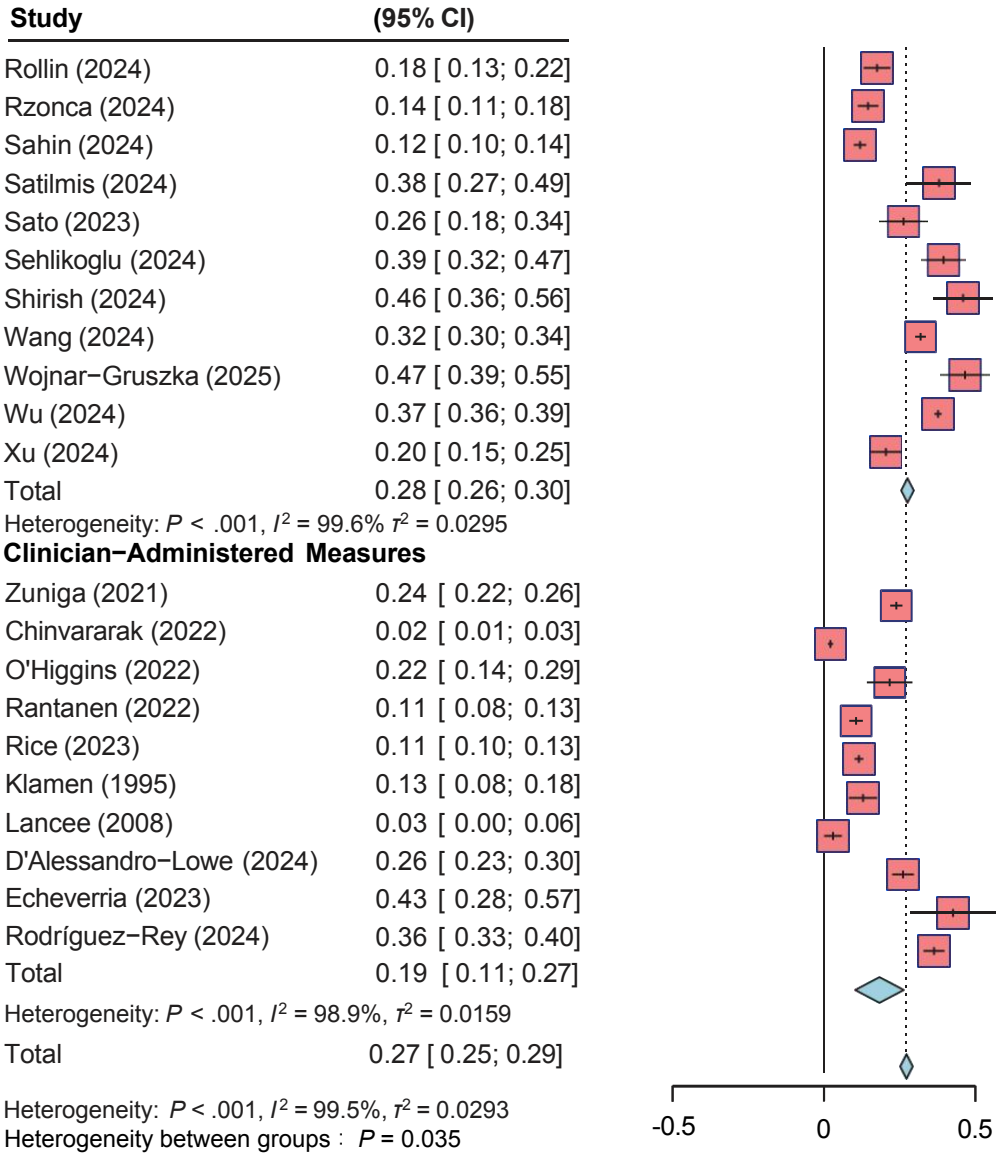
Study	(95% CI)
Robles (2022)	0.34 [0.32; 0.36]
Rodríguez−Rey (2022)	0.64 [0.51; 0.76]
Sachdeva (2021)	0.63 [0.55; 0.71]
Sanayeh (2022)	0.44 [0.40; 0.48]
Sar−El (2022)	0.10 [0.05; 0.15]
Schou−Bredal (2022)	0.14 [0.12; 0.15]
Schwartz (2022)	0.41 [0.37; 0.45]
Shahsavarinia (2022)	0.09 [0.05; 0.13]
Sangrà (2021)	0.23 [0.17; 0.30]
Stafseth (2022)	0.06 [0.04; 0.09]
Tebbeb (2022)	0.07 [0.05; 0.10]
Th'ng (2022)	0.16 [0.12; 0.20]
Tham (2022)	0.40 [0.39; 0.41]
Tong (2022)	0.13 [0.10; 0.16]
Tucker (2022)	0.14 [0.11; 0.17]
Vadi (2022)	0.22 [0.15; 0.28]
Van Steenkiste (2022)	0.51 [0.36; 0.67]
Van Wert (2022)	0.22 [0.19; 0.26]
Wild (2021)	0.44 [0.34; 0.54]
Yang (2022)	0.09 [0.08; 0.10]
Yao (2022)	0.11 [0.05; 0.17]
Young (2022)	0.13 [0.12; 0.14]
Yu (2022)	0.13 [0.11; 0.15]
Zhang (2022)	0.46 [0.44; 0.48]
Zhong (2022)	0.26 [0.23; 0.28]
Zhu (2022)	0.17 [0.13; 0.22]
Adams (2023)	0.03 [−0.00; 0.06]
Alshehri (2023)	0.14 [0.11; 0.17]
Banakar (2023)	0.43 [0.40; 0.47]
Bouaddi (2023)	0.72 [0.66; 0.79]
Brady (2023)	0.45 [0.40; 0.50]
Brunelli (2023)	0.16 [0.11; 0.22]
Cabrolier (2023)	0.12 [0.10; 0.14]
Conejero (2023)	0.21 [0.18; 0.25]
Costa (2023)	0.23 [0.21; 0.25]
D'Alessandro−Lowe (2023)	0.33 [0.27; 0.39]
Danson (2023)	0.06 [0.05; 0.07]
Dong (2023)	0.44 [0.43; 0.45]
Doukas (2023)	0.19 [0.15; 0.23]
Gaber (2023)	0.11 [0.06; 0.16]
Gambaro (2023)	0.29 [0.26; 0.32]
Gesi (2023)	0.28 [0.25; 0.30]




Study
(95% CI)
He (2023) 0.14 [0.12; 0.16]
Hennein (2023) 0.04 [0.02; 0.05]
Hruska (2023) 0.06 [0.04; 0.07]
Huang (2023) 0.33 [0.30; 0.36]
Human (2023) 0.12 [0.06; 0.17]
Hwang (2023) 0.33 [0.31; 0.35]
Jordan (2023) 0.16 [0.13; 0.19]
Kobelski (2023) 0.82 [0.78; 0.87]
Li (2023) 0.43 [0.39; 0.48]
Liang (2023) 0.57 [0.52; 0.63]
Yifang Liu (2023) 0.20 [0.19; 0.21]
Lopez−Salinas (2023) 0.23 [0.16; 0.30]
Lowry (2023) 0.28 [0.26; 0.30]
Machado (2023) 0.26 [0.23; 0.29]
Mao (2023) 0.26 [0.23; 0.29]
Negri (2023) 0.40 [0.33; 0.46]
Newnham (2023) 0.22 [0.18; 0.26]
Pahrol (2023) 0.19 [0.16; 0.21]
Patel (2023) 0.28 [0.23; 0.33]
Ferreira (2023) 0.35 [0.29; 0.41]
Portillo−Van Diest (2023) 0.22 [0.21; 0.23]
Ptak (2023) 0.07 [0.05; 0.09]
Rapisarda (2023) 0.34 [0.29; 0.39]
Renzi (2023) 0.57 [0.52; 0.62]
Riaz (2023) 0.23 [0.21; 0.26]
Scott (2023) 0.38 [0.28; 0.48]
Abdeen (2023) 0.38 [0.29; 0.46]
Shah (2023) 0.11 [0.02; 0.20]
Tabano (2023) 0.16 [0.07; 0.24]
Tong (2023) 0.14 [0.13; 0.16]
Touhami (2023) 0.22 [0.19; 0.24]
Tran (2023) 0.21 [0.18; 0.25]
Yilmaz−Karaman (2023) 0.29 [0.18; 0.40]
Yin (2023) 0.45 [0.41; 0.50]
Chan (2004) 0.20 [0.14; 0.26]
Ben−Ezra (2007) 0.23 [0.14; 0.33]
Lin (2007) 0.19 [0.11; 0.27]
Wang (2010) 0.19 [0.15; 0.23]
Roden−Foreman (2017) 0.20 [0.12; 0.27]
Tang (2017) 0.21 [0.13; 0.28]
Carmassi (2018) 0.21 [0.09; 0.34]
-0.5
0
0.5

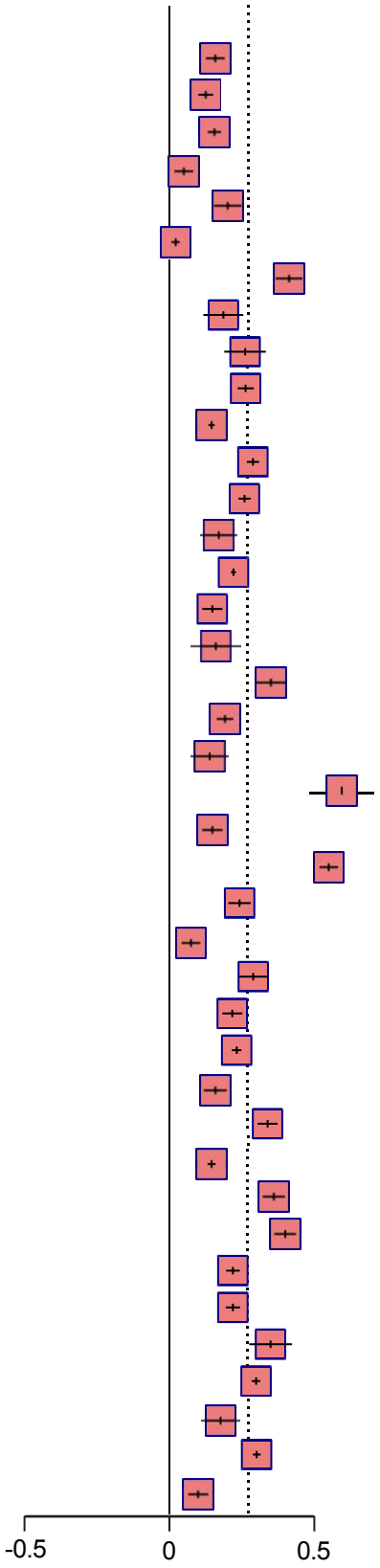
Study	(95% CI)
Lee (2018)	0.52 [0.46; 0.57]
Stefano (2018)	0.12 [0.08; 0.16]
AlJaberi (2024)	0.25 [0.22; 0.28]
Azoulay (2024)	0.36 [0.33; 0.39]
Cardinalli (2024)	0.48 [0.36; 0.60]
Chen (2023)	0.07 [0.06; 0.07]
de Souza Junior (2024)	0.34 [0.31; 0.37]
Dempsey (2024)	0.13 [0.12; 0.13]
Douplat (2024)	0.11 [0.07; 0.15]
Dufour (2021)	0.15 [0.11; 0.18]
El Kinany (2024)	0.54 [0.44; 0.64]
Fournier (2025)	0.19 [0.17; 0.22]
Gascon−Santos (2024)	0.22 [0.16; 0.27]
Ghafoori (2024)	0.18 [0.11; 0.25]
Giménez−Díez (2024)	0.43 [0.40; 0.46]
Gu (2022)	0.25 [0.22; 0.29]
Guimarães (2025)	0.36 [0.28; 0.43]
Guzzon (2024)	0.49 [0.43; 0.54]
Hamdan−Mansour (2025)	0.97 [0.95; 1.00]
Hovland (2023)	0.06 [0.03; 0.09]
Hussein (2025)	0.57 [0.54; 0.60]
Isiek (2024)	0.28 [0.22; 0.33]
Jing (2025)	0.37 [0.36; 0.39]
Kambulandu (2024)	0.32 [0.23; 0.41]
Li (2024)	0.07 [0.06; 0.08]
Li (2025)	0.76 [0.74; 0.77]
Huan Liu (2023)	0.24 [0.22; 0.27]
Loureiro (2023)	0.41 [0.33; 0.49]
Malakoutikhah (2024)	0.56 [0.51; 0.60]
Maliwichi (2024)	0.25 [0.17; 0.33]
Mani (2023)	0.71 [0.67; 0.75]
Mao (2025)	0.18 [0.13; 0.23]
Melander (2024)	0.04 [0.03; 0.05]
Mersin (2025)	0.12 [0.09; 0.15]
Molina (2024)	0.27 [0.24; 0.30]
Namgung (2025)	0.11 [0.08; 0.15]
Ntalouka (2024)	0.20 [0.12; 0.28]
Rao (2023)	0.16 [0.12; 0.20]
Rigas (2025)	0.25 [0.21; 0.29]
Ripoll (2024)	0.28 [0.23; 0.33]
Roger (2024)	0.17 [0.14; 0.20]



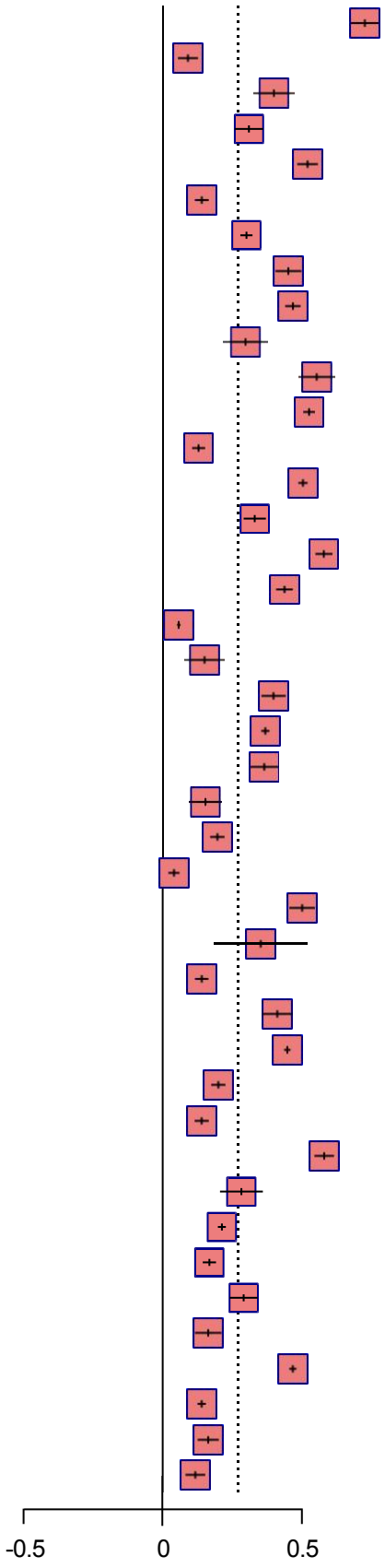

Study
(95% CI)
Rollin (2024) 0.18 [0.13; 0.22]
Rzonca (2024) 0.14 [0.11; 0.18]
Sahin (2024) 0.12 [0.10; 0.14]
Satilmis (2024) 0.38 [0.27; 0.49]
Sato (2023) 0.26 [0.18; 0.34]
Sehlikoglu (2024) 0.39 [0.32; 0.47]
Shirish (2024) 0.46 [0.36; 0.56]
Wang (2024) 0.32 [0.30; 0.34]
Wojnar−Gruszka (2025) 0.47 [0.39; 0.55]
Wu (2024) 0.37 [0.36; 0.39]
Xu (2024) 0.20 [0.15; 0.25]
Total 0.28 [0.26; 0.30]
Heterogeneity: P < .001, I² = 99.6% τ² = 0.0295
Clinician−Administered Measures
Zuniga (2021) 0.24 [0.22; 0.26]
Chinvararak (2022) 0.02 [0.01; 0.03]
O'Higgins (2022) 0.22 [0.14; 0.29]
Rantanen (2022) 0.11 [0.08; 0.13]
Rice (2023) 0.11 [0.10; 0.13]
Klamen (1995) 0.13 [0.08; 0.18]
Lancee (2008) 0.03 [0.00; 0.06]
D'Alessandro−Lowe (2024) 0.26 [0.23; 0.30]
Echeverria (2023) 0.43 [0.28; 0.57]
Rodríguez−Rey (2024) 0.36 [0.33; 0.40]
Total 0.19 [0.11; 0.27]
Heterogeneity: P < .001, I² = 98.9%, τ² = 0.0159
Total 0.27 [0.25; 0.29]
Heterogeneity: P < .001, I² = 99.5%, τ² = 0.0293
Heterogeneity between groups : P = 0.035
-0.5
0
0.5

(m) Prevalence of PTSD by country income level.

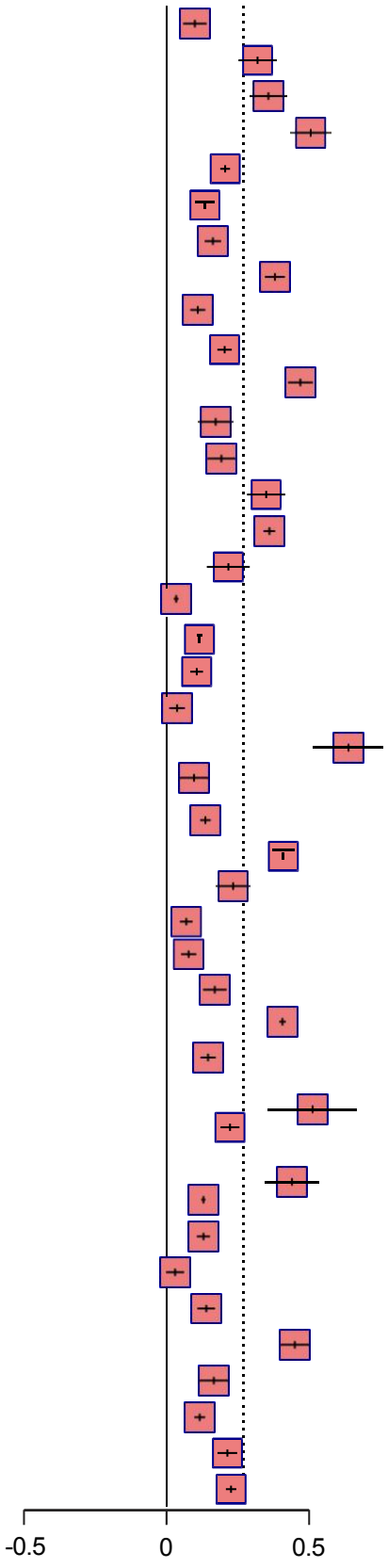
Study	(95% CI)
High−income	
DeLucia (2019)	0.16 [0.13; 0.19]
Gregory (2019)	0.12 [0.10; 0.15]
Jackson (2019)	0.16 [0.13; 0.18]
Kannan (2019)	0.05 [0.02; 0.08]
Rodríguez−Rey (2019)	0.20 [0.16; 0.25]
van Steijn (2019)	0.02 [0.01; 0.04]
Ali (2020)	0.41 [0.37; 0.46]
Demartini (2020)	0.19 [0.12; 0.26]
Di Tella (2020)	0.26 [0.19; 0.33]
Dosil (2020)	0.26 [0.24; 0.29]
Haravuori (2020)	0.15 [0.14; 0.16]
Johnson (2020)	0.29 [0.27; 0.31]
Jones (2020)	0.26 [0.24; 0.28]
Lange (2020)	0.17 [0.11; 0.23]
Alonso (2020)	0.22 [0.21; 0.23]
Alshehri (2021)	0.15 [0.11; 0.18]
Altmayer (2020)	0.16 [0.07; 0.25]
Amsalem (2021)	0.35 [0.30; 0.40]
Bahadirli (2021)	0.19 [0.16; 0.22]
Bates (2021)	0.14 [0.08; 0.20]
Carmassi (2021)	0.59 [0.48; 0.71]
Chatzittofis (2021)	0.15 [0.12; 0.18]
Conti (2021)	0.55 [0.52; 0.58]
Cyr (2021)	0.24 [0.20; 0.28]
Dehon (2021)	0.07 [0.04; 0.11]
Dobson (2021)	0.29 [0.24; 0.34]
Fattori (2021)	0.22 [0.18; 0.25]
Feingold (2021)	0.23 [0.22; 0.25]
Flateau (2021)	0.16 [0.12; 0.20]
Ghio (2021)	0.34 [0.31; 0.37]
Gilleen (2021)	0.15 [0.13; 0.16]
Gramaglia (2021)	0.36 [0.32; 0.40]
Greenberg (2021)	0.40 [0.36; 0.44]
Greene (2021)	0.22 [0.20; 0.24]
Hennein (2021)	0.22 [0.20; 0.24]
Ilias (2021)	0.35 [0.28; 0.42]
Jordan (2021)	0.30 [0.29; 0.31]
Kader (2021)	0.18 [0.11; 0.24]
Lamb (2021)	0.30 [0.29; 0.32]
Lamiani (2021)	0.10 [0.07; 0.13]



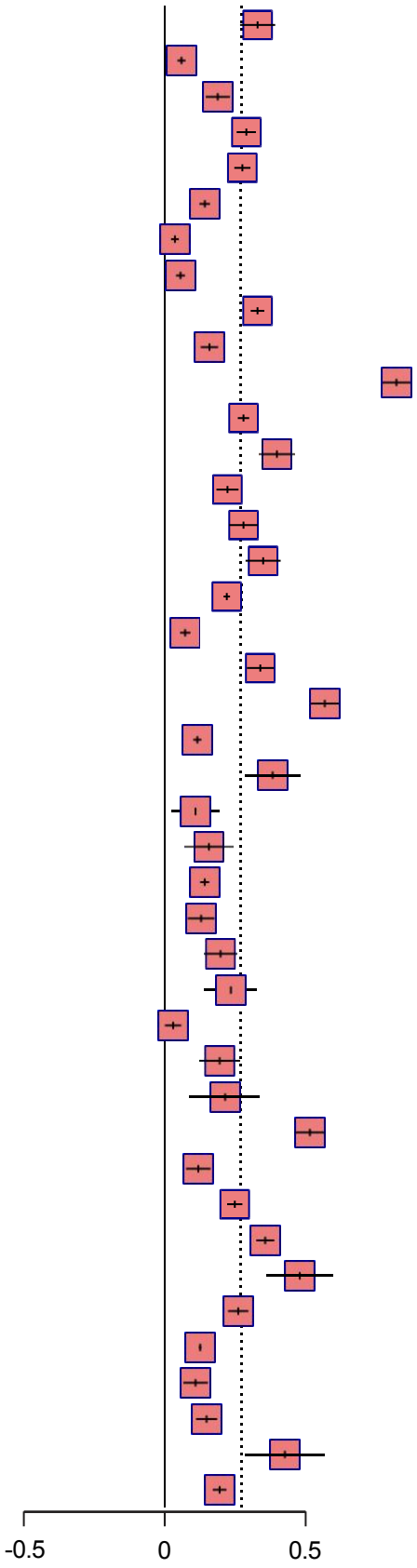
Study	(95% CI)
Lasalvia (2021)	0.72 [0.67; 0.77]
Lum (2021)	0.09 [0.05; 0.12]
Marcomini (2021)	0.40 [0.33; 0.47]
Martínez−Caballero (2021)	0.31 [0.26; 0.36]
Mediavilla (2021)	0.52 [0.48; 0.56]
Mosheva (2021)	0.14 [0.12; 0.16]
Murata (2021)	0.30 [0.28; 0.32]
Pappa (2021)	0.45 [0.40; 0.50]
Plouffe (2021)	0.47 [0.44; 0.49]
Sarapultseva (2021)	0.30 [0.22; 0.38]
Shechter (2021)	0.55 [0.49; 0.62]
Smith (2021)	0.52 [0.50; 0.55]
Sonis (2021)	0.13 [0.10; 0.15]
Styra (2021)	0.50 [0.49; 0.52]
Tomicevic (2021)	0.33 [0.29; 0.37]
Vancappel (2021)	0.58 [0.55; 0.61]
Vance (2021)	0.44 [0.41; 0.46]
Voorspoels (2021)	0.06 [0.05; 0.06]
Wright (2021)	0.15 [0.08; 0.22]
Yeo (2021)	0.40 [0.35; 0.44]
Zara (2021)	0.37 [0.35; 0.38]
Issa (2022)	0.36 [0.31; 0.41]
Bock (2022)	0.15 [0.09; 0.21]
Bonzini (2022)	0.19 [0.17; 0.22]
Brady (2022)	0.04 [0.02; 0.06]
Burhanullah (2022)	0.50 [0.46; 0.54]
Chang (2022)	0.35 [0.18; 0.52]
Cleper (2022)	0.14 [0.11; 0.16]
Costantini (2022)	0.41 [0.36; 0.46]
Couper (2022)	0.45 [0.43; 0.46]
Czepiel (2022)	0.20 [0.18; 0.22]
d'Ussel (2022)	0.14 [0.12; 0.16]
Diaz (2022)	0.58 [0.55; 0.61]
Dykes (2022)	0.28 [0.20; 0.36]
Fournier (2022)	0.21 [0.20; 0.23]
Fukushima (2022)	0.17 [0.14; 0.19]
Gagliardi (2022)	0.29 [0.24; 0.34]
Gustafson (2022)	0.16 [0.12; 0.21]
Hall (2022)	0.46 [0.45; 0.48]
Jackson (2022)	0.14 [0.13; 0.15]
James (2022)	0.16 [0.13; 0.20]
Johns (2022)	0.12 [0.08; 0.15]

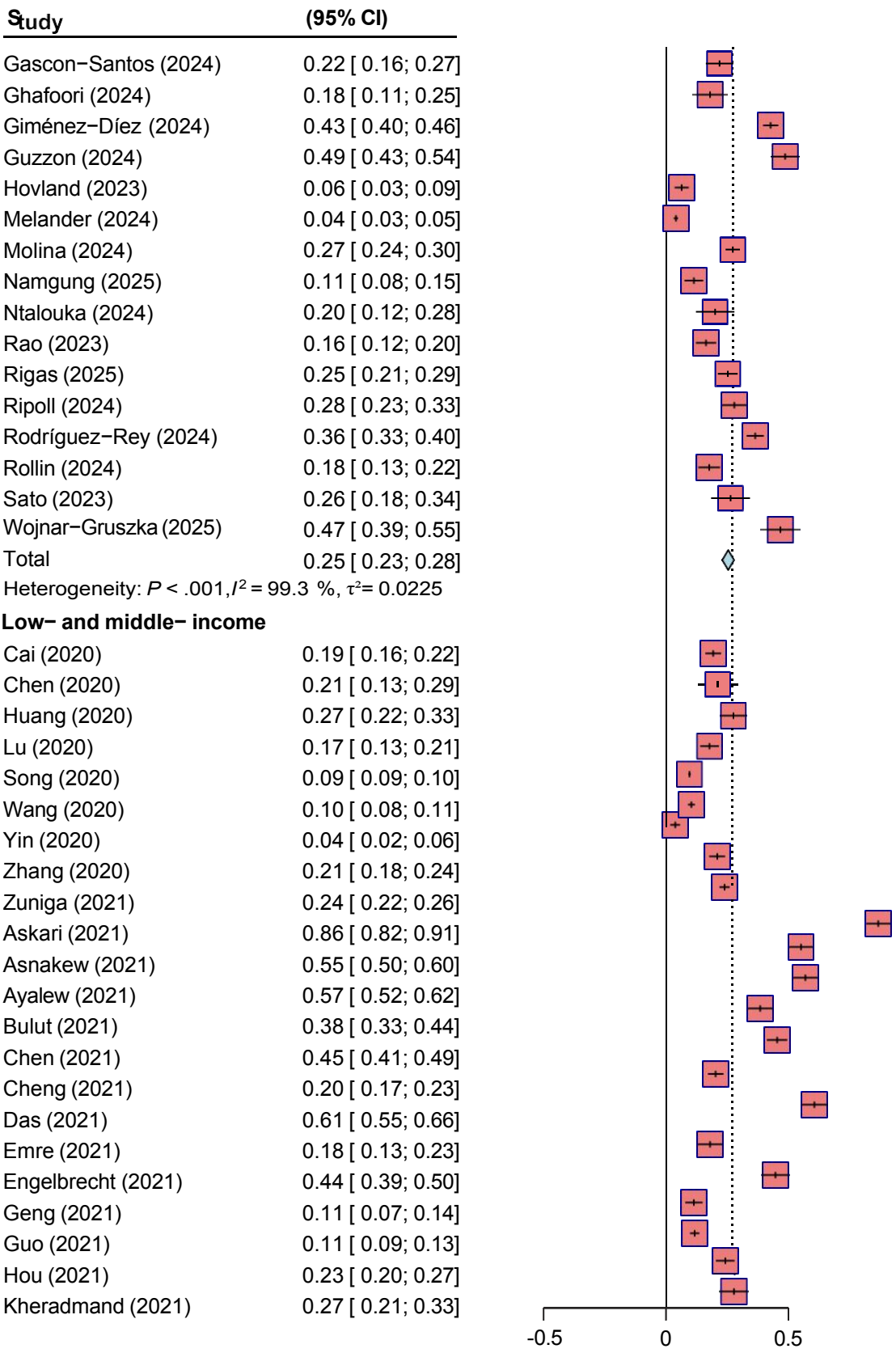


Study	(95% CI)
Jovarauskaite (2022)	0.09 [0.05; 0.13]
Kosydar−Bochenek (2022)	0.32 [0.25; 0.39]
Lasalvia (2022)	0.36 [0.29; 0.42]
Latsou (2022)	0.51 [0.43; 0.58]
Laurent (2022)	0.21 [0.19; 0.22]
Lekka (2022)	0.14 [0.10; 0.17]
Marsden (2022)	0.16 [0.13; 0.19]
Martin−Rodriguez (2022)	0.38 [0.35; 0.41]
Mausz (2022)	0.11 [0.08; 0.14]
McGuinness (2022)	0.20 [0.18; 0.23]
Mennicken (2022)	0.47 [0.43; 0.51]
Metz (2022)	0.17 [0.11; 0.23]
Minelli (2022)	0.19 [0.15; 0.24]
Irene Ng (2022)	0.35 [0.28; 0.42]
Ng (2022)	0.36 [0.34; 0.38]
O'Higgins (2022)	0.22 [0.14; 0.29]
Pascoe (2022)	0.03 [0.03; 0.04]
Piacentini (2022)	0.12 [0.11; 0.12]
Rantanen (2022)	0.11 [0.08; 0.13]
Reid (2022)	0.03 [0.00; 0.06]
Rodríguez−Rey (2022)	0.64 [0.51; 0.76]
Sar−El (2022)	0.10 [0.05; 0.15]
Schou−Bredal (2022)	0.14 [0.12; 0.15]
Schwartz (2022)	0.41 [0.37; 0.45]
Sangrà (2021)	0.23 [0.17; 0.30]
Stafseth (2022)	0.06 [0.04; 0.09]
Tebbeb (2022)	0.07 [0.05; 0.10]
Th'ng (2022)	0.16 [0.12; 0.20]
Tham (2022)	0.40 [0.39; 0.41]
Tucker (2022)	0.14 [0.11; 0.17]
Van Steenkiste (2022)	0.51 [0.36; 0.67]
Van Wert (2022)	0.22 [0.19; 0.26]
Wild (2021)	0.44 [0.34; 0.54]
Young (2022)	0.13 [0.12; 0.14]
Yu (2022)	0.13 [0.11; 0.15]
Adams (2023)	0.03 [−0.00; 0.06]
Alshehri (2023)	0.14 [0.11; 0.17]
Brady (2023)	0.45 [0.40; 0.50]
Brunelli (2023)	0.16 [0.11; 0.22]
Cabrolier (2023)	0.12 [0.10; 0.14]
Conejero (2023)	0.21 [0.18; 0.25]
Costa (2023)	0.23 [0.21; 0.25]

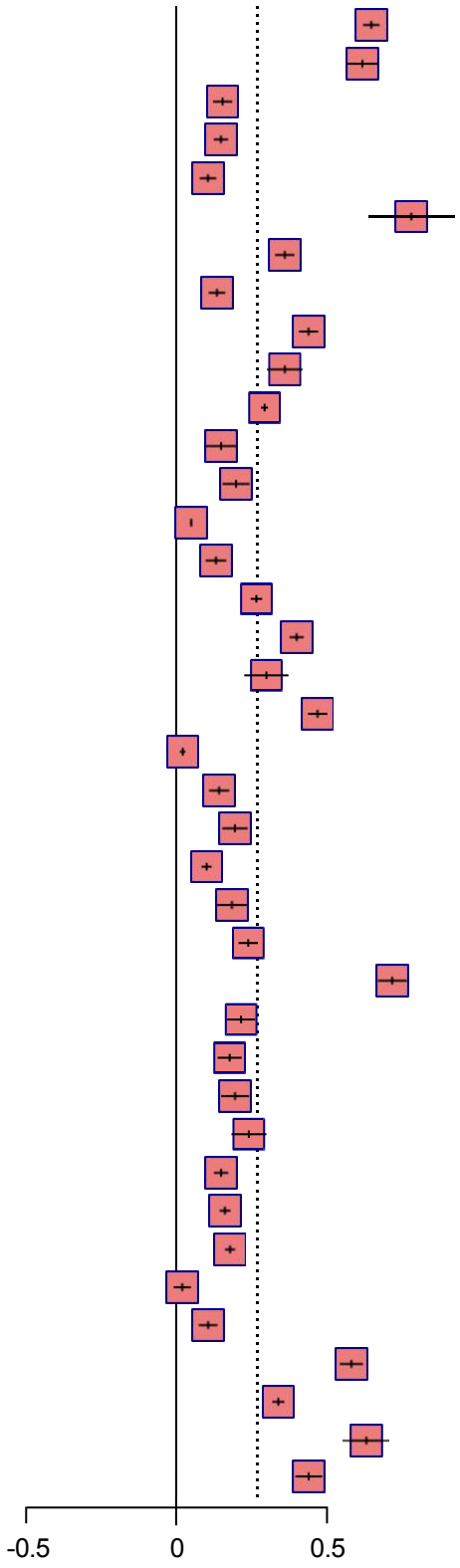


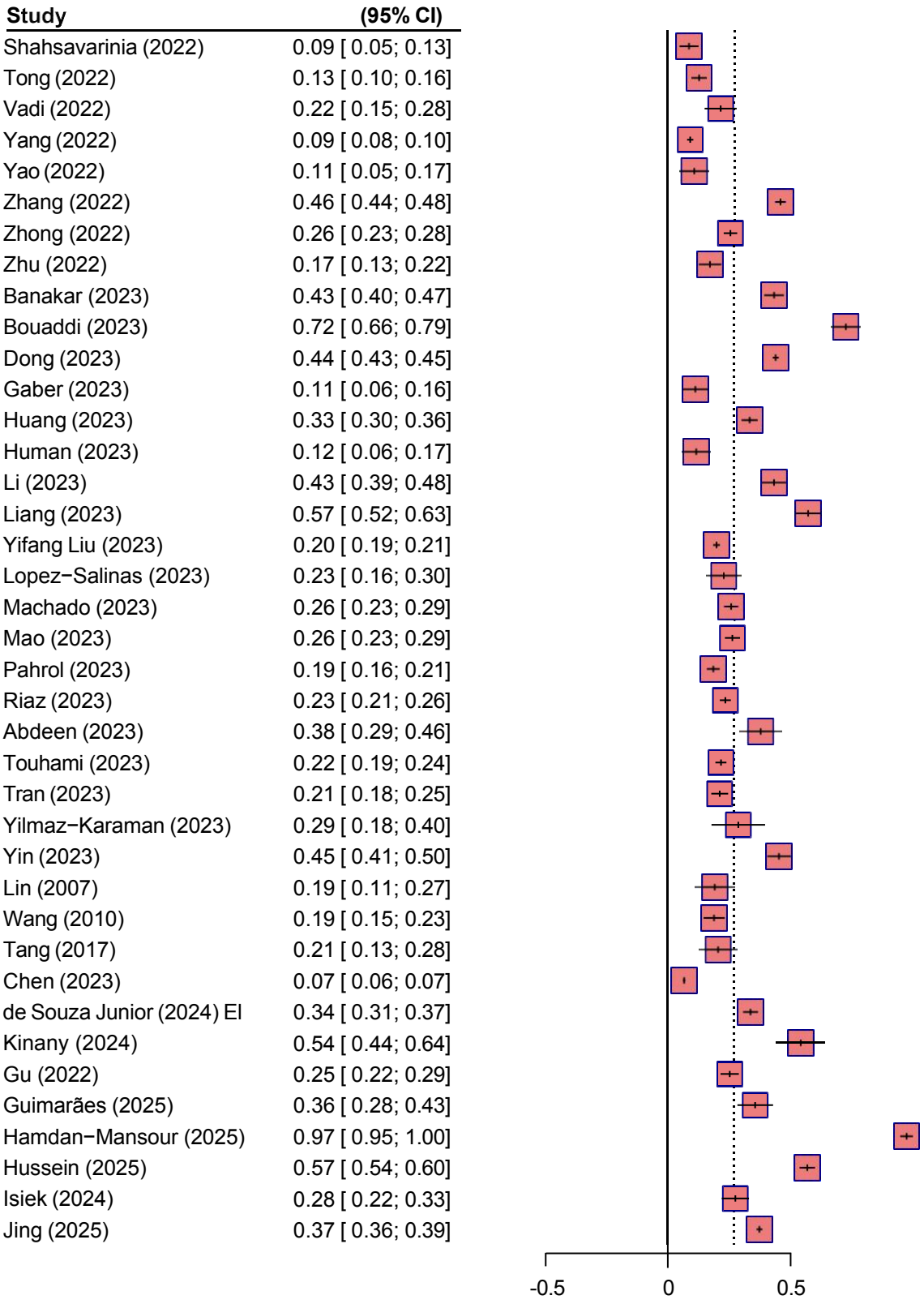
Study	(95% CI)
D'Alessandro−Lowe (2023)	0.33 [0.27; 0.39]
Danson (2023)	0.06 [0.05; 0.07]
Doukas (2023)	0.19 [0.15; 0.23]
Gambaro (2023)	0.29 [0.26; 0.32]
Gesi (2023)	0.28 [0.25; 0.30]
He (2023)	0.14 [0.12; 0.16]
Hennein (2023)	0.04 [0.02; 0.05]
Hruska (2023)	0.06 [0.04; 0.07]
Hwang (2023)	0.33 [0.31; 0.35]
Jordan (2023)	0.16 [0.13; 0.19]
Kobelski (2023)	0.82 [0.78; 0.87]
Lowry (2023)	0.28 [0.26; 0.30]
Negri (2023)	0.40 [0.33; 0.46]
Newnham (2023)	0.22 [0.18; 0.26]
Patel (2023)	0.28 [0.23; 0.33]
Ferreira (2023)	0.35 [0.29; 0.41]
Portillo−Van Diest (2023)	0.22 [0.21; 0.23]
Ptak (2023)	0.07 [0.05; 0.09]
Rapisarda (2023)	0.34 [0.29; 0.39]
Renzi (2023)	0.57 [0.52; 0.62]
Rice (2023)	0.11 [0.10; 0.13]
Scott (2023)	0.38 [0.28; 0.48]
Shah (2023)	0.11 [0.02; 0.20]
Tabano (2023)	0.16 [0.07; 0.24]
Tong (2023)	0.14 [0.13; 0.16]
Klamen (1995)	0.13 [0.08; 0.18]
Chan (2004)	0.20 [0.14; 0.26]
Ben−Ezra (2007)	0.23 [0.14; 0.33]
Lancee (2008)	0.03 [0.00; 0.06]
Roden−Foreman (2017)	0.20 [0.12; 0.27]
Carmassi (2018)	0.21 [0.09; 0.34]
Lee (2018)	0.52 [0.46; 0.57]
Stefano (2018)	0.12 [0.08; 0.16]
AlJaberi (2024)	0.25 [0.22; 0.28]
Azoulay (2024)	0.36 [0.33; 0.39]
Cardinalli (2024)	0.48 [0.36; 0.60]
D'Alessandro−Lowe (2024)	0.26 [0.23; 0.30]
Dempsey (2024)	0.13 [0.12; 0.13]
Douplat (2024)	0.11 [0.07; 0.15]
Dufour (2021)	0.15 [0.11; 0.18]
Echeverria (2023)	0.43 [0.28; 0.57]
Fournier (2025)	0.19 [0.17; 0.22]




Study
(95% CI)
Gascon−Santos (2024) 0.22 [0.16; 0.27]
Ghafoori (2024) 0.18 [0.11; 0.25]
Giménez−Díez (2024) 0.43 [0.40; 0.46]
Guzzon (2024) 0.49 [0.43; 0.54]
Hovland (2023) 0.06 [0.03; 0.09]
Melander (2024) 0.04 [0.03; 0.05]
Molina (2024) 0.27 [0.24; 0.30]
Namgung (2025) 0.11 [0.08; 0.15]
Ntalouka (2024) 0.20 [0.12; 0.28]
Rao (2023) 0.16 [0.12; 0.20]
Rigas (2025) 0.25 [0.21; 0.29]
Ripoll (2024) 0.28 [0.23; 0.33]
Rodríguez−Rey (2024) 0.36 [0.33; 0.40]
Rollin (2024) 0.18 [0.13; 0.22]
Sato (2023) 0.26 [0.18; 0.34]
Wojnar−Gruszka (2025) 0.47 [0.39; 0.55]
Total 0.25 [0.23; 0.28]
Heterogeneity: $P < .001, I^2 = 99.3$ %, $\tau^2 = 0.0225$
Low− and middle− income
Cai (2020) 0.19 [0.16; 0.22]
Chen (2020) 0.21 [0.13; 0.29]
Huang (2020) 0.27 [0.22; 0.33]
Lu (2020) 0.17 [0.13; 0.21]
Song (2020) 0.09 [0.09; 0.10]
Wang (2020) 0.10 [0.08; 0.11]
Yin (2020) 0.04 [0.02; 0.06]
Zhang (2020) 0.21 [0.18; 0.24]
Zuniga (2021) 0.24 [0.22; 0.26]
Askari (2021) 0.86 [0.82; 0.91]
Asnakew (2021) 0.55 [0.50; 0.60]
Ayalew (2021) 0.57 [0.52; 0.62]
Bulut (2021) 0.38 [0.33; 0.44]
Chen (2021) 0.45 [0.41; 0.49]
Cheng (2021) 0.20 [0.17; 0.23]
Das (2021) 0.61 [0.55; 0.66]
Emre (2021) 0.18 [0.13; 0.23]
Engelbrecht (2021) 0.44 [0.39; 0.50]
Geng (2021) 0.11 [0.07; 0.14]
Guo (2021) 0.11 [0.09; 0.13]
Hou (2021) 0.23 [0.20; 0.27]
Kheradmand (2021) 0.27 [0.21; 0.33]
-0.5
0
0.5

Study	(95% CI)
Kwobah (2021)	0.65 [0.62; 0.67]
Li (2021)	0.62 [0.57; 0.67]
Lu (2021)	0.15 [0.12; 0.19]
Luo (2021)	0.15 [0.12; 0.17]
Mei (2021)	0.10 [0.08; 0.13]
Moallef (2021)	0.78 [0.64; 0.92]
Osório (2021)	0.36 [0.33; 0.39]
Pan (2021)	0.14 [0.11; 0.16]
Erazo (2021)	0.44 [0.41; 0.47]
Qutishat (2021)	0.36 [0.30; 0.42]
Robles (2021)	0.29 [0.28; 0.31]
Villarreal−Zegarra (2021)	0.15 [0.10; 0.20]
Xiong (2021)	0.20 [0.16; 0.24]
Yang (2021)	0.05 [0.05; 0.06]
Zhang (2021)	0.13 [0.10; 0.17]
Alam (2022)	0.27 [0.25; 0.29]
Bayazit (2022)	0.40 [0.38; 0.42]
Bizri (2022)	0.30 [0.23; 0.37]
Carvalho−Alves (2022)	0.47 [0.44; 0.50]
Chinvararak (2022)	0.02 [0.01; 0.03]
Cui (2022)	0.14 [0.11; 0.18]
Da'she (2022)	0.20 [0.15; 0.24]
Mendez (2022)	0.10 [0.08; 0.12]
Guillen−Burgos (2022)	0.19 [0.14; 0.23]
Gündogmus (2022)	0.24 [0.21; 0.27]
Ilhan (2022)	0.72 [0.67; 0.77]
Korkut (2022)	0.22 [0.17; 0.26]
Lee (2022)	0.18 [0.14; 0.22]
Rojas (2022)	0.19 [0.15; 0.24]
Lei Li (2022)	0.24 [0.18; 0.30]
Minjie Li (2022)	0.15 [0.13; 0.17]
Yifang Liu (2022)	0.16 [0.15; 0.18]
Yang Liu (2022)	0.18 [0.16; 0.19]
Meena (2022)	0.02 [−0.01; 0.05]
Ouyang (2022)	0.11 [0.08; 0.14]
Qi (2022)	0.58 [0.54; 0.62]
Robles (2022)	0.34 [0.32; 0.36]
Sachdeva (2021)	0.63 [0.55; 0.71]
Sanayeh (2022)	0.44 [0.40; 0.48]

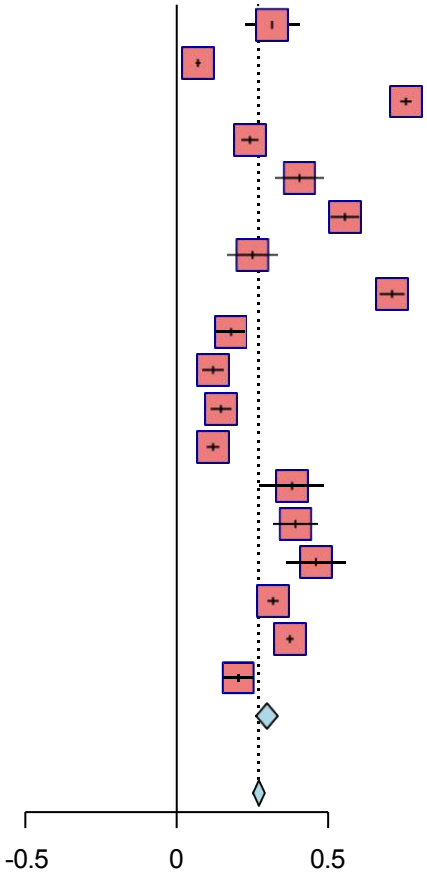



Study
(95% CI)
Shahsavarinia (2022) 0.09 [0.05; 0.13]
Tong (2022) 0.13 [0.10; 0.16]
Vadi (2022) 0.22 [0.15; 0.28]
Yang (2022) 0.09 [0.08; 0.10]
Yao (2022) 0.11 [0.05; 0.17]
Zhang (2022) 0.46 [0.44; 0.48]
Zhong (2022) 0.26 [0.23; 0.28]
Zhu (2022) 0.17 [0.13; 0.22]
Banakar (2023) 0.43 [0.40; 0.47]
Bouaddi (2023) 0.72 [0.66; 0.79]
Dong (2023) 0.44 [0.43; 0.45]
Gaber (2023) 0.11 [0.06; 0.16]
Huang (2023) 0.33 [0.30; 0.36]
Human (2023) 0.12 [0.06; 0.17]
Li (2023) 0.43 [0.39; 0.48]
Liang (2023) 0.57 [0.52; 0.63]
Yifang Liu (2023) 0.20 [0.19; 0.21]
Lopez−Salinas (2023) 0.23 [0.16; 0.30]
Machado (2023) 0.26 [0.23; 0.29]
Mao (2023) 0.26 [0.23; 0.29]
Pahrol (2023) 0.19 [0.16; 0.21]
Riaz (2023) 0.23 [0.21; 0.26]
Abdeen (2023) 0.38 [0.29; 0.46]
Touhami (2023) 0.22 [0.19; 0.24]
Tran (2023) 0.21 [0.18; 0.25]
Yilmaz−Karaman (2023) 0.29 [0.18; 0.40]
Yin (2023) 0.45 [0.41; 0.50]
Lin (2007) 0.19 [0.11; 0.27]
Wang (2010) 0.19 [0.15; 0.23]
Tang (2017) 0.21 [0.13; 0.28]
Chen (2023) 0.07 [0.06; 0.07]
de Souza Junior (2024) El 0.34 [0.31; 0.37]
Kinany (2024) 0.54 [0.44; 0.64]
Gu (2022) 0.25 [0.22; 0.29]
Guimarães (2025) 0.36 [0.28; 0.43]
Hamdan−Mansour (2025) 0.97 [0.95; 1.00]
Hussein (2025) 0.57 [0.54; 0.60]
Isiek (2024) 0.28 [0.22; 0.33]
Jing (2025) 0.37 [0.36; 0.39]
-0.5
0
0.5

Study	(95% CI)
Kambulandu (2024)	0.32 [0.23; 0.41]
Li (2024)	0.07 [0.06; 0.08]
Li (2025)	0.76 [0.74; 0.77]
Huan Liu (2023)	0.24 [0.22; 0.27]
Loureiro (2023)	0.41 [0.33; 0.49]
Malakoutikhah (2024)	0.56 [0.51; 0.60]
Maliwichi (2024)	0.25 [0.17; 0.33]
Mani (2023)	0.71 [0.67; 0.75]
Mao (2025)	0.18 [0.13; 0.23]
Mersin (2025)	0.12 [0.09; 0.15]
Rzonca (2024)	0.14 [0.11; 0.18]
Sahin (2024)	0.12 [0.10; 0.14]
Satilmis (2024)	0.38 [0.27; 0.49]
Sehlikoglu (2024)	0.39 [0.32; 0.47]
Shirish (2024)	0.46 [0.36; 0.56]
Wang (2024)	0.32 [0.30; 0.34]
Wu (2024)	0.37 [0.36; 0.39]
Xu (2024)	0.20 [0.15; 0.25]
Total	0.30 [0.27; 0.34]
Heterogeneity: $P < .001$, $I^2 = 99.7\%$, $\tau^2 = 0.0372$	
Total	0.27 [0.25; 0.29]

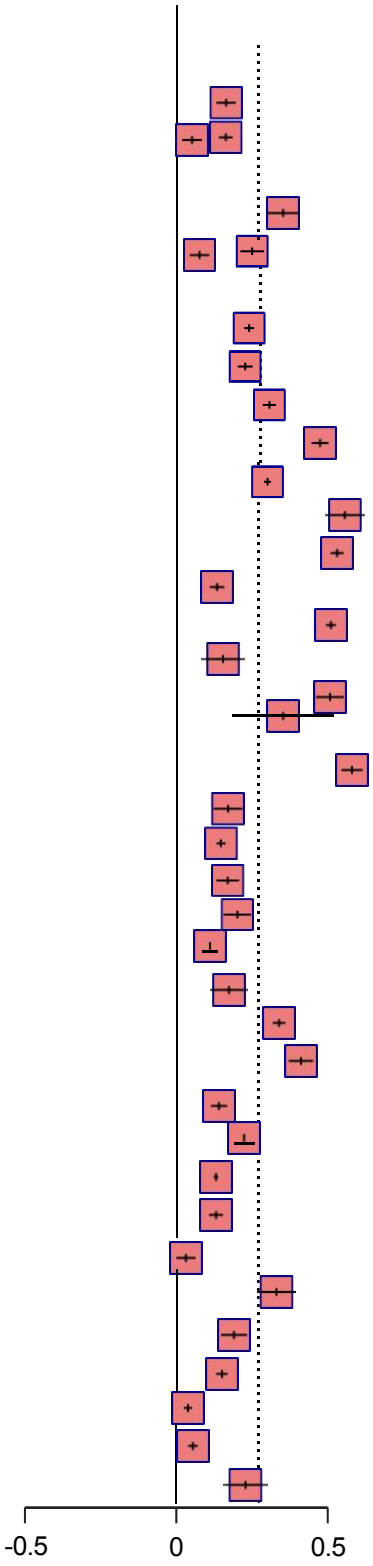
Heterogeneity: $P < .001$, $I^2 = 99.5\%$, $\tau^2 = 0.0287$

Test for subgroup differences: $P = 0.029$

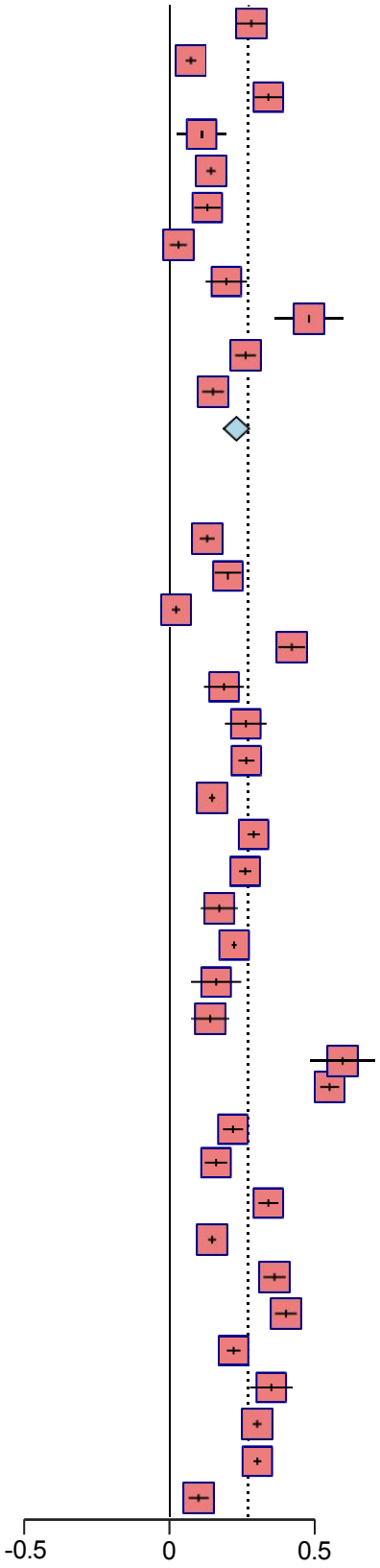


(n) Prevalence of PTSD by continent.

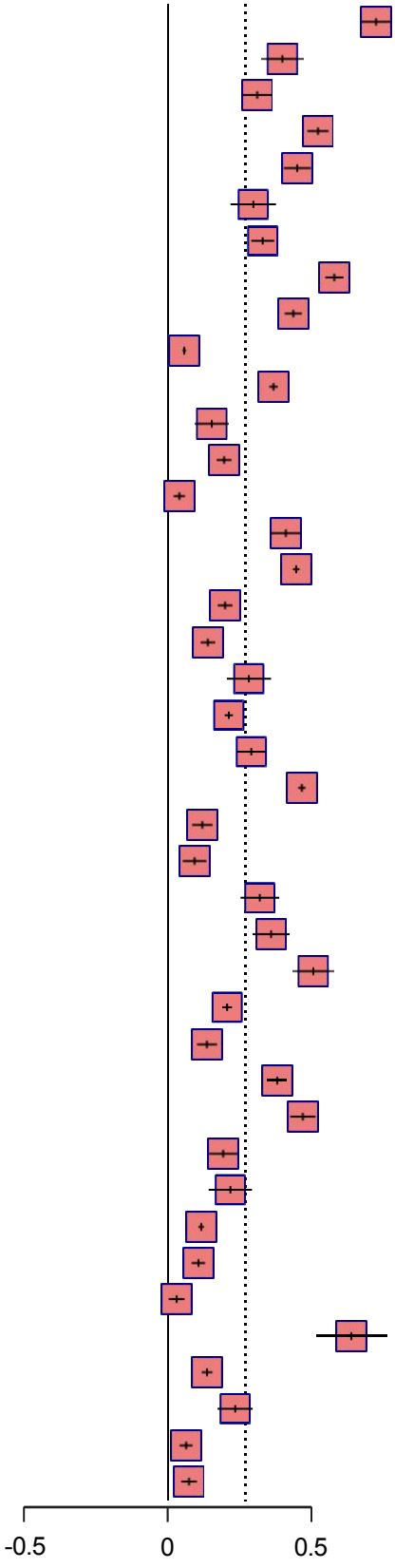
Study	(95% CI)
North America	
DeLucia (2019)	0.16 [0.13; 0.19]
Jackson (2019)	0.16 [0.13; 0.18]
Kannan (2019)	0.05 [0.02; 0.08]
Amsalem (2021)	0.35 [0.30; 0.40]
Cyr (2021)	0.24 [0.20; 0.28]
Dehon (2021)	0.07 [0.04; 0.11]
Feingold (2021)	0.23 [0.22; 0.25]
Hennein (2021)	0.22 [0.20; 0.24]
Murata (2021)	0.30 [0.28; 0.32]
Plouffe (2021)	0.47 [0.44; 0.49]
Robles (2021)	0.29 [0.28; 0.31]
Shechter (2021)	0.55 [0.49; 0.62]
Smith (2021)	0.52 [0.50; 0.55]
Sonis (2021)	0.13 [0.10; 0.15]
Styra (2021)	0.50 [0.49; 0.52]
Wright (2021)	0.15 [0.08; 0.22]
Burhanullah (2022)	0.50 [0.46; 0.54]
Chang (2022)	0.35 [0.18; 0.52]
Diaz (2022)	0.58 [0.55; 0.61]
Gustafson (2022)	0.16 [0.12; 0.21]
Jackson (2022)	0.14 [0.13; 0.15]
James (2022)	0.16 [0.13; 0.20]
Rojas (2022)	0.19 [0.15; 0.24]
Mausz (2022)	0.11 [0.08; 0.14]
Metz (2022)	0.17 [0.11; 0.23]
Robles (2022)	0.34 [0.32; 0.36]
Schwartz (2022)	0.41 [0.37; 0.45]
Tucker (2022)	0.14 [0.11; 0.17]
Van Wert (2022)	0.22 [0.19; 0.26]
Young (2022)	0.13 [0.12; 0.14]
Yu (2022)	0.13 [0.11; 0.15]
Adams (2023)	0.03 [−0.00; 0.06]
D'Alessandro−Lowe (2023)	0.33 [0.27; 0.39]
Doukas (2023)	0.19 [0.15; 0.23]
He (2023)	0.14 [0.12; 0.16]
Hennein (2023)	0.04 [0.02; 0.05]
Hruska (2023)	0.06 [0.04; 0.07]
Lopez−Salinas (2023)	0.23 [0.16; 0.30]



Study	(95% CI)
Patel (2023)	0.28 [0.23; 0.33]
Ptak (2023)	0.07 [0.05; 0.09]
Rapisarda (2023)	0.34 [0.29; 0.39]
Shah (2023)	0.11 [0.02; 0.20]
Tong (2023)	0.14 [0.13; 0.16]
Klamen (1995)	0.13 [0.08; 0.18]
Lancee (2008)	0.03 [0.00; 0.06]
Roden−Foreman (2017)	0.20 [0.12; 0.27]
Cardinalli (2024)	0.48 [0.36; 0.60]
D'Alessandro−Lowe (2024)	0.26 [0.23; 0.30]
Dufour (2021)	0.15 [0.11; 0.18]
Total	0.23 [0.19; 0.27]
Heterogeneity: $P < .001, I^2 = 99.3\%, \tau^2 = 0.0214$	
Europe	
Gregory (2019)	0.12 [0.10; 0.15]
Rodríguez−Rey (2019)	0.20 [0.16; 0.25]
van Steijn (2019)	0.02 [0.01; 0.04]
Ali (2020)	0.41 [0.37; 0.46]
Demartini (2020)	0.19 [0.12; 0.26]
Di Tella (2020)	0.26 [0.19; 0.33]
Dosil (2020)	0.26 [0.24; 0.29]
Haravuori (2020)	0.15 [0.14; 0.16]
Johnson (2020)	0.29 [0.27; 0.31]
Jones (2020)	0.26 [0.24; 0.28]
Lange (2020)	0.17 [0.11; 0.23]
Alonso (2020)	0.22 [0.21; 0.23]
Altmayer (2020)	0.16 [0.07; 0.25]
Bates (2021)	0.14 [0.08; 0.20]
Carmassi (2021)	0.59 [0.48; 0.71]
Conti (2021)	0.55 [0.52; 0.58]
Fattori (2021)	0.22 [0.18; 0.25]
Flateau (2021)	0.16 [0.12; 0.20]
Ghio (2021)	0.34 [0.31; 0.37]
Gilleen (2021)	0.15 [0.13; 0.16]
Gramaglia (2021)	0.36 [0.32; 0.40]
Greenberg (2021)	0.40 [0.36; 0.44]
Greene (2021)	0.22 [0.20; 0.24]
Ilias (2021)	0.35 [0.28; 0.42]
Jordan (2021)	0.30 [0.29; 0.31]
Lamb (2021)	0.30 [0.29; 0.32]
Lamiani (2021)	0.10 [0.07; 0.13]

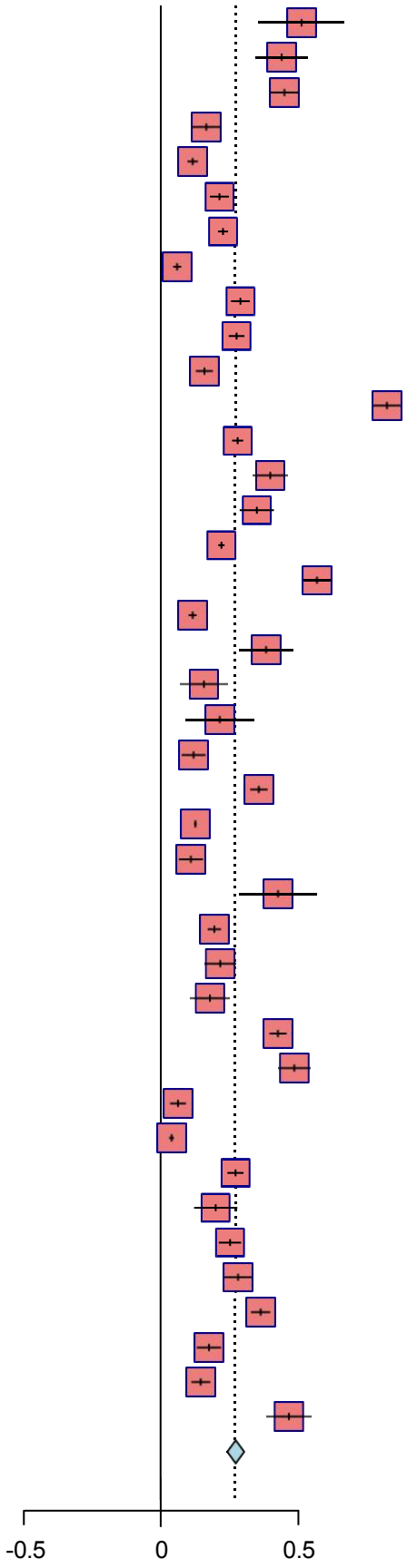


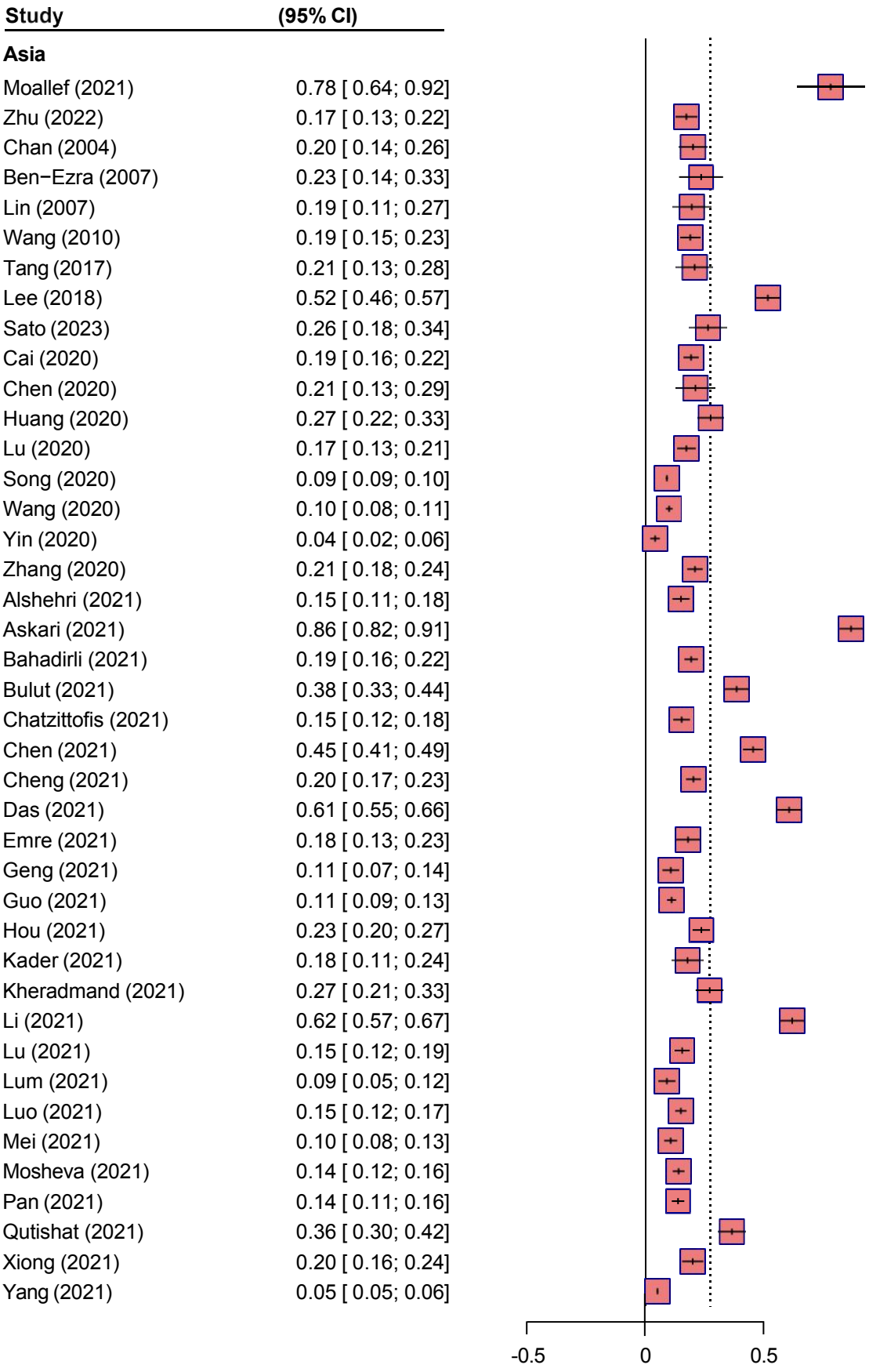
Study	(95% CI)
Lasalvia (2021)	0.72 [0.67; 0.77]
Marcomini (2021)	0.40 [0.33; 0.47]
Martínez−Caballero (2021)	0.31 [0.26; 0.36]
Mediavilla (2021)	0.52 [0.48; 0.56]
Pappa (2021)	0.45 [0.40; 0.50]
Sarapultseva (2021)	0.30 [0.22; 0.38]
Tomicevic (2021)	0.33 [0.29; 0.37]
Vancappel (2021)	0.58 [0.55; 0.61]
Vance (2021)	0.44 [0.41; 0.46]
Voorspoels (2021)	0.06 [0.05; 0.06]
Zara (2021)	0.37 [0.35; 0.38]
Bock (2022)	0.15 [0.09; 0.21]
Bonzini (2022)	0.19 [0.17; 0.22]
Brady (2022)	0.04 [0.02; 0.06]
Costantini (2022)	0.41 [0.36; 0.46]
Couper (2022)	0.45 [0.43; 0.46]
Czepiel (2022)	0.20 [0.18; 0.22]
d'Ussel (2022)	0.14 [0.12; 0.16]
Dykes (2022)	0.28 [0.20; 0.36]
Fournier (2022)	0.21 [0.20; 0.23]
Gagliardi (2022)	0.29 [0.24; 0.34]
Hall (2022)	0.46 [0.45; 0.48]
Johns (2022)	0.12 [0.08; 0.15]
Jovarauskaite (2022)	0.09 [0.05; 0.13]
Kosydar−Bochenek (2022)	0.32 [0.25; 0.39]
Lasalvia (2022)	0.36 [0.29; 0.42]
Latsou (2022)	0.51 [0.43; 0.58]
Laurent (2022)	0.21 [0.19; 0.22]
Lekka (2022)	0.14 [0.10; 0.17]
Martin−Rodriguez (2022)	0.38 [0.35; 0.41]
Mennicken (2022)	0.47 [0.43; 0.51]
Minelli (2022)	0.19 [0.15; 0.24]
O'Higgins (2022)	0.22 [0.14; 0.29]
Piacentini (2022)	0.12 [0.11; 0.12]
Rantanen (2022)	0.11 [0.08; 0.13]
Reid (2022)	0.03 [0.00; 0.06]
Rodríguez−Rey (2022)	0.64 [0.51; 0.76]
Schou−Bredal (2022)	0.14 [0.12; 0.15]
Sangrà (2021)	0.23 [0.17; 0.30]
Stafseth (2022)	0.06 [0.04; 0.09]
Tebbeb (2022)	0.07 [0.05; 0.10]



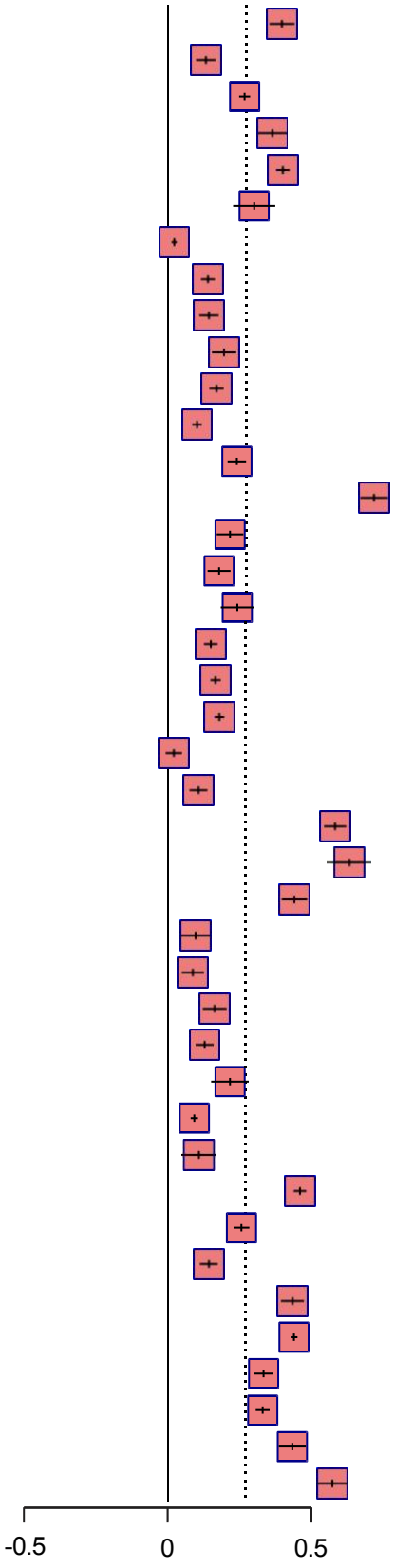
Study	(95% CI)
Van Steenkiste (2022)	0.51 [0.36; 0.67]
Wild (2021)	0.44 [0.34; 0.54]
Brady (2023)	0.45 [0.40; 0.50]
Brunelli (2023)	0.16 [0.11; 0.22]
Cabrolier (2023)	0.12 [0.10; 0.14]
Conejero (2023)	0.21 [0.18; 0.25]
Costa (2023)	0.23 [0.21; 0.25]
Danson (2023)	0.06 [0.05; 0.07]
Gambaro (2023)	0.29 [0.26; 0.32]
Gesi (2023)	0.28 [0.25; 0.30]
Jordan (2023)	0.16 [0.13; 0.19]
Kobelski (2023)	0.82 [0.78; 0.87]
Lowry (2023)	0.28 [0.26; 0.30]
Negri (2023)	0.40 [0.33; 0.46]
Ferreira (2023)	0.35 [0.29; 0.41]
Portillo−Van Diest (2023)	0.22 [0.21; 0.23]
Renzi (2023)	0.57 [0.52; 0.62]
Rice (2023)	0.11 [0.10; 0.13]
Scott (2023)	0.38 [0.28; 0.48]
Tabano (2023)	0.16 [0.07; 0.24]
Carmassi (2018)	0.21 [0.09; 0.34]
Stefano (2018)	0.12 [0.08; 0.16]
Azoulay (2024)	0.36 [0.33; 0.39]
Dempsey (2024)	0.13 [0.12; 0.13]
Douplat (2024)	0.11 [0.07; 0.15]
Echeverria (2023)	0.43 [0.28; 0.57]
Fournier (2025)	0.19 [0.17; 0.22]
Gascon−Santos (2024)	0.22 [0.16; 0.27]
Ghafoori (2024)	0.18 [0.11; 0.25]
Giménez−Díez (2024)	0.43 [0.40; 0.46]
Guzzon (2024)	0.49 [0.43; 0.54]
Hovland (2023)	0.06 [0.03; 0.09]
Melander (2024)	0.04 [0.03; 0.05]
Molina (2024)	0.27 [0.24; 0.30]
Ntalouka (2024)	0.20 [0.12; 0.28]
Rigas (2025)	0.25 [0.21; 0.29]
Ripoll (2024)	0.28 [0.23; 0.33]
Rodríguez−Rey (2024)	0.36 [0.33; 0.40]
Rollin (2024)	0.18 [0.13; 0.22]
Rzonca (2024)	0.14 [0.11; 0.18]
Wojnar−Gruszka (2025)	0.47 [0.39; 0.55]
Total	0.27 [0.24; 0.30]

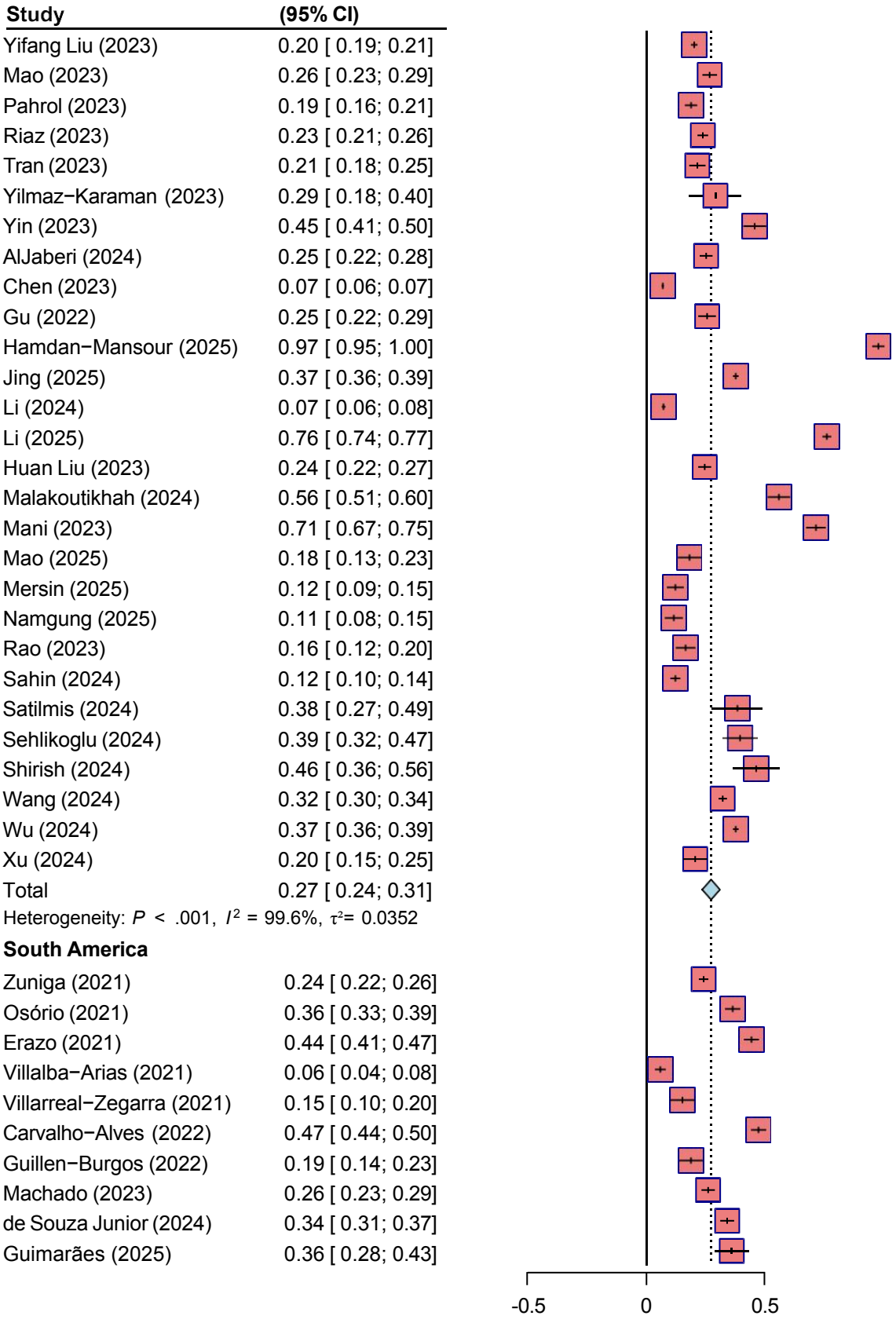
Heterogeneity: $P < .001$, $I^2 = 99.4\%$, $\tau^2 = 0.0244$

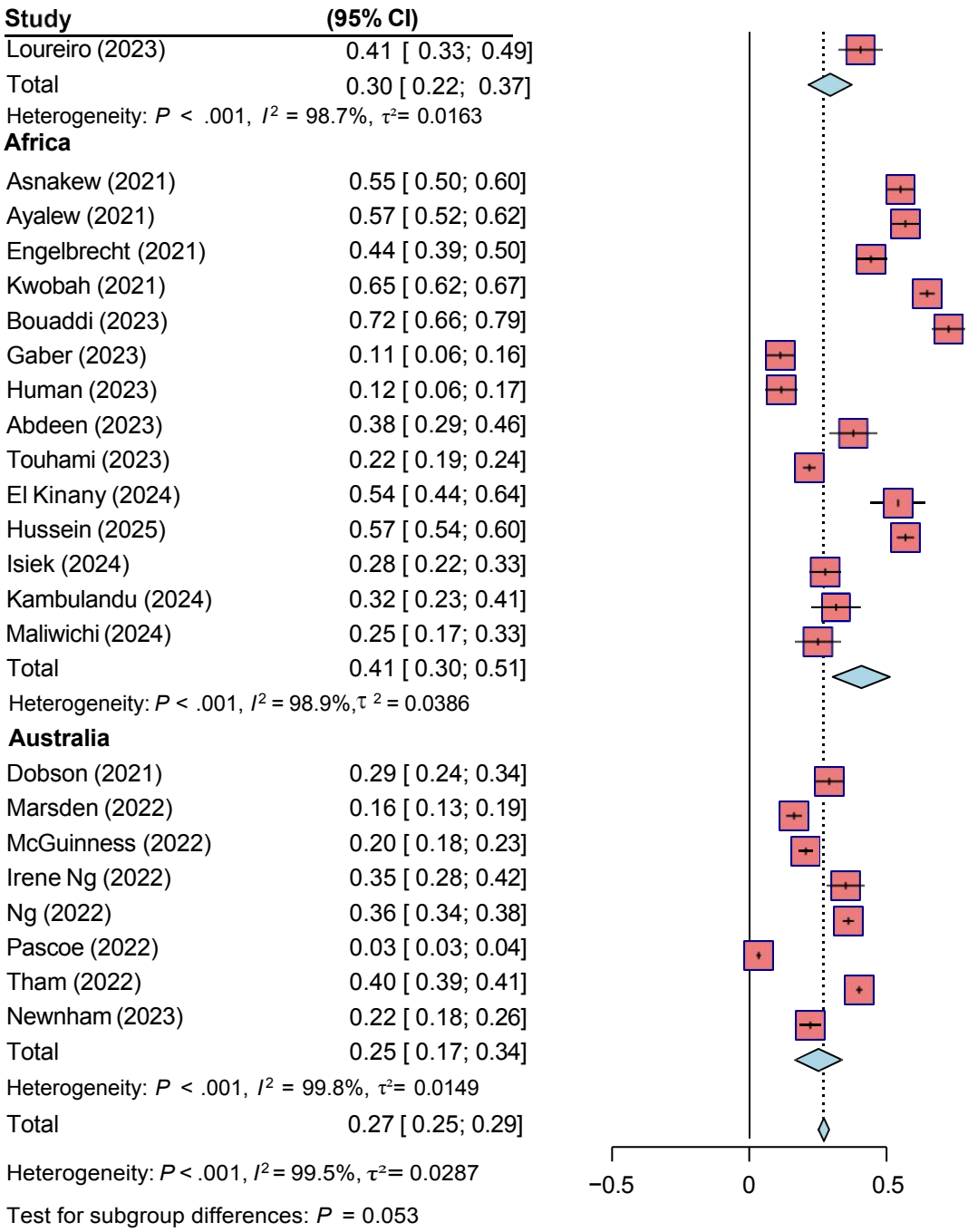



Study
(95% CI)
Asia
Moallef (2021) 0.78 [0.64; 0.92]
Zhu (2022) 0.17 [0.13; 0.22]
Chan (2004) 0.20 [0.14; 0.26]
Ben−Ezra (2007) 0.23 [0.14; 0.33]
Lin (2007) 0.19 [0.11; 0.27]
Wang (2010) 0.19 [0.15; 0.23]
Tang (2017) 0.21 [0.13; 0.28]
Lee (2018) 0.52 [0.46; 0.57]
Sato (2023) 0.26 [0.18; 0.34]
Cai (2020) 0.19 [0.16; 0.22]
Chen (2020) 0.21 [0.13; 0.29]
Huang (2020) 0.27 [0.22; 0.33]
Lu (2020) 0.17 [0.13; 0.21]
Song (2020) 0.09 [0.09; 0.10]
Wang (2020) 0.10 [0.08; 0.11]
Yin (2020) 0.04 [0.02; 0.06]
Zhang (2020) 0.21 [0.18; 0.24]
Alshehri (2021) 0.15 [0.11; 0.18]
Askari (2021) 0.86 [0.82; 0.91]
Bahadirli (2021) 0.19 [0.16; 0.22]
Bulut (2021) 0.38 [0.33; 0.44]
Chatzittofis (2021) 0.15 [0.12; 0.18]
Chen (2021) 0.45 [0.41; 0.49]
Cheng (2021) 0.20 [0.17; 0.23]
Das (2021) 0.61 [0.55; 0.66]
Emre (2021) 0.18 [0.13; 0.23]
Geng (2021) 0.11 [0.07; 0.14]
Guo (2021) 0.11 [0.09; 0.13]
Hou (2021) 0.23 [0.20; 0.27]
Kader (2021) 0.18 [0.11; 0.24]
Kheradmand (2021) 0.27 [0.21; 0.33]
Li (2021) 0.62 [0.57; 0.67]
Lu (2021) 0.15 [0.12; 0.19]
Lum (2021) 0.09 [0.05; 0.12]
Luo (2021) 0.15 [0.12; 0.17]
Mei (2021) 0.10 [0.08; 0.13]
Mosheva (2021) 0.14 [0.12; 0.16]
Pan (2021) 0.14 [0.11; 0.16]
Qutishat (2021) 0.36 [0.30; 0.42]
Xiong (2021) 0.20 [0.16; 0.24]
Yang (2021) 0.05 [0.05; 0.06]
-0.5
0
0.5

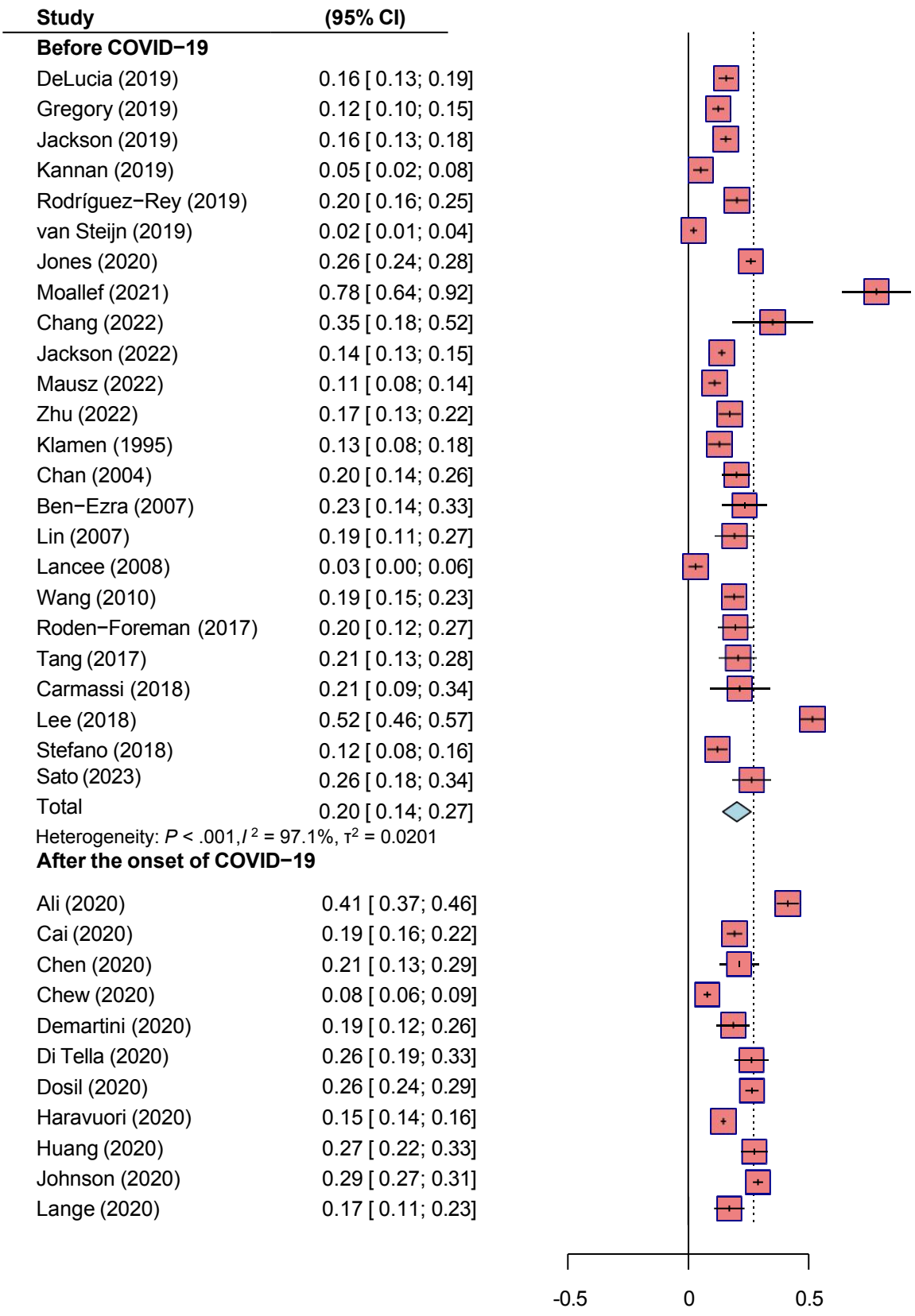
Study	(95% CI)
Yeo (2021)	0.40 [0.35; 0.44]
Zhang (2021)	0.13 [0.10; 0.17]
Alam (2022)	0.27 [0.25; 0.29]
Issa (2022)	0.36 [0.31; 0.41]
Bayazit (2022)	0.40 [0.38; 0.42]
Bizri (2022)	0.30 [0.23; 0.37]
Chinvararak (2022)	0.02 [0.01; 0.03]
Cleper (2022)	0.14 [0.11; 0.16]
Cui (2022)	0.14 [0.11; 0.18]
Da'she (2022)	0.20 [0.15; 0.24]
Fukushima (2022)	0.17 [0.14; 0.19]
Mendez (2022)	0.10 [0.08; 0.12]
Gündogmus (2022)	0.24 [0.21; 0.27]
Ilhan (2022)	0.72 [0.67; 0.77]
Korkut (2022)	0.22 [0.17; 0.26]
Lee (2022)	0.18 [0.14; 0.22]
Lei Li (2022)	0.24 [0.18; 0.30]
Minjie Li (2022)	0.15 [0.13; 0.17]
Yifang Liu (2022)	0.16 [0.15; 0.18]
Yang Liu (2022)	0.18 [0.16; 0.19]
Meena (2022)	0.02 [−0.01; 0.05]
Ouyang (2022)	0.11 [0.08; 0.14]
Qi (2022)	0.58 [0.54; 0.62]
Sachdeva (2021)	0.63 [0.55; 0.71]
Sanayeh (2022)	0.44 [0.40; 0.48]
Sar−El (2022)	0.10 [0.05; 0.15]
Shahsavarinia (2022)	0.09 [0.05; 0.13]
Th'ng (2022)	0.16 [0.12; 0.20]
Tong (2022)	0.13 [0.10; 0.16]
Vadi (2022)	0.22 [0.15; 0.28]
Yang (2022)	0.09 [0.08; 0.10]
Yao (2022)	0.11 [0.05; 0.17]
Zhang (2022)	0.46 [0.44; 0.48]
Zhong (2022)	0.26 [0.23; 0.28]
Alshehri (2023)	0.14 [0.11; 0.17]
Banakar (2023)	0.43 [0.40; 0.47]
Dong (2023)	0.44 [0.43; 0.45]
Huang (2023)	0.33 [0.30; 0.36]
Hwang (2023)	0.33 [0.31; 0.35]
Li (2023)	0.43 [0.39; 0.48]
Liang (2023)	0.57 [0.52; 0.63]



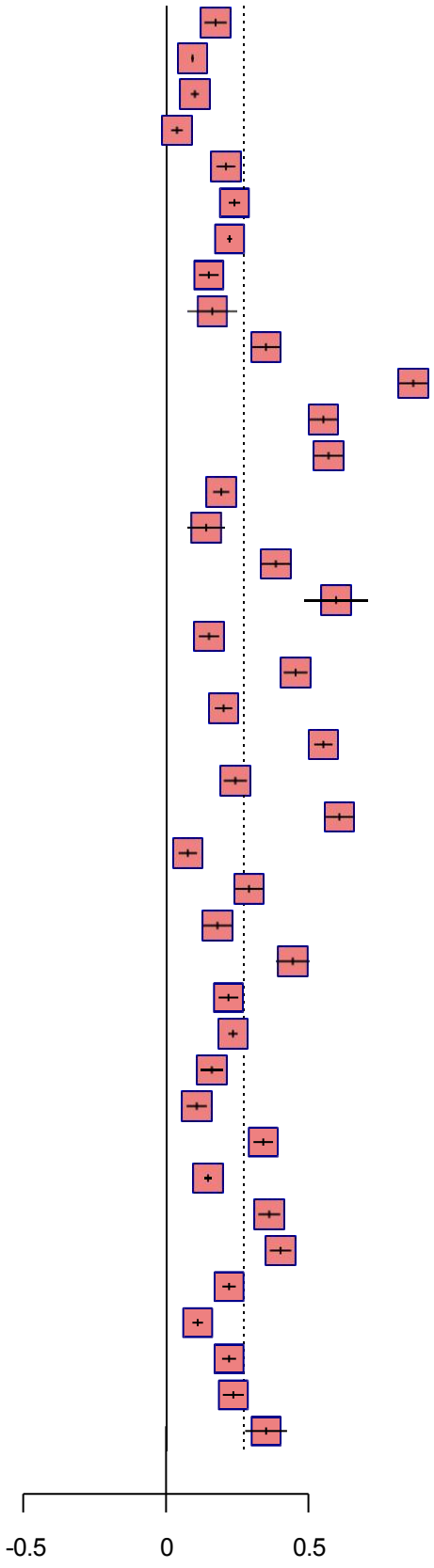

Study
(95% CI)
Yifang Liu (2023) 0.20 [0.19; 0.21]
Mao (2023) 0.26 [0.23; 0.29]
Pahrol (2023) 0.19 [0.16; 0.21]
Riaz (2023) 0.23 [0.21; 0.26]
Tran (2023) 0.21 [0.18; 0.25]
Yilmaz−Karaman (2023) 0.29 [0.18; 0.40]
Yin (2023) 0.45 [0.41; 0.50]
AlJaberi (2024) 0.25 [0.22; 0.28]
Chen (2023) 0.07 [0.06; 0.07]
Gu (2022) 0.25 [0.22; 0.29]
Hamdan−Mansour (2025) 0.97 [0.95; 1.00]
Jing (2025) 0.37 [0.36; 0.39]
Li (2024) 0.07 [0.06; 0.08]
Li (2025) 0.76 [0.74; 0.77]
Huan Liu (2023) 0.24 [0.22; 0.27]
Malakoutikhah (2024) 0.56 [0.51; 0.60]
Mani (2023) 0.71 [0.67; 0.75]
Mao (2025) 0.18 [0.13; 0.23]
Mersin (2025) 0.12 [0.09; 0.15]
Namgung (2025) 0.11 [0.08; 0.15]
Rao (2023) 0.16 [0.12; 0.20]
Sahin (2024) 0.12 [0.10; 0.14]
Satilmis (2024) 0.38 [0.27; 0.49]
Sehlikoglu (2024) 0.39 [0.32; 0.47]
Shirish (2024) 0.46 [0.36; 0.56]
Wang (2024) 0.32 [0.30; 0.34]
Wu (2024) 0.37 [0.36; 0.39]
Xu (2024) 0.20 [0.15; 0.25]
Total 0.27 [0.24; 0.31]
Heterogeneity: P < .001, I² = 99.6%, τ²= 0.0352
South America
Zuniga (2021) 0.24 [0.22; 0.26]
Osório (2021) 0.36 [0.33; 0.39]
Erazo (2021) 0.44 [0.41; 0.47]
Villalba−Arias (2021) 0.06 [0.04; 0.08]
Villarreal−Zegarra (2021) 0.15 [0.10; 0.20]
Carvalho−Alves (2022) 0.47 [0.44; 0.50]
Guillen−Burgos (2022) 0.19 [0.14; 0.23]
Machado (2023) 0.26 [0.23; 0.29]
de Souza Junior (2024) 0.34 [0.31; 0.37]
Guimarães (2025) 0.36 [0.28; 0.43]
-0.5
0
0.5


Study
(95% CI)
Loureiro (2023) 0.41 [0.33; 0.49]
Total 0.30 [0.22; 0.37]
Heterogeneity: P < .001, I² = 98.7%, τ²= 0.0163
Africa
Asnakew (2021) 0.55 [0.50; 0.60]
Ayalew (2021) 0.57 [0.52; 0.62]
Engelbrecht (2021) 0.44 [0.39; 0.50]
Kwobah (2021) 0.65 [0.62; 0.67]
Bouaddi (2023) 0.72 [0.66; 0.79]
Gaber (2023) 0.11 [0.06; 0.16]
Human (2023) 0.12 [0.06; 0.17]
Abdeen (2023) 0.38 [0.29; 0.46]
Touhami (2023) 0.22 [0.19; 0.24]
El Kinany (2024) 0.54 [0.44; 0.64]
Hussein (2025) 0.57 [0.54; 0.60]
Isiek (2024) 0.28 [0.22; 0.33]
Kambulandu (2024) 0.32 [0.23; 0.41]
Maliwichi (2024) 0.25 [0.17; 0.33]
Total 0.41 [0.30; 0.51]
Heterogeneity: P < .001, I² = 98.9%, τ² = 0.0386
Australia
Dobson (2021) 0.29 [0.24; 0.34]
Marsden (2022) 0.16 [0.13; 0.19]
McGuinness (2022) 0.20 [0.18; 0.23]
Irene Ng (2022) 0.35 [0.28; 0.42]
Ng (2022) 0.36 [0.34; 0.38]
Pascoe (2022) 0.03 [0.03; 0.04]
Tham (2022) 0.40 [0.39; 0.41]
Newnham (2023) 0.22 [0.18; 0.26]
Total 0.25 [0.17; 0.34]
Heterogeneity: P < .001, I² = 99.8%, τ²= 0.0149
Total 0.27 [0.25; 0.29]
Heterogeneity: P < .001, I² = 99.5%, τ²= 0.0287
Test for subgroup differences: P = 0.053
−0.5
0
0.5

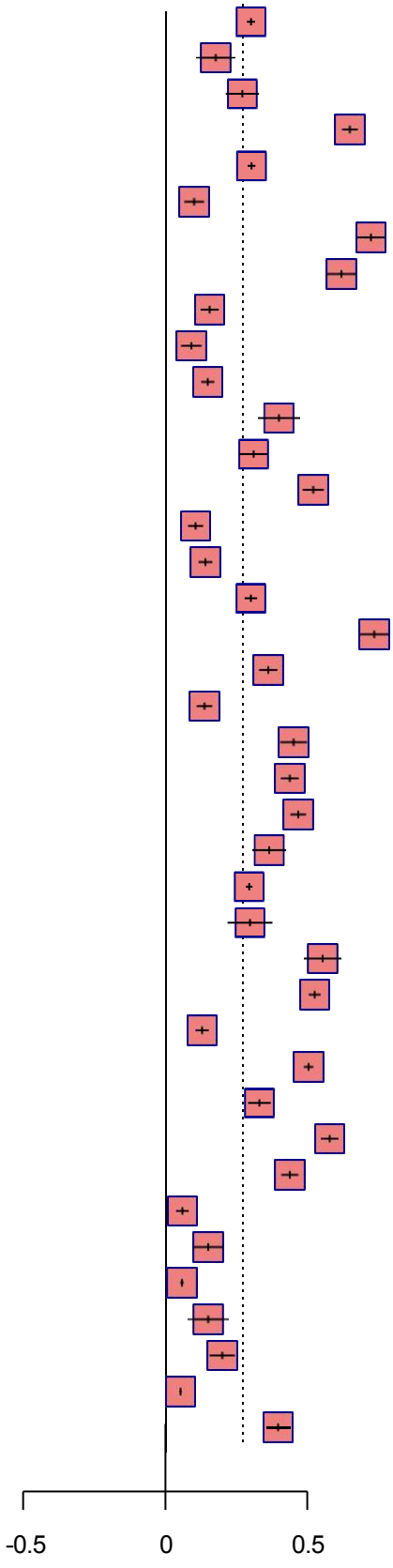
Appendix K:Figure 2. The forest plots of PTSD prevalence among healthcare workers before and after the onset of COVID-19.



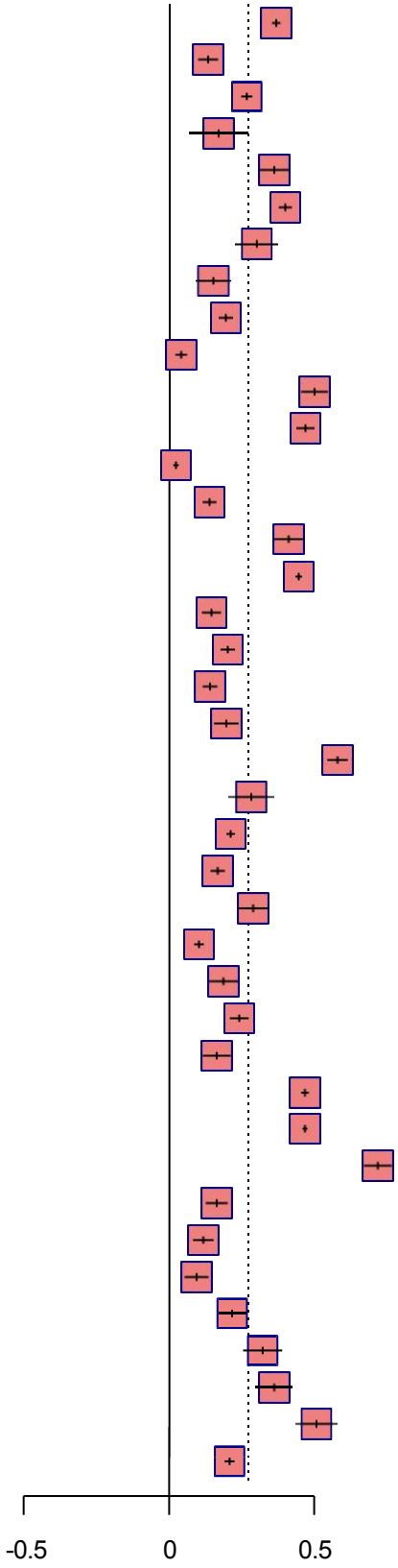
Study	(95% CI)
Lu (2020)	0.17 [0.13; 0.21]
Song (2020)	0.09 [0.09; 0.10]
Wang (2020)	0.10 [0.08; 0.11]
Yin (2020)	0.04 [0.02; 0.06]
Zhang (2020)	0.21 [0.18; 0.24]
Zuniga (2021)	0.24 [0.22; 0.26]
Alonso (2020)	0.22 [0.21; 0.23]
Alshehri (2021)	0.15 [0.11; 0.18]
Altmayer (2020)	0.16 [0.07; 0.25]
Amsalem (2021)	0.35 [0.30; 0.40]
Askari (2021)	0.86 [0.82; 0.91]
Asnakew (2021)	0.55 [0.50; 0.60]
Ayalew (2021)	0.57 [0.52; 0.62]
Bahadirli (2021)	0.19 [0.16; 0.22]
Bates (2021)	0.14 [0.08; 0.20]
Bulut (2021)	0.38 [0.33; 0.44]
Carmassi (2021)	0.59 [0.48; 0.71]
Chatzittofis (2021)	0.15 [0.12; 0.18]
Chen (2021)	0.45 [0.41; 0.49]
Cheng (2021)	0.20 [0.17; 0.23]
Conti (2021)	0.55 [0.52; 0.58]
Cyr (2021)	0.24 [0.20; 0.28]
Das (2021)	0.61 [0.55; 0.66]
Dehon (2021)	0.07 [0.04; 0.11]
Dobson (2021)	0.29 [0.24; 0.34]
Emre (2021)	0.18 [0.13; 0.23]
Engelbrecht (2021)	0.44 [0.39; 0.50]
Fattori (2021)	0.22 [0.18; 0.25]
Feingold (2021)	0.23 [0.22; 0.25]
Flateau (2021)	0.16 [0.12; 0.20]
Geng (2021)	0.11 [0.07; 0.14]
Ghio (2021)	0.34 [0.31; 0.37]
Gilleen (2021)	0.15 [0.13; 0.16]
Gramaglia (2021)	0.36 [0.32; 0.40]
Greenberg (2021)	0.40 [0.36; 0.44]
Greene (2021)	0.22 [0.20; 0.24]
Guo (2021)	0.11 [0.09; 0.13]
Hennein (2021)	0.22 [0.20; 0.24]
Hou (2021)	0.23 [0.20; 0.27]
Ilias (2021)	0.35 [0.28; 0.42]



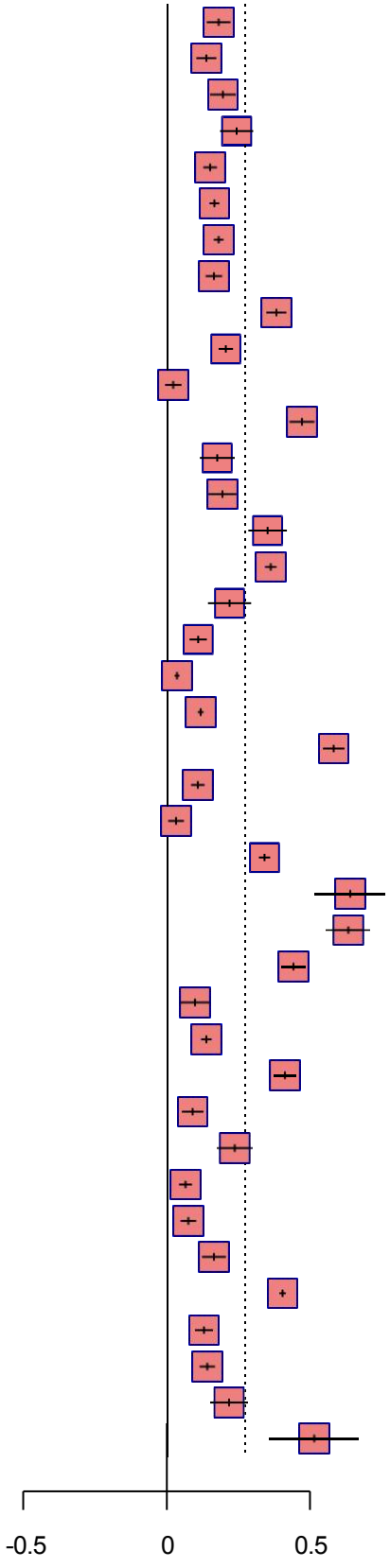
Study	(95% CI)
Jordan (2021)	0.30 [0.29; 0.31]
Kader (2021)	0.18 [0.11; 0.24]
Kheradmand (2021)	0.27 [0.21; 0.33]
Kwobah (2021)	0.65 [0.62; 0.67]
Lamb (2021)	0.30 [0.29; 0.32]
Lamiani (2021)	0.10 [0.07; 0.13]
Lasalvia (2021)	0.72 [0.67; 0.77]
Li (2021)	0.62 [0.57; 0.67]
Lu (2021)	0.15 [0.12; 0.19]
Lum (2021)	0.09 [0.05; 0.12]
Luo (2021)	0.15 [0.12; 0.17]
Marcomini (2021)	0.40 [0.33; 0.47]
Martínez−Caballero (2021)	0.31 [0.26; 0.36]
Mediavilla (2021)	0.52 [0.48; 0.56]
Mei (2021)	0.10 [0.08; 0.13]
Mosheva (2021)	0.14 [0.12; 0.16]
Murata (2021)	0.30 [0.28; 0.32]
TG COVID (2021)	0.73 [0.68; 0.78]
Osório (2021)	0.36 [0.33; 0.39]
Pan (2021)	0.14 [0.11; 0.16]
Pappa (2021)	0.45 [0.40; 0.50]
Erazo (2021)	0.44 [0.41; 0.47]
Plouffe (2021)	0.47 [0.44; 0.49]
Qutishat (2021)	0.36 [0.30; 0.42]
Robles (2021)	0.29 [0.28; 0.31]
Sarapultseva (2021)	0.30 [0.22; 0.38]
Shechter (2021)	0.55 [0.49; 0.62]
Smith (2021)	0.52 [0.50; 0.55]
Sonis (2021)	0.13 [0.10; 0.15]
Styra (2021)	0.50 [0.49; 0.52]
Tomicevic (2021)	0.33 [0.29; 0.37]
Vancappel (2021)	0.58 [0.55; 0.61]
Vance (2021)	0.44 [0.41; 0.46]
Villalba−Arias (2021)	0.06 [0.04; 0.08]
Villarreal−Zegarra (2021)	0.15 [0.10; 0.20]
Voorspoels (2021)	0.06 [0.05; 0.06]
Wright (2021)	0.15 [0.08; 0.22]
Xiong (2021)	0.20 [0.16; 0.24]
Yang (2021)	0.05 [0.05; 0.06]
Yeo (2021)	0.40 [0.35; 0.44]

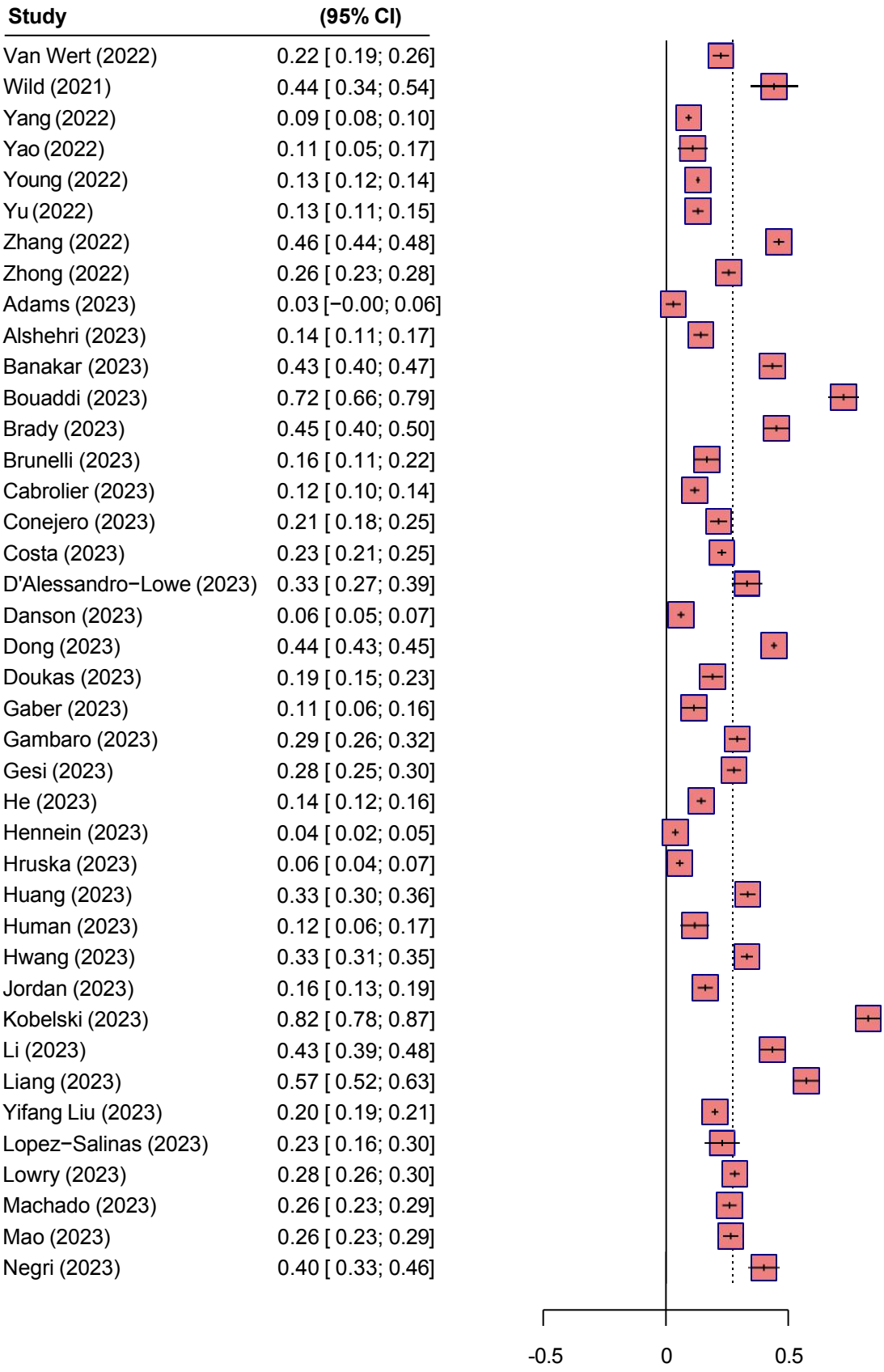


Study	(95% CI)
Zara (2021)	0.37 [0.35; 0.38]
Zhang (2021)	0.13 [0.10; 0.17]
Alam (2022)	0.27 [0.25; 0.29]
Aljaberi (2022)	0.17 [0.07; 0.27]
Issa (2022)	0.36 [0.31; 0.41]
Bayazit (2022)	0.40 [0.38; 0.42]
Bizri (2022)	0.30 [0.23; 0.37]
Bock (2022)	0.15 [0.09; 0.21]
Bonzini (2022)	0.19 [0.17; 0.22]
Brady (2022)	0.04 [0.02; 0.06]
Burhanullah (2022)	0.50 [0.46; 0.54]
Carvalho−Alves (2022)	0.47 [0.44; 0.50]
Chinvararak (2022)	0.02 [0.01; 0.03]
Cleper (2022)	0.14 [0.11; 0.16]
Costantini (2022)	0.41 [0.36; 0.46]
Couper (2022)	0.45 [0.43; 0.46]
Cui (2022)	0.14 [0.11; 0.18]
Czepiel (2022)	0.20 [0.18; 0.22]
d'Ussel (2022)	0.14 [0.12; 0.16]
Da'she (2022)	0.20 [0.15; 0.24]
Diaz (2022)	0.58 [0.55; 0.61]
Dykes (2022)	0.28 [0.20; 0.36]
Fournier (2022)	0.21 [0.20; 0.23]
Fukushima (2022)	0.17 [0.14; 0.19]
Gagliardi (2022)	0.29 [0.24; 0.34]
Mendez (2022)	0.10 [0.08; 0.12]
Guillen−Burgos (2022)	0.19 [0.14; 0.23]
Gündogmus (2022)	0.24 [0.21; 0.27]
Gustafson (2022)	0.16 [0.12; 0.21]
Hall (2022)	0.46 [0.45; 0.48]
Holzinger (2022)	0.47 [0.46; 0.47]
Ilhan (2022)	0.72 [0.67; 0.77]
James (2022)	0.16 [0.13; 0.20]
Johns (2022)	0.12 [0.08; 0.15]
Jovarauskaite (2022)	0.09 [0.05; 0.13]
Korkut (2022)	0.22 [0.17; 0.26]
Kosydar−Bochenek (2022)	0.32 [0.25; 0.39]
Lasalvia (2022)	0.36 [0.29; 0.42]
Latsou (2022)	0.51 [0.43; 0.58]
Laurent (2022)	0.21 [0.19; 0.22]

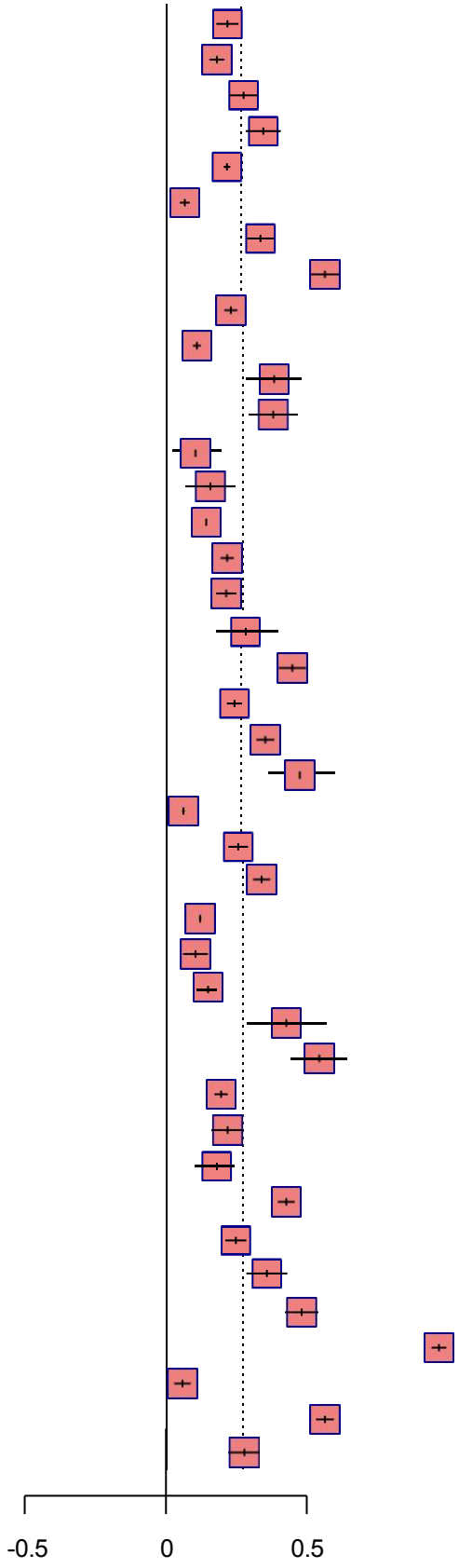


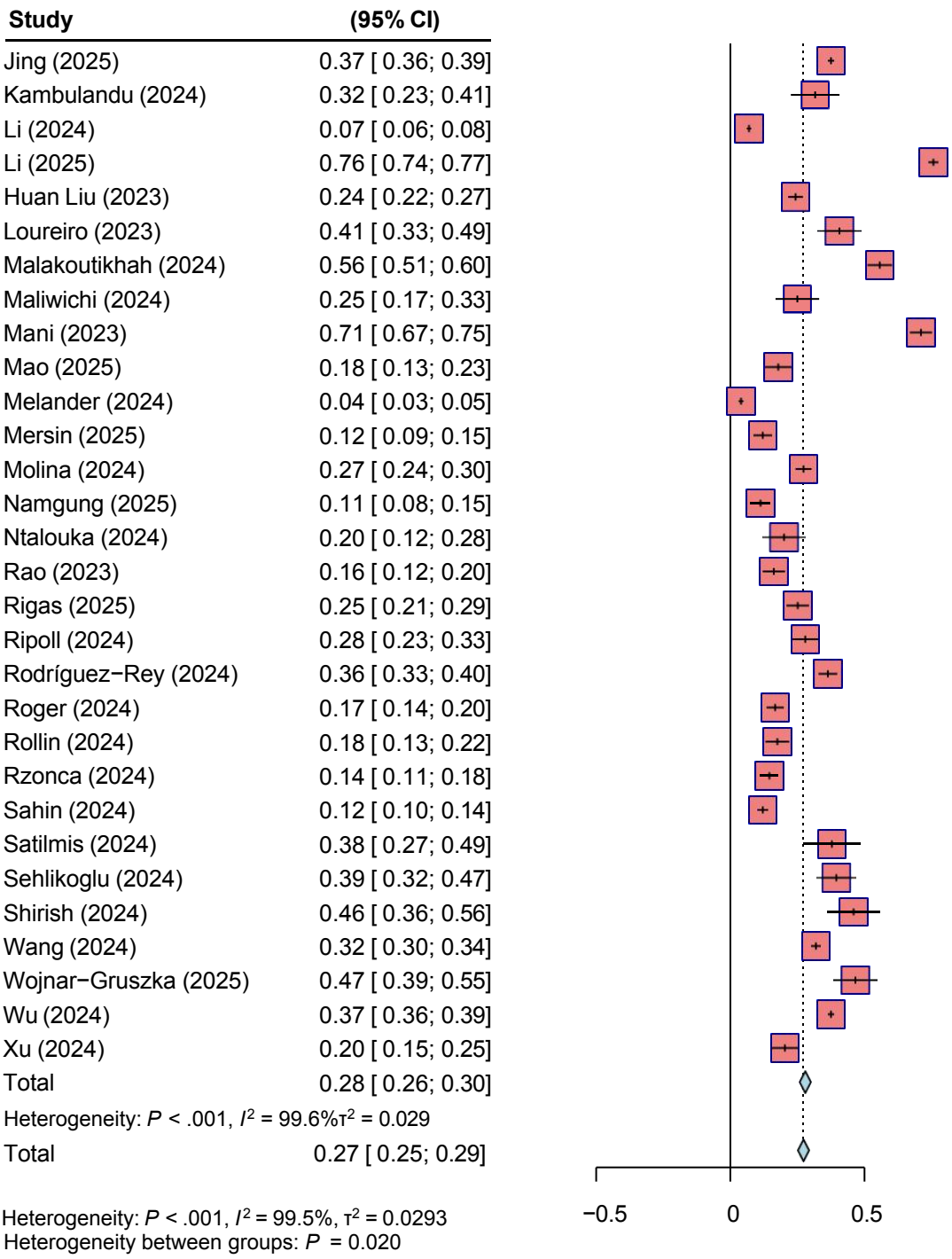
Study	(95% CI)
Lee (2022)	0.18 [0.14; 0.22]
Lekka (2022)	0.14 [0.10; 0.17]
Rojas (2022)	0.19 [0.15; 0.24]
Lei Li (2022)	0.24 [0.18; 0.30]
Minjie Li (2022)	0.15 [0.13; 0.17]
Yifang Liu (2022)	0.16 [0.15; 0.18]
Yang Liu (2022)	0.18 [0.16; 0.19]
Marsden (2022)	0.16 [0.13; 0.19]
Martin−Rodriguez (2022)	0.38 [0.35; 0.41]
McGuinness (2022)	0.20 [0.18; 0.23]
Meena (2022)	0.02 [−0.01; 0.05]
Mennicken (2022)	0.47 [0.43; 0.51]
Metz (2022)	0.17 [0.11; 0.23]
Minelli (2022)	0.19 [0.15; 0.24]
Irene Ng (2022)	0.35 [0.28; 0.42]
Ng (2022)	0.36 [0.34; 0.38]
O'Higgins (2022)	0.22 [0.14; 0.29]
Ouyang (2022)	0.11 [0.08; 0.14]
Pascoe (2022)	0.03 [0.03; 0.04]
Piacentini (2022)	0.12 [0.11; 0.12]
Qi (2022)	0.58 [0.54; 0.62]
Rantanen (2022)	0.11 [0.08; 0.13]
Reid (2022)	0.03 [0.00; 0.06]
Robles (2022)	0.34 [0.32; 0.36]
Rodríguez−Rey (2022)	0.64 [0.51; 0.76]
Sachdeva (2021)	0.63 [0.55; 0.71]
Sanayeh (2022)	0.44 [0.40; 0.48]
Sar−El (2022)	0.10 [0.05; 0.15]
Schou−Bredal (2022)	0.14 [0.12; 0.15]
Schwartz (2022)	0.41 [0.37; 0.45]
Shahsavarinia (2022)	0.09 [0.05; 0.13]
Sangrà (2021)	0.23 [0.17; 0.30]
Stafseth (2022)	0.06 [0.04; 0.09]
Tebbeb (2022)	0.07 [0.05; 0.10]
Th'ng (2022)	0.16 [0.12; 0.20]
Tham (2022)	0.40 [0.39; 0.41]
Tong (2022)	0.13 [0.10; 0.16]
Tucker (2022)	0.14 [0.11; 0.17]
Vadi (2022)	0.22 [0.15; 0.28]
Van Steenkiste (2022)	0.51 [0.36; 0.67]



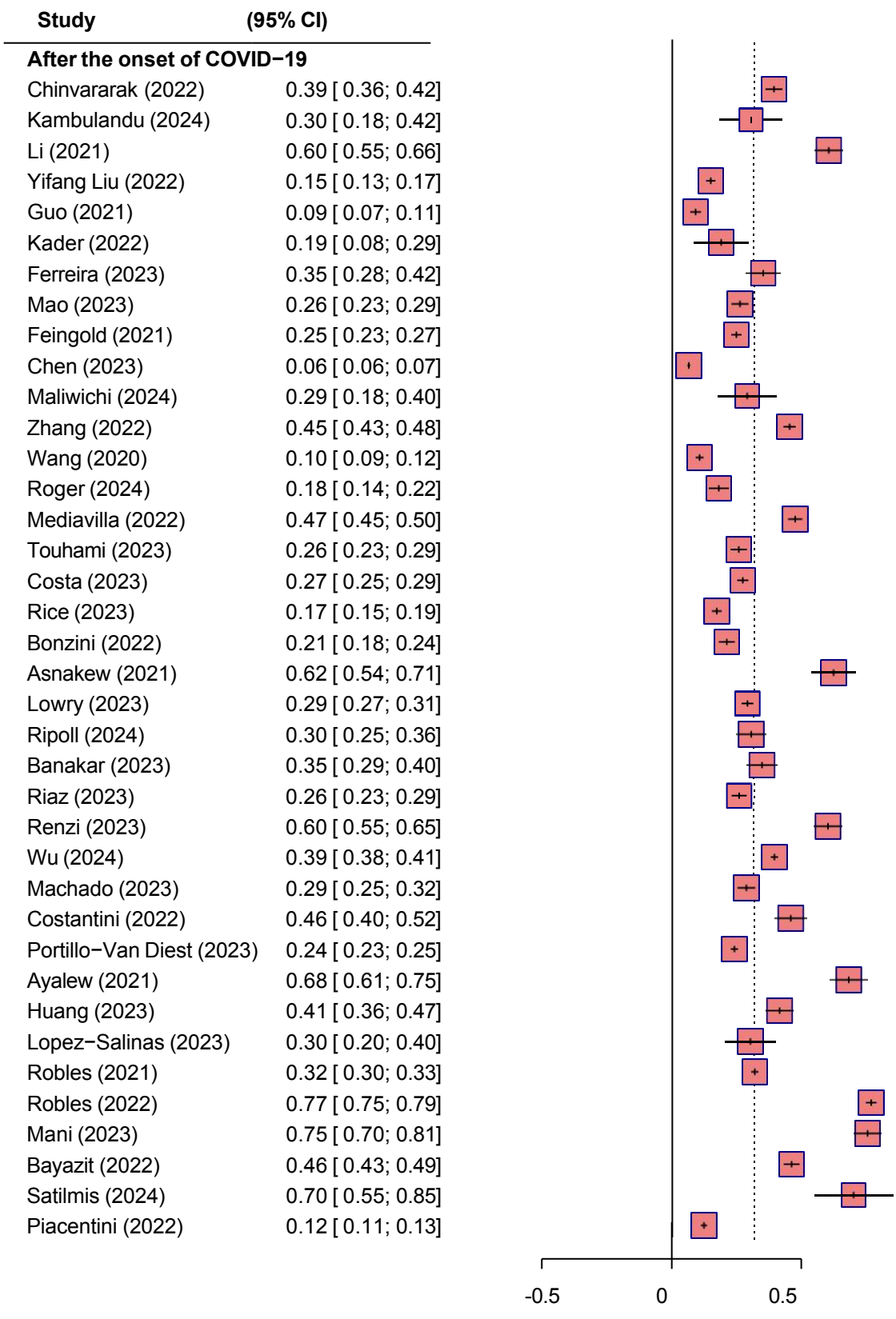

Study
(95% CI)
Van Wert (2022) 0.22 [0.19; 0.26]
Wild (2021) 0.44 [0.34; 0.54]
Yang (2022) 0.09 [0.08; 0.10]
Yao (2022) 0.11 [0.05; 0.17]
Young (2022) 0.13 [0.12; 0.14]
Yu (2022) 0.13 [0.11; 0.15]
Zhang (2022) 0.46 [0.44; 0.48]
Zhong (2022) 0.26 [0.23; 0.28]
Adams (2023) 0.03 [−0.00; 0.06]
Alshehri (2023) 0.14 [0.11; 0.17]
Banakar (2023) 0.43 [0.40; 0.47]
Bouaddi (2023) 0.72 [0.66; 0.79]
Brady (2023) 0.45 [0.40; 0.50]
Brunelli (2023) 0.16 [0.11; 0.22]
Cabrolier (2023) 0.12 [0.10; 0.14]
Conejero (2023) 0.21 [0.18; 0.25]
Costa (2023) 0.23 [0.21; 0.25]
D'Alessandro−Lowe (2023) 0.33 [0.27; 0.39]
Danson (2023) 0.06 [0.05; 0.07]
Dong (2023) 0.44 [0.43; 0.45]
Doukas (2023) 0.19 [0.15; 0.23]
Gaber (2023) 0.11 [0.06; 0.16]
Gambaro (2023) 0.29 [0.26; 0.32]
Gesi (2023) 0.28 [0.25; 0.30]
He (2023) 0.14 [0.12; 0.16]
Hennein (2023) 0.04 [0.02; 0.05]
Hruska (2023) 0.06 [0.04; 0.07]
Huang (2023) 0.33 [0.30; 0.36]
Human (2023) 0.12 [0.06; 0.17]
Hwang (2023) 0.33 [0.31; 0.35]
Jordan (2023) 0.16 [0.13; 0.19]
Kobelski (2023) 0.82 [0.78; 0.87]
Li (2023) 0.43 [0.39; 0.48]
Liang (2023) 0.57 [0.52; 0.63]
Yifang Liu (2023) 0.20 [0.19; 0.21]
Lopez−Salinas (2023) 0.23 [0.16; 0.30]
Lowry (2023) 0.28 [0.26; 0.30]
Machado (2023) 0.26 [0.23; 0.29]
Mao (2023) 0.26 [0.23; 0.29]
Negri (2023) 0.40 [0.33; 0.46]
-0.5
0
0.5

Study	(95% CI)
Newnham (2023)	0.22 [0.18; 0.26]
Pahrol (2023)	0.19 [0.16; 0.21]
Patel (2023)	0.28 [0.23; 0.33]
Ferreira (2023)	0.35 [0.29; 0.41]
Portillo−Van Diest (2023)	0.22 [0.21; 0.23]
Ptak (2023)	0.07 [0.05; 0.09]
Rapisarda (2023)	0.34 [0.29; 0.39]
Renzi (2023)	0.57 [0.52; 0.62]
Riaz (2023)	0.23 [0.21; 0.26]
Rice (2023)	0.11 [0.10; 0.13]
Scott (2023)	0.38 [0.28; 0.48]
Abdeen (2023)	0.38 [0.29; 0.46]
Shah (2023)	0.11 [0.02; 0.20]
Tabano (2023)	0.16 [0.07; 0.24]
Tong (2023)	0.14 [0.13; 0.16]
Touhami (2023)	0.22 [0.19; 0.24]
Tran (2023)	0.21 [0.18; 0.25]
Yilmaz−Karaman (2023)	0.29 [0.18; 0.40]
Yin (2023)	0.45 [0.41; 0.50]
AlJaberi (2024)	0.25 [0.22; 0.28]
Azoulay (2024)	0.36 [0.33; 0.39]
Cardinalli (2024)	0.48 [0.36; 0.60]
Chen (2023)	0.07 [0.06; 0.07]
D'Alessandro−Lowe	0.26 [0.23; 0.30]
(2024) de Souza Junior	0.34 [0.31; 0.37]
(2024) Dempsey (2024)	0.13 [0.12; 0.13]
Douplat (2024)	0.11 [0.07; 0.15]
Dufour (2021)	0.15 [0.11; 0.18]
Echeverria (2023)	0.43 [0.28; 0.57]
El Kinany (2024)	0.54 [0.44; 0.64]
Fournier (2025)	0.19 [0.17; 0.22]
Gascon−Santos (2024)	0.22 [0.16; 0.27]
Ghafoori (2024)	0.18 [0.11; 0.25]
Giménez−Díez (2024)	0.43 [0.40; 0.46]
Gu (2022)	0.25 [0.22; 0.29]
Guimarães (2025)	0.36 [0.28; 0.43]
Guzzon (2024)	0.49 [0.43; 0.54]
Hamdan−Mansour (2025)	0.97 [0.95; 1.00]
Hovland (2023)	0.06 [0.03; 0.09]
Hussein (2025)	0.57 [0.54; 0.60]
Isiek (2024)	0.28 [0.22; 0.33]

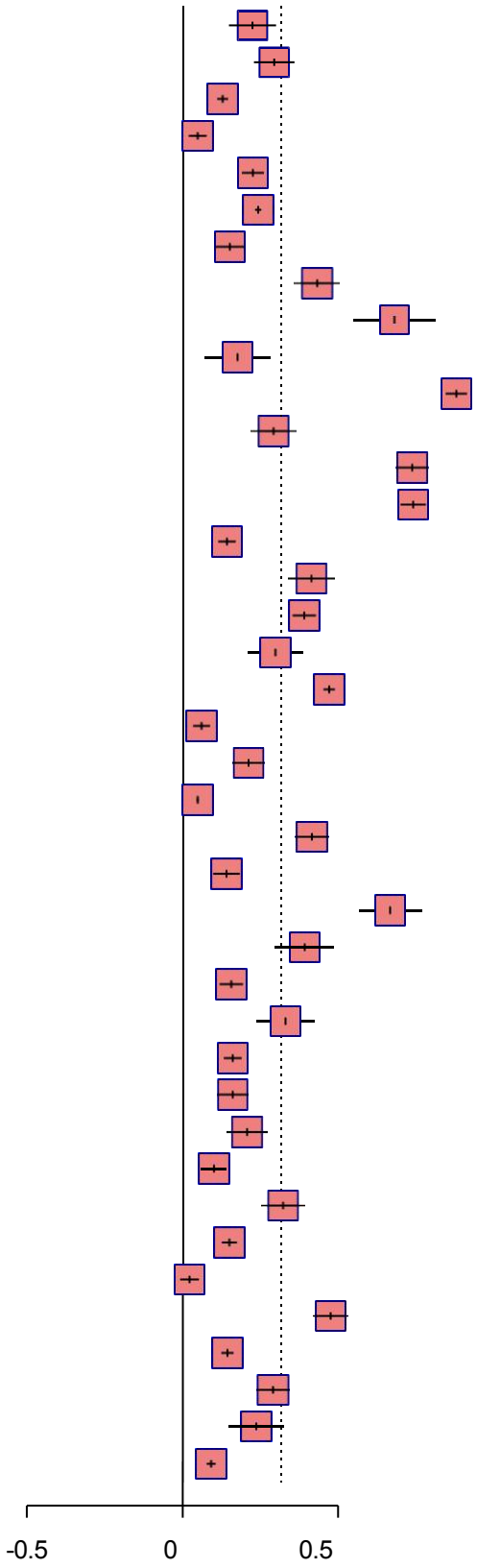


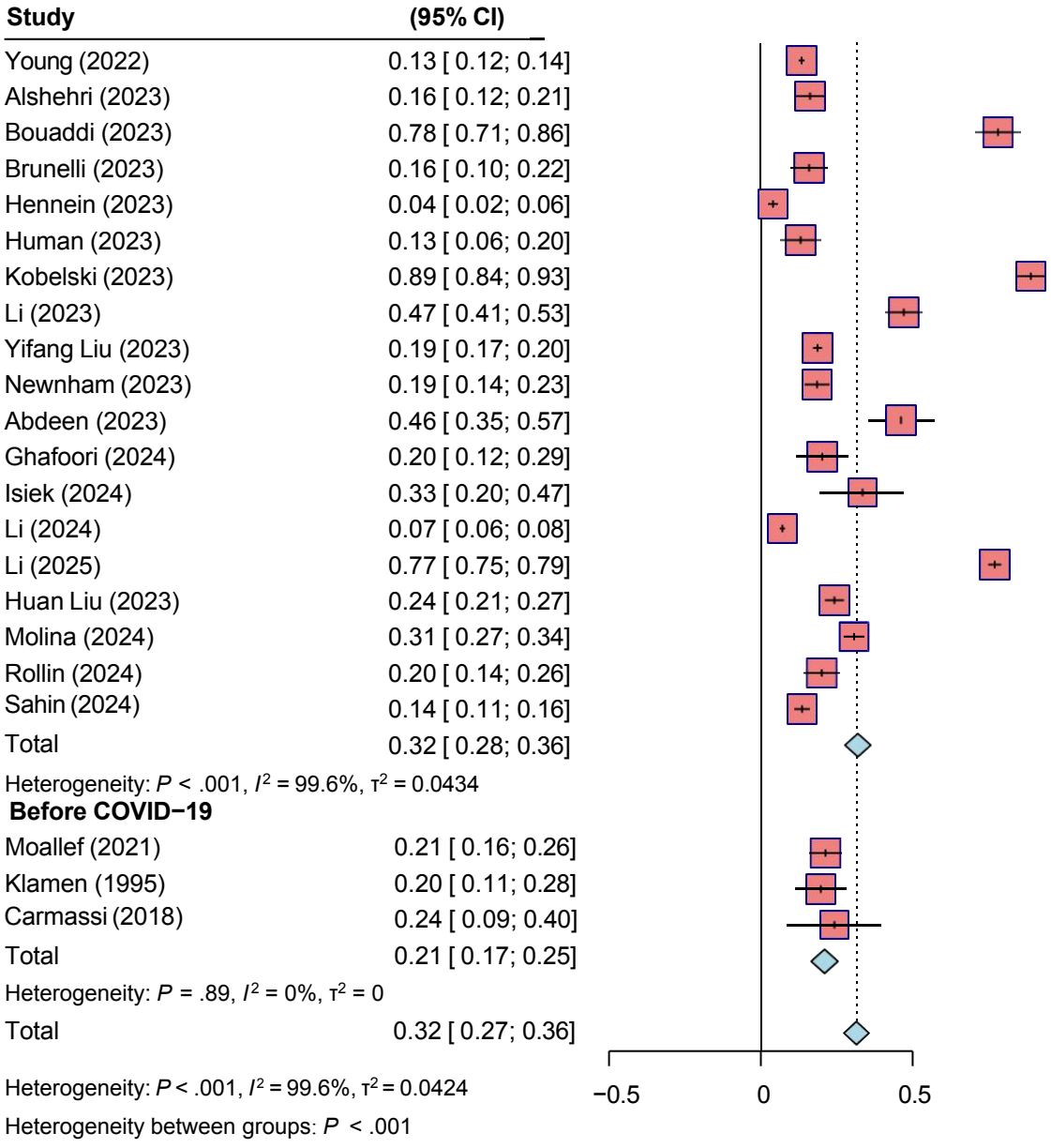

Study
(95% CI)
Jing (2025) 0.37 [0.36; 0.39]
Kambulandu (2024) 0.32 [0.23; 0.41]
Li (2024) 0.07 [0.06; 0.08]
Li (2025) 0.76 [0.74; 0.77]
Huan Liu (2023) 0.24 [0.22; 0.27]
Loureiro (2023) 0.41 [0.33; 0.49]
Malakoutikhah (2024) 0.56 [0.51; 0.60]
Maliwichi (2024) 0.25 [0.17; 0.33]
Mani (2023) 0.71 [0.67; 0.75]
Mao (2025) 0.18 [0.13; 0.23]
Melander (2024) 0.04 [0.03; 0.05]
Mersin (2025) 0.12 [0.09; 0.15]
Molina (2024) 0.27 [0.24; 0.30]
Namgung (2025) 0.11 [0.08; 0.15]
Ntalouka (2024) 0.20 [0.12; 0.28]
Rao (2023) 0.16 [0.12; 0.20]
Rigas (2025) 0.25 [0.21; 0.29]
Ripoll (2024) 0.28 [0.23; 0.33]
Rodríguez−Rey (2024) 0.36 [0.33; 0.40]
Roger (2024) 0.17 [0.14; 0.20]
Rollin (2024) 0.18 [0.13; 0.22]
Rzonca (2024) 0.14 [0.11; 0.18]
Sahin (2024) 0.12 [0.10; 0.14]
Satilmis (2024) 0.38 [0.27; 0.49]
Sehlikoglu (2024) 0.39 [0.32; 0.47]
Shirish (2024) 0.46 [0.36; 0.56]
Wang (2024) 0.32 [0.30; 0.34]
Wojnar−Gruszka (2025) 0.47 [0.39; 0.55]
Wu (2024) 0.37 [0.36; 0.39]
Xu (2024) 0.20 [0.15; 0.25]
Total 0.28 [0.26; 0.30]
Heterogeneity: P < .001, I^2 = 99.6%τ^2 = 0.029
Total 0.27 [0.25; 0.29]
Heterogeneity: P < .001, I^2 = 99.5%, τ^2 = 0.0293
Heterogeneity between groups: P = 0.020
−0.5
0
0.5

Appendix L: Figure 3. The forest plots of PTSD prevalence among healthcare workers in different risk factors before and after the onset of COVID-19. (a1-a2) The forest plots of PTSD prevalence in healthcare workers of different sex before and after the onset of COVID-19. (a1) Prevalence of PTSD in female.



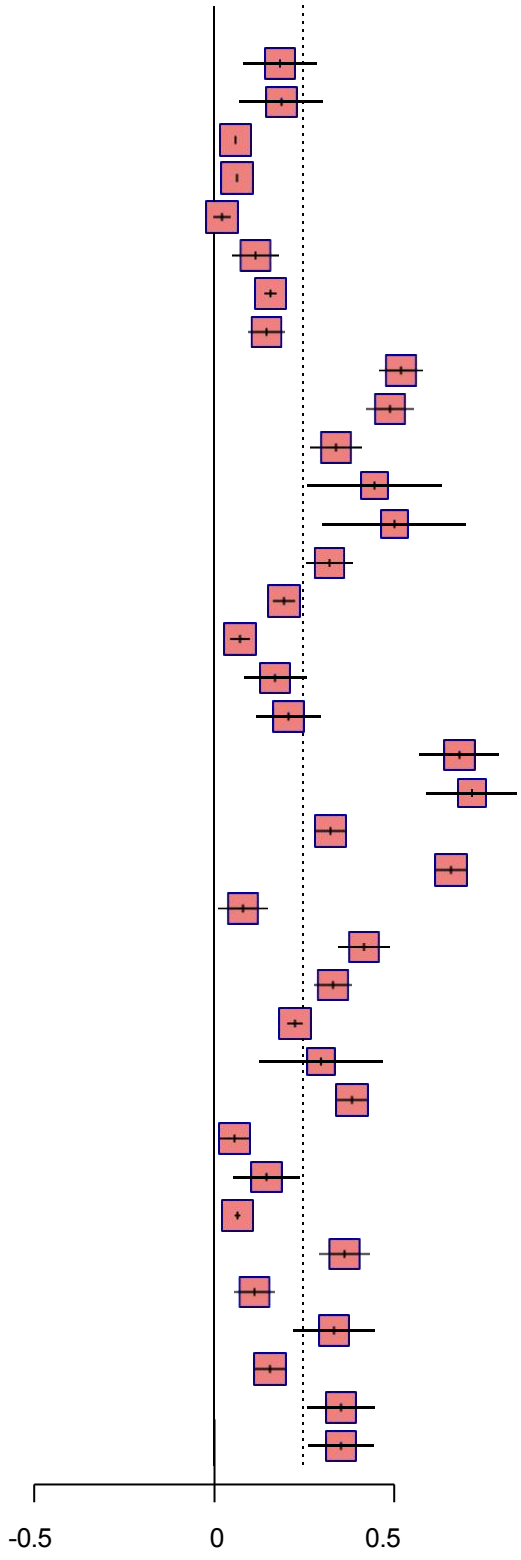
Study	(95% CI)
Dosil (2020)	0.22 [0.15; 0.30]
Huang (2020)	0.29 [0.23; 0.36]
Johnson (2020)	0.13 [0.11; 0.14]
Yin (2020)	0.05 [0.02; 0.08]
Zhang (2020)	0.23 [0.19; 0.26]
Alonso (2020)	0.24 [0.23; 0.25]
Alshehri (2021)	0.15 [0.10; 0.20]
Bulut (2021)	0.43 [0.36; 0.51]
Carmassi (2021)	0.68 [0.55; 0.81]
Dobson (2021)	0.18 [0.07; 0.28]
Fattori (2021)	0.88 [0.85; 0.91]
Kheradmand (2022)	0.29 [0.22; 0.37]
Lasalvia (2021)	0.74 [0.69; 0.79]
TG COVID (2021)	0.74 [0.70; 0.78]
Osório (2021)	0.14 [0.11; 0.17]
Pappa (2021)	0.41 [0.34; 0.49]
Erazo (2021)	0.39 [0.35; 0.43]
Sarapultseva (2021)	0.30 [0.21; 0.39]
Styra (2021)	0.47 [0.45; 0.49]
Villalba−Arias (2021)	0.06 [0.03; 0.08]
Xiong (2021)	0.21 [0.16; 0.26]
Yang (2021)	0.05 [0.04; 0.05]
Yeo (2021)	0.42 [0.36; 0.47]
Zhang (2021)	0.14 [0.10; 0.18]
Bizri (2022)	0.67 [0.57; 0.77]
Cenat (2022)	0.39 [0.30; 0.49]
Jing (2022)	0.15 [0.12; 0.19]
Dykes (2022)	0.33 [0.24; 0.42]
Fukushima (2022)	0.16 [0.13; 0.19]
Guillen−Burgos (2022)	0.16 [0.11; 0.21]
James (2022)	0.21 [0.14; 0.27]
Jovarauskaite (2022)	0.10 [0.06; 0.14]
Korkut (2022)	0.32 [0.25; 0.39]
Minjie Li (2022)	0.15 [0.13; 0.17]
Meena (2022)	0.02 [−0.01; 0.05]
Sanayeh (2022)	0.47 [0.42; 0.53]
Schou−Bredal (2022)	0.14 [0.12; 0.16]
Schwartz (2022)	0.29 [0.24; 0.34]
Vadi (2022)	0.24 [0.15; 0.32]
Yang (2022)	0.09 [0.08; 0.11]



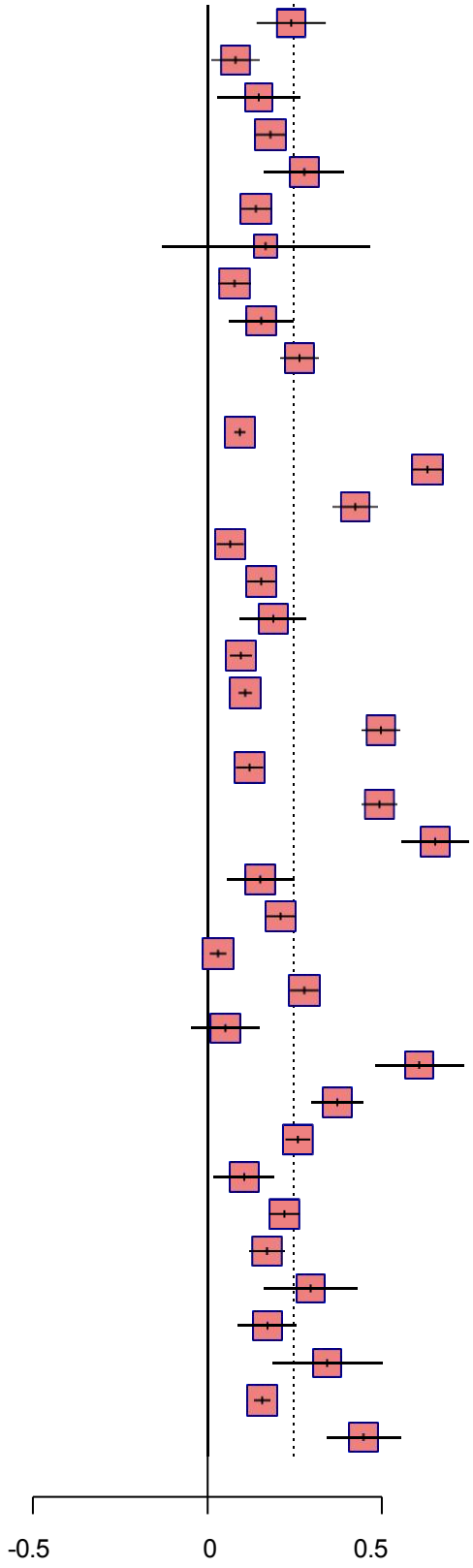

Study
(95% CI)
Young (2022) 0.13 [0.12; 0.14]
Alshehri (2023) 0.16 [0.12; 0.21]
Bouaddi (2023) 0.78 [0.71; 0.86]
Brunelli (2023) 0.16 [0.10; 0.22]
Hennein (2023) 0.04 [0.02; 0.06]
Human (2023) 0.13 [0.06; 0.20]
Kobelski (2023) 0.89 [0.84; 0.93]
Li (2023) 0.47 [0.41; 0.53]
Yifang Liu (2023) 0.19 [0.17; 0.20]
Newnham (2023) 0.19 [0.14; 0.23]
Abdeen (2023) 0.46 [0.35; 0.57]
Ghafoori (2024) 0.20 [0.12; 0.29]
Isiek (2024) 0.33 [0.20; 0.47]
Li (2024) 0.07 [0.06; 0.08]
Li (2025) 0.77 [0.75; 0.79]
Huan Liu (2023) 0.24 [0.21; 0.27]
Molina (2024) 0.31 [0.27; 0.34]
Rollin (2024) 0.20 [0.14; 0.26]
Sahin (2024) 0.14 [0.11; 0.16]
Total 0.32 [0.28; 0.36]
Heterogeneity: P < .001, I² = 99.6%, τ² = 0.0434
Before COVID−19
Moallef (2021) 0.21 [0.16; 0.26]
Klamen (1995) 0.20 [0.11; 0.28]
Carmassi (2018) 0.24 [0.09; 0.40]
Total 0.21 [0.17; 0.25]
Heterogeneity: P = .89, I² = 0%, τ² = 0
Total 0.32 [0.27; 0.36]
Heterogeneity: P < .001, I² = 99.6%, τ² = 0.0424
Heterogeneity between groups: P < .001
−0.5
0
0.5

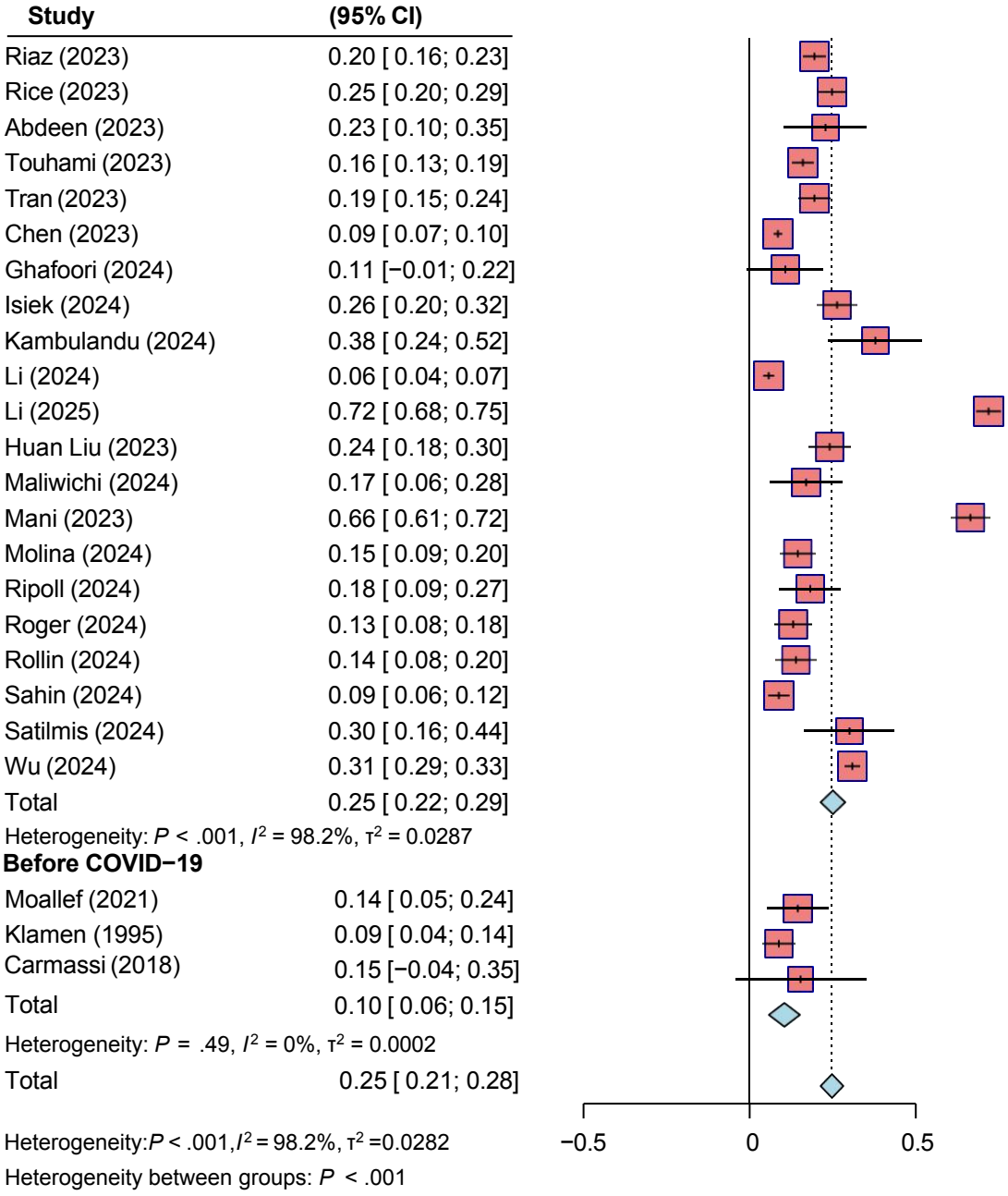
(a2) Prevalence of PTSD in male.

Study	(95% CI)
After the onset of COVID−19	
Dosil (2020)	0.18 [0.08; 0.28]
Huang (2020)	0.19 [0.07; 0.30]
Johnson (2020)	0.06 [0.03; 0.09]
Wang (2020)	0.06 [0.04; 0.09]
Yin (2020)	0.02 [−0.00; 0.04]
Zhang (2020)	0.11 [0.05; 0.18]
Alonso (2020)	0.16 [0.14; 0.17]
Alshehri (2021)	0.14 [0.09; 0.20]
Asnakew (2021)	0.52 [0.46; 0.58]
Ayalew (2021)	0.49 [0.42; 0.55]
Bulut (2021)	0.34 [0.27; 0.41]
Carmassi (2021)	0.44 [0.26; 0.63]
Dobson (2021)	0.50 [0.30; 0.70]
Fattori (2021)	0.32 [0.25; 0.39]
Feingold (2021)	0.19 [0.16; 0.22]
Guo (2021)	0.07 [0.04; 0.10]
Kader (2021)	0.17 [0.08; 0.26]
Kheradmand (2021)	0.20 [0.12; 0.29]
Lasalvia (2021)	0.68 [0.57; 0.79]
Li (2021)	0.71 [0.59; 0.84]
Mediavilla (2022)	0.32 [0.28; 0.37]
TG COVID (2021)	0.66 [0.62; 0.70]
Osório (2021)	0.08 [0.01; 0.15]
Pappa (2021)	0.42 [0.35; 0.49]
Erazo (2021)	0.33 [0.28; 0.38]
Robles (2021)	0.22 [0.20; 0.24]
Sarapultseva (2021)	0.30 [0.12; 0.47]
Styra (2021)	0.38 [0.34; 0.42]
Villalba−Arias (2021)	0.06 [0.02; 0.10]
Xiong (2021)	0.14 [0.05; 0.24]
Yang (2021)	0.06 [0.06; 0.07]
Yeo (2021)	0.36 [0.29; 0.43]
Zhang (2021)	0.11 [0.06; 0.17]
Bizri (2022)	0.33 [0.22; 0.45]
Bonzini (2022)	0.15 [0.11; 0.20]
Cenat (2022)	0.35 [0.26; 0.45]
Chinvararak (2022)	0.35 [0.26; 0.44]

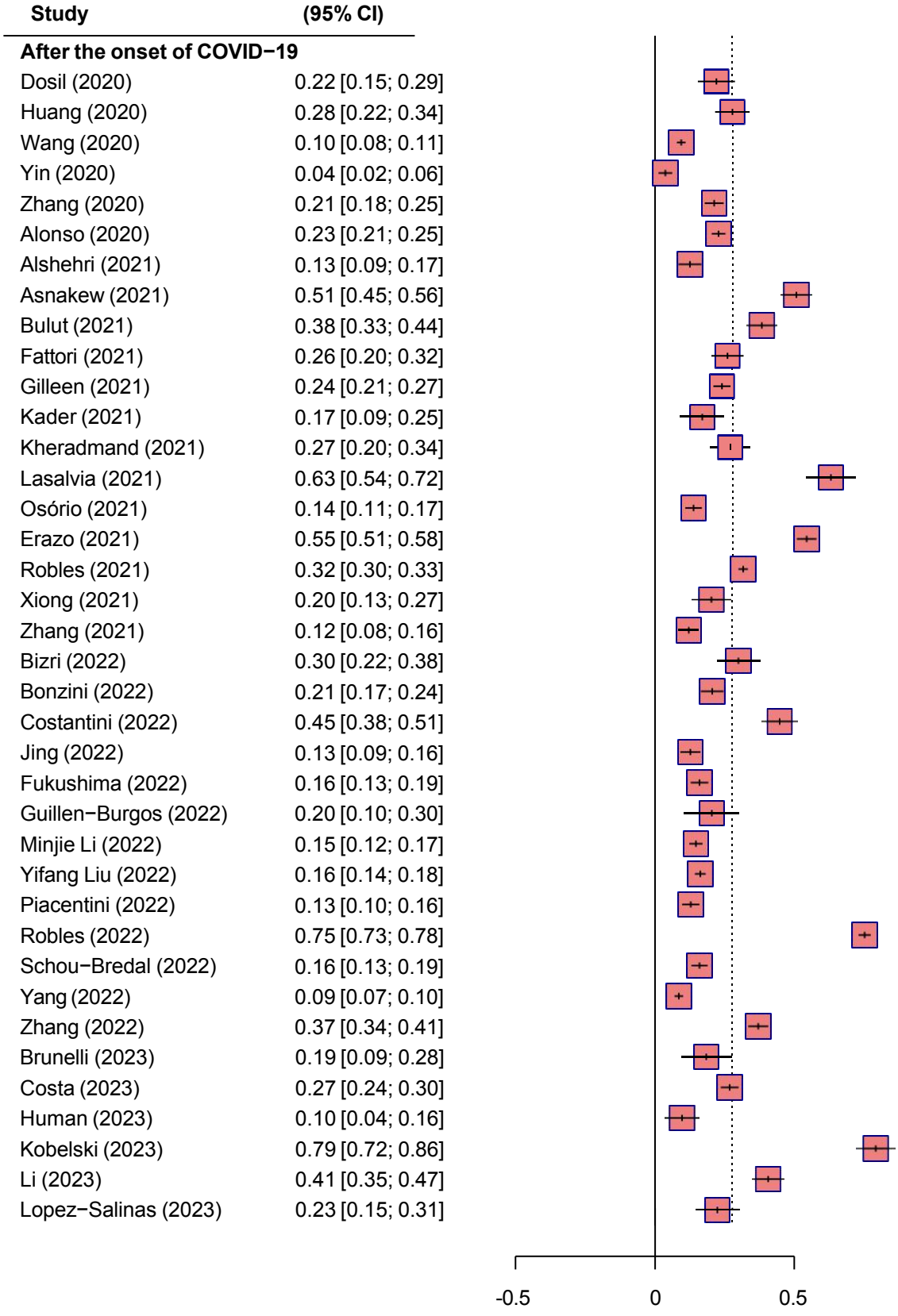


Study	(95% CI)
Costantini (2022)	0.24 [0.14; 0.34]
Jing (2022)	0.08 [0.01; 0.15]
Dykes (2022)	0.15 [0.03; 0.27]
Fukushima (2022)	0.18 [0.14; 0.22]
Guillen−Burgos (2022)	0.28 [0.16; 0.39]
James (2022)	0.14 [0.09; 0.18]
Jovarauskaite (2022)	0.17 [−0.13; 0.47]
Korkut (2022)	0.08 [0.03; 0.12]
Minjie Li (2022)	0.15 [0.06; 0.24]
Yifang Liu (2022)	0.26 [0.21; 0.32]
Meena (2022)	0.00
Piacentini (2022)	0.09 [0.08; 0.11]
Robles (2022)	0.63 [0.59; 0.67]
Sanayeh (2022)	0.42 [0.36; 0.49]
Schou−Bredal (2022)	0.06 [0.03; 0.10]
Schwartz (2022)	0.15 [0.11; 0.19]
Vadi (2022)	0.19 [0.09; 0.28]
Yang (2022)	0.09 [0.06; 0.13]
Young (2022)	0.11 [0.09; 0.13]
Zhang (2022)	0.50 [0.44; 0.55]
Alshehri (2023)	0.12 [0.08; 0.16]
Banakar (2023)	0.49 [0.44; 0.54]
Bouaddi (2023)	0.65 [0.55; 0.75]
Brunelli (2023)	0.15 [0.05; 0.25]
Costa (2023)	0.21 [0.16; 0.25]
Hennein (2023)	0.03 [0.01; 0.05]
Huang (2023)	0.28 [0.24; 0.32]
Human (2023)	0.05 [−0.05; 0.15]
Kobelski (2023)	0.61 [0.48; 0.74]
Li (2023)	0.37 [0.30; 0.45]
Yifang Liu (2023)	0.26 [0.22; 0.29]
Lopez−Salinas (2023)	0.10 [0.02; 0.19]
Lowry (2023)	0.22 [0.18; 0.26]
Machado (2023)	0.17 [0.12; 0.22]
Mao (2023)	0.30 [0.16; 0.43]
Newnham (2023)	0.17 [0.09; 0.26]
Ferreira (2023)	0.34 [0.19; 0.50]
Portillo−Van Diest (2023)	0.16 [0.13; 0.18]
Renzi (2023)	0.45 [0.34; 0.55]




Study
(95% CI)
Riaz (2023) 0.20 [0.16; 0.23]
Rice (2023) 0.25 [0.20; 0.29]
Abdeen (2023) 0.23 [0.10; 0.35]
Touhami (2023) 0.16 [0.13; 0.19]
Tran (2023) 0.19 [0.15; 0.24]
Chen (2023) 0.09 [0.07; 0.10]
Ghafoori (2024) 0.11 [−0.01; 0.22]
Isiek (2024) 0.26 [0.20; 0.32]
Kambulandu (2024) 0.38 [0.24; 0.52]
Li (2024) 0.06 [0.04; 0.07]
Li (2025) 0.72 [0.68; 0.75]
Huan Liu (2023) 0.24 [0.18; 0.30]
Maliwichi (2024) 0.17 [0.06; 0.28]
Mani (2023) 0.66 [0.61; 0.72]
Molina (2024) 0.15 [0.09; 0.20]
Ripoll (2024) 0.18 [0.09; 0.27]
Roger (2024) 0.13 [0.08; 0.18]
Rollin (2024) 0.14 [0.08; 0.20]
Sahin (2024) 0.09 [0.06; 0.12]
Satilmis (2024) 0.30 [0.16; 0.44]
Wu (2024) 0.31 [0.29; 0.33]
Total 0.25 [0.22; 0.29]
Heterogeneity: P < .001, I² = 98.2%, τ² = 0.0287
Before COVID−19
Moallef (2021) 0.14 [0.05; 0.24]
Klamen (1995) 0.09 [0.04; 0.14]
Carmassi (2018) 0.15 [−0.04; 0.35]
Total 0.10 [0.06; 0.15]
Heterogeneity: P = .49, I² = 0%, τ² = 0.0002
Total 0.25 [0.21; 0.28]
Heterogeneity: P < .001, I² = 98.2%, τ² = 0.0282
Heterogeneity between groups: P < .001
−0.5
0
0.5

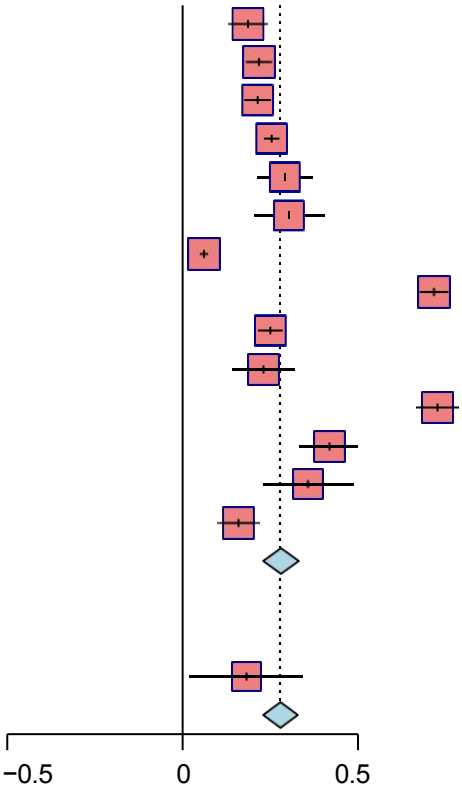
(b1-b2) The forest plots of PTSD prevalence in healthcare workers of different age groups before and after the onset of COVID-19.
(b1) Prevalence of PTSD in healthcare workers < 40 years old.



Study	(95% CI)
Newnham (2023)	0.19 [0.13; 0.24]
Portillo−Van Diest (2023)	0.22 [0.18; 0.25]
Riaz (2023)	0.21 [0.18; 0.25]
Rice (2023)	0.26 [0.23; 0.28]
Isiek (2024)	0.29 [0.21; 0.37]
Kambulandu (2024)	0.30 [0.21; 0.40]
Li (2024)	0.06 [0.05; 0.07]
Li (2025)	0.71 [0.68; 0.75]
Huan Liu (2023)	0.25 [0.21; 0.28]
Maliwichi (2024)	0.23 [0.14; 0.32]
Mani (2023)	0.73 [0.67; 0.79]
Molina (2024)	0.42 [0.33; 0.50]
Ripoll (2024)	0.36 [0.23; 0.49]
Rollin (2024)	0.16 [0.10; 0.22]
Total	0.28 [0.23; 0.33]
Heterogeneity: $P < .001, I^2 = 99.2\%, \tau^2 = 0.0325$	
Before COVID−19	
Carmassi (2018)	0.18 [0.02; 0.34]
Total	0.28 [0.23; 0.33]

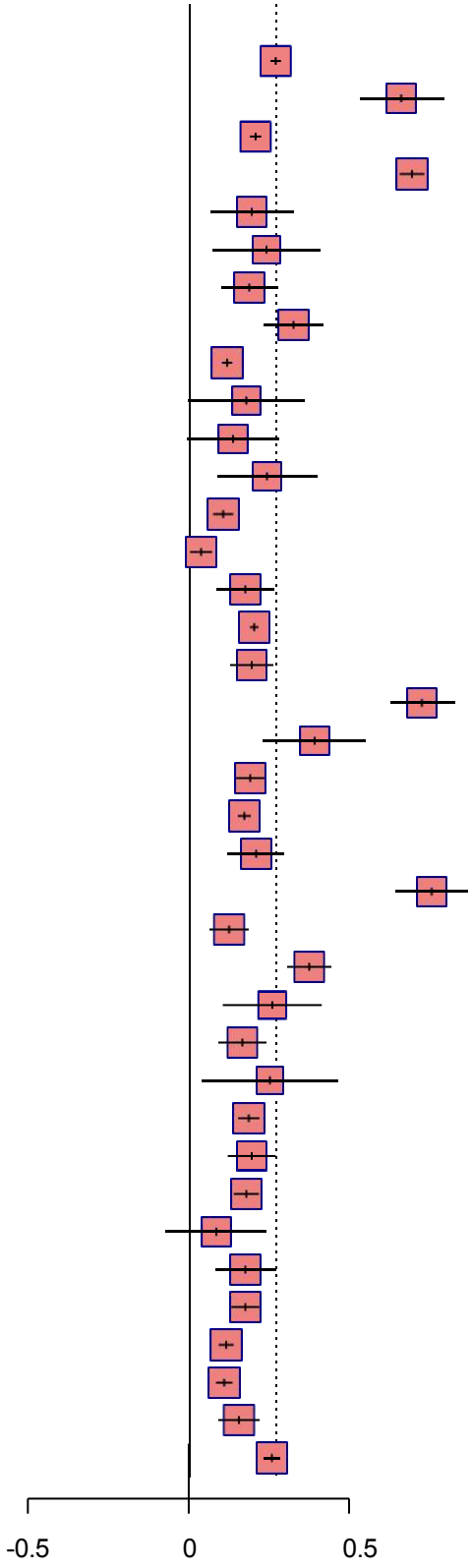
Heterogeneity: $P < .001$, $I^2 = 99.2\%$, $\tau^2 = 0.0321$

Heterogeneity between groups: $P = 0.253$

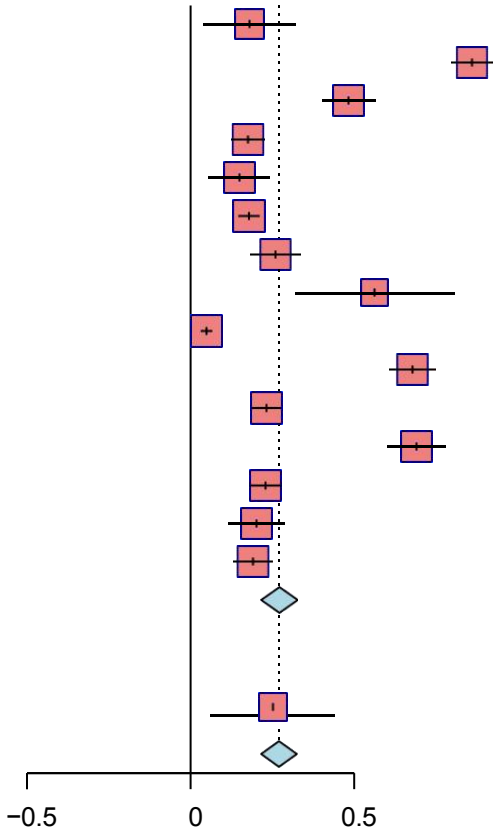


(b2) Prevalence of PTSD in healthcare workers≥ 40 years old.

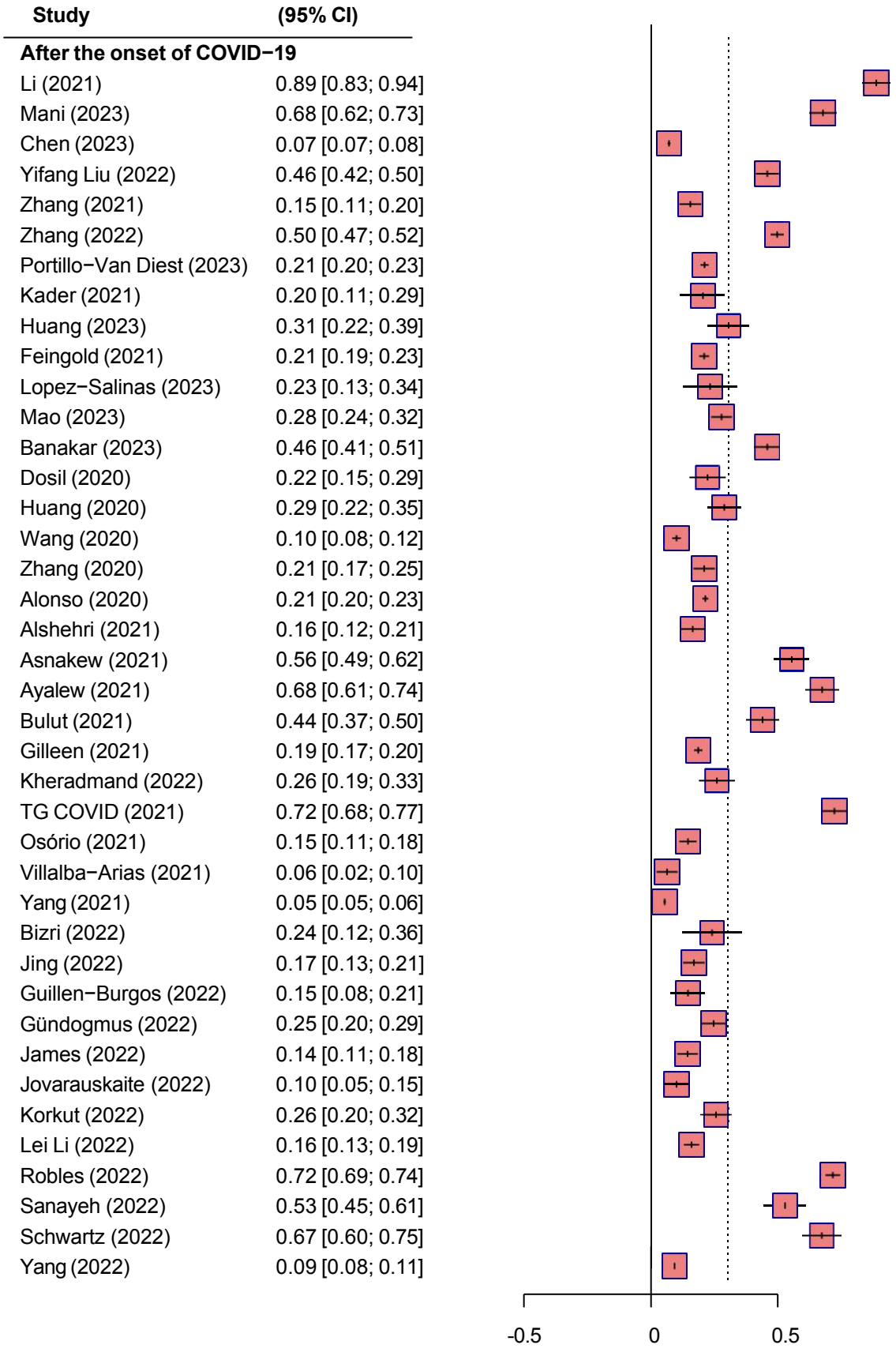
Study	(95% CI)
After the onset of COVID−19	
Robles (2021)	0.27 [0.25; 0.28]
Zhang (2022)	0.66 [0.53; 0.79]
Portillo−Van Diest (2023)	0.21 [0.19; 0.22]
Robles (2022)	0.69 [0.65; 0.73]
Kader (2021)	0.19 [0.06; 0.32]
Lopez−Salinas (2023)	0.24 [0.07; 0.41]
Tran (2023)	0.19 [0.10; 0.27]
Costantini (2022)	0.32 [0.23; 0.42]
Piacentini (2022)	0.12 [0.10; 0.13]
Maliwichi (2024)	0.18 [−0.00; 0.36]
Dosil (2020)	0.14 [−0.01; 0.28]
Huang (2020)	0.24 [0.09; 0.40]
Wang (2020)	0.10 [0.07; 0.13]
Yin (2020)	0.04 [0.00; 0.07]
Zhang (2020)	0.17 [0.08; 0.26]
Alonso (2020)	0.20 [0.19; 0.21]
Alshehri (2021)	0.19 [0.13; 0.26]
Asnakew (2021)	0.72 [0.62; 0.82]
Bulut (2021)	0.39 [0.23; 0.55]
Fattori (2021)	0.19 [0.15; 0.23]
Gilleen (2021)	0.17 [0.15; 0.19]
Kheradmand (2021)	0.21 [0.12; 0.29]
Lasalvia (2021)	0.75 [0.64; 0.87]
Osório (2021)	0.12 [0.07; 0.18]
Erazo (2021)	0.37 [0.30; 0.44]
Xiong (2021)	0.26 [0.10; 0.41]
Zhang (2021)	0.16 [0.09; 0.24]
Bizri (2022)	0.25 [0.04; 0.46]
Bonzini (2022)	0.19 [0.15; 0.22]
Jing (2022)	0.19 [0.12; 0.27]
Fukushima (2022)	0.18 [0.14; 0.21]
Guillen−Burgos (2022)	0.08 [−0.07; 0.24]
Minjie Li (2022)	0.17 [0.08; 0.27]
Yifang Liu (2022)	0.17 [0.13; 0.22]
Schou−Bredal (2022)	0.12 [0.09; 0.14]
Yang (2022)	0.11 [0.08; 0.13]
Brunelli (2023)	0.15 [0.09; 0.22]
Costa (2023)	0.26 [0.23; 0.28]

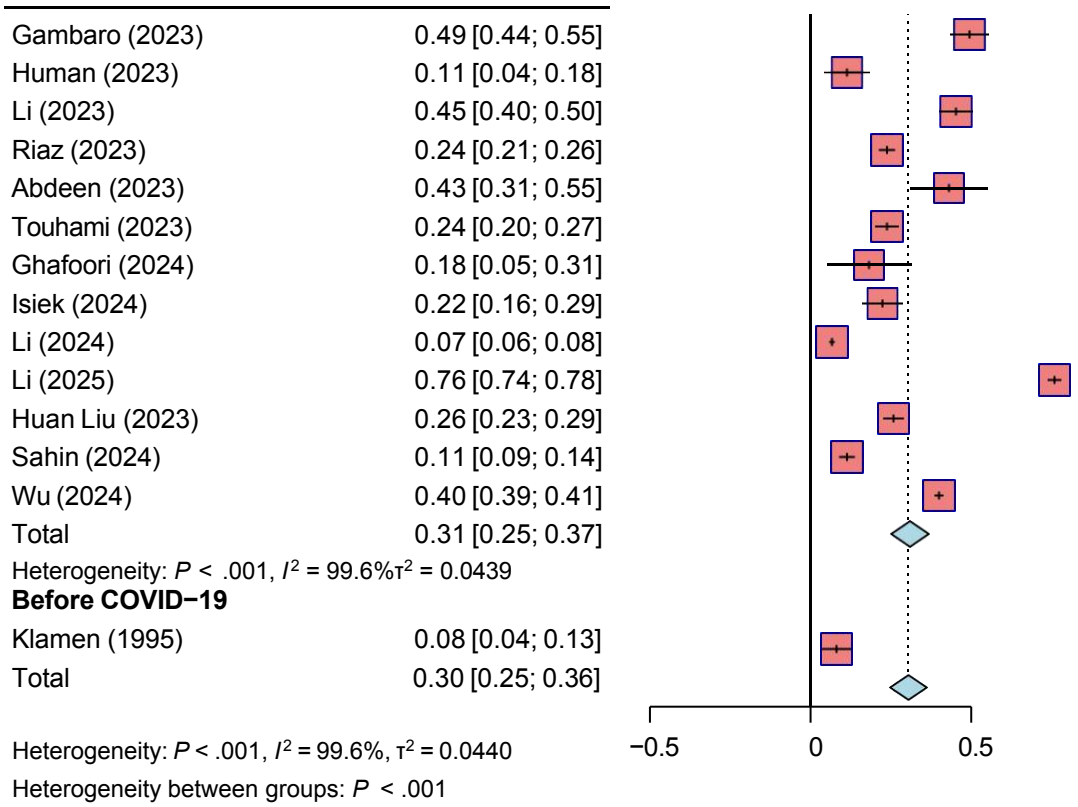


Study	(95% CI)
Human (2023)	0.18 [0.04; 0.32]
Kobelski (2023)	0.86 [0.80; 0.92]
Li (2023)	0.48 [0.40; 0.56]
Newnham (2023)	0.18 [0.12; 0.23]
Riaz (2023)	0.15 [0.05; 0.24]
Rice (2023)	0.18 [0.15; 0.21]
Isiek (2024)	0.26 [0.18; 0.34]
Kambulandu (2024)	0.56 [0.32; 0.81]
Li (2024)	0.05 [0.03; 0.07]
Li (2025)	0.68 [0.61; 0.75]
Huan Liu (2023)	0.23 [0.19; 0.28]
Mani (2023)	0.69 [0.60; 0.78]
Molina (2024)	0.23 [0.18; 0.27]
Ripoll (2024)	0.20 [0.12; 0.29]
Rollin (2024)	0.19 [0.13; 0.25]
Total	0.27 [0.22; 0.32]
Heterogeneity: P < .001, I^2 = 97.9%, τ^2 = 0.0379	
Before COVID−19	
Carmassi (2018)	0.25 [0.06; 0.44]
Total	0.27 [0.22; 0.32]
Heterogeneity: P < .001, I^2 = 97.9%, τ^2 = 0.0373	
Heterogeneity between groups: P = 0.835	



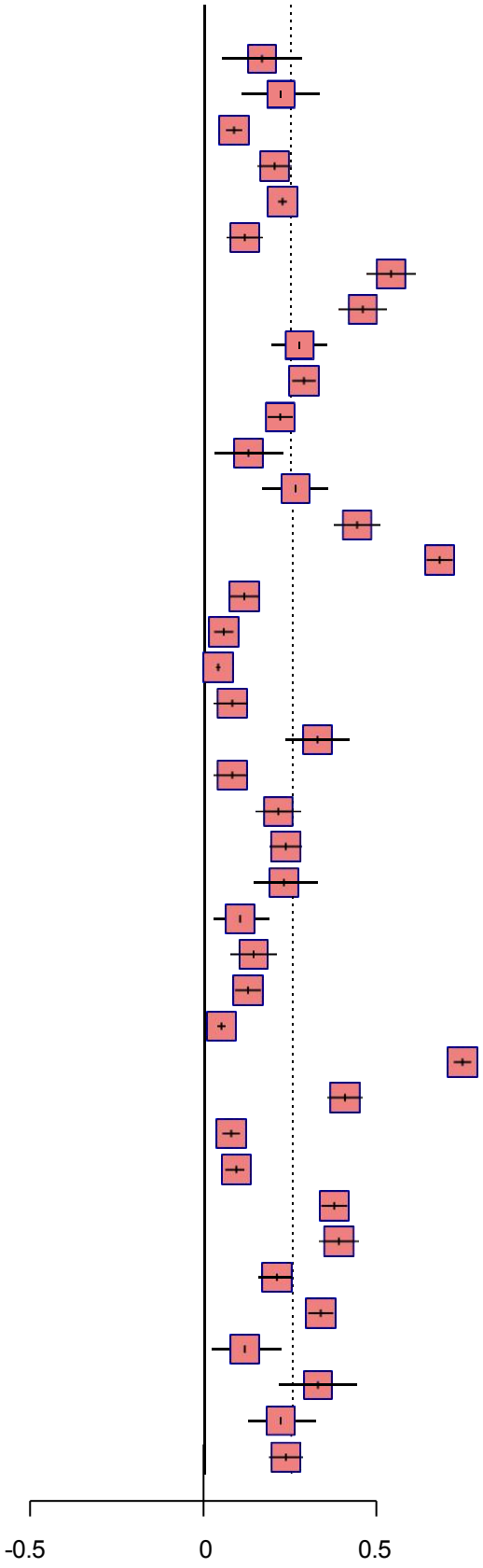
(c1-c2) The forest plots of PTSD prevalence in healthcare workers of different marriage status before and after the onset of COVID-19.
(c1) Prevalence of PTSD in married healthcare workers.



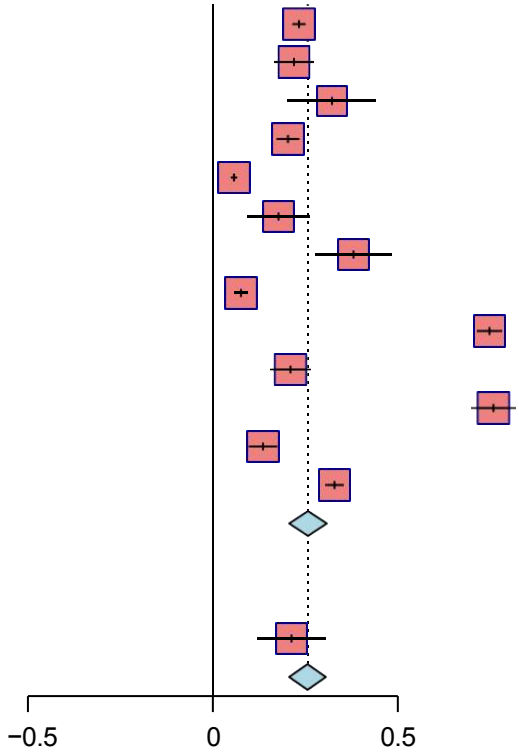

Study
(95% CI)
Gambaro (2023) 0.49 [0.44; 0.55]
Human (2023) 0.11 [0.04; 0.18]
Li (2023) 0.45 [0.40; 0.50]
Riaz (2023) 0.24 [0.21; 0.26]
Abdeen (2023) 0.43 [0.31; 0.55]
Touhami (2023) 0.24 [0.20; 0.27]
Ghafoori (2024) 0.18 [0.05; 0.31]
Isiek (2024) 0.22 [0.16; 0.29]
Li (2024) 0.07 [0.06; 0.08]
Li (2025) 0.76 [0.74; 0.78]
Huan Liu (2023) 0.26 [0.23; 0.29]
Sahin (2024) 0.11 [0.09; 0.14]
Wu (2024) 0.40 [0.39; 0.41]
Total 0.31 [0.25; 0.37]
Heterogeneity: P < .001, I² = 99.6%τ² = 0.0439
Before COVID−19
Klamen (1995) 0.08 [0.04; 0.13]
Total 0.30 [0.25; 0.36]
Heterogeneity: P < .001, I² = 99.6%, τ² = 0.0440
Heterogeneity between groups: P < .001
−0.5
0
0.5

(c2) Prevalence of PTSD in unmarried healthcare workers.

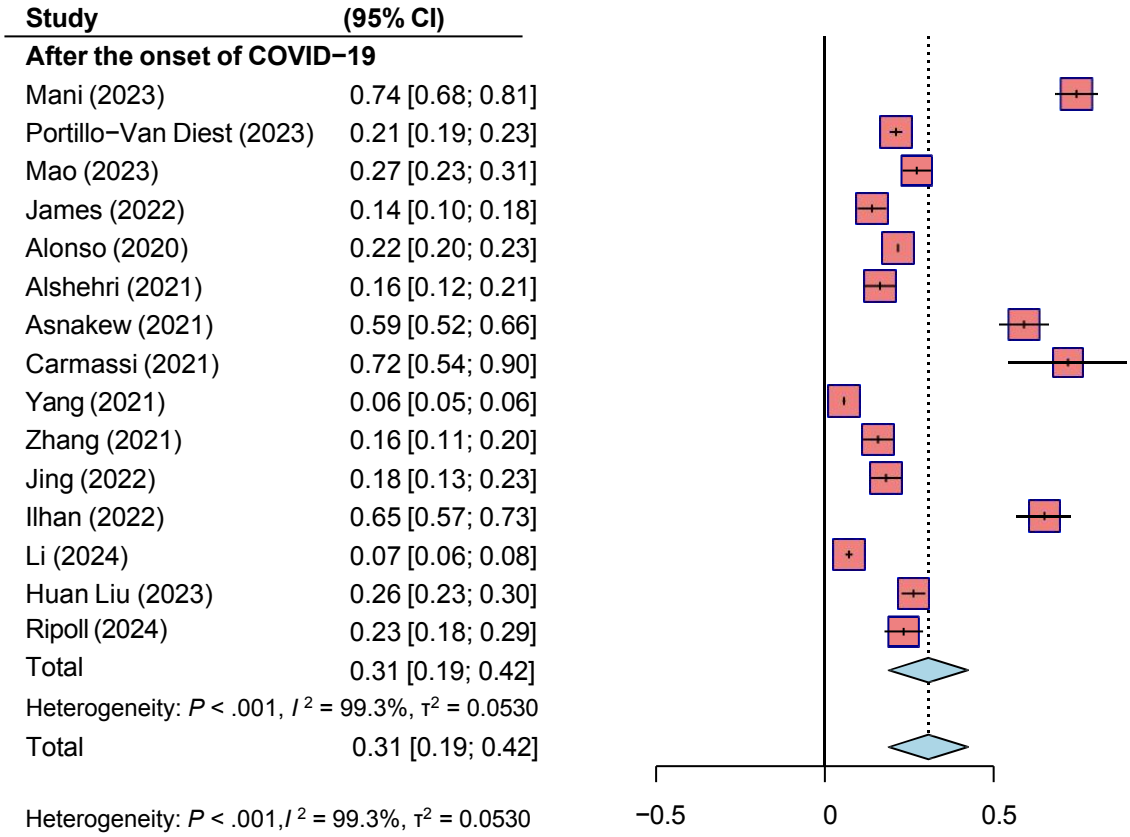
Study	(95% CI)
After the onset of COVID−19	
Dosil (2020)	0.17 [0.06; 0.29]
Huang (2020)	0.23 [0.11; 0.34]
Wang (2020)	0.09 [0.07; 0.11]
Zhang (2020)	0.21 [0.16; 0.26]
Alonso (2020)	0.23 [0.22; 0.24]
Alshehri (2021)	0.12 [0.07; 0.17]
Asnakew (2021)	0.55 [0.48; 0.62]
Ayalew (2021)	0.46 [0.39; 0.53]
Bulut (2021)	0.28 [0.20; 0.36]
Feingold (2021)	0.29 [0.26; 0.33]
Gilleen (2021)	0.22 [0.19; 0.26]
Kader (2022)	0.13 [0.03; 0.23]
Kheradmand (2022)	0.27 [0.17; 0.36]
Li (2021)	0.45 [0.38; 0.51]
TG COVID (2021)	0.69 [0.65; 0.72]
Osório (2021)	0.12 [0.08; 0.16]
Villalba−Arias (2021)	0.06 [0.03; 0.08]
Yang (2021)	0.04 [0.03; 0.05]
Zhang (2021)	0.08 [0.03; 0.13]
Bizri (2022)	0.33 [0.23; 0.42]
Jing (2022)	0.08 [0.03; 0.13]
Guillen−Burgos (2022)	0.21 [0.15; 0.28]
Gündogmus (2022)	0.24 [0.19; 0.29]
James (2022)	0.23 [0.14; 0.33]
Jovarauskaite (2022)	0.11 [0.03; 0.19]
Korkut (2022)	0.14 [0.08; 0.21]
Lei Li (2022)	0.13 [0.09; 0.17]
Yifang Liu (2022)	0.05 [0.04; 0.06]
Robles (2022)	0.75 [0.73; 0.78]
Sanayeh (2022)	0.41 [0.36; 0.46]
Schwartz (2022)	0.08 [0.05; 0.10]
Yang (2022)	0.09 [0.06; 0.12]
Zhang (2022)	0.38 [0.34; 0.41]
Banakar (2023)	0.39 [0.33; 0.45]
Gambaro (2023)	0.21 [0.16; 0.26]
Huang (2023)	0.34 [0.30; 0.37]
Human (2023)	0.12 [0.02; 0.22]
Li (2023)	0.33 [0.22; 0.44]
Lopez−Salinas (2023)	0.23 [0.13; 0.32]
Mao (2023)	0.24 [0.19; 0.29]



Study	(95% CI)
Portillo−Van Diest (2023)	0.23 [0.22; 0.25]
Riaz (2023)	0.22 [0.17; 0.27]
Abdeen (2023)	0.32 [0.20; 0.44]
Touhami (2023)	0.20 [0.17; 0.23]
Chen (2023)	0.06 [0.05; 0.07]
Ghafoori (2024)	0.18 [0.09; 0.26]
Isiek (2024)	0.38 [0.28; 0.48]
Li (2024)	0.08 [0.06; 0.09]
Li (2025)	0.75 [0.71; 0.78]
Huan Liu (2023)	0.21 [0.16; 0.26]
Mani (2023)	0.76 [0.70; 0.82]
Sahin (2024)	0.14 [0.10; 0.17]
Wu (2024)	0.33 [0.30; 0.35]
Total	0.26 [0.21; 0.31]
Heterogeneity: $P < .001$, $I^2 = 99.4\%$ $\tau^2 = 0.0326$	
Before COVID−19	
Klamen (1995)	0.21 [0.12; 0.31]
Total	0.26 [0.21; 0.31]
Heterogeneity: $P < .001$, $I^2 = 99.4\%$, $\tau^2 = 0.0321$	
Heterogeneity between groups: $P = 0.418$	



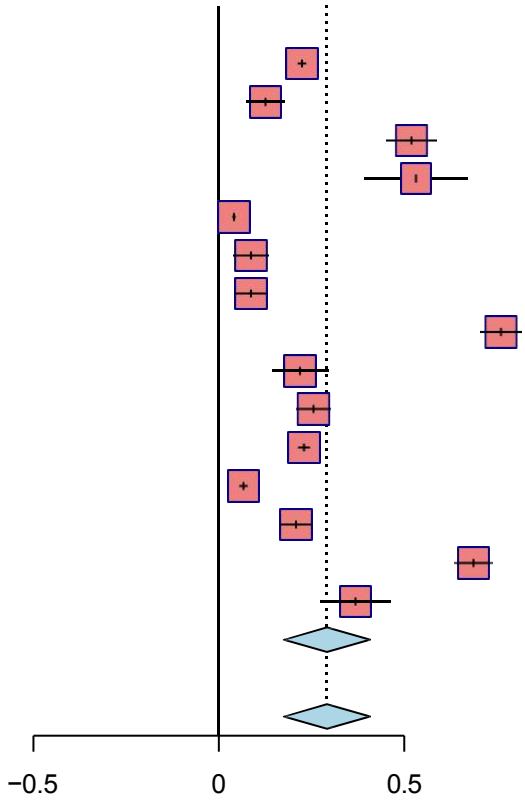
(d1-d2) The forest plots of PTSD prevalence in healthcare workers with or without children before and after the onset of COVID-19.
(d1) Prevalence of PTSD in healthcare workers with children.



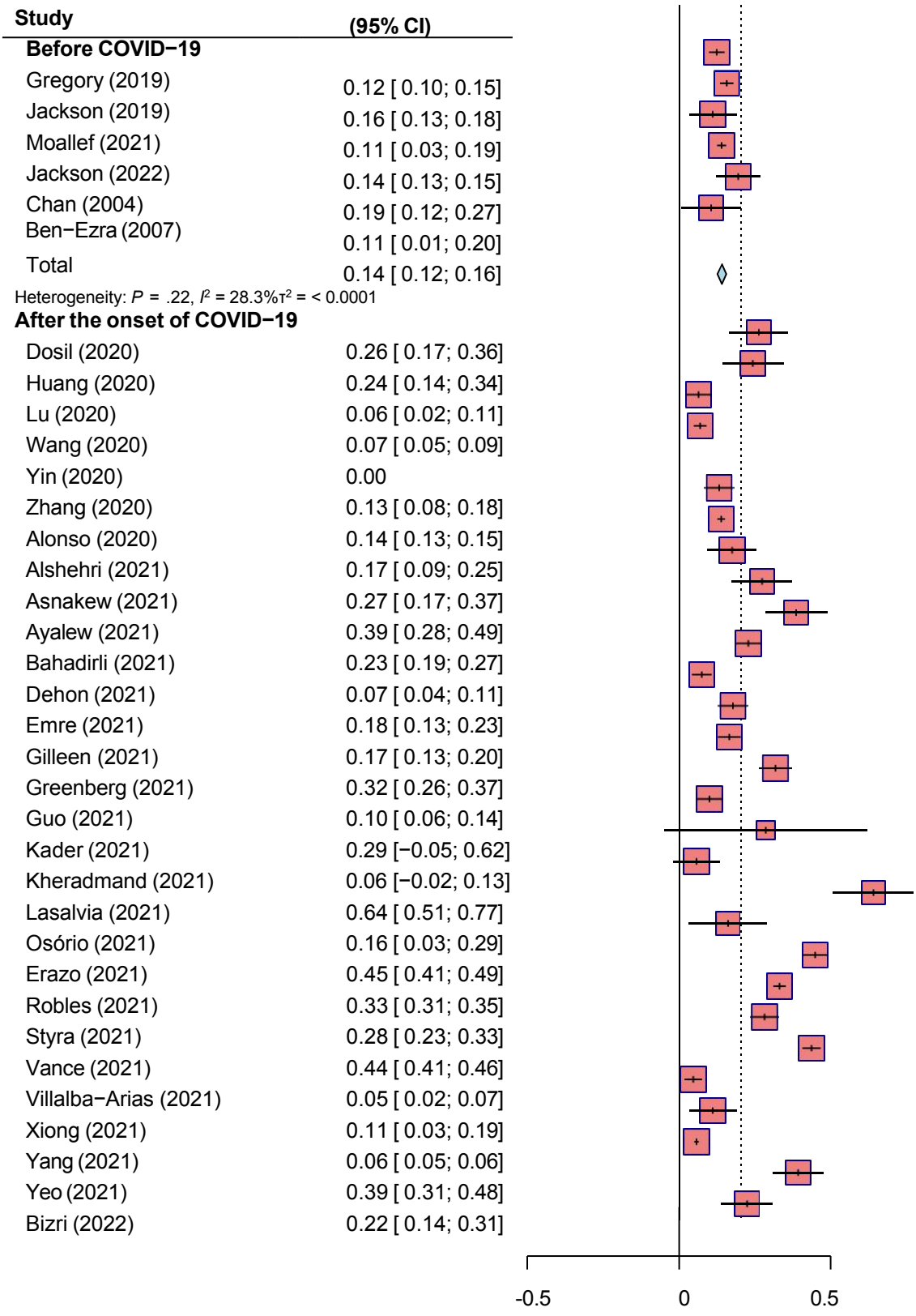
(d2) Prevalence of PTSD in healthcare workers without children.

Study	(95% CI)
After the onset of COVID−19	
Alonso (2020)	0.22 [0.21; 0.24]
Alshehri (2021)	0.13 [0.07; 0.18]
Asnakew (2021)	0.52 [0.45; 0.59]
Carmassi (2021)	0.53 [0.39; 0.67]
Yang (2021)	0.04 [0.04; 0.05]
Zhang (2021)	0.09 [0.04; 0.13]
Jing (2022)	0.08 [0.04; 0.13]
Ilhan (2022)	0.76 [0.70; 0.82]
James (2022)	0.22 [0.14; 0.30]
Mao (2023)	0.25 [0.21; 0.30]
Portillo−Van Diest (2023)	0.23 [0.21; 0.24]
Li (2024)	0.07 [0.05; 0.08]
Huan Liu (2023)	0.21 [0.16; 0.25]
Mani (2023)	0.69 [0.64; 0.74]
Ripoll (2024)	0.37 [0.27; 0.46]
Total	0.29 [0.18; 0.41]
Heterogeneity: $P < .001, I^2 = 99.5\%, \tau^2 = 0.0518$	
Total	0.29 [0.18; 0.41]

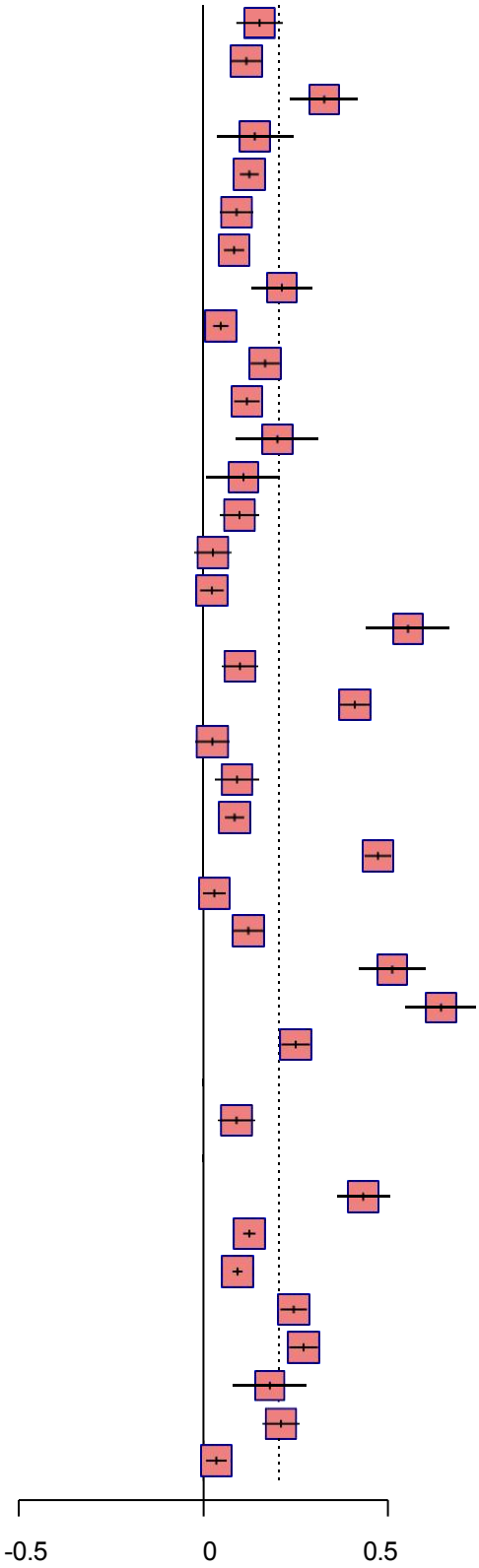
Heterogeneity: $P < .001, I^2 = 99.5\%, \tau^2 = 0.0518$

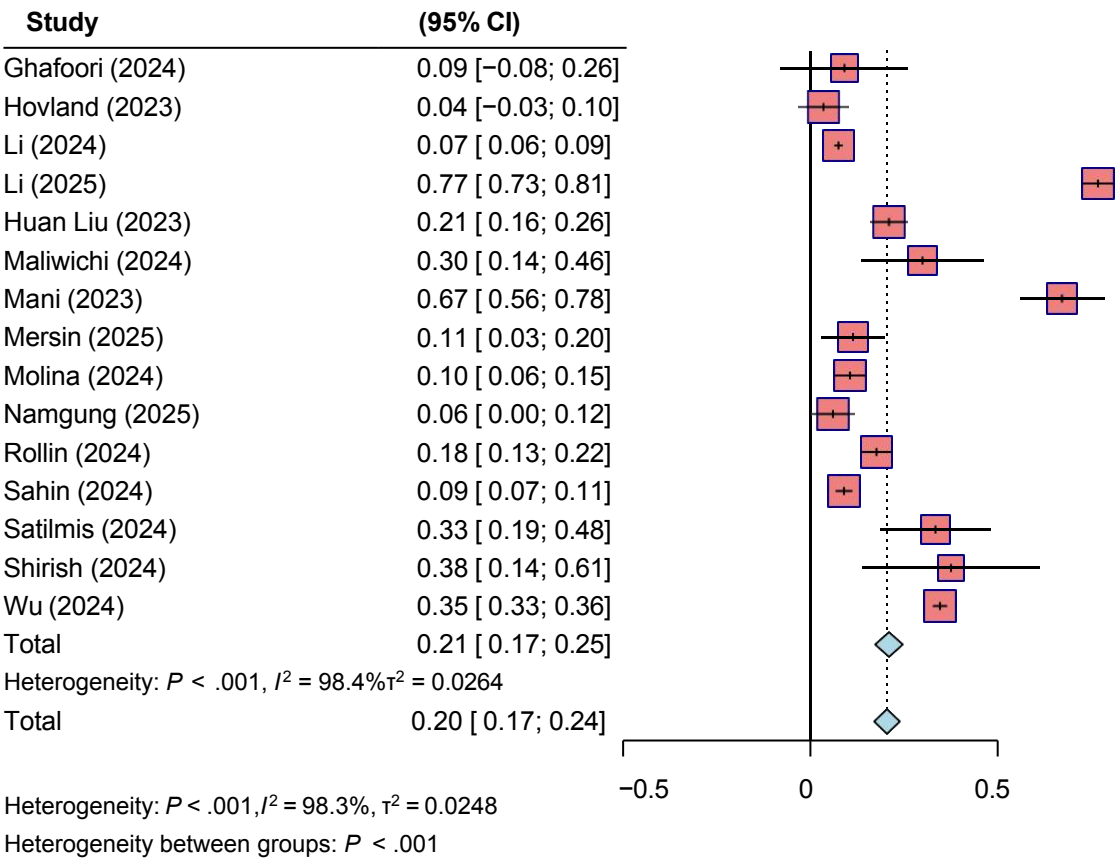


(e1-e3) The forest plots of PTSD prevalence among healthcare workers in different occupations before and after the onset of COVID-19.
(e1) Prevalence of PTSD in physician.



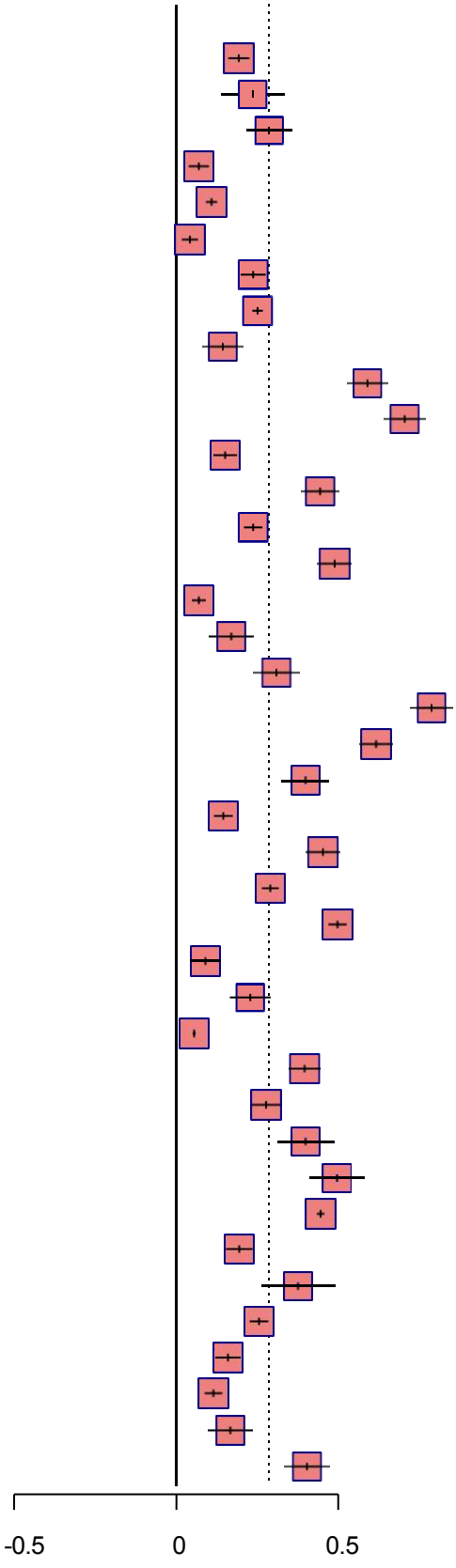
Study	(95% CI)
Bock (2022)	0.15 [0.09; 0.21]
Bonzini (2022)	0.12 [0.07; 0.16]
Costantini (2022)	0.33 [0.24; 0.42]
Dykes (2022)	0.14 [0.04; 0.24]
Fournier (2022)	0.12 [0.10; 0.15]
Fukushima (2022)	0.09 [0.04; 0.13]
Mendez (2022)	0.08 [0.06; 0.11]
Guillen−Burgos (2022)	0.21 [0.13; 0.30]
Gündogmus (2022)	0.05 [0.03; 0.07]
James (2022)	0.17 [0.13; 0.21]
Johns (2022)	0.12 [0.08; 0.15]
Korkut (2022)	0.20 [0.09; 0.31]
Minjie Li (2022)	0.11 [0.01; 0.21]
McGuinness (2022)	0.10 [0.05; 0.15]
Meena (2022)	0.03 [−0.02; 0.08]
Reid (2022)	0.02 [−0.01; 0.05]
Sanayeh (2022)	0.55 [0.44; 0.67]
Schou−Bredal (2022)	0.10 [0.05; 0.15]
Schwartz (2022)	0.41 [0.37; 0.45]
Stafseth (2022)	0.02 [−0.02; 0.07]
Th'ng (2022)	0.09 [0.03; 0.15]
Young (2022)	0.08 [0.06; 0.11]
Zhang (2022)	0.47 [0.44; 0.51]
Adams (2023)	0.03 [−0.00; 0.06]
Alshehri (2023)	0.12 [0.08; 0.16]
Banakar (2023)	0.51 [0.42; 0.60]
Bouaddi (2023)	0.64 [0.55; 0.74]
Costa (2023)	0.25 [0.21; 0.29]
Danson (2023)	0.00
Hruska (2023)	0.09 [0.04; 0.14]
Human (2023)	0.00
Li (2023)	0.43 [0.36; 0.50]
Portillo−Van Diest (2023)	0.12 [0.11; 0.14]
Ptak (2023)	0.09 [0.08; 0.10]
Riaz (2023)	0.24 [0.21; 0.28]
Rice (2023)	0.27 [0.23; 0.31]
Rice (2023)	0.18 [0.08; 0.28]
Tran (2023)	0.21 [0.16; 0.26]
Fournier (2025)	0.04 [0.01; 0.06]



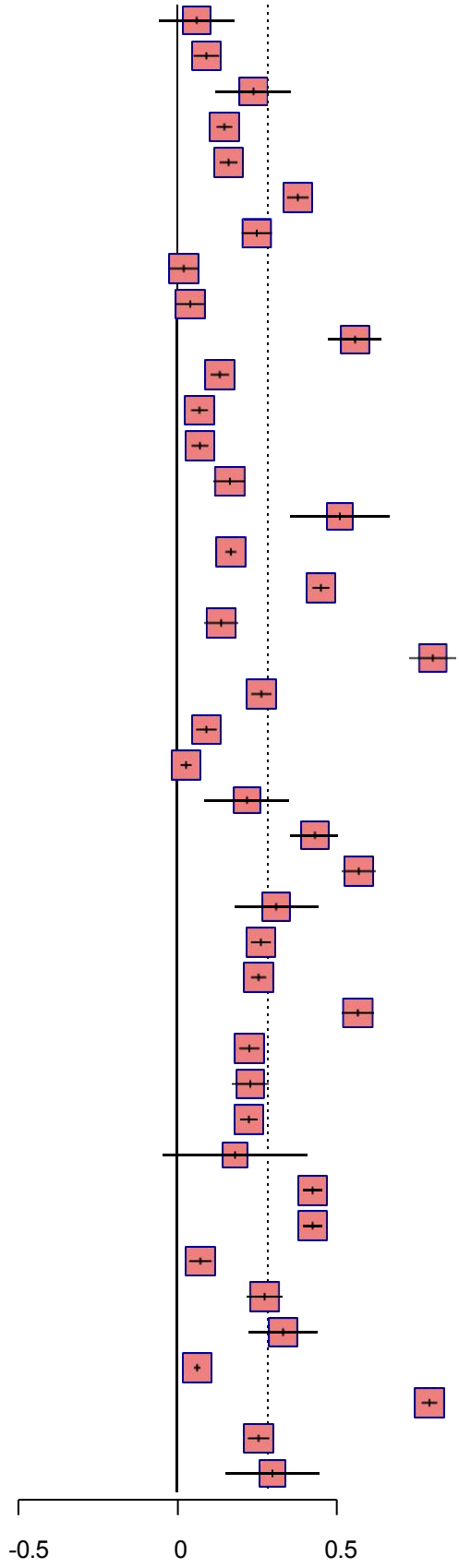

Study
(95% CI)
Ghafoori (2024) 0.09 [−0.08; 0.26]
Hovland (2023) 0.04 [−0.03; 0.10]
Li (2024) 0.07 [0.06; 0.09]
Li (2025) 0.77 [0.73; 0.81]
Huan Liu (2023) 0.21 [0.16; 0.26]
Maliwichi (2024) 0.30 [0.14; 0.46]
Mani (2023) 0.67 [0.56; 0.78]
Mersin (2025) 0.11 [0.03; 0.20]
Molina (2024) 0.10 [0.06; 0.15]
Namgung (2025) 0.06 [0.00; 0.12]
Rollin (2024) 0.18 [0.13; 0.22]
Sahin (2024) 0.09 [0.07; 0.11]
Satilmis (2024) 0.33 [0.19; 0.48]
Shirish (2024) 0.38 [0.14; 0.61]
Wu (2024) 0.35 [0.33; 0.36]
Total 0.21 [0.17; 0.25]
Heterogeneity: P < .001, I^2 = 98.4%τ^2 = 0.0264
Total 0.20 [0.17; 0.24]
−0.5
0
0.5
Heterogeneity: P < .001,I^2 = 98.3%, τ^2 = 0.0248
Heterogeneity between groups: P < .001

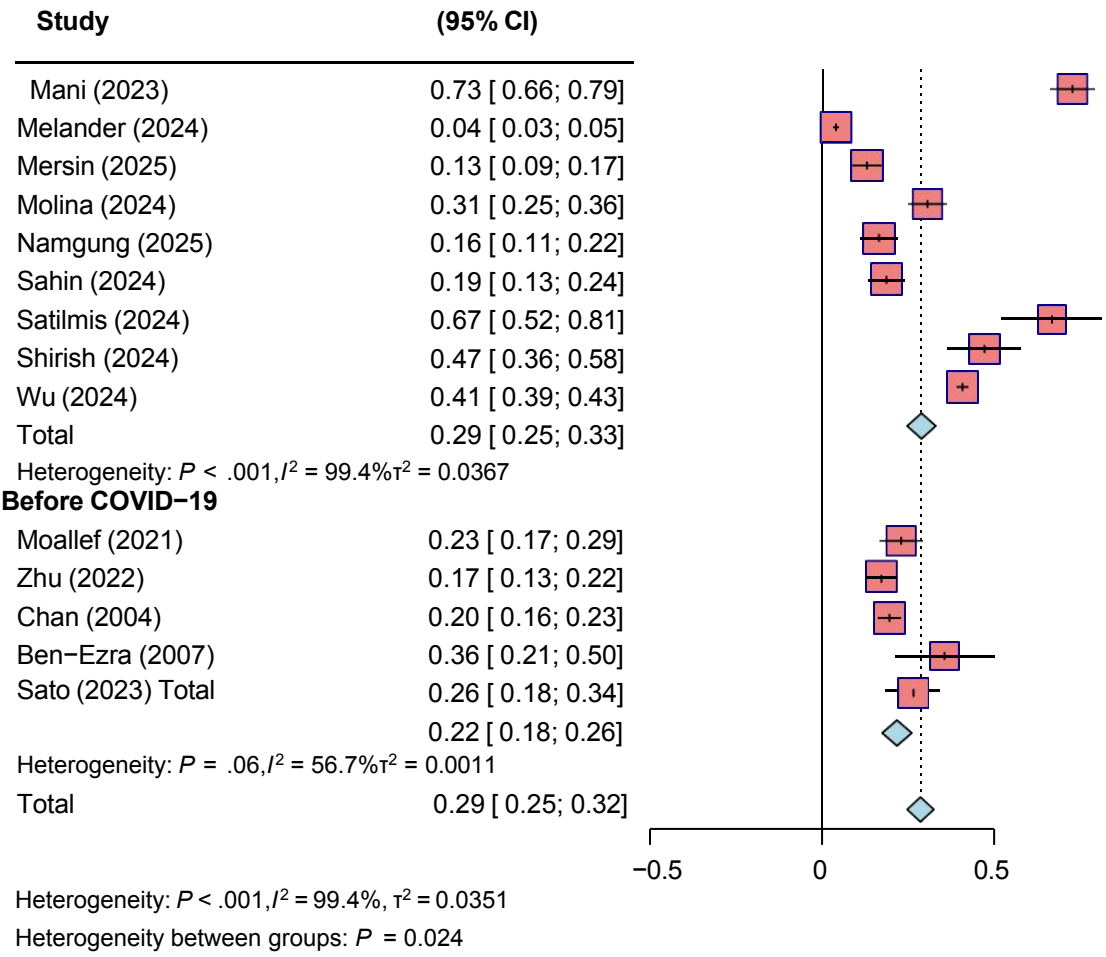
(e2) Prevalence of PTSD in nurse.

Study	(95% CI)
After the onset of COVID−19	
Cai (2020)	0.19 [0.16; 0.22]
Dosil (2020)	0.24 [0.14; 0.33]
Huang (2020)	0.29 [0.22; 0.36]
Lu (2020)	0.07 [0.04; 0.10]
Wang (2020)	0.11 [0.09; 0.13]
Yin (2020)	0.04 [0.02; 0.07]
Zhang (2020)	0.24 [0.20; 0.28]
Alonso (2020)	0.25 [0.23; 0.27]
Alshehri (2021)	0.14 [0.08; 0.21]
Asnakew (2021)	0.59 [0.53; 0.65]
Ayalew (2021)	0.71 [0.64; 0.77]
Bahadirli (2021)	0.15 [0.11; 0.19]
Engelbrecht (2021)	0.44 [0.39; 0.50]
Gilleen (2021)	0.24 [0.21; 0.27]
Greenberg (2021)	0.49 [0.44; 0.54]
Guo (2021)	0.07 [0.05; 0.09]
Kader (2022)	0.17 [0.10; 0.24]
Kheradmand (2022)	0.31 [0.24; 0.38]
Lasalvia (2021)	0.79 [0.72; 0.85]
Li (2021)	0.62 [0.57; 0.67]
Marcomini (2021)	0.40 [0.33; 0.47]
Osório (2021)	0.14 [0.12; 0.17]
Erazo (2021)	0.45 [0.40; 0.50]
Robles (2021)	0.29 [0.26; 0.32]
Styra (2021)	0.50 [0.47; 0.53]
Villalba−Arias (2021)	0.09 [0.04; 0.14]
Xiong (2021)	0.23 [0.17; 0.29]
Yang (2021)	0.06 [0.05; 0.06]
Yeo (2021)	0.40 [0.35; 0.45]
Bonzini (2022)	0.28 [0.23; 0.32]
Brady (2022)	0.40 [0.31; 0.49]
Costantini (2022)	0.50 [0.41; 0.58]
Couper (2022)	0.45 [0.43; 0.46]
Da'she (2022)	0.20 [0.15; 0.24]
Dykes (2022)	0.38 [0.26; 0.49]
Fournier (2022)	0.26 [0.23; 0.28]
Fukushima (2022)	0.16 [0.12; 0.20]
Mendez (2022)	0.12 [0.09; 0.14]
Guillen−Burgos (2022)	0.17 [0.10; 0.24]
Gündogmus (2022)	0.40 [0.33; 0.47]

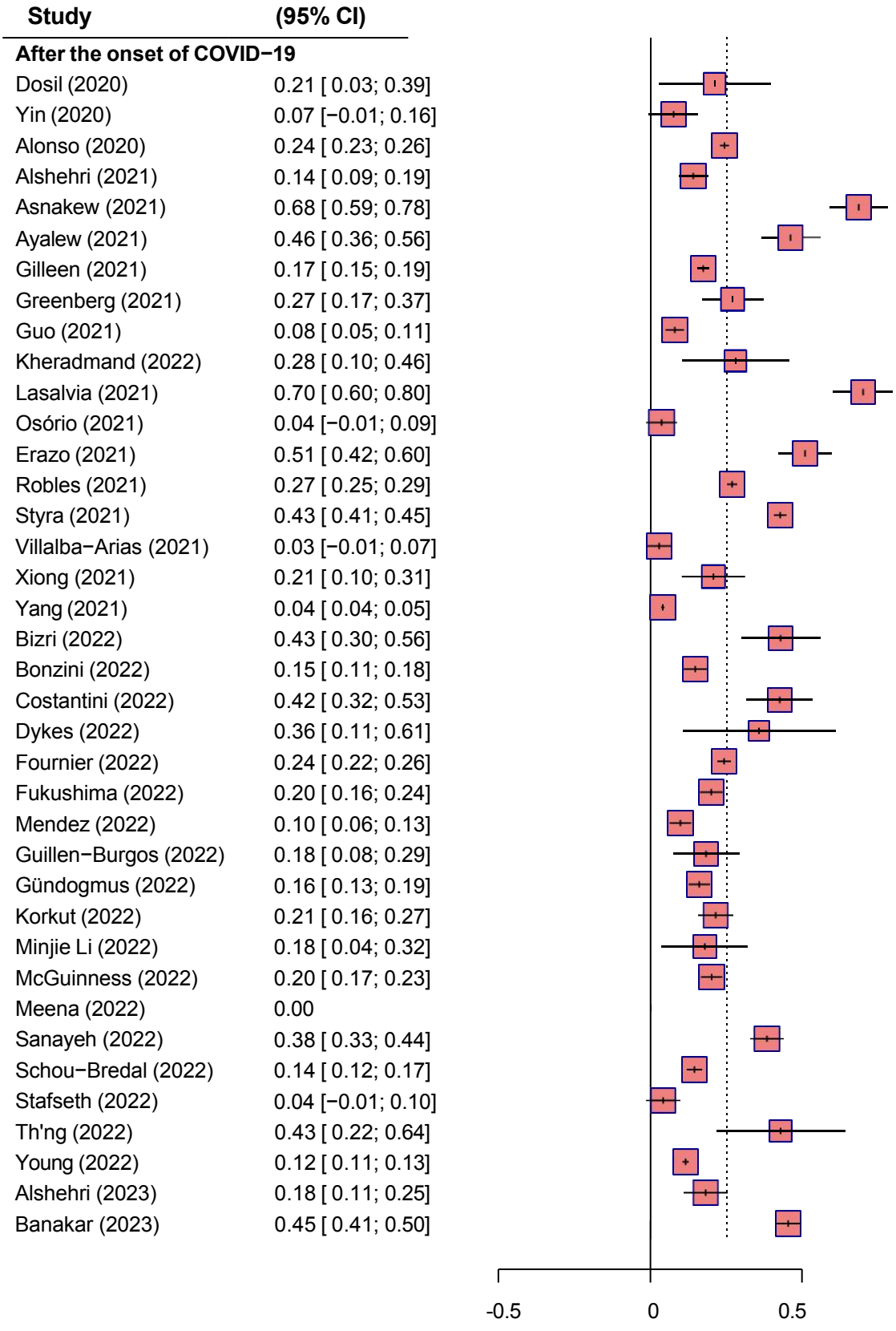


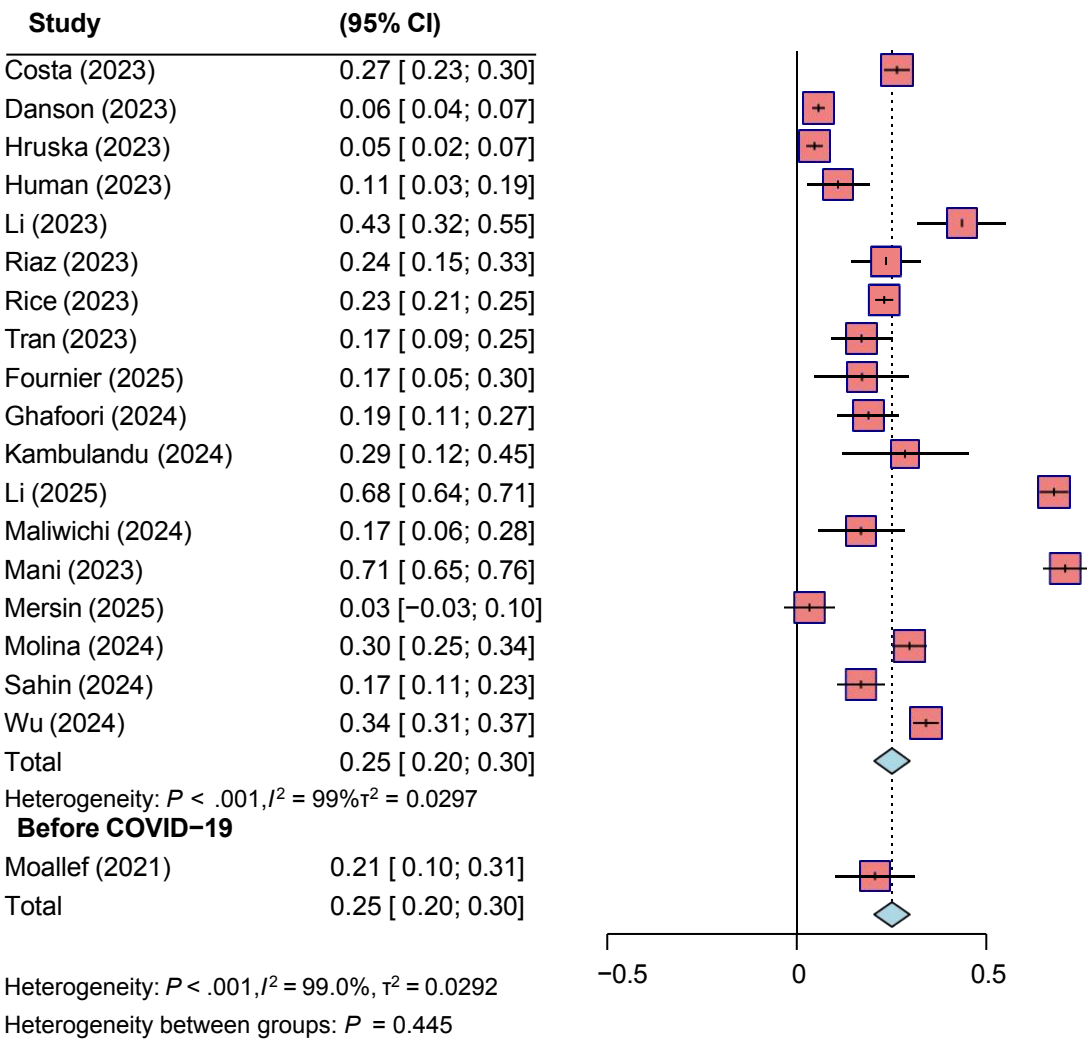
Study	(95% CI)
James (2022)	0.06 [−0.06; 0.18]
Jovarauskaite (2022)	0.09 [0.05; 0.13]
Korkut (2022)	0.24 [0.12; 0.36]
Minjie Li (2022)	0.15 [0.13; 0.17]
Marsden (2022)	0.16 [0.13; 0.19]
Martin−Rodriguez (2022)	0.38 [0.35; 0.41]
McGuinness (2022)	0.25 [0.20; 0.30]
Meena (2022)	0.02 [−0.02; 0.06]
Reid (2022)	0.04 [−0.00; 0.09]
Sanayeh (2022)	0.56 [0.48; 0.64]
Schou−Bredal (2022)	0.13 [0.11; 0.16]
Stafseth (2022)	0.07 [0.05; 0.10]
Tebbeb (2022)	0.07 [0.05; 0.10]
Th'ng (2022)	0.17 [0.12; 0.22]
Van Steenkiste (2022)	0.51 [0.36; 0.67]
Young (2022)	0.17 [0.15; 0.19]
Zhang (2022)	0.45 [0.43; 0.48]
Alshehri (2023)	0.14 [0.09; 0.19]
Bouaddi (2023)	0.81 [0.73; 0.88]
Costa (2023)	0.27 [0.24; 0.30]
Danson (2023)	0.09 [0.06; 0.12]
Hruska (2023)	0.03 [0.01; 0.05]
Human (2023)	0.22 [0.09; 0.35]
Li (2023)	0.43 [0.36; 0.51]
Liang (2023)	0.57 [0.52; 0.63]
Lopez−Salinas (2023)	0.31 [0.18; 0.44]
Mao (2023)	0.26 [0.23; 0.29]
Portillo−Van Diest (2023)	0.26 [0.23; 0.28]
Renzi (2023)	0.57 [0.52; 0.62]
Riaz (2023)	0.23 [0.20; 0.26]
Tran (2023)	0.23 [0.17; 0.29]
Fournier (2025)	0.23 [0.20; 0.25]
Ghafoori (2024)	0.18 [−0.05; 0.41]
Giménez−Díez (2024)	0.43 [0.40; 0.46]
Giménez−Díez (2024)	0.43 [0.40; 0.46]
Hovland (2023)	0.07 [0.04; 0.11]
Isiek (2024)	0.28 [0.22; 0.33]
Kambulandu (2024)	0.33 [0.22; 0.44]
Li (2024)	0.06 [0.05; 0.07]
Li (2025)	0.79 [0.77; 0.82]
Huan Liu (2023)	0.26 [0.22; 0.29]
Maliwichi (2024)	0.30 [0.15; 0.45]



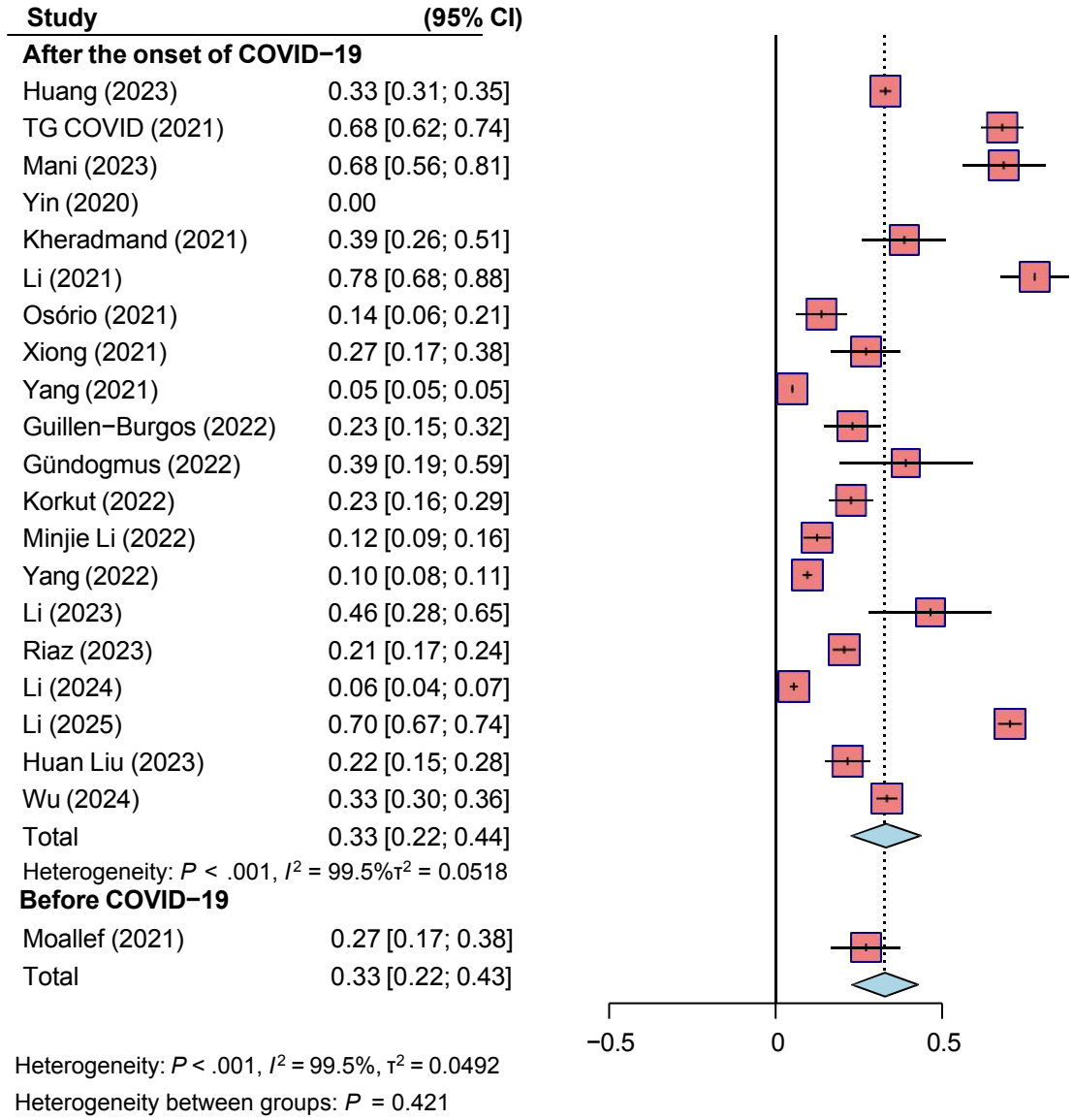

Study
(95% CI)
Mani (2023) 0.73 [0.66; 0.79]
Melander (2024) 0.04 [0.03; 0.05]
Mersin (2025) 0.13 [0.09; 0.17]
Molina (2024) 0.31 [0.25; 0.36]
Namgung (2025) 0.16 [0.11; 0.22]
Sahin (2024) 0.19 [0.13; 0.24]
Satilmis (2024) 0.67 [0.52; 0.81]
Shirish (2024) 0.47 [0.36; 0.58]
Wu (2024) 0.41 [0.39; 0.43]
Total 0.29 [0.25; 0.33]
Heterogeneity: P < .001, I² = 99.4% τ² = 0.0367
Before COVID−19
Moallef (2021) 0.23 [0.17; 0.29]
Zhu (2022) 0.17 [0.13; 0.22]
Chan (2004) 0.20 [0.16; 0.23]
Ben−Ezra (2007) 0.36 [0.21; 0.50]
Sato (2023) Total 0.26 [0.18; 0.34]
0.22 [0.18; 0.26]
Heterogeneity: P = .06, I² = 56.7% τ² = 0.0011
Total 0.29 [0.25; 0.32]
−0.5
0
0.5
Heterogeneity: P < .001, I² = 99.4%, τ² = 0.0351
Heterogeneity between groups: P = 0.024

(e3) Prevalence of PTSD in other occupations.

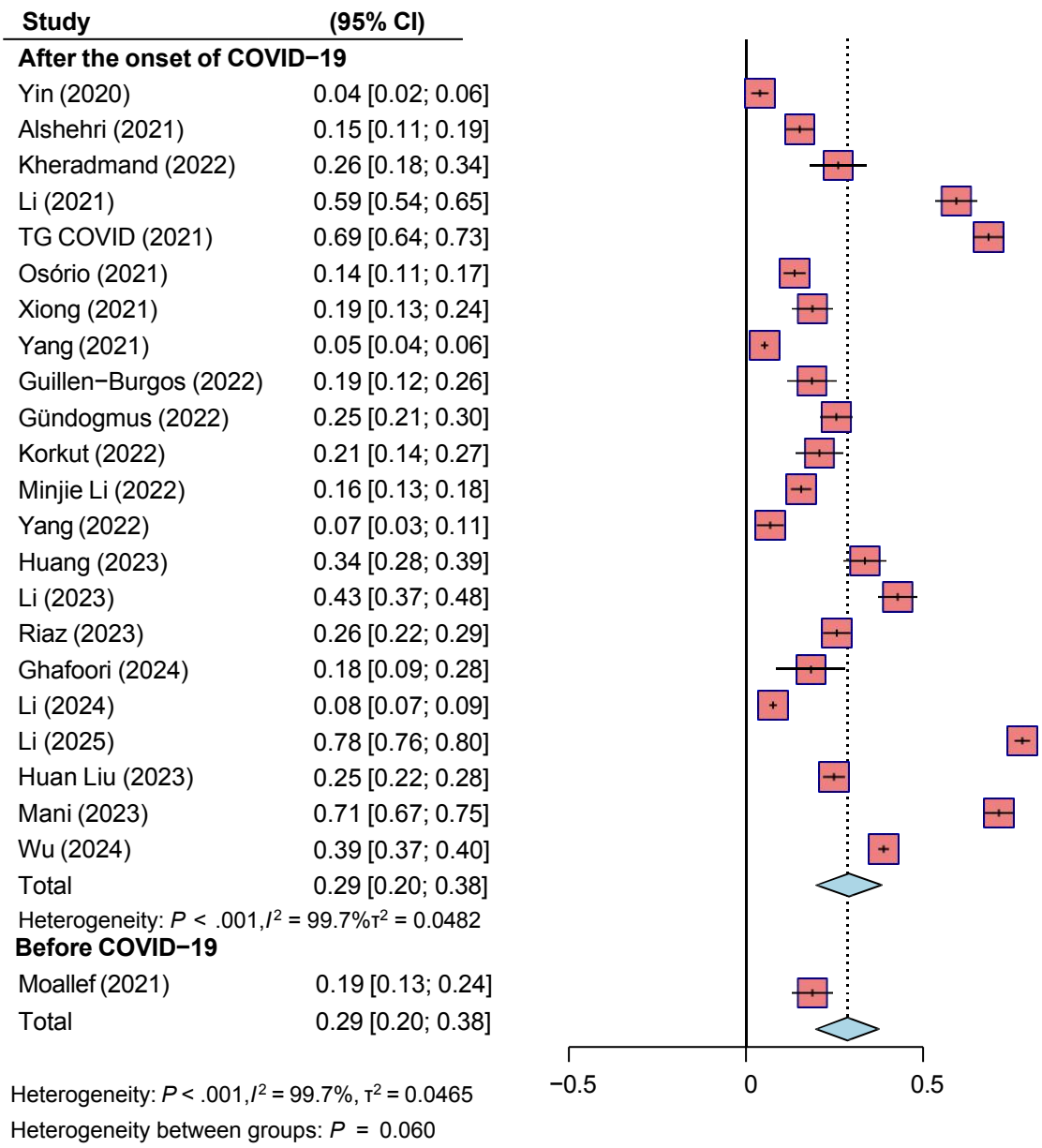



Study
(95% CI)
Costa (2023) 0.27 [0.23; 0.30]
Danson (2023) 0.06 [0.04; 0.07]
Hruska (2023) 0.05 [0.02; 0.07]
Human (2023) 0.11 [0.03; 0.19]
Li (2023) 0.43 [0.32; 0.55]
Riaz (2023) 0.24 [0.15; 0.33]
Rice (2023) 0.23 [0.21; 0.25]
Tran (2023) 0.17 [0.09; 0.25]
Fournier (2025) 0.17 [0.05; 0.30]
Ghafoori (2024) 0.19 [0.11; 0.27]
Kambulandu (2024) 0.29 [0.12; 0.45]
Li (2025) 0.68 [0.64; 0.71]
Maliwichi (2024) 0.17 [0.06; 0.28]
Mani (2023) 0.71 [0.65; 0.76]
Mersin (2025) 0.03 [−0.03; 0.10]
Molina (2024) 0.30 [0.25; 0.34]
Sahin (2024) 0.17 [0.11; 0.23]
Wu (2024) 0.34 [0.31; 0.37]
Total 0.25 [0.20; 0.30]
Heterogeneity: P < .001, I² = 99% τ² = 0.0297
Before COVID−19
Moallef (2021) 0.21 [0.10; 0.31]
Total 0.25 [0.20; 0.30]
Heterogeneity: P < .001, I² = 99.0%, τ² = 0.0292
Heterogeneity between groups: P = 0.445
−0.5
0
0.5

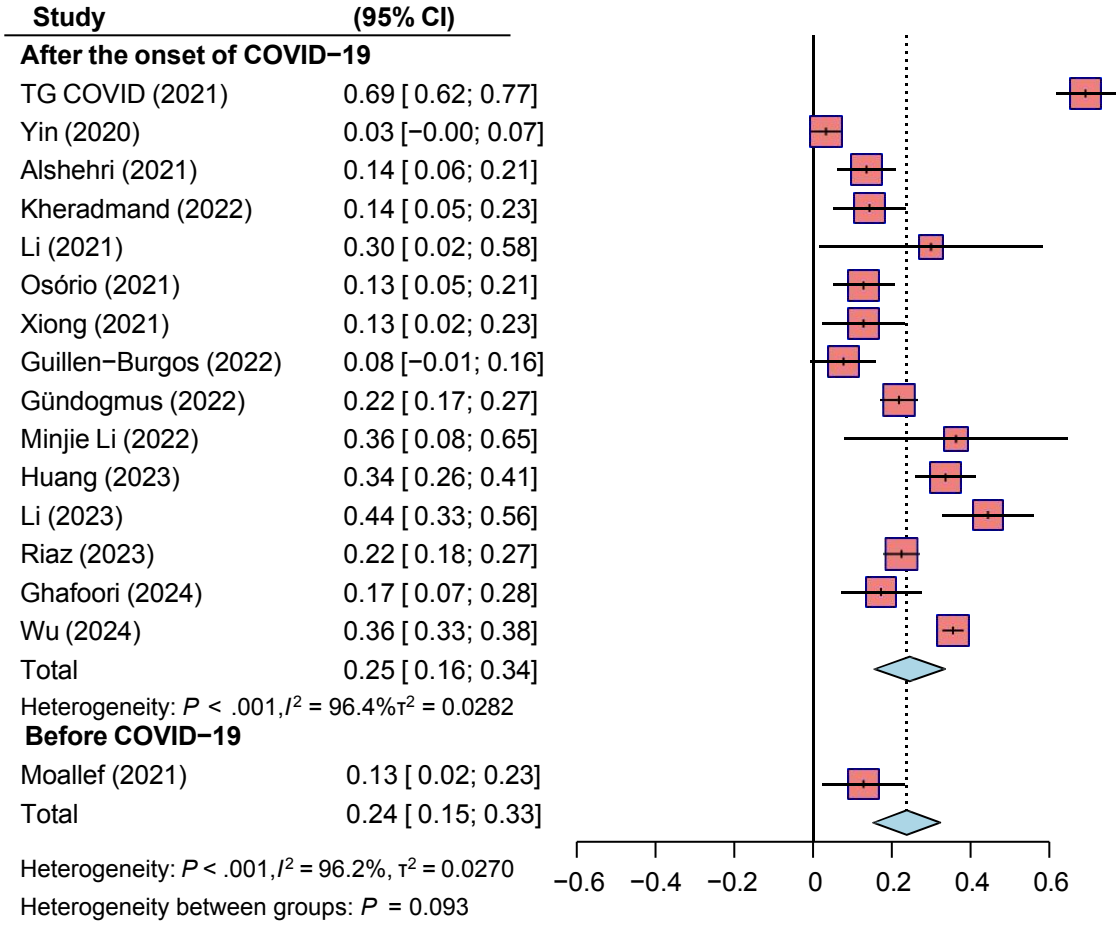
(f1-f3) The forest plots of PTSD prevalence in healthcare workers of different education level before and after the onset of COVID-19.
(f1) Prevalence of PTSD in healthcare workers with below or equal to high school education.



(f2) Prevalence of PTSD in healthcare workers with graduate education.

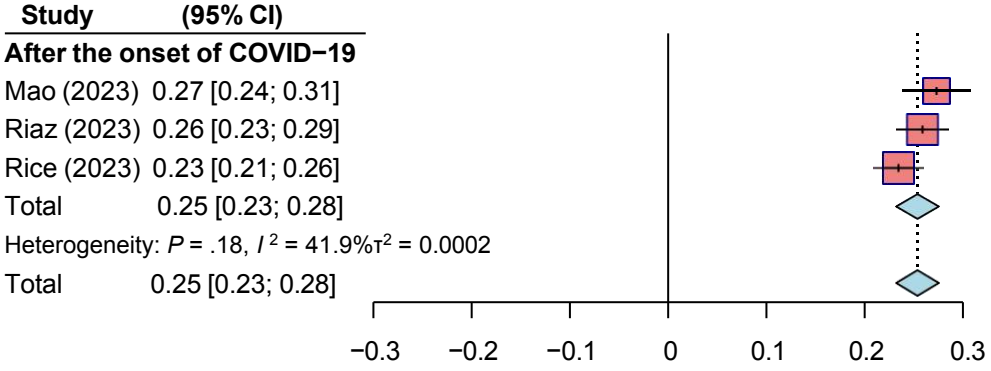


(f3) Prevalence of PTSD in healthcare workers with post-graduate education.

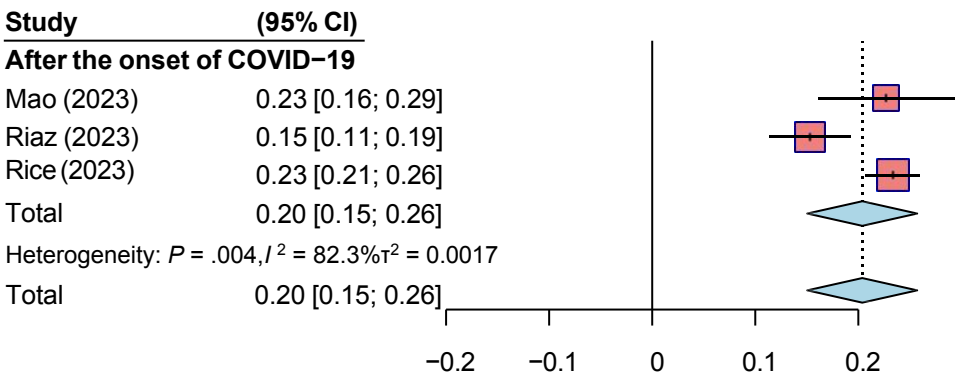


(g1-g2) The forest plots of PTSD prevalence in healthcare workers with different average weekly working hours before and after the onset of COVID-19.

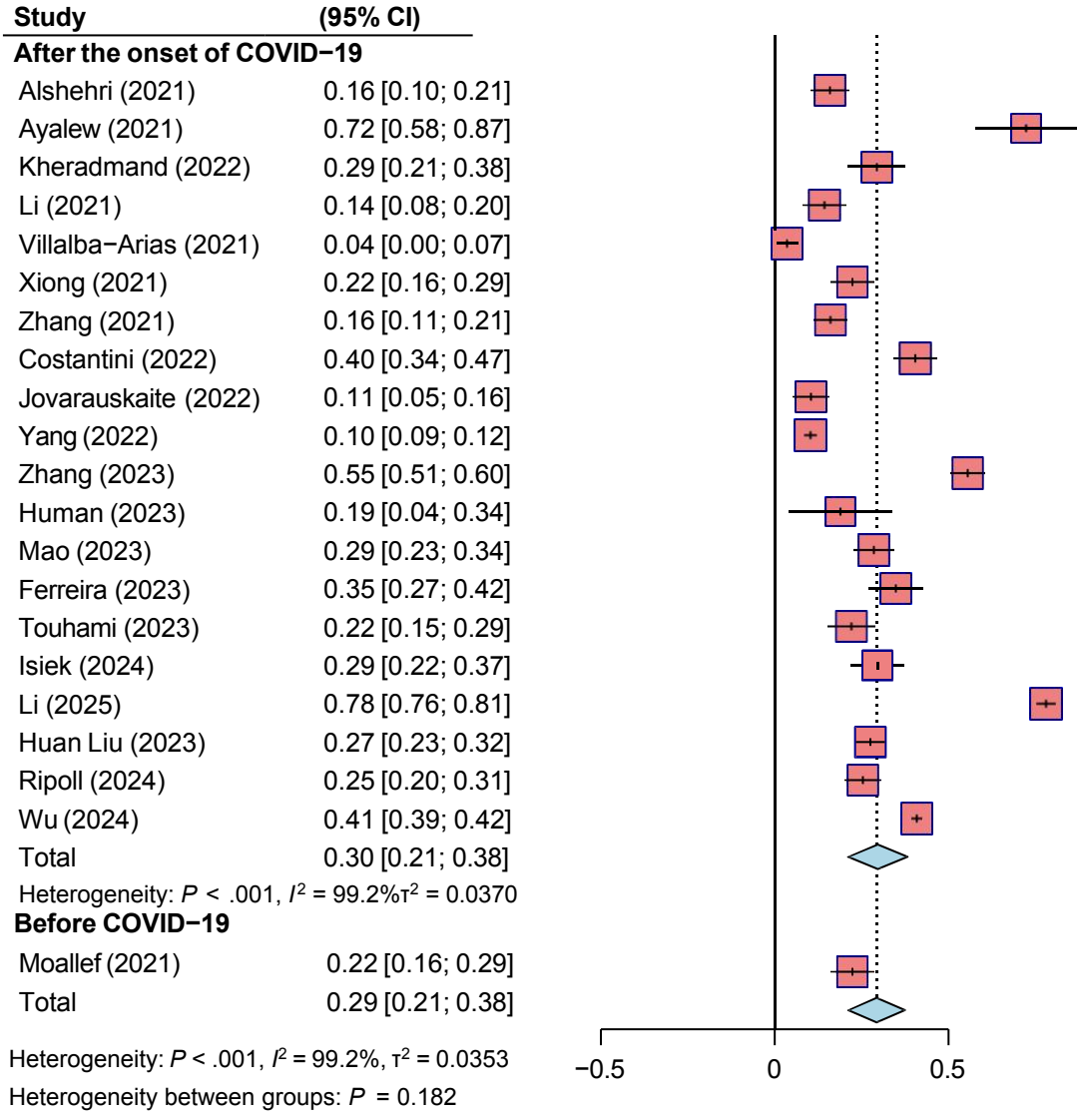
(g1) Prevalence of PTSD in healthcare workers working ≥40 hours per week on average.



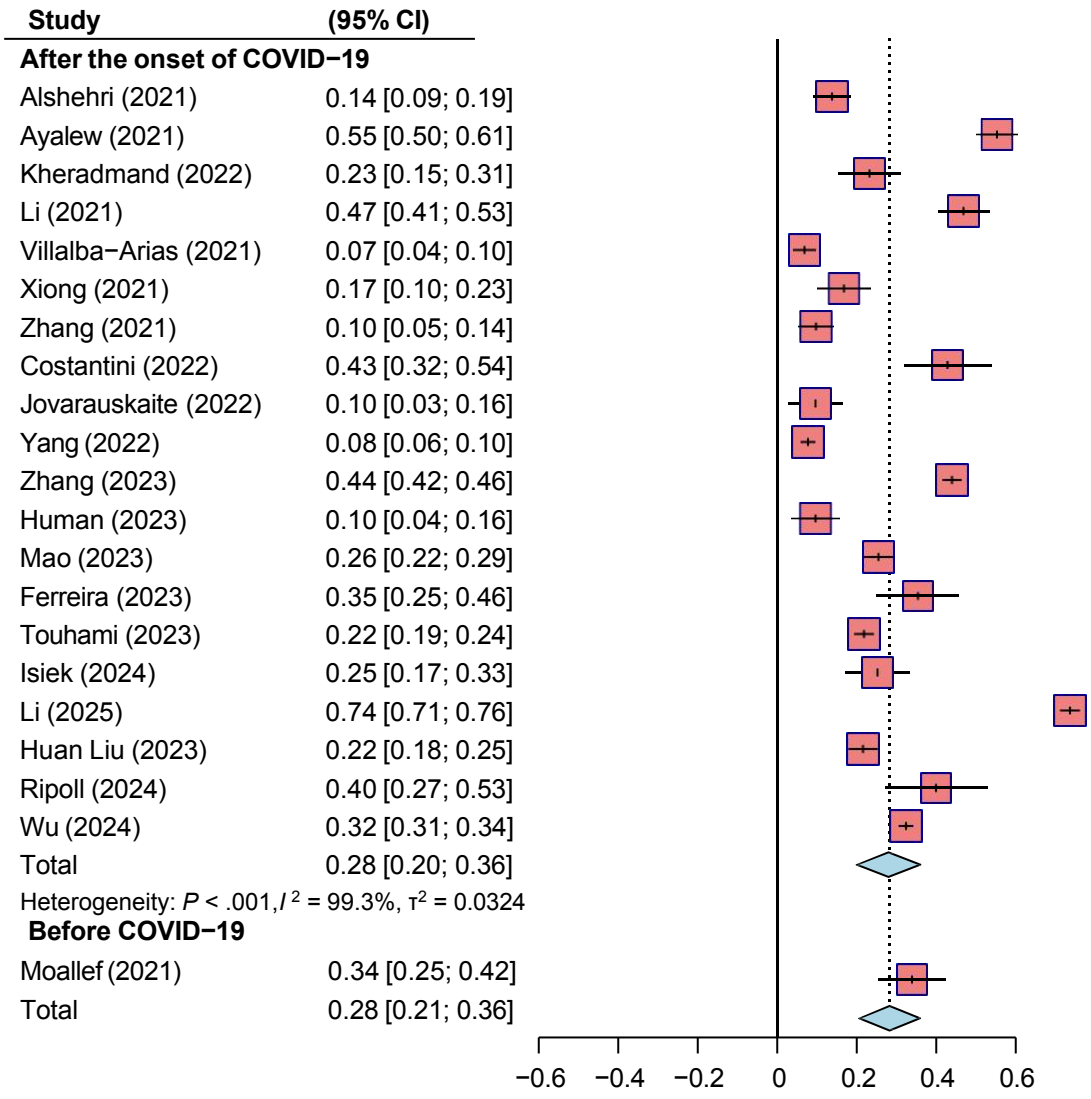
(g2) Prevalence of PTSD in healthcare workers working <40 hours per week on average.



(h1-h2) The forest plots of PTSD prevalence in healthcare workers stratified by years of practice before and after the onset of COVID-19.
(h1) Prevalence of PTSD in healthcare workers working ≥10 years.



(h2) Prevalence of PTSD in healthcare workers working <10 years.

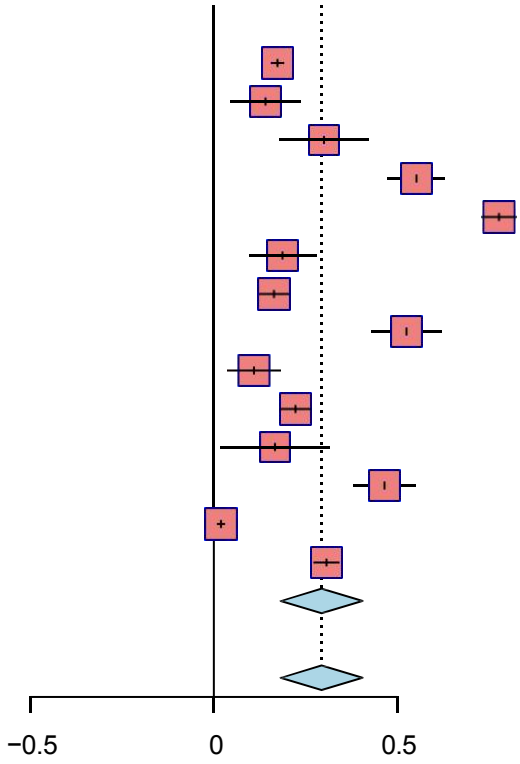


Heterogeneity: P < .001, I^2 = 99.2%, τ^2 = 0.0310

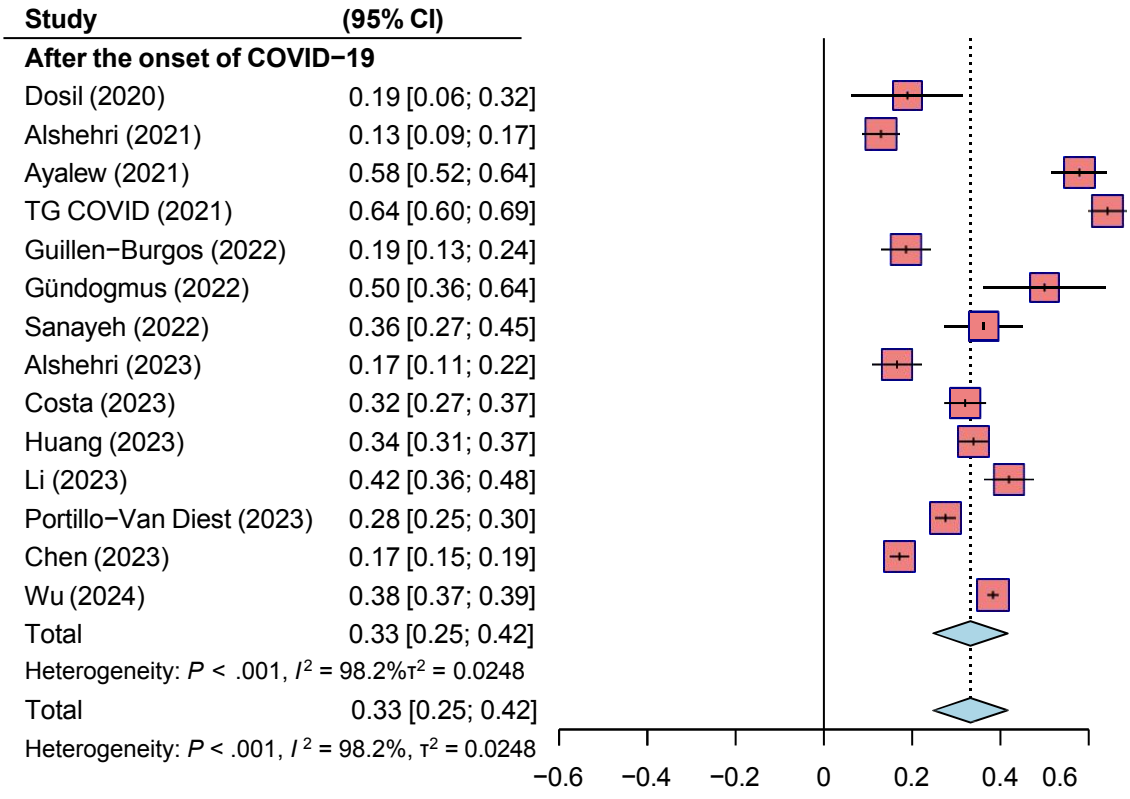
Heterogeneity between groups: P = 0.318

(i1-i2) The forest plots of PTSD prevalence in healthcare workers in different income level before and after the onset of COVID-19.
(i1) Prevalence of PTSD in high-income healthcare workers.

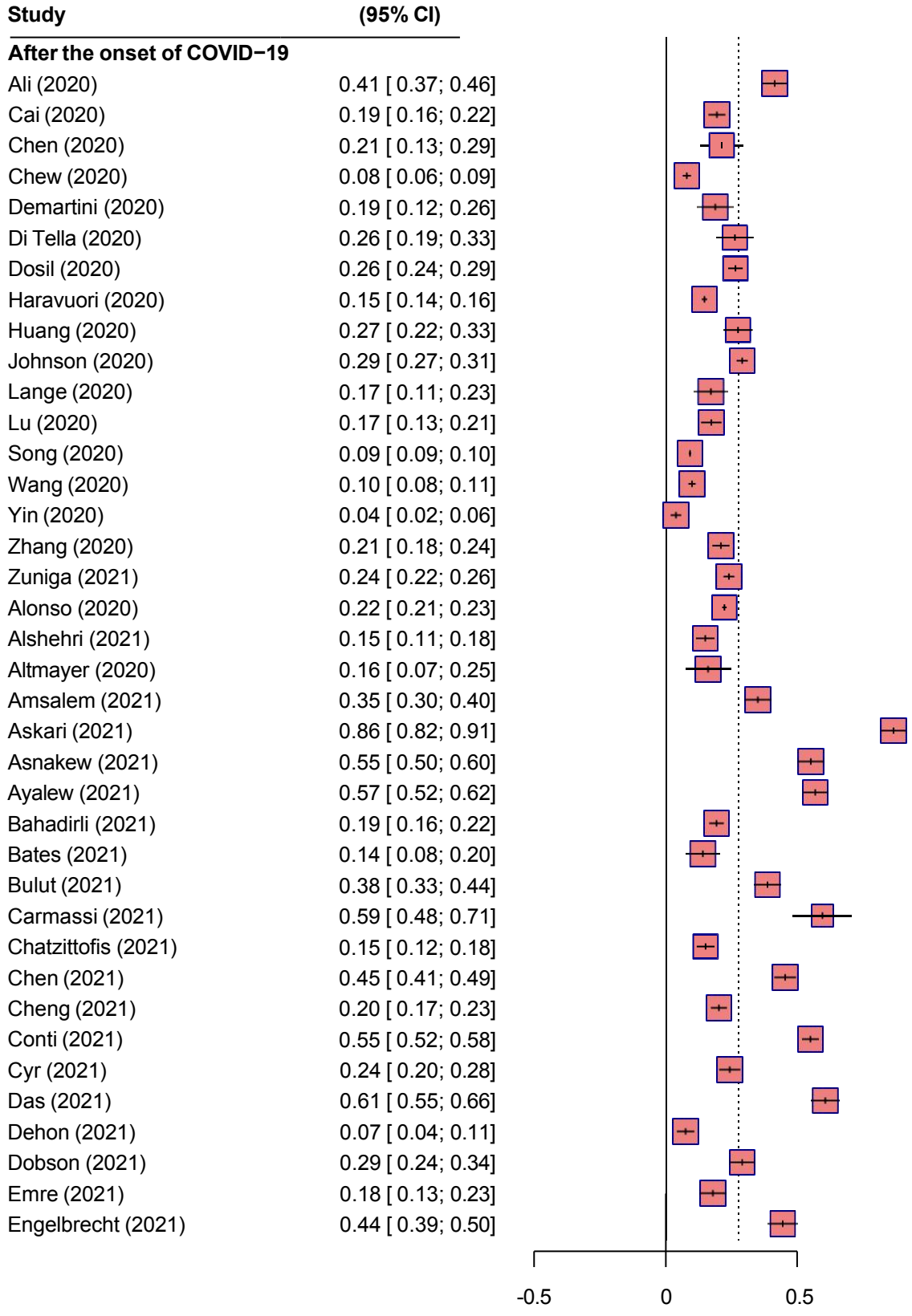
Study	(95% CI)
After the onset of COVID−19	
Portillo−Van Diest (2023)	0.17 [0.15; 0.19]
Dosil (2020)	0.14 [0.04; 0.24]
Alshehri (2021)	0.30 [0.18; 0.42]
Ayalew (2021)	0.55 [0.47; 0.63]
TG COVID (2021)	0.78 [0.73; 0.82]
Guillen−Burgos (2022)	0.19 [0.10; 0.28]
Gündogmus (2022)	0.16 [0.12; 0.20]
Sanayeh (2022)	0.52 [0.43; 0.62]
Alshehri (2023)	0.11 [0.04; 0.18]
Costa (2023)	0.22 [0.18; 0.27]
Huang (2023)	0.17 [0.02; 0.32]
Li (2023)	0.47 [0.38; 0.55]
Chen (2023)	0.02 [0.01; 0.03]
Wu (2024)	0.31 [0.27; 0.34]
Total	0.29 [0.18; 0.41]
Heterogeneity: $P < .001, I^2 = 99.1\%, \tau^2 = 0.0440$	
Total	0.29 [0.18; 0.41]



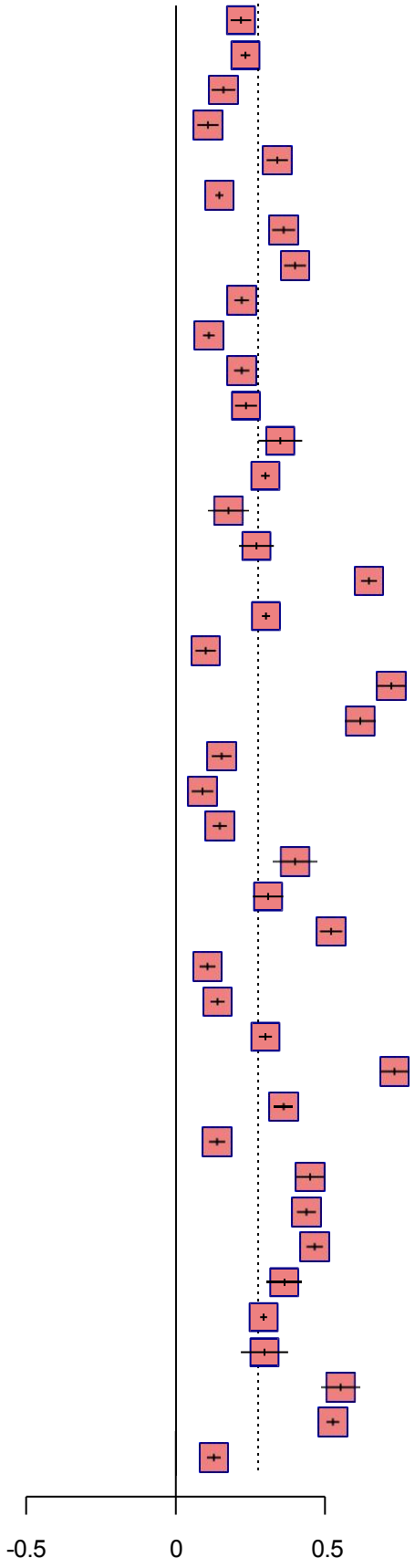
(i2) Prevalence of PTSD in low-income healthcare workers.

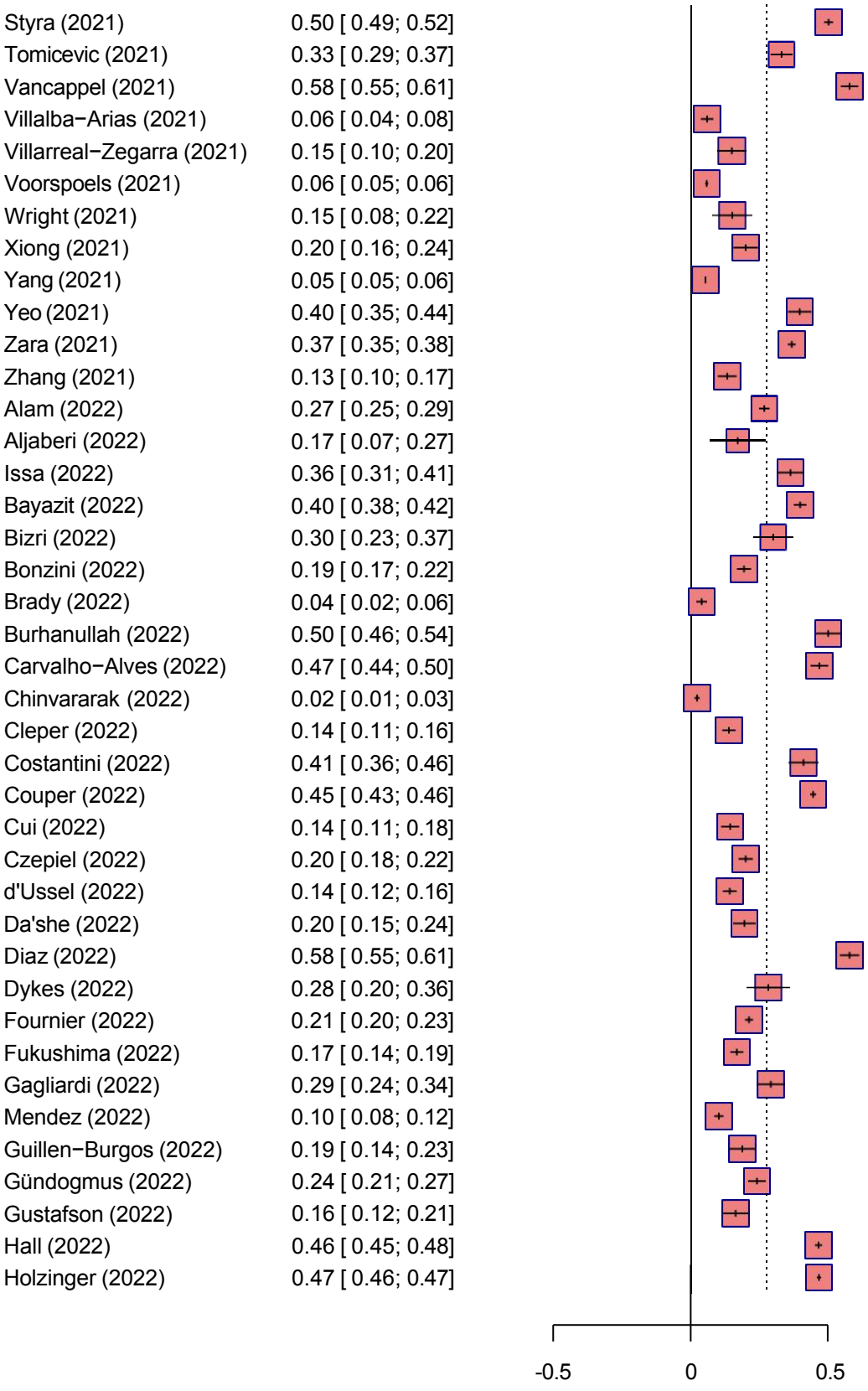


(j1-j3) The forest plots of PTSD prevalence among healthcare workers in traumatic events before and after the onset of COVID-19.
(j1) Prevalence of PTSD in healthcare workers in epidemic.



Study	(95% CI)
Fattori (2021)	0.22 [0.18; 0.25]
Feingold (2021)	0.23 [0.22; 0.25]
Flateau (2021)	0.16 [0.12; 0.20]
Geng (2021)	0.11 [0.07; 0.14]
Ghio (2021)	0.34 [0.31; 0.37]
Gilleen (2021)	0.15 [0.13; 0.16]
Gramaglia (2021)	0.36 [0.32; 0.40]
Greenberg (2021)	0.40 [0.36; 0.44]
Greene (2021)	0.22 [0.20; 0.24]
Guo (2021)	0.11 [0.09; 0.13]
Hennein (2021)	0.22 [0.20; 0.24]
Hou (2021)	0.23 [0.20; 0.27]
Ilias (2021)	0.35 [0.28; 0.42]
Jordan (2021)	0.30 [0.29; 0.31]
Kader (2021)	0.18 [0.11; 0.24]
Kheradmand (2021)	0.27 [0.21; 0.33]
Kwobah (2021)	0.65 [0.62; 0.67]
Lamb (2021)	0.30 [0.29; 0.32]
Lamiani (2021)	0.10 [0.07; 0.13]
Lasalvia (2021)	0.72 [0.67; 0.77]
Li (2021)	0.62 [0.57; 0.67]
Lu (2021)	0.15 [0.12; 0.19]
Lum (2021)	0.09 [0.05; 0.12]
Luo (2021)	0.15 [0.12; 0.17]
Marcomini (2021)	0.40 [0.33; 0.47]
Martínez−Caballero (2021)	0.31 [0.26; 0.36]
Mediavilla (2021)	0.52 [0.48; 0.56]
Mei (2021)	0.10 [0.08; 0.13]
Mosheva (2021)	0.14 [0.12; 0.16]
Murata (2021)	0.30 [0.28; 0.32]
TG COVID (2021)	0.73 [0.68; 0.78]
Osório (2021)	0.36 [0.33; 0.39]
Pan (2021)	0.14 [0.11; 0.16]
Pappa (2021)	0.45 [0.40; 0.50]
Erazo (2021)	0.44 [0.41; 0.47]
Plouffe (2021)	0.47 [0.44; 0.49]
Qutishat (2021)	0.36 [0.30; 0.42]
Robles (2021)	0.29 [0.28; 0.31]
Sarapultseva (2021)	0.30 [0.22; 0.38]
Shechter (2021)	0.55 [0.49; 0.62]
Smith (2021)	0.52 [0.50; 0.55]
Sonis (2021)	0.13 [0.10; 0.15]




Study
(95% CI)
Styra (2021) 0.50 [0.49; 0.52]
Tomicevic (2021) 0.33 [0.29; 0.37]
Vancappel (2021) 0.58 [0.55; 0.61]
Villalba−Arias (2021) 0.06 [0.04; 0.08]
Villarreal−Zegarra (2021) 0.15 [0.10; 0.20]
Voorspoels (2021) 0.06 [0.05; 0.06]
Wright (2021) 0.15 [0.08; 0.22]
Xiong (2021) 0.20 [0.16; 0.24]
Yang (2021) 0.05 [0.05; 0.06]
Yeo (2021) 0.40 [0.35; 0.44]
Zara (2021) 0.37 [0.35; 0.38]
Zhang (2021) 0.13 [0.10; 0.17]
Alam (2022) 0.27 [0.25; 0.29]
Aljaberi (2022) 0.17 [0.07; 0.27]
Issa (2022) 0.36 [0.31; 0.41]
Bayazit (2022) 0.40 [0.38; 0.42]
Bizri (2022) 0.30 [0.23; 0.37]
Bonzini (2022) 0.19 [0.17; 0.22]
Brady (2022) 0.04 [0.02; 0.06]
Burhanullah (2022) 0.50 [0.46; 0.54]
Carvalho−Alves (2022) 0.47 [0.44; 0.50]
Chinvararak (2022) 0.02 [0.01; 0.03]
Cleper (2022) 0.14 [0.11; 0.16]
Costantini (2022) 0.41 [0.36; 0.46]
Couper (2022) 0.45 [0.43; 0.46]
Cui (2022) 0.14 [0.11; 0.18]
Czepiel (2022) 0.20 [0.18; 0.22]
d'Ussel (2022) 0.14 [0.12; 0.16]
Da'she (2022) 0.20 [0.15; 0.24]
Diaz (2022) 0.58 [0.55; 0.61]
Dykes (2022) 0.28 [0.20; 0.36]
Fournier (2022) 0.21 [0.20; 0.23]
Fukushima (2022) 0.17 [0.14; 0.19]
Gagliardi (2022) 0.29 [0.24; 0.34]
Mendez (2022) 0.10 [0.08; 0.12]
Guillen−Burgos (2022) 0.19 [0.14; 0.23]
Gündogmus (2022) 0.24 [0.21; 0.27]
Gustafson (2022) 0.16 [0.12; 0.21]
Hall (2022) 0.46 [0.45; 0.48]
Holzinger (2022) 0.47 [0.46; 0.47]
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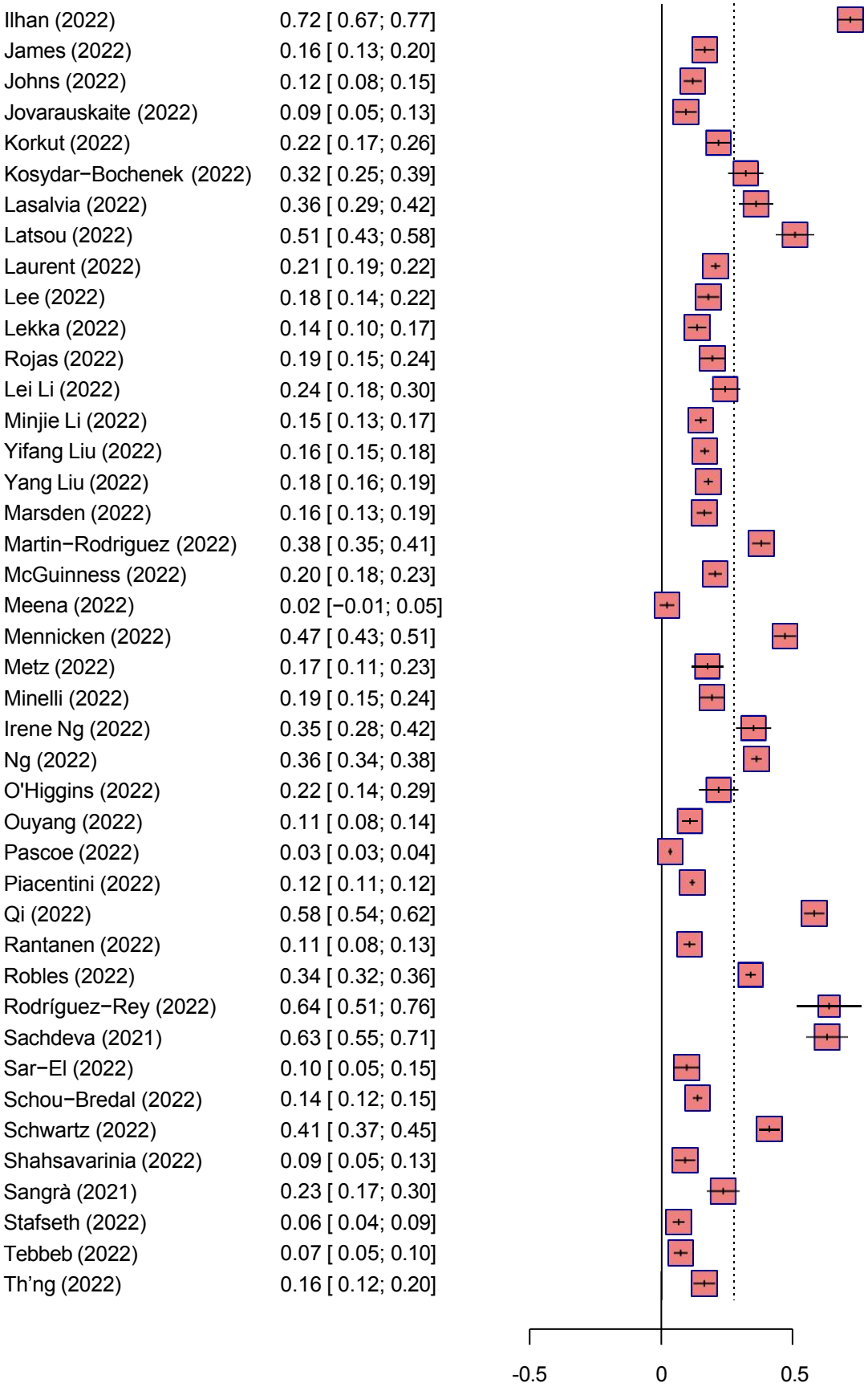
Study
(95% CI)
Ilhan (2022) 0.72 [0.67; 0.77]
James (2022) 0.16 [0.13; 0.20]
Johns (2022) 0.12 [0.08; 0.15]
Jovarauskaite (2022) 0.09 [0.05; 0.13]
Korkut (2022) 0.22 [0.17; 0.26]
Kosydar−Bochenek (2022) 0.32 [0.25; 0.39]
Lasalvia (2022) 0.36 [0.29; 0.42]
Latsou (2022) 0.51 [0.43; 0.58]
Laurent (2022) 0.21 [0.19; 0.22]
Lee (2022) 0.18 [0.14; 0.22]
Lekka (2022) 0.14 [0.10; 0.17]
Rojas (2022) 0.19 [0.15; 0.24]
Lei Li (2022) 0.24 [0.18; 0.30]
Minjie Li (2022) 0.15 [0.13; 0.17]
Yifang Liu (2022) 0.16 [0.15; 0.18]
Yang Liu (2022) 0.18 [0.16; 0.19]
Marsden (2022) 0.16 [0.13; 0.19]
Martin−Rodriguez (2022) 0.38 [0.35; 0.41]
McGuinness (2022) 0.20 [0.18; 0.23]
Meena (2022) 0.02 [−0.01; 0.05]
Mennicken (2022) 0.47 [0.43; 0.51]
Metz (2022) 0.17 [0.11; 0.23]
Minelli (2022) 0.19 [0.15; 0.24]
Irene Ng (2022) 0.35 [0.28; 0.42]
Ng (2022) 0.36 [0.34; 0.38]
O'Higgins (2022) 0.22 [0.14; 0.29]
Ouyang (2022) 0.11 [0.08; 0.14]
Pascoe (2022) 0.03 [0.03; 0.04]
Piacentini (2022) 0.12 [0.11; 0.12]
Qi (2022) 0.58 [0.54; 0.62]
Rantanen (2022) 0.11 [0.08; 0.13]
Robles (2022) 0.34 [0.32; 0.36]
Rodríguez−Rey (2022) 0.64 [0.51; 0.76]
Sachdeva (2021) 0.63 [0.55; 0.71]
Sar−El (2022) 0.10 [0.05; 0.15]
Schou−Bredal (2022) 0.14 [0.12; 0.15]
Schwartz (2022) 0.41 [0.37; 0.45]
Shahsavarinia (2022) 0.09 [0.05; 0.13]
Sangrà (2021) 0.23 [0.17; 0.30]
Stafseth (2022) 0.06 [0.04; 0.09]
Tebbeb (2022) 0.07 [0.05; 0.10]
Th'ng (2022) 0.16 [0.12; 0.20]
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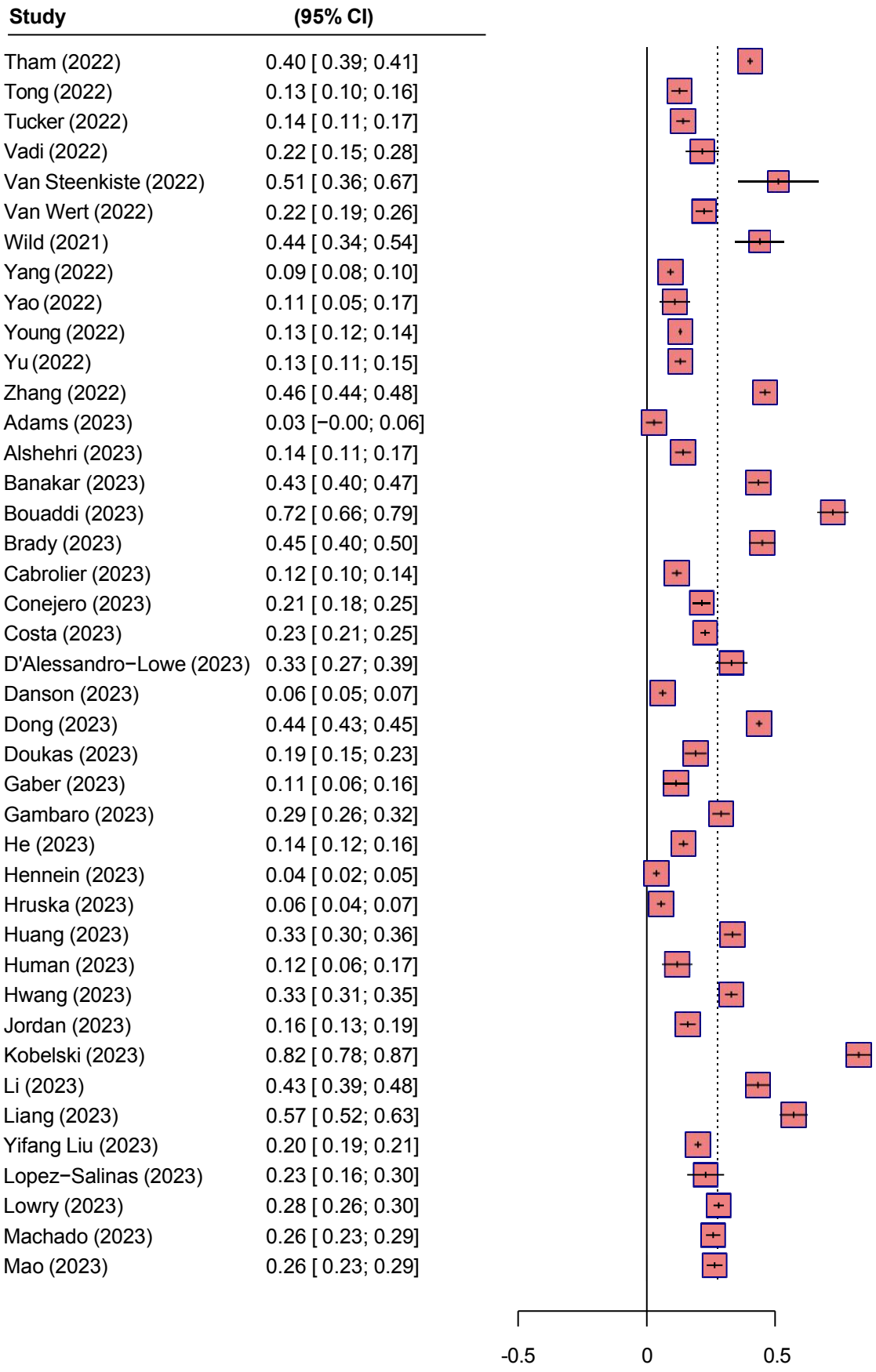
Study
(95% CI)
Tham (2022) 0.40 [0.39; 0.41]
Tong (2022) 0.13 [0.10; 0.16]
Tucker (2022) 0.14 [0.11; 0.17]
Vadi (2022) 0.22 [0.15; 0.28]
Van Steenkiste (2022) 0.51 [0.36; 0.67]
Van Wert (2022) 0.22 [0.19; 0.26]
Wild (2021) 0.44 [0.34; 0.54]
Yang (2022) 0.09 [0.08; 0.10]
Yao (2022) 0.11 [0.05; 0.17]
Young (2022) 0.13 [0.12; 0.14]
Yu (2022) 0.13 [0.11; 0.15]
Zhang (2022) 0.46 [0.44; 0.48]
Adams (2023) 0.03 [−0.00; 0.06]
Alshehri (2023) 0.14 [0.11; 0.17]
Banakar (2023) 0.43 [0.40; 0.47]
Bouaddi (2023) 0.72 [0.66; 0.79]
Brady (2023) 0.45 [0.40; 0.50]
Cabrolier (2023) 0.12 [0.10; 0.14]
Conejero (2023) 0.21 [0.18; 0.25]
Costa (2023) 0.23 [0.21; 0.25]
D'Alessandro−Lowe (2023) 0.33 [0.27; 0.39]
Danson (2023) 0.06 [0.05; 0.07]
Dong (2023) 0.44 [0.43; 0.45]
Doukas (2023) 0.19 [0.15; 0.23]
Gaber (2023) 0.11 [0.06; 0.16]
Gambaro (2023) 0.29 [0.26; 0.32]
He (2023) 0.14 [0.12; 0.16]
Hennein (2023) 0.04 [0.02; 0.05]
Hruska (2023) 0.06 [0.04; 0.07]
Huang (2023) 0.33 [0.30; 0.36]
Human (2023) 0.12 [0.06; 0.17]
Hwang (2023) 0.33 [0.31; 0.35]
Jordan (2023) 0.16 [0.13; 0.19]
Kobelski (2023) 0.82 [0.78; 0.87]
Li (2023) 0.43 [0.39; 0.48]
Liang (2023) 0.57 [0.52; 0.63]
Yifang Liu (2023) 0.20 [0.19; 0.21]
Lopez−Salinas (2023) 0.23 [0.16; 0.30]
Lowry (2023) 0.28 [0.26; 0.30]
Machado (2023) 0.26 [0.23; 0.29]
Mao (2023) 0.26 [0.23; 0.29]
-0.5
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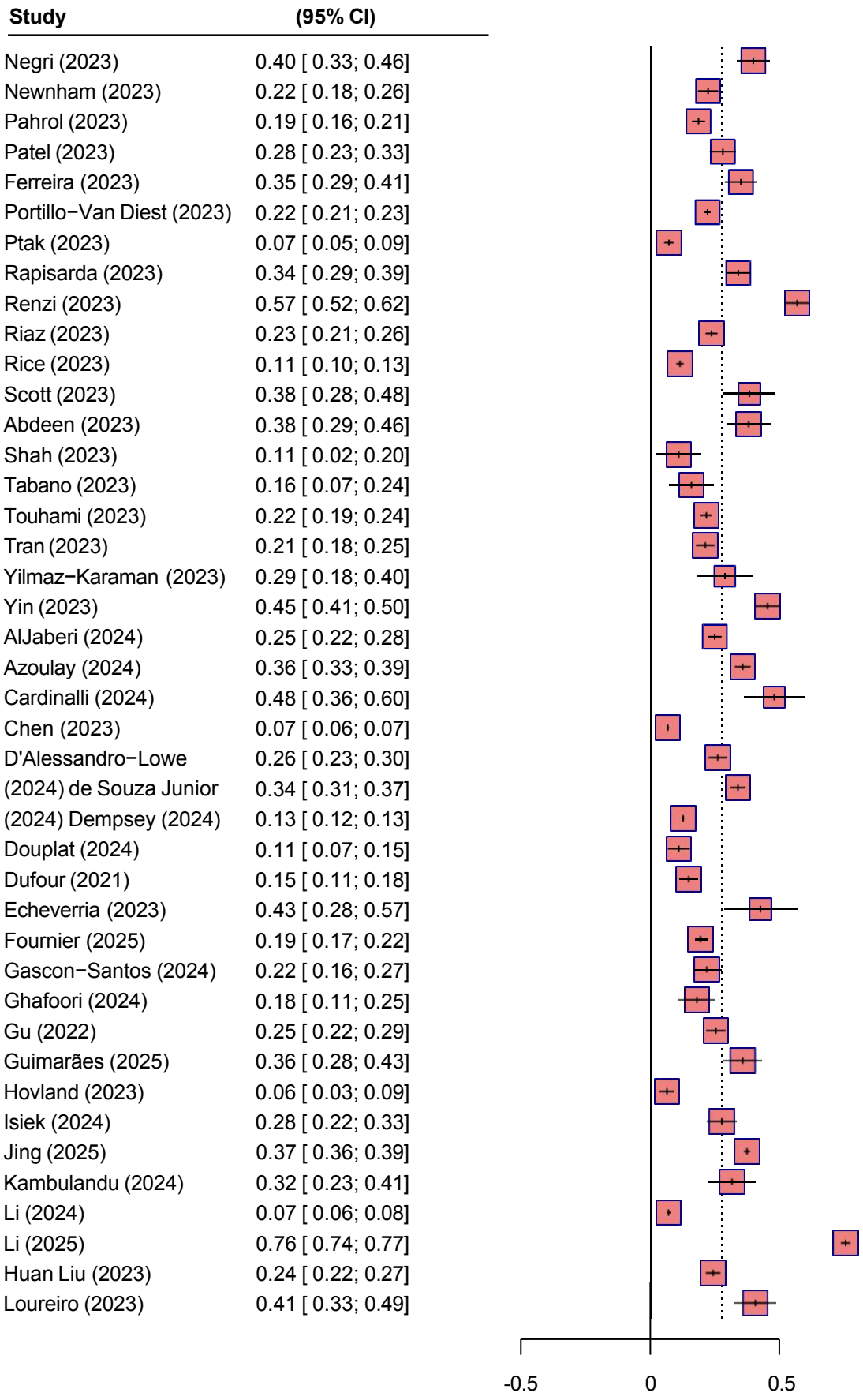
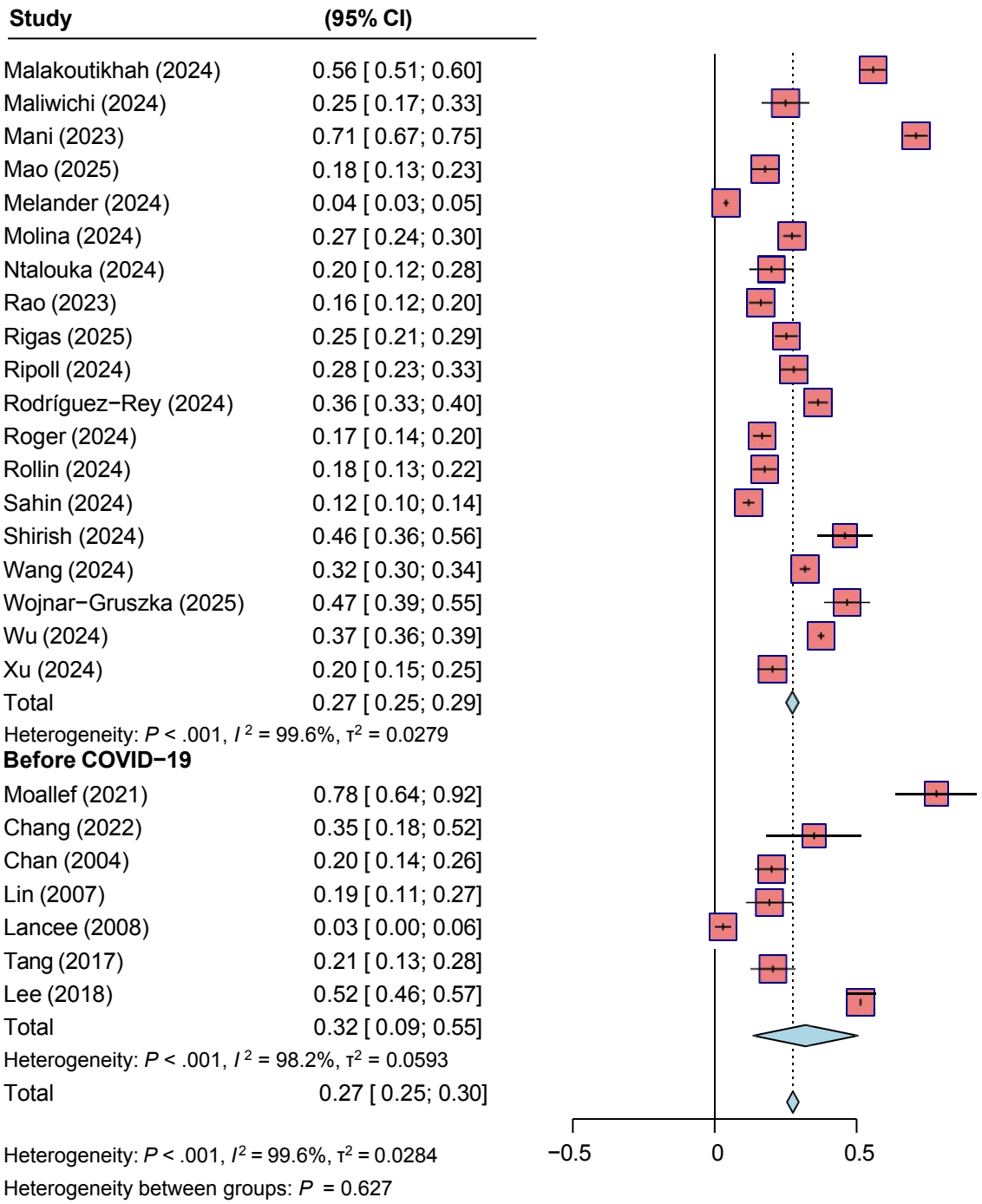
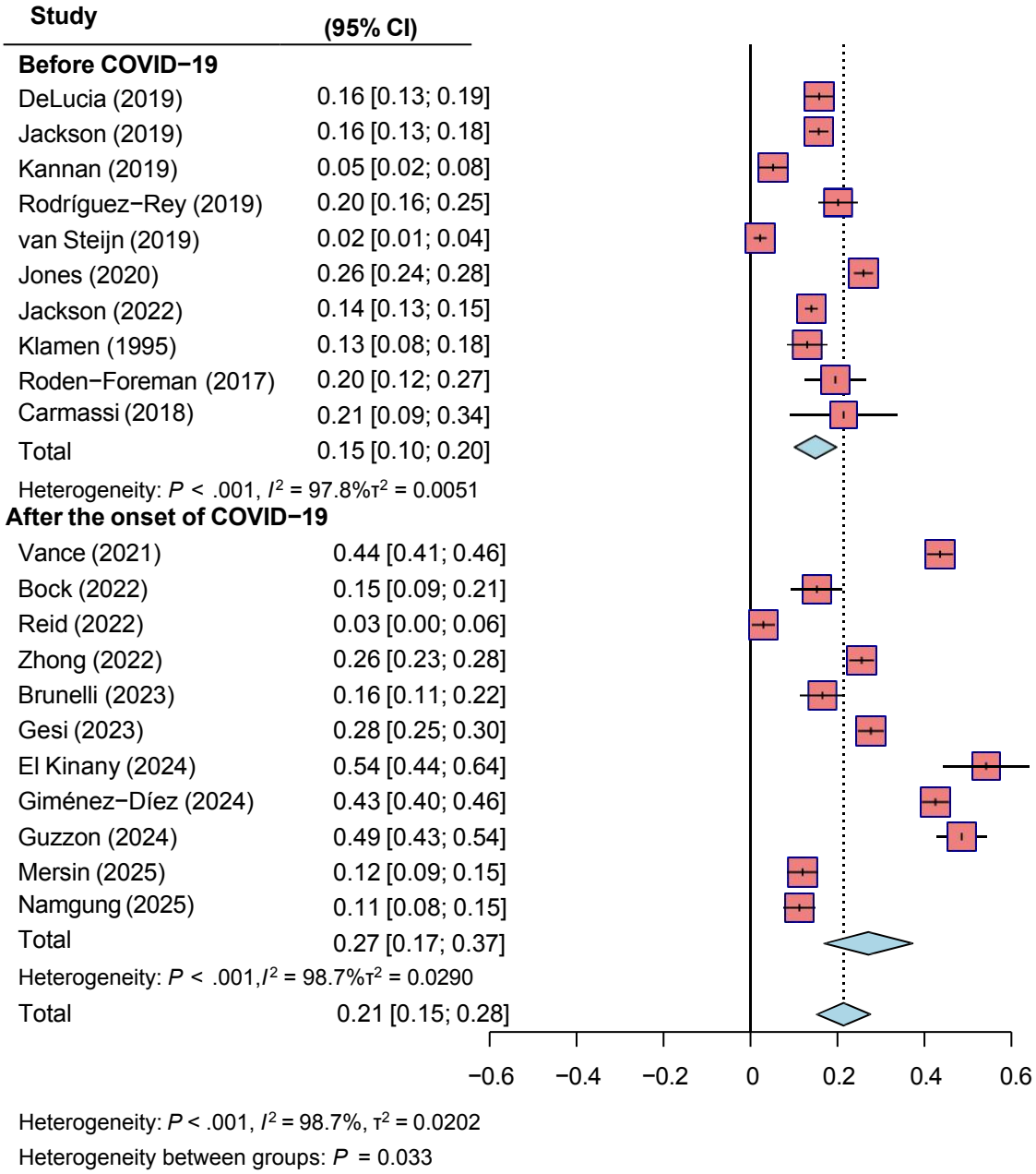
0.5


Study
(95% CI)
Negri (2023) 0.40 [0.33; 0.46]
Newnham (2023) 0.22 [0.18; 0.26]
Pahrol (2023) 0.19 [0.16; 0.21]
Patel (2023) 0.28 [0.23; 0.33]
Ferreira (2023) 0.35 [0.29; 0.41]
Portillo−Van Diest (2023) 0.22 [0.21; 0.23]
Ptak (2023) 0.07 [0.05; 0.09]
Rapisarda (2023) 0.34 [0.29; 0.39]
Renzi (2023) 0.57 [0.52; 0.62]
Riaz (2023) 0.23 [0.21; 0.26]
Rice (2023) 0.11 [0.10; 0.13]
Scott (2023) 0.38 [0.28; 0.48]
Abdeen (2023) 0.38 [0.29; 0.46]
Shah (2023) 0.11 [0.02; 0.20]
Tabano (2023) 0.16 [0.07; 0.24]
Touhami (2023) 0.22 [0.19; 0.24]
Tran (2023) 0.21 [0.18; 0.25]
Yilmaz−Karaman (2023) 0.29 [0.18; 0.40]
Yin (2023) 0.45 [0.41; 0.50]
AlJaberi (2024) 0.25 [0.22; 0.28]
Azoulay (2024) 0.36 [0.33; 0.39]
Cardinalli (2024) 0.48 [0.36; 0.60]
Chen (2023) 0.07 [0.06; 0.07]
D'Alessandro−Lowe 0.26 [0.23; 0.30]
(2024) de Souza Junior 0.34 [0.31; 0.37]
(2024) Dempsey (2024) 0.13 [0.12; 0.13]
Douplat (2024) 0.11 [0.07; 0.15]
Dufour (2021) 0.15 [0.11; 0.18]
Echeverria (2023) 0.43 [0.28; 0.57]
Fournier (2025) 0.19 [0.17; 0.22]
Gascon−Santos (2024) 0.22 [0.16; 0.27]
Ghafoori (2024) 0.18 [0.11; 0.25]
Gu (2022) 0.25 [0.22; 0.29]
Guimarães (2025) 0.36 [0.28; 0.43]
Hovland (2023) 0.06 [0.03; 0.09]
Isiek (2024) 0.28 [0.22; 0.33]
Jing (2025) 0.37 [0.36; 0.39]
Kambulandu (2024) 0.32 [0.23; 0.41]
Li (2024) 0.07 [0.06; 0.08]
Li (2025) 0.76 [0.74; 0.77]
Huan Liu (2023) 0.24 [0.22; 0.27]
Loureiro (2023) 0.41 [0.33; 0.49]
-0.5
0
0.5


Study
(95% CI)
Malakoutikhah (2024) 0.56 [0.51; 0.60]
Maliwichi (2024) 0.25 [0.17; 0.33]
Mani (2023) 0.71 [0.67; 0.75]
Mao (2025) 0.18 [0.13; 0.23]
Melander (2024) 0.04 [0.03; 0.05]
Molina (2024) 0.27 [0.24; 0.30]
Ntalouka (2024) 0.20 [0.12; 0.28]
Rao (2023) 0.16 [0.12; 0.20]
Rigas (2025) 0.25 [0.21; 0.29]
Ripoll (2024) 0.28 [0.23; 0.33]
Rodríguez−Rey (2024) 0.36 [0.33; 0.40]
Roger (2024) 0.17 [0.14; 0.20]
Rollin (2024) 0.18 [0.13; 0.22]
Sahin (2024) 0.12 [0.10; 0.14]
Shirish (2024) 0.46 [0.36; 0.56]
Wang (2024) 0.32 [0.30; 0.34]
Wojnar−Gruszka (2025) 0.47 [0.39; 0.55]
Wu (2024) 0.37 [0.36; 0.39]
Xu (2024) 0.20 [0.15; 0.25]
Total 0.27 [0.25; 0.29]
Heterogeneity: P < .001, I 2 = 99.6%, τ2 = 0.0279
Before COVID−19
Moallef (2021) 0.78 [0.64; 0.92]
Chang (2022) 0.35 [0.18; 0.52]
Chan (2004) 0.20 [0.14; 0.26]
Lin (2007) 0.19 [0.11; 0.27]
Lancee (2008) 0.03 [0.00; 0.06]
Tang (2017) 0.21 [0.13; 0.28]
Lee (2018) 0.52 [0.46; 0.57]
Total 0.32 [0.09; 0.55]
Heterogeneity: P < .001, I 2 = 98.2%, τ2 = 0.0593
Total 0.27 [0.25; 0.30]
Heterogeneity: P < .001, I2 = 99.6%, τ2 = 0.0284
Heterogeneity between groups: P = 0.627
−0.5
0
0.5

(j2) Prevalence of PTSD in healthcare workers in work-related events.

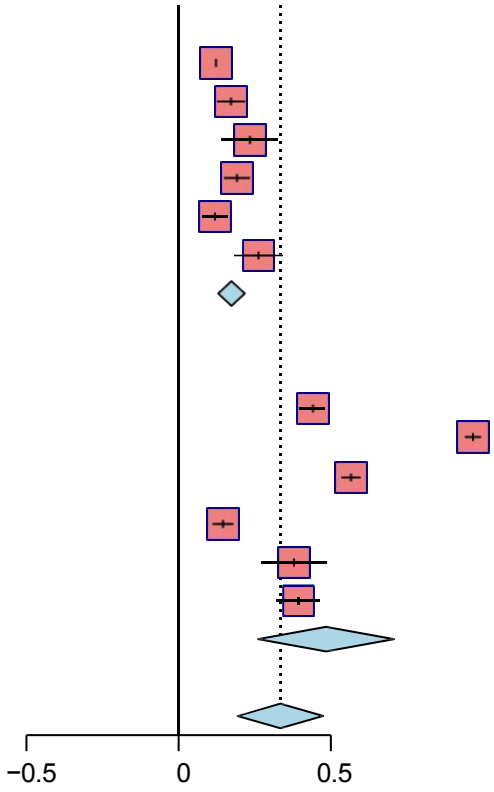


Heterogeneity: $P < .001$, $I^2 = 98.7\%$, $\tau^2 = 0.0202$

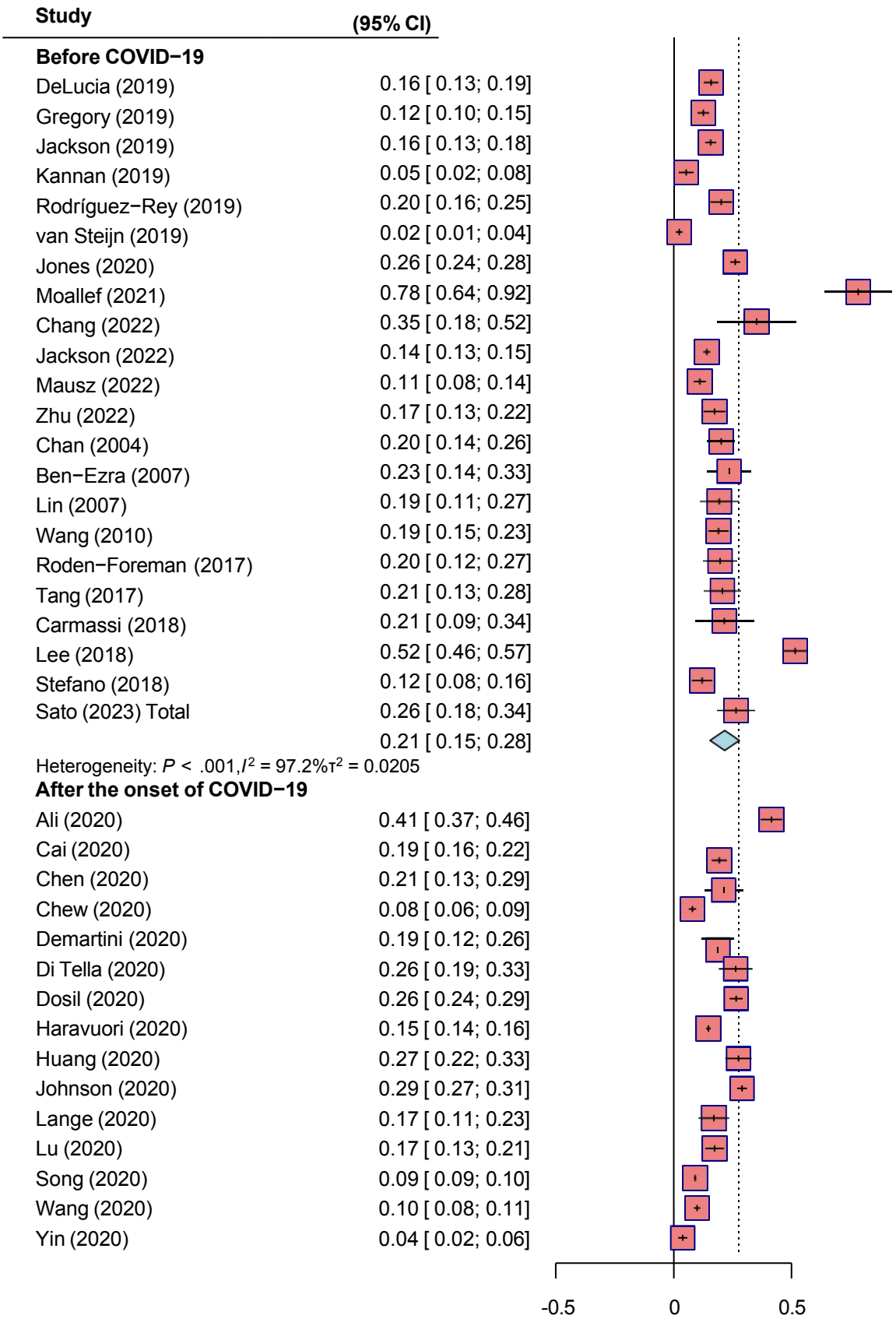
Heterogeneity between groups: $P = 0.033$

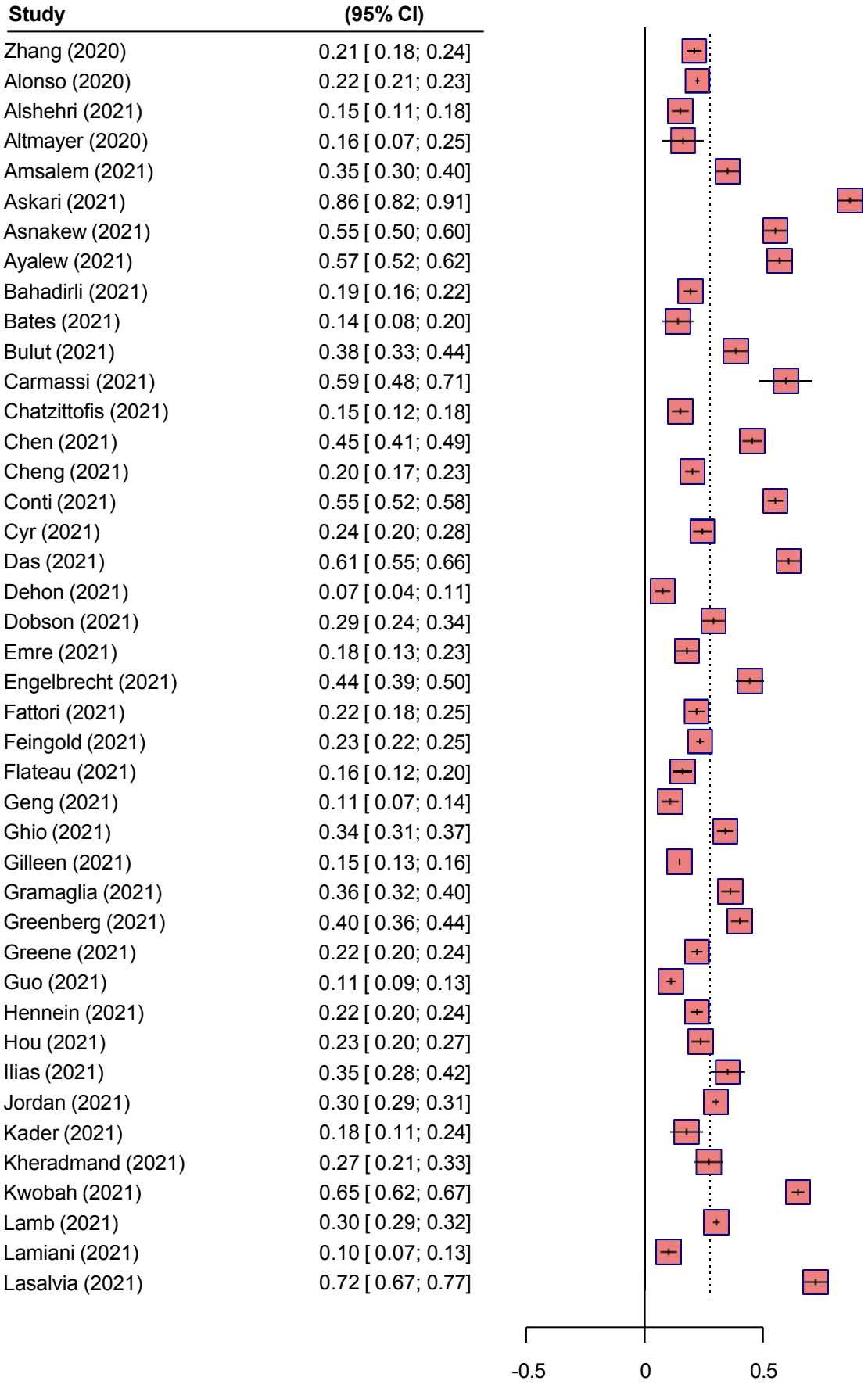
(j3) Prevalence of PTSD in healthcare workers in mass casualty incident.

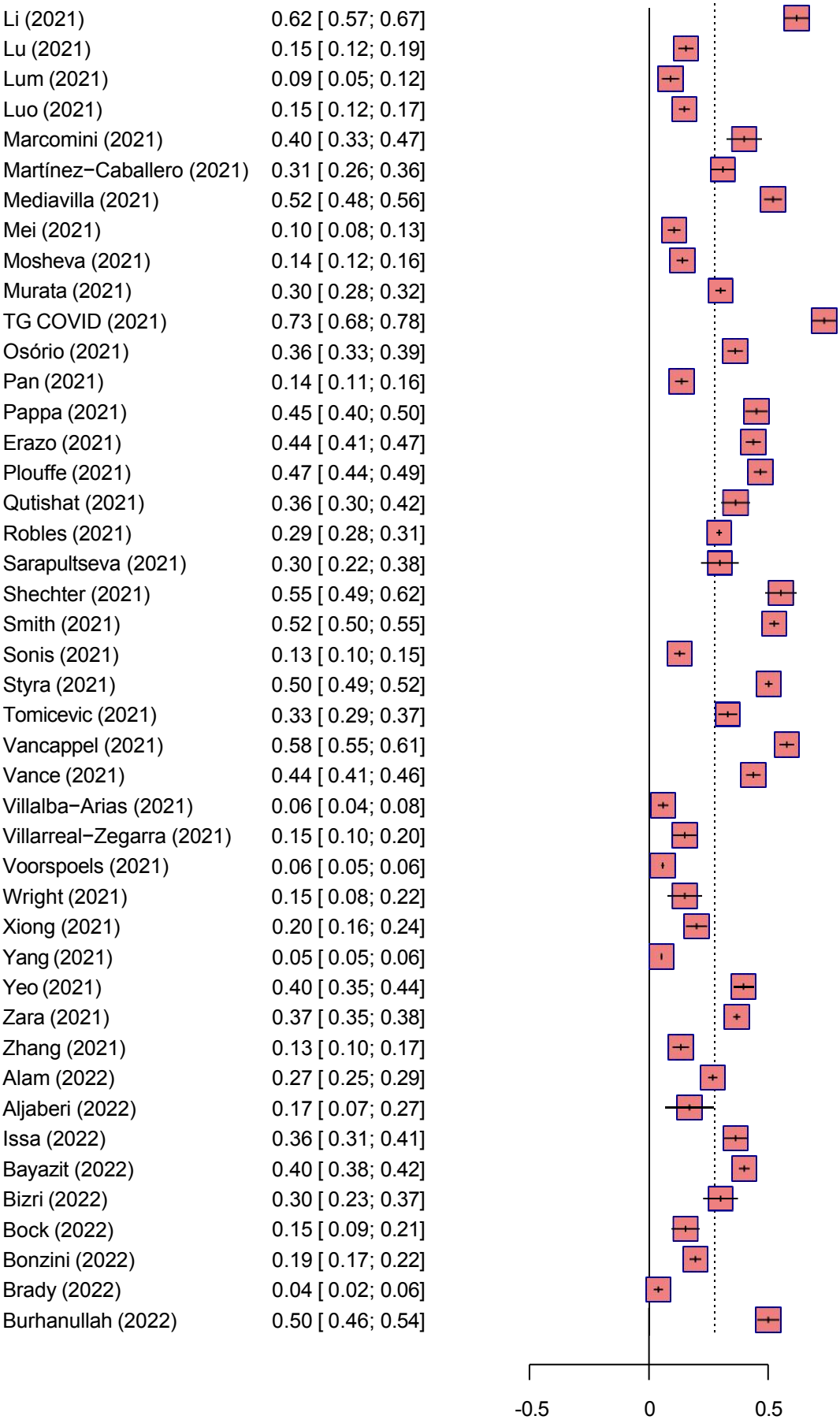
Study	(95% CI)
Before COVID−19	
Gregory (2019)	0.12 [0.10; 0.15]
Zhu (2022)	0.17 [0.13; 0.22]
Ben−Ezra (2007)	0.23 [0.14; 0.33]
Wang (2010)	0.19 [0.15; 0.23]
Stefano (2018)	0.12 [0.08; 0.16]
Sato (2023)	0.26 [0.18; 0.34]
Total	0.17 [0.13; 0.22]
Heterogeneity: P < .001, I^2 = 76.9%τ^2 = 0.0021	
After the onset of COVID−19	
Sanayeh (2022)	0.44 [0.40; 0.48]
Hamdan−Mansour (2025)	0.97 [0.95; 1.00]
Hussein (2025)	0.57 [0.54; 0.60]
Rzonca (2024)	0.14 [0.11; 0.18]
Satilmis (2024)	0.38 [0.27; 0.49]
Sehlikoglu (2024)	0.39 [0.32; 0.47]
Total	0.48 [0.19; 0.78]
Heterogeneity: P < .001, I^2 = 99.7%τ^2 = 0.0767	
Total	0.33 [0.18; 0.49]
Heterogeneity: P < .001 I^2 = 99.6%, τ^2 = 0.0611	
Heterogeneity between groups: P = 0.007	

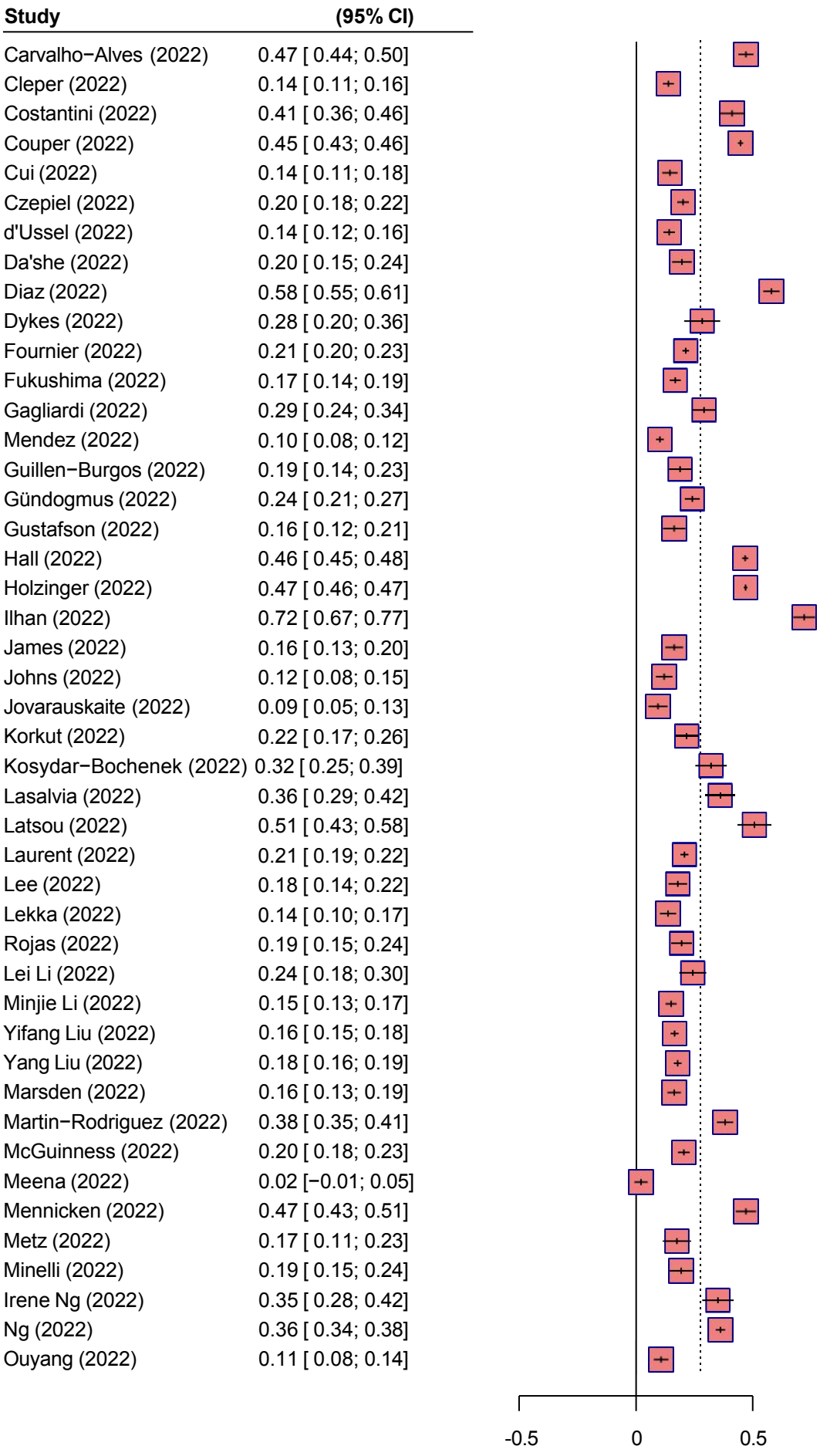


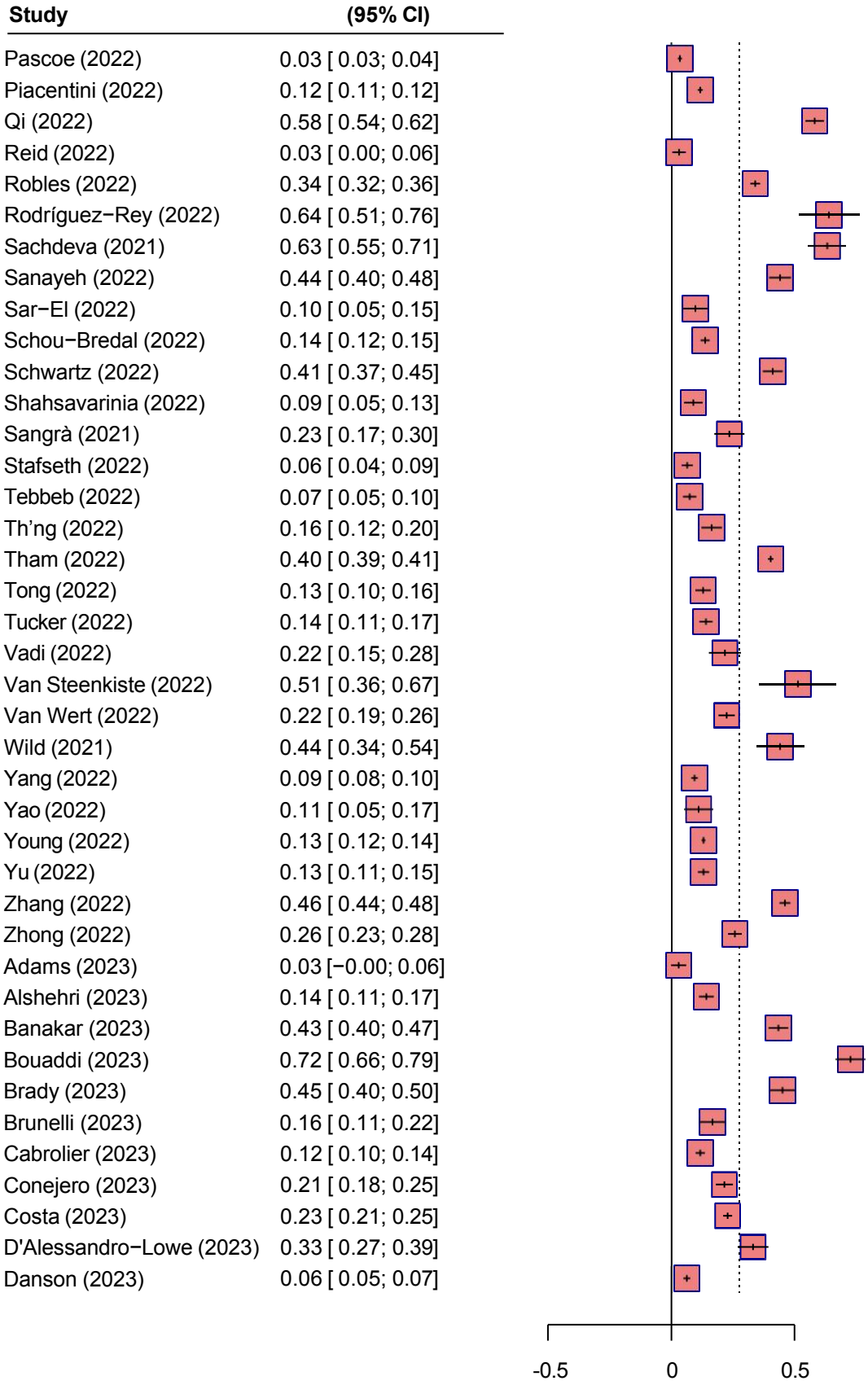
(k1-k2) The forest plots of PTSD prevalence among healthcare workers in PTSD assessment before and after the onset of COVID-19.
(k1) Prevalence of PTSD in healthcare workers in Self-Report Measures.

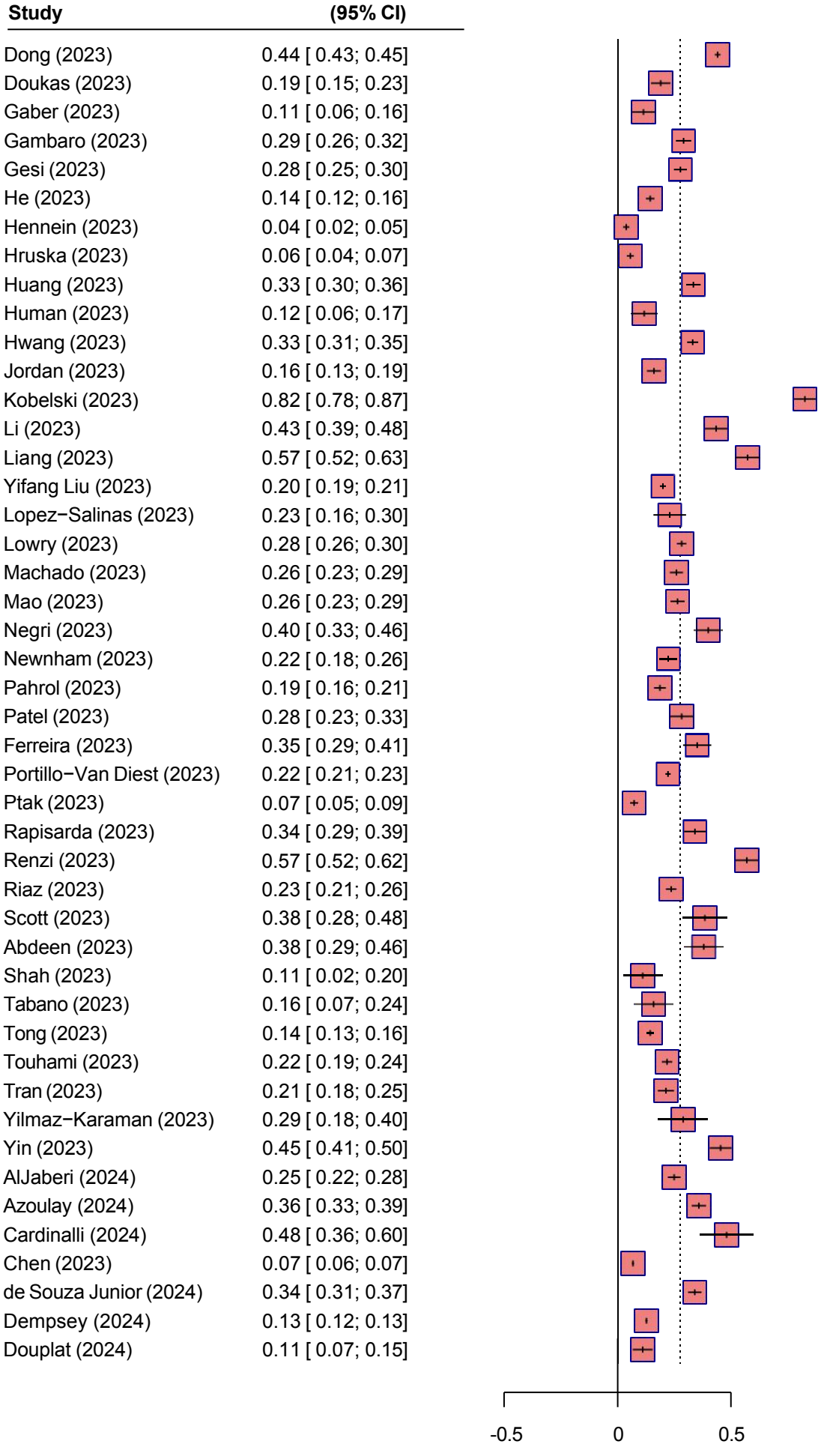


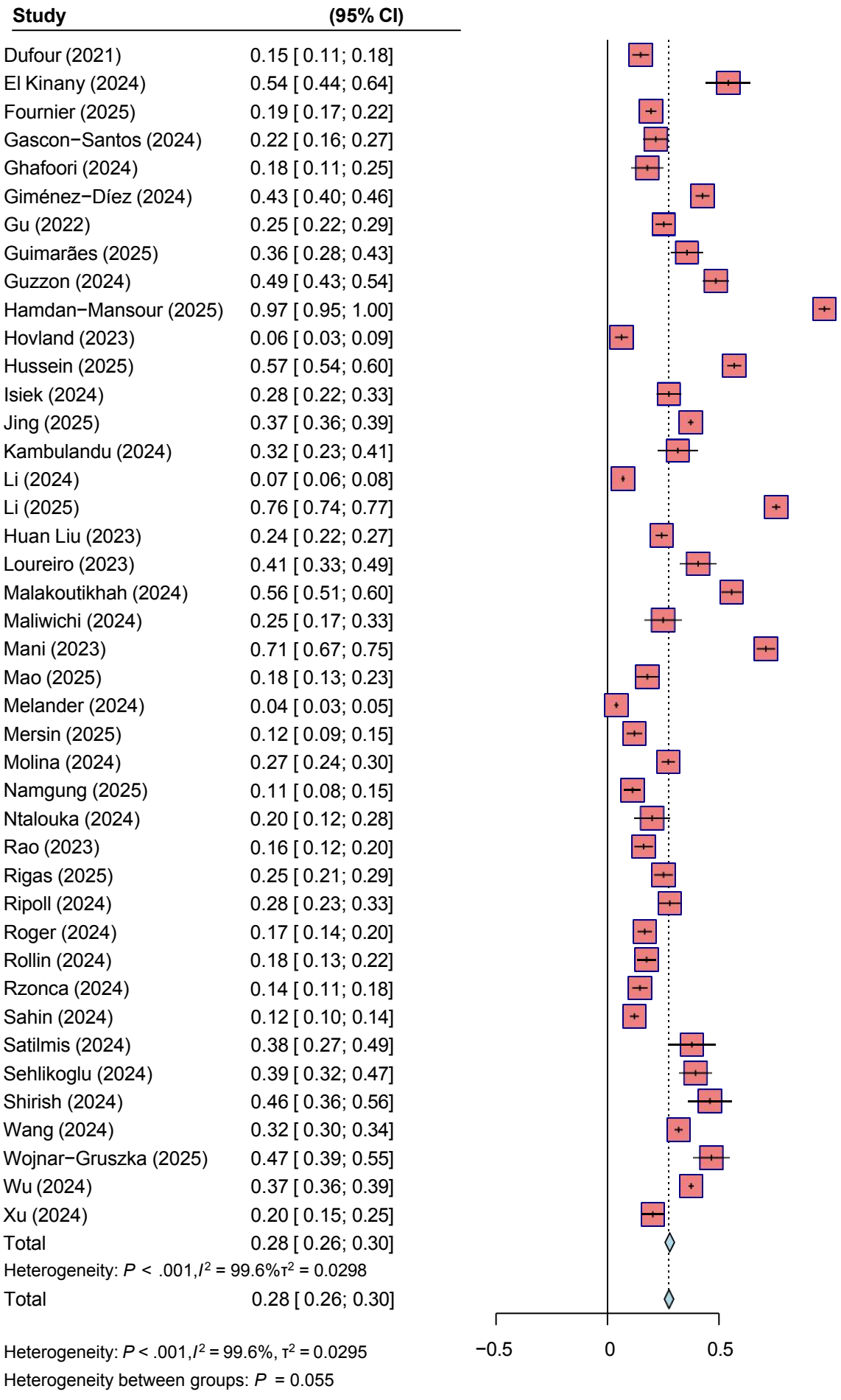

Study
(95% CI)
Zhang (2020) 0.21 [0.18; 0.24]
Alonso (2020) 0.22 [0.21; 0.23]
Alshehri (2021) 0.15 [0.11; 0.18]
Altmayer (2020) 0.16 [0.07; 0.25]
Amsalem (2021) 0.35 [0.30; 0.40]
Askari (2021) 0.86 [0.82; 0.91]
Asnakew (2021) 0.55 [0.50; 0.60]
Ayalew (2021) 0.57 [0.52; 0.62]
Bahadirli (2021) 0.19 [0.16; 0.22]
Bates (2021) 0.14 [0.08; 0.20]
Bulut (2021) 0.38 [0.33; 0.44]
Carmassi (2021) 0.59 [0.48; 0.71]
Chatzittofis (2021) 0.15 [0.12; 0.18]
Chen (2021) 0.45 [0.41; 0.49]
Cheng (2021) 0.20 [0.17; 0.23]
Conti (2021) 0.55 [0.52; 0.58]
Cyr (2021) 0.24 [0.20; 0.28]
Das (2021) 0.61 [0.55; 0.66]
Dehon (2021) 0.07 [0.04; 0.11]
Dobson (2021) 0.29 [0.24; 0.34]
Emre (2021) 0.18 [0.13; 0.23]
Engelbrecht (2021) 0.44 [0.39; 0.50]
Fattori (2021) 0.22 [0.18; 0.25]
Feingold (2021) 0.23 [0.22; 0.25]
Flateau (2021) 0.16 [0.12; 0.20]
Geng (2021) 0.11 [0.07; 0.14]
Ghio (2021) 0.34 [0.31; 0.37]
Gilleen (2021) 0.15 [0.13; 0.16]
Gramaglia (2021) 0.36 [0.32; 0.40]
Greenberg (2021) 0.40 [0.36; 0.44]
Greene (2021) 0.22 [0.20; 0.24]
Guo (2021) 0.11 [0.09; 0.13]
Hennein (2021) 0.22 [0.20; 0.24]
Hou (2021) 0.23 [0.20; 0.27]
Ilias (2021) 0.35 [0.28; 0.42]
Jordan (2021) 0.30 [0.29; 0.31]
Kader (2021) 0.18 [0.11; 0.24]
Kheradmand (2021) 0.27 [0.21; 0.33]
Kwobah (2021) 0.65 [0.62; 0.67]
Lamb (2021) 0.30 [0.29; 0.32]
Lamiani (2021) 0.10 [0.07; 0.13]
Lasalvia (2021) 0.72 [0.67; 0.77]
-0.5
0
0.5


Study
(95% CI)
Li (2021) 0.62 [0.57; 0.67]
Lu (2021) 0.15 [0.12; 0.19]
Lum (2021) 0.09 [0.05; 0.12]
Luo (2021) 0.15 [0.12; 0.17]
Marcomini (2021) 0.40 [0.33; 0.47]
Martínez−Caballero (2021) 0.31 [0.26; 0.36]
Mediavilla (2021) 0.52 [0.48; 0.56]
Mei (2021) 0.10 [0.08; 0.13]
Mosheva (2021) 0.14 [0.12; 0.16]
Murata (2021) 0.30 [0.28; 0.32]
TG COVID (2021) 0.73 [0.68; 0.78]
Osório (2021) 0.36 [0.33; 0.39]
Pan (2021) 0.14 [0.11; 0.16]
Pappa (2021) 0.45 [0.40; 0.50]
Erazo (2021) 0.44 [0.41; 0.47]
Plouffe (2021) 0.47 [0.44; 0.49]
Qutishat (2021) 0.36 [0.30; 0.42]
Robles (2021) 0.29 [0.28; 0.31]
Sarapultseva (2021) 0.30 [0.22; 0.38]
Shechter (2021) 0.55 [0.49; 0.62]
Smith (2021) 0.52 [0.50; 0.55]
Sonis (2021) 0.13 [0.10; 0.15]
Styra (2021) 0.50 [0.49; 0.52]
Tomicevic (2021) 0.33 [0.29; 0.37]
Vancappel (2021) 0.58 [0.55; 0.61]
Vance (2021) 0.44 [0.41; 0.46]
Villalba−Arias (2021) 0.06 [0.04; 0.08]
Villarreal−Zegarra (2021) 0.15 [0.10; 0.20]
Voorspoels (2021) 0.06 [0.05; 0.06]
Wright (2021) 0.15 [0.08; 0.22]
Xiong (2021) 0.20 [0.16; 0.24]
Yang (2021) 0.05 [0.05; 0.06]
Yeo (2021) 0.40 [0.35; 0.44]
Zara (2021) 0.37 [0.35; 0.38]
Zhang (2021) 0.13 [0.10; 0.17]
Alam (2022) 0.27 [0.25; 0.29]
Aljaberi (2022) 0.17 [0.07; 0.27]
Issa (2022) 0.36 [0.31; 0.41]
Bayazit (2022) 0.40 [0.38; 0.42]
Bizri (2022) 0.30 [0.23; 0.37]
Bock (2022) 0.15 [0.09; 0.21]
Bonzini (2022) 0.19 [0.17; 0.22]
Brady (2022) 0.04 [0.02; 0.06]
Burhanullah (2022) 0.50 [0.46; 0.54]
-0.5
0
0.5

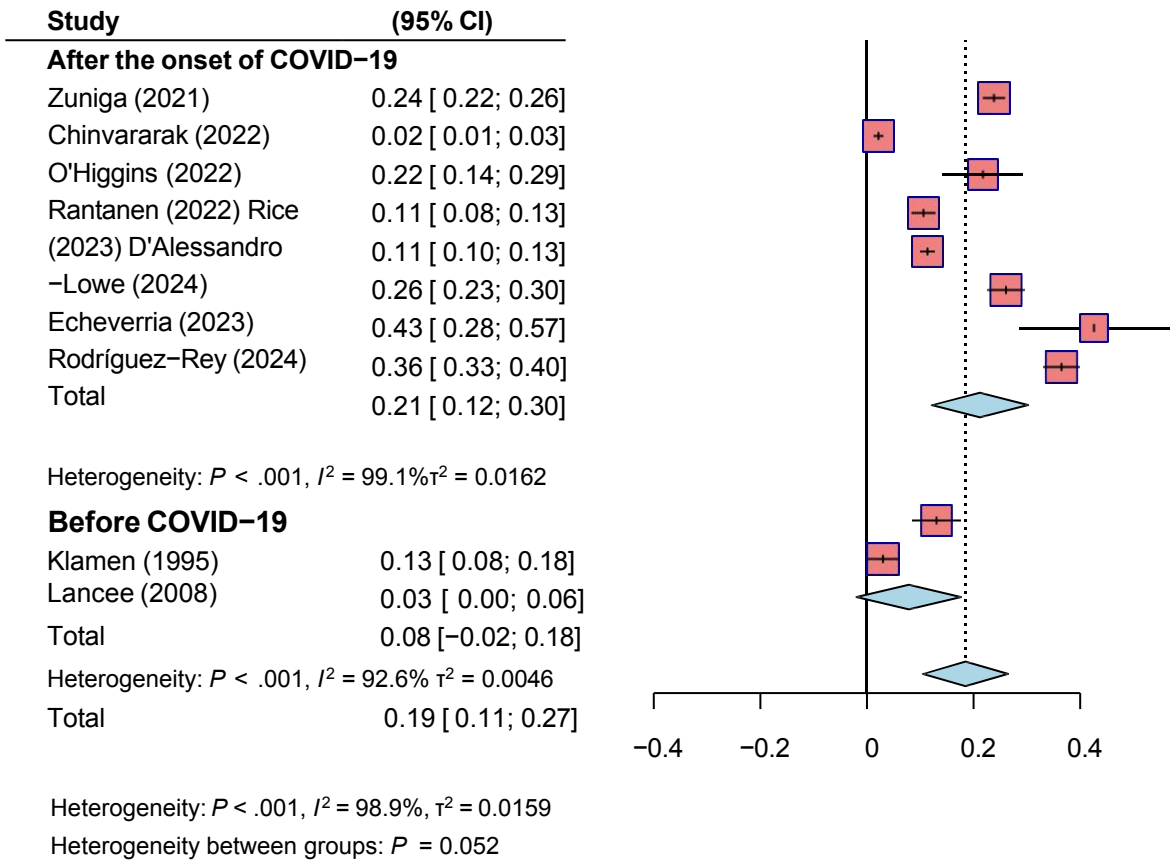

Study
(95% CI)
Carvalho−Alves (2022) 0.47 [0.44; 0.50]
Cleper (2022) 0.14 [0.11; 0.16]
Costantini (2022) 0.41 [0.36; 0.46]
Couper (2022) 0.45 [0.43; 0.46]
Cui (2022) 0.14 [0.11; 0.18]
Czepiel (2022) 0.20 [0.18; 0.22]
d'Ussel (2022) 0.14 [0.12; 0.16]
Da'she (2022) 0.20 [0.15; 0.24]
Diaz (2022) 0.58 [0.55; 0.61]
Dykes (2022) 0.28 [0.20; 0.36]
Fournier (2022) 0.21 [0.20; 0.23]
Fukushima (2022) 0.17 [0.14; 0.19]
Gagliardi (2022) 0.29 [0.24; 0.34]
Mendez (2022) 0.10 [0.08; 0.12]
Guillen−Burgos (2022) 0.19 [0.14; 0.23]
Gündogmus (2022) 0.24 [0.21; 0.27]
Gustafson (2022) 0.16 [0.12; 0.21]
Hall (2022) 0.46 [0.45; 0.48]
Holzinger (2022) 0.47 [0.46; 0.47]
Ilhan (2022) 0.72 [0.67; 0.77]
James (2022) 0.16 [0.13; 0.20]
Johns (2022) 0.12 [0.08; 0.15]
Jovarauskaite (2022) 0.09 [0.05; 0.13]
Korkut (2022) 0.22 [0.17; 0.26]
Kosydar−Bochenek (2022) 0.32 [0.25; 0.39]
Lasalvia (2022) 0.36 [0.29; 0.42]
Latsou (2022) 0.51 [0.43; 0.58]
Laurent (2022) 0.21 [0.19; 0.22]
Lee (2022) 0.18 [0.14; 0.22]
Lekka (2022) 0.14 [0.10; 0.17]
Rojas (2022) 0.19 [0.15; 0.24]
Lei Li (2022) 0.24 [0.18; 0.30]
Minjie Li (2022) 0.15 [0.13; 0.17]
Yifang Liu (2022) 0.16 [0.15; 0.18]
Yang Liu (2022) 0.18 [0.16; 0.19]
Marsden (2022) 0.16 [0.13; 0.19]
Martin−Rodriguez (2022) 0.38 [0.35; 0.41]
McGuinness (2022) 0.20 [0.18; 0.23]
Meena (2022) 0.02 [−0.01; 0.05]
Mennicken (2022) 0.47 [0.43; 0.51]
Metz (2022) 0.17 [0.11; 0.23]
Minelli (2022) 0.19 [0.15; 0.24]
Irene Ng (2022) 0.35 [0.28; 0.42]
Ng (2022) 0.36 [0.34; 0.38]
Ouyang (2022) 0.11 [0.08; 0.14]
-0.5
0
0.5


Study
(95% CI)
Pascoe (2022) 0.03 [0.03; 0.04]
Piacentini (2022) 0.12 [0.11; 0.12]
Qi (2022) 0.58 [0.54; 0.62]
Reid (2022) 0.03 [0.00; 0.06]
Robles (2022) 0.34 [0.32; 0.36]
Rodríguez−Rey (2022) 0.64 [0.51; 0.76]
Sachdeva (2021) 0.63 [0.55; 0.71]
Sanayeh (2022) 0.44 [0.40; 0.48]
Sar−El (2022) 0.10 [0.05; 0.15]
Schou−Bredal (2022) 0.14 [0.12; 0.15]
Schwartz (2022) 0.41 [0.37; 0.45]
Shahsavarinia (2022) 0.09 [0.05; 0.13]
Sangrà (2021) 0.23 [0.17; 0.30]
Stafseth (2022) 0.06 [0.04; 0.09]
Tebbeb (2022) 0.07 [0.05; 0.10]
Th'ng (2022) 0.16 [0.12; 0.20]
Tham (2022) 0.40 [0.39; 0.41]
Tong (2022) 0.13 [0.10; 0.16]
Tucker (2022) 0.14 [0.11; 0.17]
Vadi (2022) 0.22 [0.15; 0.28]
Van Steenkiste (2022) 0.51 [0.36; 0.67]
Van Wert (2022) 0.22 [0.19; 0.26]
Wild (2021) 0.44 [0.34; 0.54]
Yang (2022) 0.09 [0.08; 0.10]
Yao (2022) 0.11 [0.05; 0.17]
Young (2022) 0.13 [0.12; 0.14]
Yu (2022) 0.13 [0.11; 0.15]
Zhang (2022) 0.46 [0.44; 0.48]
Zhong (2022) 0.26 [0.23; 0.28]
Adams (2023) 0.03 [−0.00; 0.06]
Alshehri (2023) 0.14 [0.11; 0.17]
Banakar (2023) 0.43 [0.40; 0.47]
Bouaddi (2023) 0.72 [0.66; 0.79]
Brady (2023) 0.45 [0.40; 0.50]
Brunelli (2023) 0.16 [0.11; 0.22]
Cabrolier (2023) 0.12 [0.10; 0.14]
Conejero (2023) 0.21 [0.18; 0.25]
Costa (2023) 0.23 [0.21; 0.25]
D'Alessandro−Lowe (2023) 0.33 [0.27; 0.39]
Danson (2023) 0.06 [0.05; 0.07]
-0.5
0
0.5

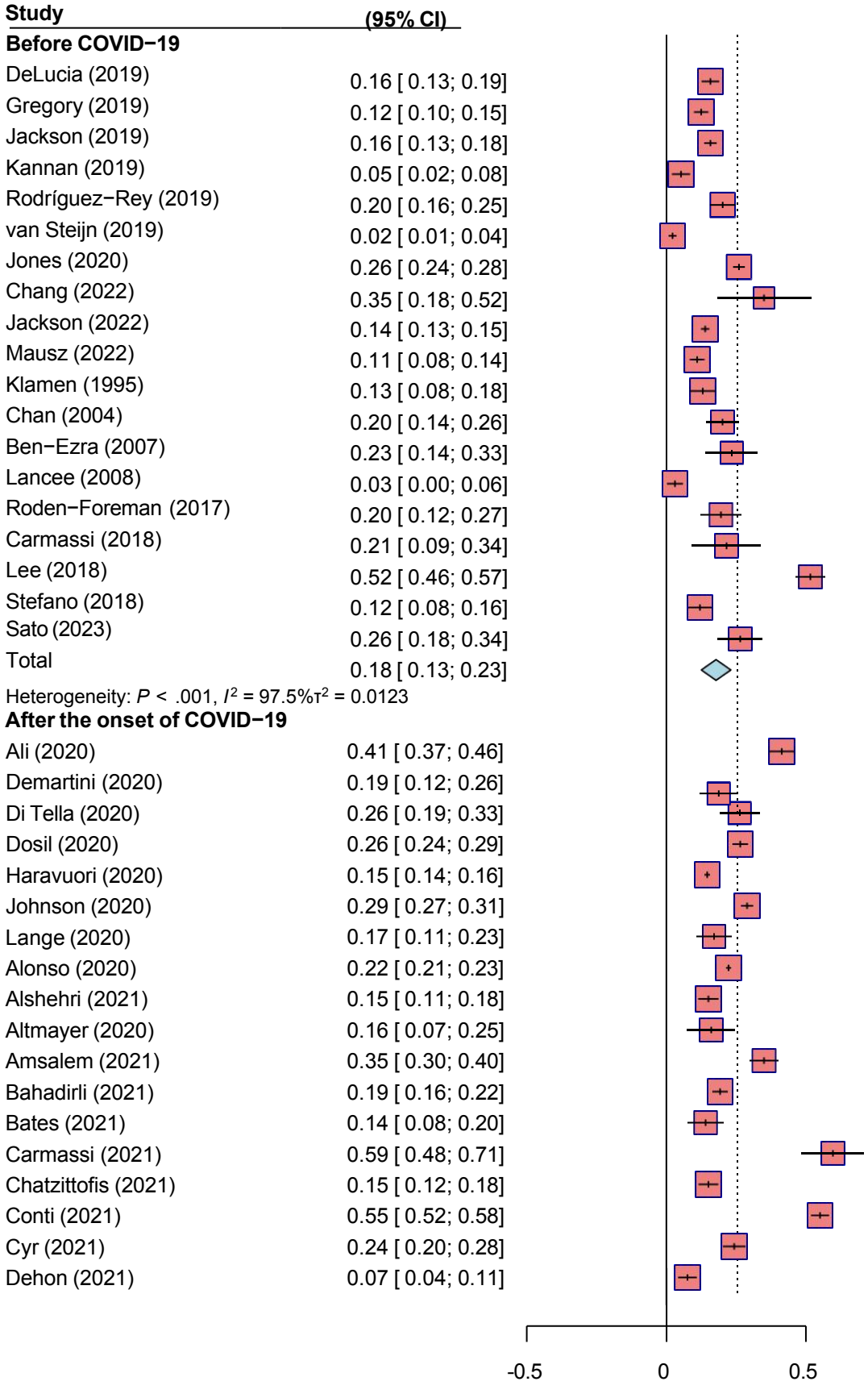

Study
(95% CI)
Dong (2023) 0.44 [0.43; 0.45]
Doukas (2023) 0.19 [0.15; 0.23]
Gaber (2023) 0.11 [0.06; 0.16]
Gambaro (2023) 0.29 [0.26; 0.32]
Gesi (2023) 0.28 [0.25; 0.30]
He (2023) 0.14 [0.12; 0.16]
Hennein (2023) 0.04 [0.02; 0.05]
Hruska (2023) 0.06 [0.04; 0.07]
Huang (2023) 0.33 [0.30; 0.36]
Human (2023) 0.12 [0.06; 0.17]
Hwang (2023) 0.33 [0.31; 0.35]
Jordan (2023) 0.16 [0.13; 0.19]
Kobelski (2023) 0.82 [0.78; 0.87]
Li (2023) 0.43 [0.39; 0.48]
Liang (2023) 0.57 [0.52; 0.63]
Yifang Liu (2023) 0.20 [0.19; 0.21]
Lopez−Salinas (2023) 0.23 [0.16; 0.30]
Lowry (2023) 0.28 [0.26; 0.30]
Machado (2023) 0.26 [0.23; 0.29]
Mao (2023) 0.26 [0.23; 0.29]
Negri (2023) 0.40 [0.33; 0.46]
Newnham (2023) 0.22 [0.18; 0.26]
Pahrol (2023) 0.19 [0.16; 0.21]
Patel (2023) 0.28 [0.23; 0.33]
Ferreira (2023) 0.35 [0.29; 0.41]
Portillo−Van Diest (2023) 0.22 [0.21; 0.23]
Ptak (2023) 0.07 [0.05; 0.09]
Rapisarda (2023) 0.34 [0.29; 0.39]
Renzi (2023) 0.57 [0.52; 0.62]
Riaz (2023) 0.23 [0.21; 0.26]
Scott (2023) 0.38 [0.28; 0.48]
Abdeen (2023) 0.38 [0.29; 0.46]
Shah (2023) 0.11 [0.02; 0.20]
Tabano (2023) 0.16 [0.07; 0.24]
Tong (2023) 0.14 [0.13; 0.16]
Touhami (2023) 0.22 [0.19; 0.24]
Tran (2023) 0.21 [0.18; 0.25]
Yilmaz−Karaman (2023) 0.29 [0.18; 0.40]
Yin (2023) 0.45 [0.41; 0.50]
AlJaberi (2024) 0.25 [0.22; 0.28]
Azoulay (2024) 0.36 [0.33; 0.39]
Cardinalli (2024) 0.48 [0.36; 0.60]
Chen (2023) 0.07 [0.06; 0.07]
de Souza Junior (2024) 0.34 [0.31; 0.37]
Dempsey (2024) 0.13 [0.12; 0.13]
Douplat (2024) 0.11 [0.07; 0.15]
-0.5
0
0.5

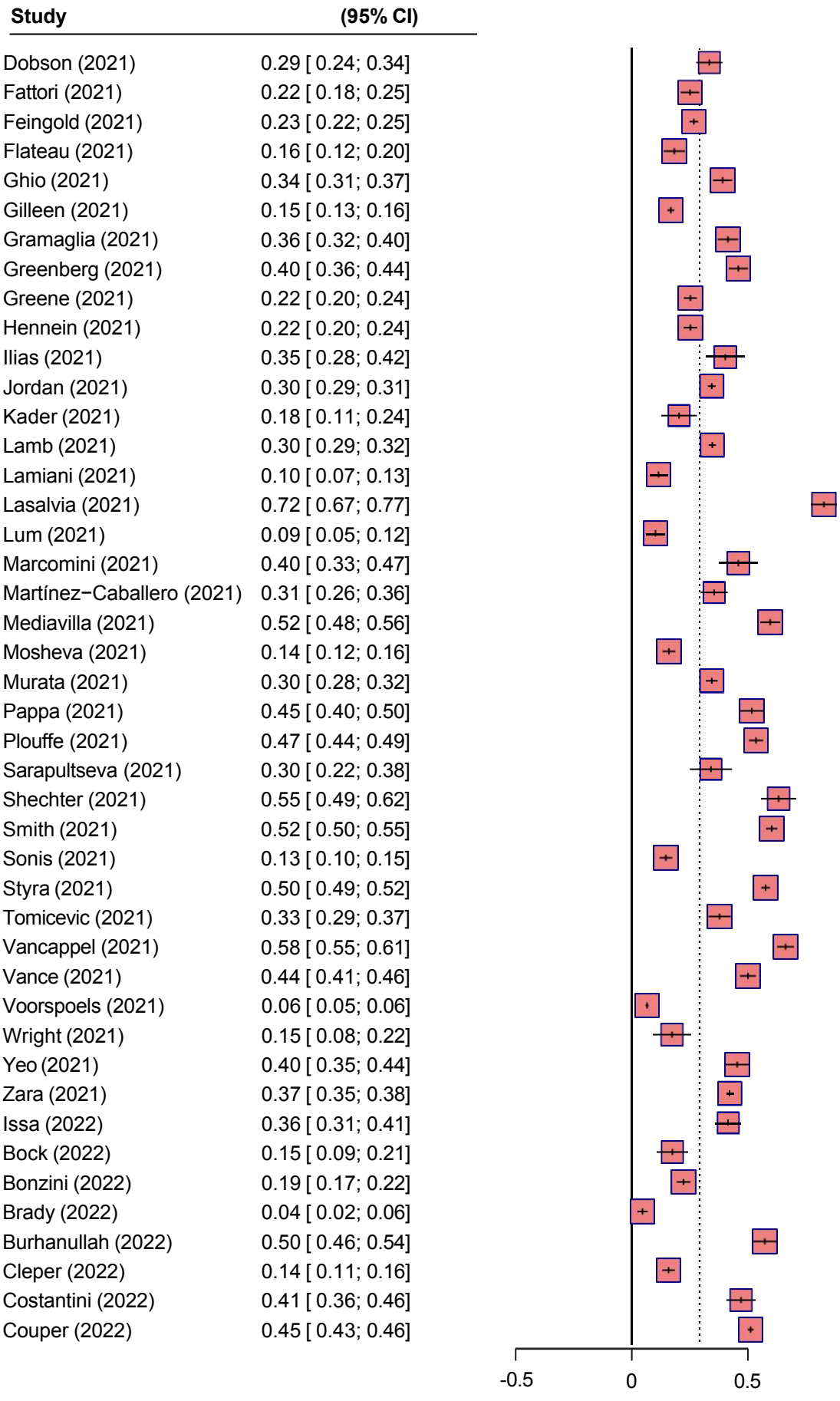

Study
(95% CI)
Dufour (2021) 0.15 [0.11; 0.18]
El Kinany (2024) 0.54 [0.44; 0.64]
Fournier (2025) 0.19 [0.17; 0.22]
Gascon−Santos (2024) 0.22 [0.16; 0.27]
Ghafoori (2024) 0.18 [0.11; 0.25]
Giménez−Díez (2024) 0.43 [0.40; 0.46]
Gu (2022) 0.25 [0.22; 0.29]
Guimarães (2025) 0.36 [0.28; 0.43]
Guzzon (2024) 0.49 [0.43; 0.54]
Hamdan−Mansour (2025) 0.97 [0.95; 1.00]
Hovland (2023) 0.06 [0.03; 0.09]
Hussein (2025) 0.57 [0.54; 0.60]
Isiek (2024) 0.28 [0.22; 0.33]
Jing (2025) 0.37 [0.36; 0.39]
Kambulandu (2024) 0.32 [0.23; 0.41]
Li (2024) 0.07 [0.06; 0.08]
Li (2025) 0.76 [0.74; 0.77]
Huan Liu (2023) 0.24 [0.22; 0.27]
Loureiro (2023) 0.41 [0.33; 0.49]
Malakoutikhah (2024) 0.56 [0.51; 0.60]
Maliwichi (2024) 0.25 [0.17; 0.33]
Mani (2023) 0.71 [0.67; 0.75]
Mao (2025) 0.18 [0.13; 0.23]
Melander (2024) 0.04 [0.03; 0.05]
Mersin (2025) 0.12 [0.09; 0.15]
Molina (2024) 0.27 [0.24; 0.30]
Namgung (2025) 0.11 [0.08; 0.15]
Ntalouka (2024) 0.20 [0.12; 0.28]
Rao (2023) 0.16 [0.12; 0.20]
Rigas (2025) 0.25 [0.21; 0.29]
Ripoll (2024) 0.28 [0.23; 0.33]
Roger (2024) 0.17 [0.14; 0.20]
Rollin (2024) 0.18 [0.13; 0.22]
Rzonca (2024) 0.14 [0.11; 0.18]
Sahin (2024) 0.12 [0.10; 0.14]
Satilmis (2024) 0.38 [0.27; 0.49]
Sehlikoglu (2024) 0.39 [0.32; 0.47]
Shirish (2024) 0.46 [0.36; 0.56]
Wang (2024) 0.32 [0.30; 0.34]
Wojnar−Gruszka (2025) 0.47 [0.39; 0.55]
Wu (2024) 0.37 [0.36; 0.39]
Xu (2024) 0.20 [0.15; 0.25]
Total 0.28 [0.26; 0.30]
Heterogeneity: P < .001, I^2 = 99.6% τ^2 = 0.0298
Total 0.28 [0.26; 0.30]
Heterogeneity: P < .001, I^2 = 99.6%, τ^2 = 0.0295
Heterogeneity between groups: P = 0.055
−0.5
0
0.5

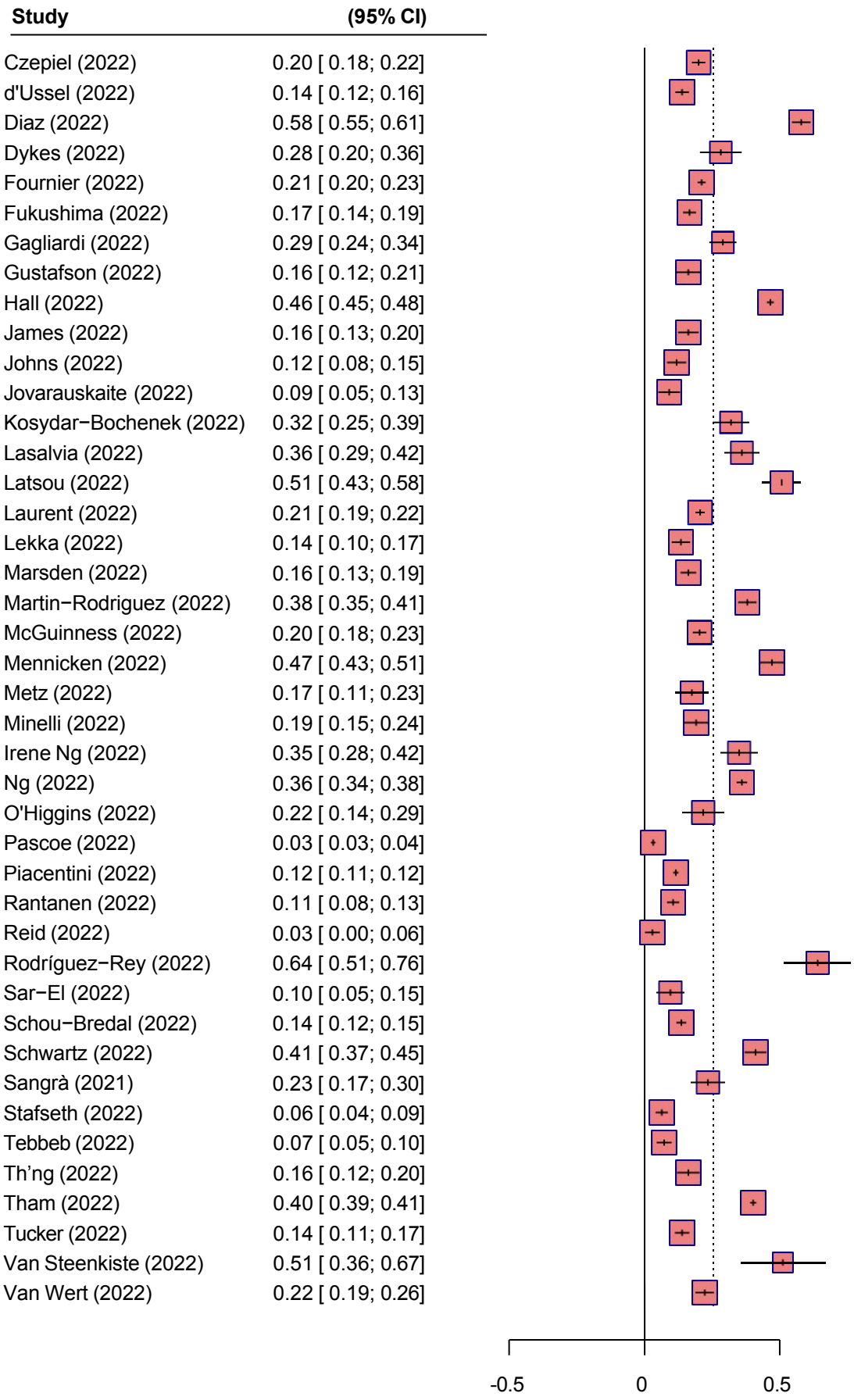
(k2) Prevalence of PTSD in HCWs in Clinician-Administered Measures.

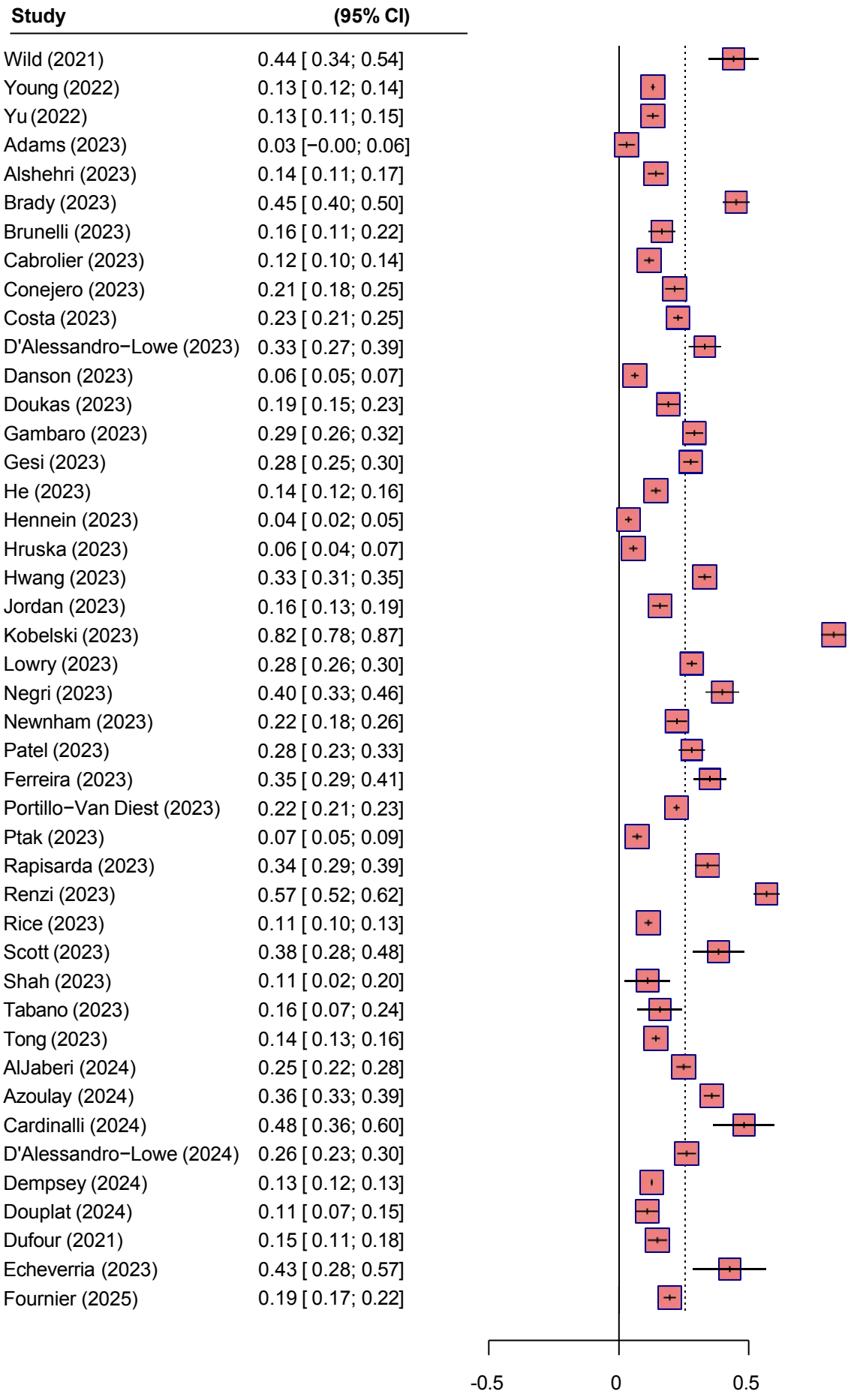


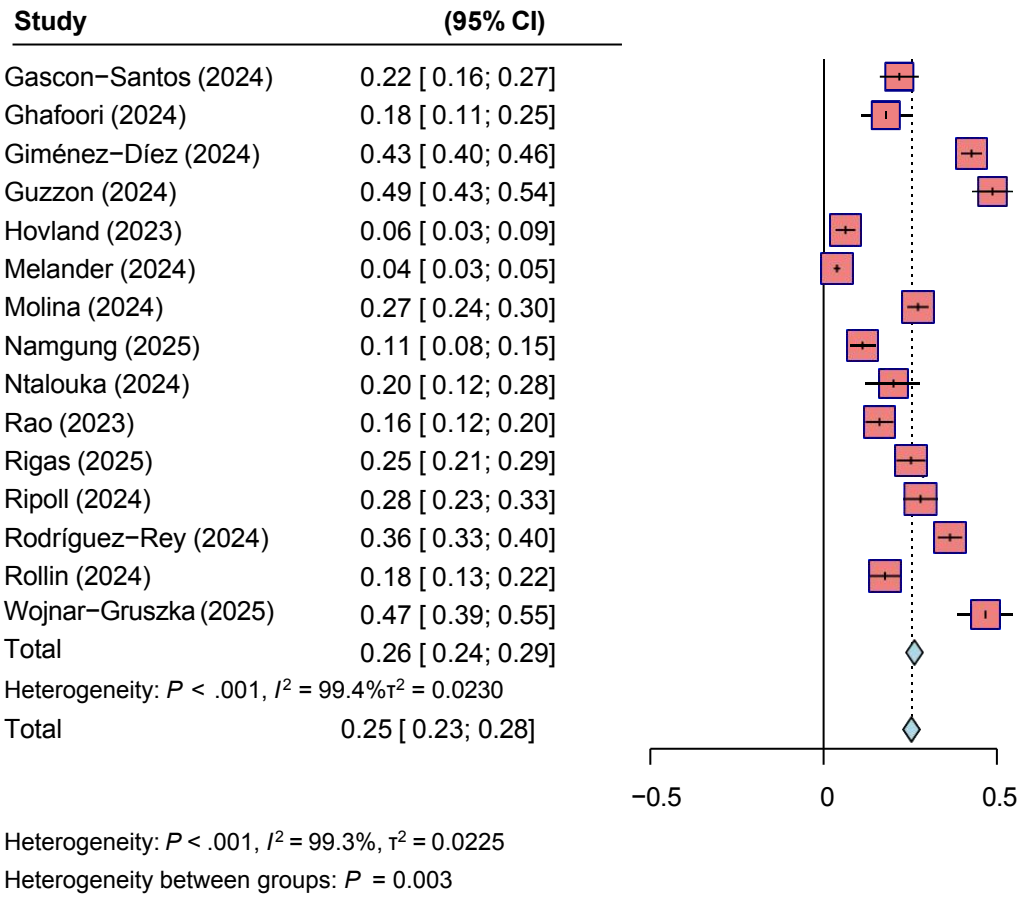
(I1-I2) The forest plots of PTSD prevalence among healthcare workers in country income level before and after the onset of COVID-19.
(I1) Prevalence of PTSD in healthcare workers in high-income countries.




Study
(95% CI)
Dobson (2021) 0.29 [0.24; 0.34]
Fattori (2021) 0.22 [0.18; 0.25]
Feingold (2021) 0.23 [0.22; 0.25]
Flateau (2021) 0.16 [0.12; 0.20]
Ghio (2021) 0.34 [0.31; 0.37]
Gilleen (2021) 0.15 [0.13; 0.16]
Gramaglia (2021) 0.36 [0.32; 0.40]
Greenberg (2021) 0.40 [0.36; 0.44]
Greene (2021) 0.22 [0.20; 0.24]
Hennein (2021) 0.22 [0.20; 0.24]
Ilias (2021) 0.35 [0.28; 0.42]
Jordan (2021) 0.30 [0.29; 0.31]
Kader (2021) 0.18 [0.11; 0.24]
Lamb (2021) 0.30 [0.29; 0.32]
Lamiani (2021) 0.10 [0.07; 0.13]
Lasalvia (2021) 0.72 [0.67; 0.77]
Lum (2021) 0.09 [0.05; 0.12]
Marcomini (2021) 0.40 [0.33; 0.47]
Martínez−Caballero (2021) 0.31 [0.26; 0.36]
Mediavilla (2021) 0.52 [0.48; 0.56]
Mosheva (2021) 0.14 [0.12; 0.16]
Murata (2021) 0.30 [0.28; 0.32]
Pappa (2021) 0.45 [0.40; 0.50]
Plouffe (2021) 0.47 [0.44; 0.49]
Sarapultseva (2021) 0.30 [0.22; 0.38]
Shechter (2021) 0.55 [0.49; 0.62]
Smith (2021) 0.52 [0.50; 0.55]
Sonis (2021) 0.13 [0.10; 0.15]
Styra (2021) 0.50 [0.49; 0.52]
Tomicevic (2021) 0.33 [0.29; 0.37]
Vancappel (2021) 0.58 [0.55; 0.61]
Vance (2021) 0.44 [0.41; 0.46]
Voorspoels (2021) 0.06 [0.05; 0.06]
Wright (2021) 0.15 [0.08; 0.22]
Yeo (2021) 0.40 [0.35; 0.44]
Zara (2021) 0.37 [0.35; 0.38]
Issa (2022) 0.36 [0.31; 0.41]
Bock (2022) 0.15 [0.09; 0.21]
Bonzini (2022) 0.19 [0.17; 0.22]
Brady (2022) 0.04 [0.02; 0.06]
Burhanullah (2022) 0.50 [0.46; 0.54]
Cleper (2022) 0.14 [0.11; 0.16]
Costantini (2022) 0.41 [0.36; 0.46]
Couper (2022) 0.45 [0.43; 0.46]
-0.5
0
0.5


Study
(95% CI)
Czepiel (2022) 0.20 [0.18; 0.22]
d'Ussel (2022) 0.14 [0.12; 0.16]
Diaz (2022) 0.58 [0.55; 0.61]
Dykes (2022) 0.28 [0.20; 0.36]
Fournier (2022) 0.21 [0.20; 0.23]
Fukushima (2022) 0.17 [0.14; 0.19]
Gagliardi (2022) 0.29 [0.24; 0.34]
Gustafson (2022) 0.16 [0.12; 0.21]
Hall (2022) 0.46 [0.45; 0.48]
James (2022) 0.16 [0.13; 0.20]
Johns (2022) 0.12 [0.08; 0.15]
Jovarauskaite (2022) 0.09 [0.05; 0.13]
Kosydar−Bochenek (2022) 0.32 [0.25; 0.39]
Lasalvia (2022) 0.36 [0.29; 0.42]
Latsou (2022) 0.51 [0.43; 0.58]
Laurent (2022) 0.21 [0.19; 0.22]
Lekka (2022) 0.14 [0.10; 0.17]
Marsden (2022) 0.16 [0.13; 0.19]
Martin−Rodriguez (2022) 0.38 [0.35; 0.41]
McGuinness (2022) 0.20 [0.18; 0.23]
Mennicken (2022) 0.47 [0.43; 0.51]
Metz (2022) 0.17 [0.11; 0.23]
Minelli (2022) 0.19 [0.15; 0.24]
Irene Ng (2022) 0.35 [0.28; 0.42]
Ng (2022) 0.36 [0.34; 0.38]
O'Higgins (2022) 0.22 [0.14; 0.29]
Pascoe (2022) 0.03 [0.03; 0.04]
Piacentini (2022) 0.12 [0.11; 0.12]
Rantanen (2022) 0.11 [0.08; 0.13]
Reid (2022) 0.03 [0.00; 0.06]
Rodríguez−Rey (2022) 0.64 [0.51; 0.76]
Sar−El (2022) 0.10 [0.05; 0.15]
Schou−Bredal (2022) 0.14 [0.12; 0.15]
Schwartz (2022) 0.41 [0.37; 0.45]
Sangrà (2021) 0.23 [0.17; 0.30]
Stafseth (2022) 0.06 [0.04; 0.09]
Tebbeb (2022) 0.07 [0.05; 0.10]
Th'ng (2022) 0.16 [0.12; 0.20]
Tham (2022) 0.40 [0.39; 0.41]
Tucker (2022) 0.14 [0.11; 0.17]
Van Steenkiste (2022) 0.51 [0.36; 0.67]
Van Wert (2022) 0.22 [0.19; 0.26]
-0.5
0
0.5

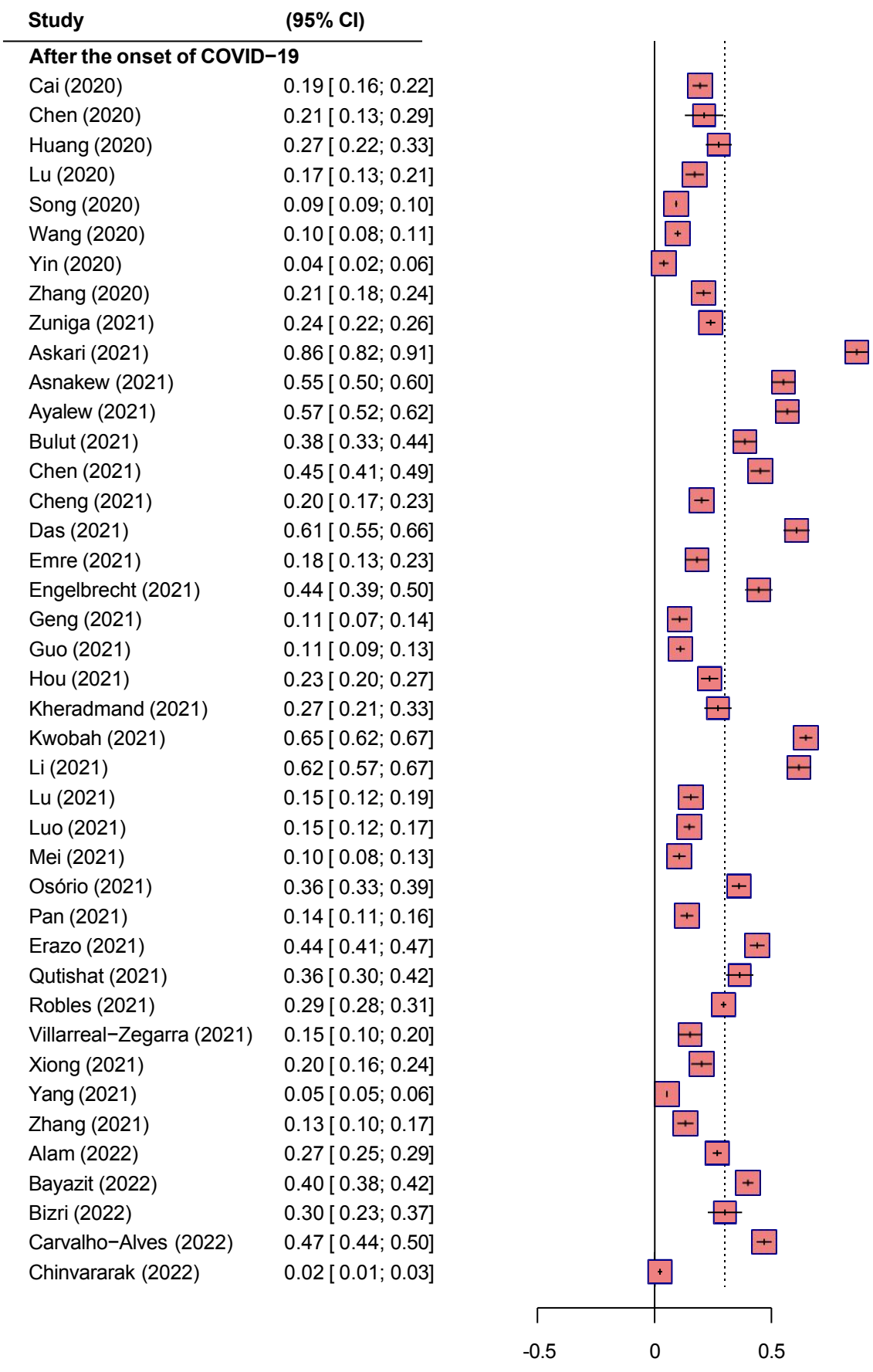

Study
(95% CI)
Wild (2021) 0.44 [0.34; 0.54]
Young (2022) 0.13 [0.12; 0.14]
Yu (2022) 0.13 [0.11; 0.15]
Adams (2023) 0.03 [−0.00; 0.06]
Alshehri (2023) 0.14 [0.11; 0.17]
Brady (2023) 0.45 [0.40; 0.50]
Brunelli (2023) 0.16 [0.11; 0.22]
Cabrolier (2023) 0.12 [0.10; 0.14]
Conejero (2023) 0.21 [0.18; 0.25]
Costa (2023) 0.23 [0.21; 0.25]
D'Alessandro−Lowe (2023) 0.33 [0.27; 0.39]
Danson (2023) 0.06 [0.05; 0.07]
Doukas (2023) 0.19 [0.15; 0.23]
Gambaro (2023) 0.29 [0.26; 0.32]
Gesi (2023) 0.28 [0.25; 0.30]
He (2023) 0.14 [0.12; 0.16]
Hennein (2023) 0.04 [0.02; 0.05]
Hruska (2023) 0.06 [0.04; 0.07]
Hwang (2023) 0.33 [0.31; 0.35]
Jordan (2023) 0.16 [0.13; 0.19]
Kobelski (2023) 0.82 [0.78; 0.87]
Lowry (2023) 0.28 [0.26; 0.30]
Negri (2023) 0.40 [0.33; 0.46]
Newnham (2023) 0.22 [0.18; 0.26]
Patel (2023) 0.28 [0.23; 0.33]
Ferreira (2023) 0.35 [0.29; 0.41]
Portillo−Van Diest (2023) 0.22 [0.21; 0.23]
Ptak (2023) 0.07 [0.05; 0.09]
Rapisarda (2023) 0.34 [0.29; 0.39]
Renzi (2023) 0.57 [0.52; 0.62]
Rice (2023) 0.11 [0.10; 0.13]
Scott (2023) 0.38 [0.28; 0.48]
Shah (2023) 0.11 [0.02; 0.20]
Tabano (2023) 0.16 [0.07; 0.24]
Tong (2023) 0.14 [0.13; 0.16]
AlJaberi (2024) 0.25 [0.22; 0.28]
Azoulay (2024) 0.36 [0.33; 0.39]
Cardinalli (2024) 0.48 [0.36; 0.60]
D'Alessandro−Lowe (2024) 0.26 [0.23; 0.30]
Dempsey (2024) 0.13 [0.12; 0.13]
Douplat (2024) 0.11 [0.07; 0.15]
Dufour (2021) 0.15 [0.11; 0.18]
Echeverria (2023) 0.43 [0.28; 0.57]
Fournier (2025) 0.19 [0.17; 0.22]
-0.5
0
0.5



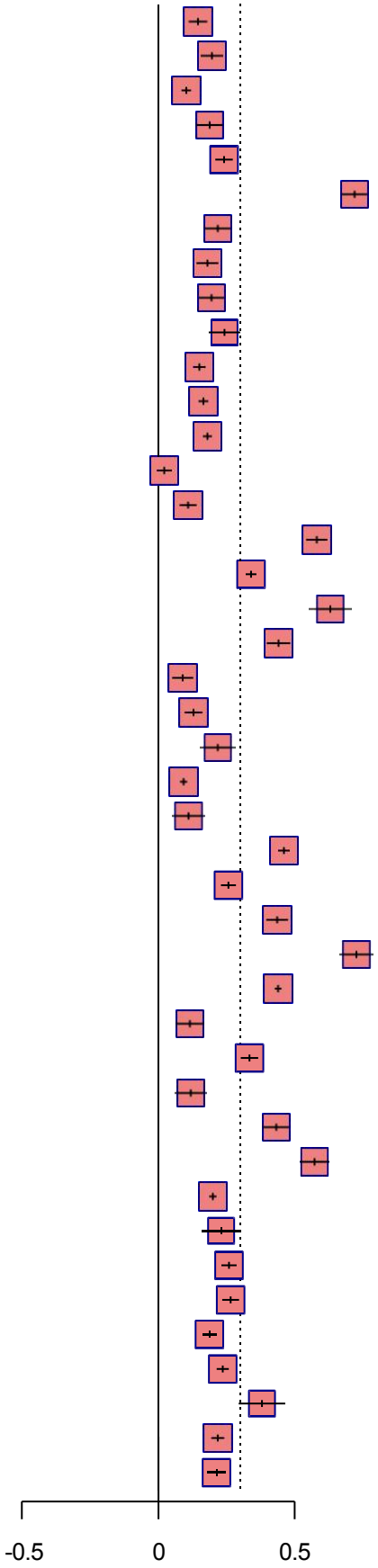
Heterogeneity: $P < .001$, $I^2 = 99.3\%$, $\tau^2 = 0.0225$

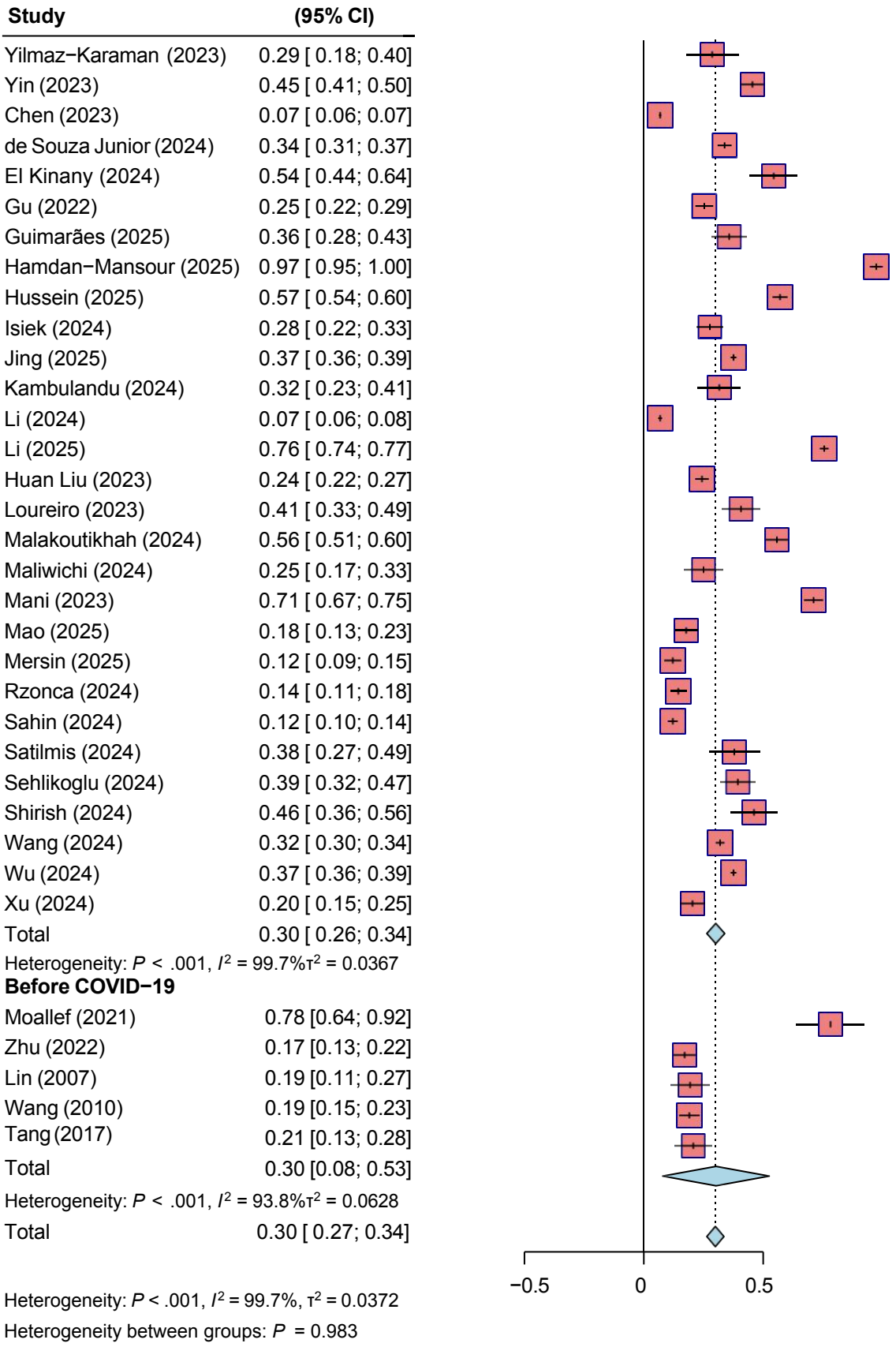
Heterogeneity between groups: $P = 0.003$

(I2) Prevalence of PTSD in healthcare workers in low- and middle-income countries.

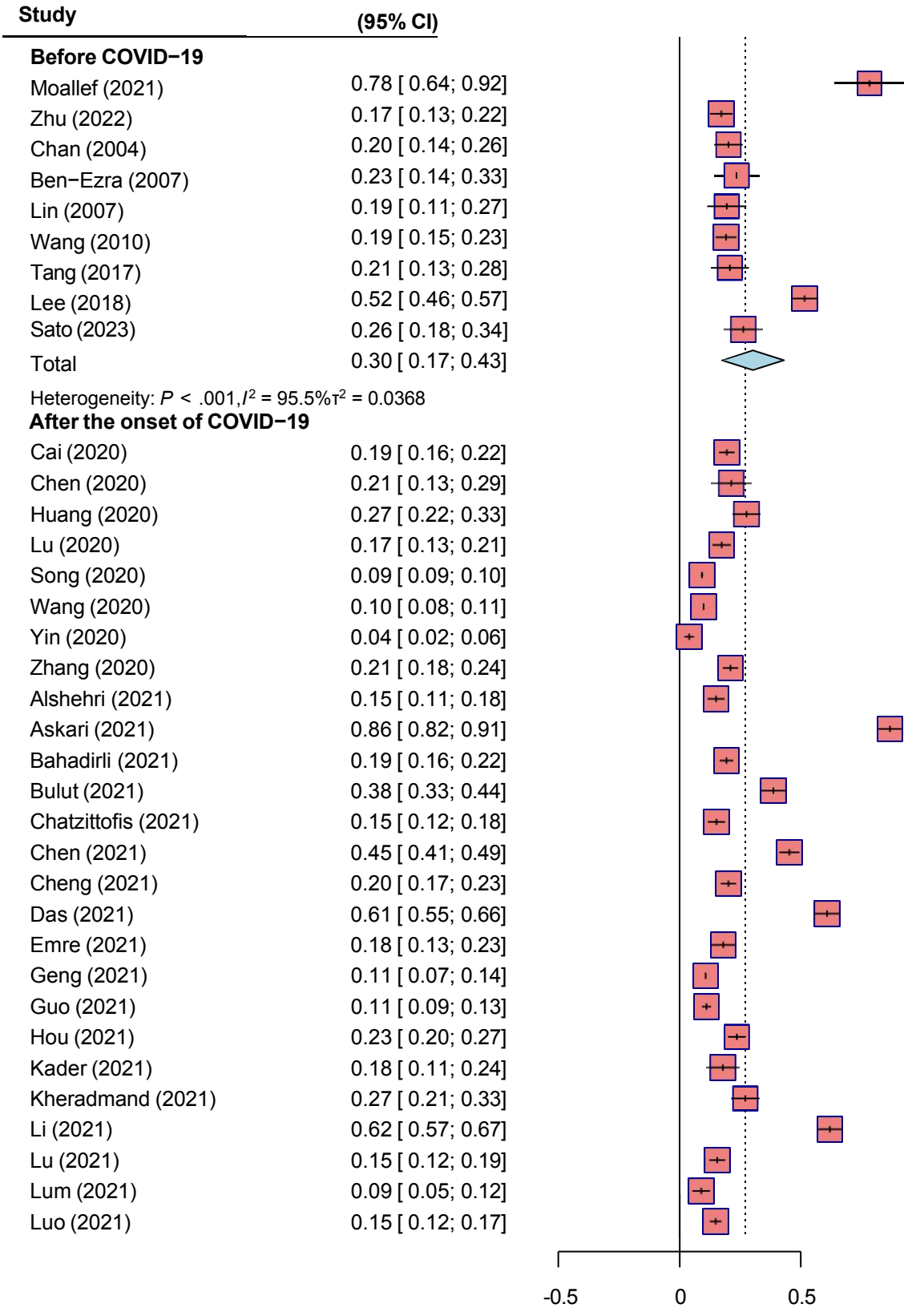


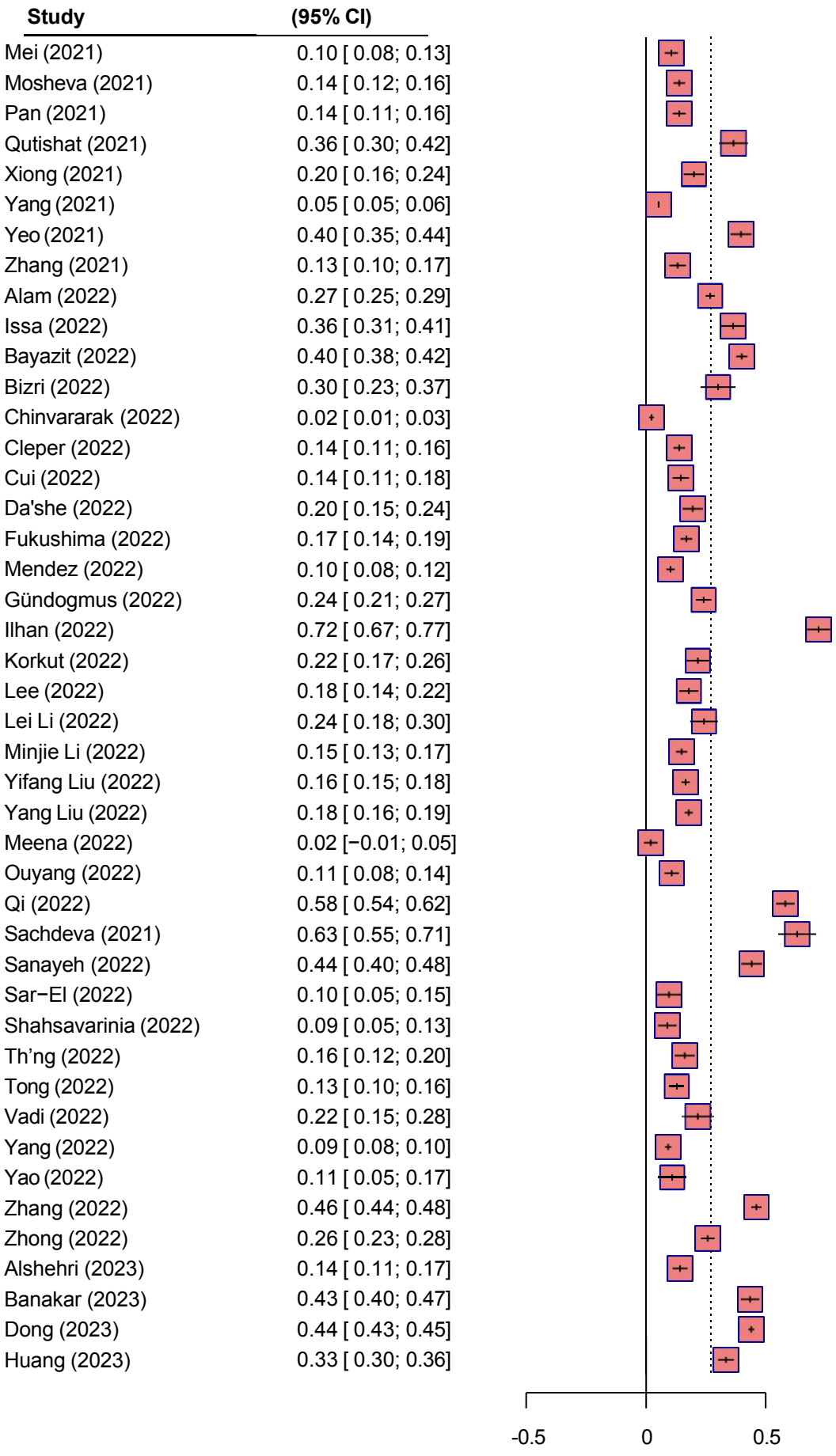
Study	(95% CI)
Cui (2022)	0.14 [0.11; 0.18]
Da'she (2022)	0.20 [0.15; 0.24]
Mendez (2022)	0.10 [0.08; 0.12]
Guillen−Burgos (2022)	0.19 [0.14; 0.23]
Gündogmus (2022)	0.24 [0.21; 0.27]
Ilhan (2022)	0.72 [0.67; 0.77]
Korkut (2022)	0.22 [0.17; 0.26]
Lee (2022)	0.18 [0.14; 0.22]
Rojas (2022)	0.19 [0.15; 0.24]
Lei Li (2022)	0.24 [0.18; 0.30]
Minjie Li (2022)	0.15 [0.13; 0.17]
Yifang Liu (2022)	0.16 [0.15; 0.18]
Yang Liu (2022)	0.18 [0.16; 0.19]
Meena (2022)	0.02 [−0.01; 0.05]
Ouyang (2022)	0.11 [0.08; 0.14]
Qi (2022)	0.58 [0.54; 0.62]
Robles (2022)	0.34 [0.32; 0.36]
Sachdeva (2021)	0.63 [0.55; 0.71]
Sanayeh (2022)	0.44 [0.40; 0.48]
Shahsavarinia (2022)	0.09 [0.05; 0.13]
Tong (2022)	0.13 [0.10; 0.16]
Vadi (2022)	0.22 [0.15; 0.28]
Yang (2022)	0.09 [0.08; 0.10]
Yao (2022)	0.11 [0.05; 0.17]
Zhang (2022)	0.46 [0.44; 0.48]
Zhong (2022)	0.26 [0.23; 0.28]
Banakar (2023)	0.43 [0.40; 0.47]
Bouaddi (2023)	0.72 [0.66; 0.79]
Dong (2023)	0.44 [0.43; 0.45]
Gaber (2023)	0.11 [0.06; 0.16]
Huang (2023)	0.33 [0.30; 0.36]
Human (2023)	0.12 [0.06; 0.17]
Li (2023)	0.43 [0.39; 0.48]
Liang (2023)	0.57 [0.52; 0.63]
Yifang Liu (2023)	0.20 [0.19; 0.21]
Lopez−Salinas (2023)	0.23 [0.16; 0.30]
Machado (2023)	0.26 [0.23; 0.29]
Mao (2023)	0.26 [0.23; 0.29]
Pahrol (2023)	0.19 [0.16; 0.21]
Riaz (2023)	0.23 [0.21; 0.26]
Abdeen (2023)	0.38 [0.29; 0.46]
Touhami (2023)	0.22 [0.19; 0.24]
Tran (2023)	0.21 [0.18; 0.25]

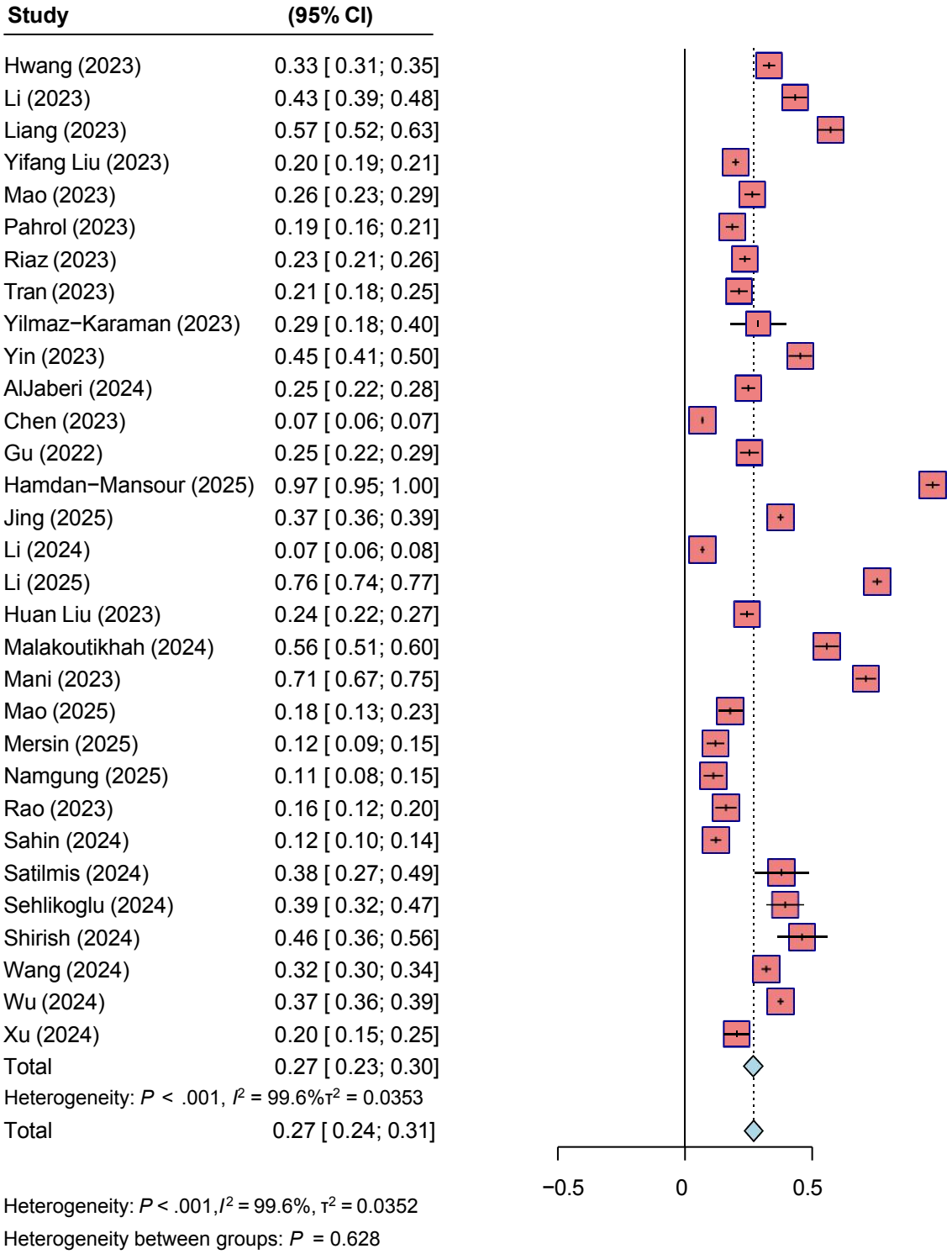



Study
(95% CI)
Yilmaz−Karaman (2023) 0.29 [0.18; 0.40]
Yin (2023) 0.45 [0.41; 0.50]
Chen (2023) 0.07 [0.06; 0.07]
de Souza Junior (2024) 0.34 [0.31; 0.37]
El Kinany (2024) 0.54 [0.44; 0.64]
Gu (2022) 0.25 [0.22; 0.29]
Guimarães (2025) 0.36 [0.28; 0.43]
Hamdan−Mansour (2025) 0.97 [0.95; 1.00]
Hussein (2025) 0.57 [0.54; 0.60]
Isiek (2024) 0.28 [0.22; 0.33]
Jing (2025) 0.37 [0.36; 0.39]
Kambulandu (2024) 0.32 [0.23; 0.41]
Li (2024) 0.07 [0.06; 0.08]
Li (2025) 0.76 [0.74; 0.77]
Huan Liu (2023) 0.24 [0.22; 0.27]
Loureiro (2023) 0.41 [0.33; 0.49]
Malakoutikhah (2024) 0.56 [0.51; 0.60]
Maliwichi (2024) 0.25 [0.17; 0.33]
Mani (2023) 0.71 [0.67; 0.75]
Mao (2025) 0.18 [0.13; 0.23]
Mersin (2025) 0.12 [0.09; 0.15]
Rzonca (2024) 0.14 [0.11; 0.18]
Sahin (2024) 0.12 [0.10; 0.14]
Satilmis (2024) 0.38 [0.27; 0.49]
Sehlikoglu (2024) 0.39 [0.32; 0.47]
Shirish (2024) 0.46 [0.36; 0.56]
Wang (2024) 0.32 [0.30; 0.34]
Wu (2024) 0.37 [0.36; 0.39]
Xu (2024) 0.20 [0.15; 0.25]
Total 0.30 [0.26; 0.34]
Heterogeneity: P < .001, I² = 99.7%τ² = 0.0367
Before COVID−19
Moallef (2021) 0.78 [0.64; 0.92]
Zhu (2022) 0.17 [0.13; 0.22]
Lin (2007) 0.19 [0.11; 0.27]
Wang (2010) 0.19 [0.15; 0.23]
Tang (2017) 0.21 [0.13; 0.28]
Total 0.30 [0.08; 0.53]
Heterogeneity: P < .001, I² = 93.8%τ² = 0.0628
Total 0.30 [0.27; 0.34]
Heterogeneity: P < .001, I² = 99.7%, τ² = 0.0372
Heterogeneity between groups: P = 0.983
−0.5
0
0.5

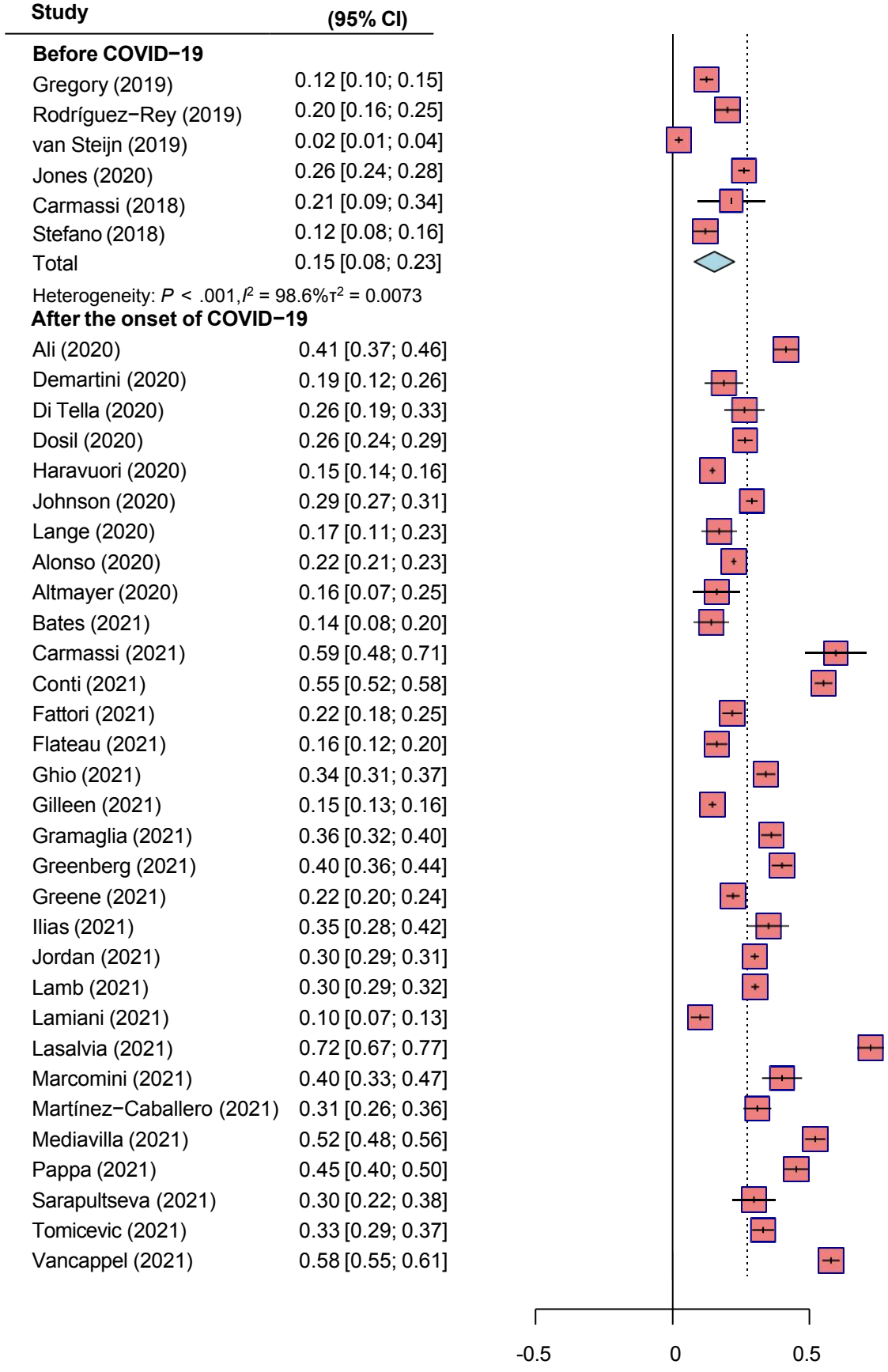
(m1-m6) The forest plots of PTSD prevalence among healthcare workers in continents before and after the onset of COVID-19.
(m1) Prevalence of PTSD in healthcare workers in Asia.



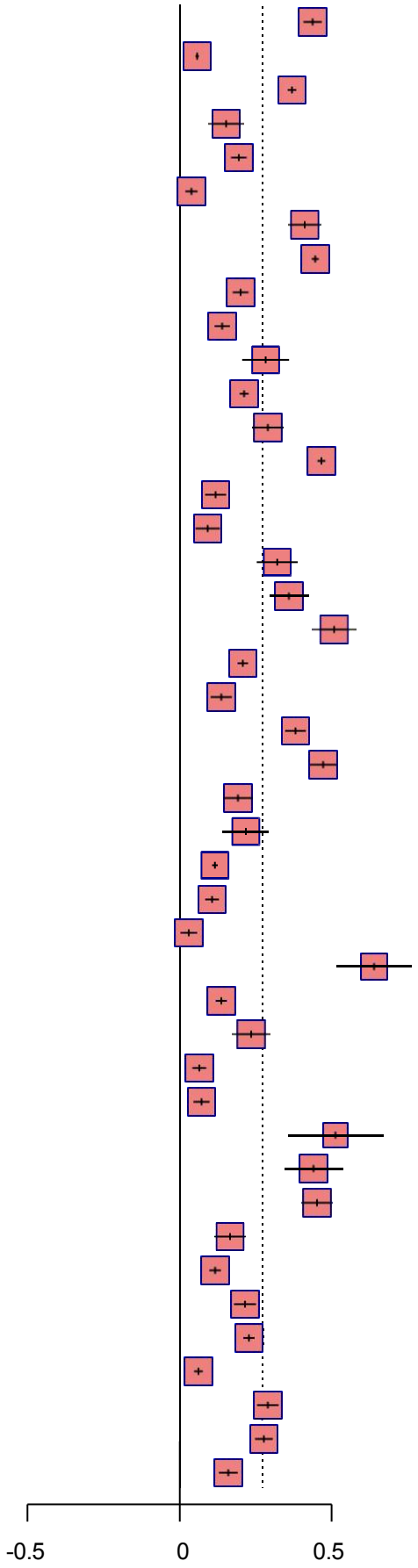

Study
(95% CI)
Mei (2021) 0.10 [0.08; 0.13]
Mosheva (2021) 0.14 [0.12; 0.16]
Pan (2021) 0.14 [0.11; 0.16]
Qutishat (2021) 0.36 [0.30; 0.42]
Xiong (2021) 0.20 [0.16; 0.24]
Yang (2021) 0.05 [0.05; 0.06]
Yeo (2021) 0.40 [0.35; 0.44]
Zhang (2021) 0.13 [0.10; 0.17]
Alam (2022) 0.27 [0.25; 0.29]
Issa (2022) 0.36 [0.31; 0.41]
Bayazit (2022) 0.40 [0.38; 0.42]
Bizri (2022) 0.30 [0.23; 0.37]
Chinvararak (2022) 0.02 [0.01; 0.03]
Cleper (2022) 0.14 [0.11; 0.16]
Cui (2022) 0.14 [0.11; 0.18]
Da'she (2022) 0.20 [0.15; 0.24]
Fukushima (2022) 0.17 [0.14; 0.19]
Mendez (2022) 0.10 [0.08; 0.12]
Gündogmus (2022) 0.24 [0.21; 0.27]
Ilhan (2022) 0.72 [0.67; 0.77]
Korkut (2022) 0.22 [0.17; 0.26]
Lee (2022) 0.18 [0.14; 0.22]
Lei Li (2022) 0.24 [0.18; 0.30]
Minjie Li (2022) 0.15 [0.13; 0.17]
Yifang Liu (2022) 0.16 [0.15; 0.18]
Yang Liu (2022) 0.18 [0.16; 0.19]
Meena (2022) 0.02 [−0.01; 0.05]
Ouyang (2022) 0.11 [0.08; 0.14]
Qi (2022) 0.58 [0.54; 0.62]
Sachdeva (2021) 0.63 [0.55; 0.71]
Sanayeh (2022) 0.44 [0.40; 0.48]
Sar−El (2022) 0.10 [0.05; 0.15]
Shahsavarinia (2022) 0.09 [0.05; 0.13]
Th'ng (2022) 0.16 [0.12; 0.20]
Tong (2022) 0.13 [0.10; 0.16]
Vadi (2022) 0.22 [0.15; 0.28]
Yang (2022) 0.09 [0.08; 0.10]
Yao (2022) 0.11 [0.05; 0.17]
Zhang (2022) 0.46 [0.44; 0.48]
Zhong (2022) 0.26 [0.23; 0.28]
Alshehri (2023) 0.14 [0.11; 0.17]
Banakar (2023) 0.43 [0.40; 0.47]
Dong (2023) 0.44 [0.43; 0.45]
Huang (2023) 0.33 [0.30; 0.36]
-0.5
0
0.5


Study
(95% CI)
Hwang (2023) 0.33 [0.31; 0.35]
Li (2023) 0.43 [0.39; 0.48]
Liang (2023) 0.57 [0.52; 0.63]
Yifang Liu (2023) 0.20 [0.19; 0.21]
Mao (2023) 0.26 [0.23; 0.29]
Pahrol (2023) 0.19 [0.16; 0.21]
Riaz (2023) 0.23 [0.21; 0.26]
Tran (2023) 0.21 [0.18; 0.25]
Yilmaz−Karaman (2023) 0.29 [0.18; 0.40]
Yin (2023) 0.45 [0.41; 0.50]
AlJaberi (2024) 0.25 [0.22; 0.28]
Chen (2023) 0.07 [0.06; 0.07]
Gu (2022) 0.25 [0.22; 0.29]
Hamdan−Mansour (2025) 0.97 [0.95; 1.00]
Jing (2025) 0.37 [0.36; 0.39]
Li (2024) 0.07 [0.06; 0.08]
Li (2025) 0.76 [0.74; 0.77]
Huan Liu (2023) 0.24 [0.22; 0.27]
Malakoutikhah (2024) 0.56 [0.51; 0.60]
Mani (2023) 0.71 [0.67; 0.75]
Mao (2025) 0.18 [0.13; 0.23]
Mersin (2025) 0.12 [0.09; 0.15]
Namgung (2025) 0.11 [0.08; 0.15]
Rao (2023) 0.16 [0.12; 0.20]
Sahin (2024) 0.12 [0.10; 0.14]
Satilmis (2024) 0.38 [0.27; 0.49]
Sehlikoglu (2024) 0.39 [0.32; 0.47]
Shirish (2024) 0.46 [0.36; 0.56]
Wang (2024) 0.32 [0.30; 0.34]
Wu (2024) 0.37 [0.36; 0.39]
Xu (2024) 0.20 [0.15; 0.25]
Total 0.27 [0.23; 0.30]
Heterogeneity: P < .001, I² = 99.6% τ² = 0.0353
Total 0.27 [0.24; 0.31]
−0.5
0
0.5
Heterogeneity: P < .001, I² = 99.6%, τ² = 0.0352
Heterogeneity between groups: P = 0.628

(m2) Prevalence of PTSD in healthcare workers in Europe.



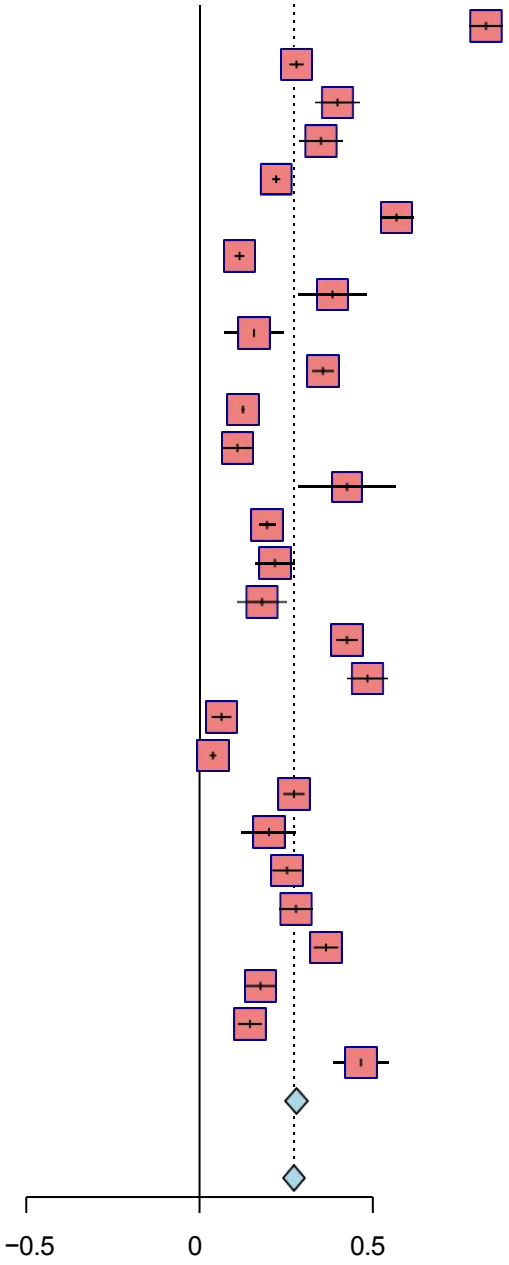
Study	(95% CI)
Vance (2021)	0.44 [0.41; 0.46]
Voorspoels (2021)	0.06 [0.05; 0.06]
Zara (2021)	0.37 [0.35; 0.38]
Bock (2022)	0.15 [0.09; 0.21]
Bonzini (2022)	0.19 [0.17; 0.22]
Brady (2022)	0.04 [0.02; 0.06]
Costantini (2022)	0.41 [0.36; 0.46]
Couper (2022)	0.45 [0.43; 0.46]
Czepiel (2022)	0.20 [0.18; 0.22]
d'Ussel (2022)	0.14 [0.12; 0.16]
Dykes (2022)	0.28 [0.20; 0.36]
Fournier (2022)	0.21 [0.20; 0.23]
Gagliardi (2022)	0.29 [0.24; 0.34]
Hall (2022)	0.46 [0.45; 0.48]
Johns (2022)	0.12 [0.08; 0.15]
Jovarauskaite (2022)	0.09 [0.05; 0.13]
Kosydar−Bochenek (2022)	0.32 [0.25; 0.39]
Lasalvia (2022)	0.36 [0.29; 0.42]
Latsou (2022)	0.51 [0.43; 0.58]
Laurent (2022)	0.21 [0.19; 0.22]
Lekka (2022)	0.14 [0.10; 0.17]
Martin−Rodriguez (2022)	0.38 [0.35; 0.41]
Mennicken (2022)	0.47 [0.43; 0.51]
Minelli (2022)	0.19 [0.15; 0.24]
O'Higgins (2022)	0.22 [0.14; 0.29]
Piacentini (2022)	0.12 [0.11; 0.12]
Rantanen (2022)	0.11 [0.08; 0.13]
Reid (2022)	0.03 [0.00; 0.06]
Rodríguez−Rey (2022)	0.64 [0.51; 0.76]
Schou−Bredal (2022)	0.14 [0.12; 0.15]
Sangrà (2021)	0.23 [0.17; 0.30]
Stafseth (2022)	0.06 [0.04; 0.09]
Tebbeb (2022)	0.07 [0.05; 0.10]
Van Steenkiste (2022)	0.51 [0.36; 0.67]
Wild (2021)	0.44 [0.34; 0.54]
Brady (2023)	0.45 [0.40; 0.50]
Brunelli (2023)	0.16 [0.11; 0.22]
Cabrolier (2023)	0.12 [0.10; 0.14]
Conejero (2023)	0.21 [0.18; 0.25]
Costa (2023)	0.23 [0.21; 0.25]
Danson (2023)	0.06 [0.05; 0.07]
Gambaro (2023)	0.29 [0.26; 0.32]
Gesi (2023)	0.28 [0.25; 0.30]
Jordan (2023)	0.16 [0.13; 0.19]



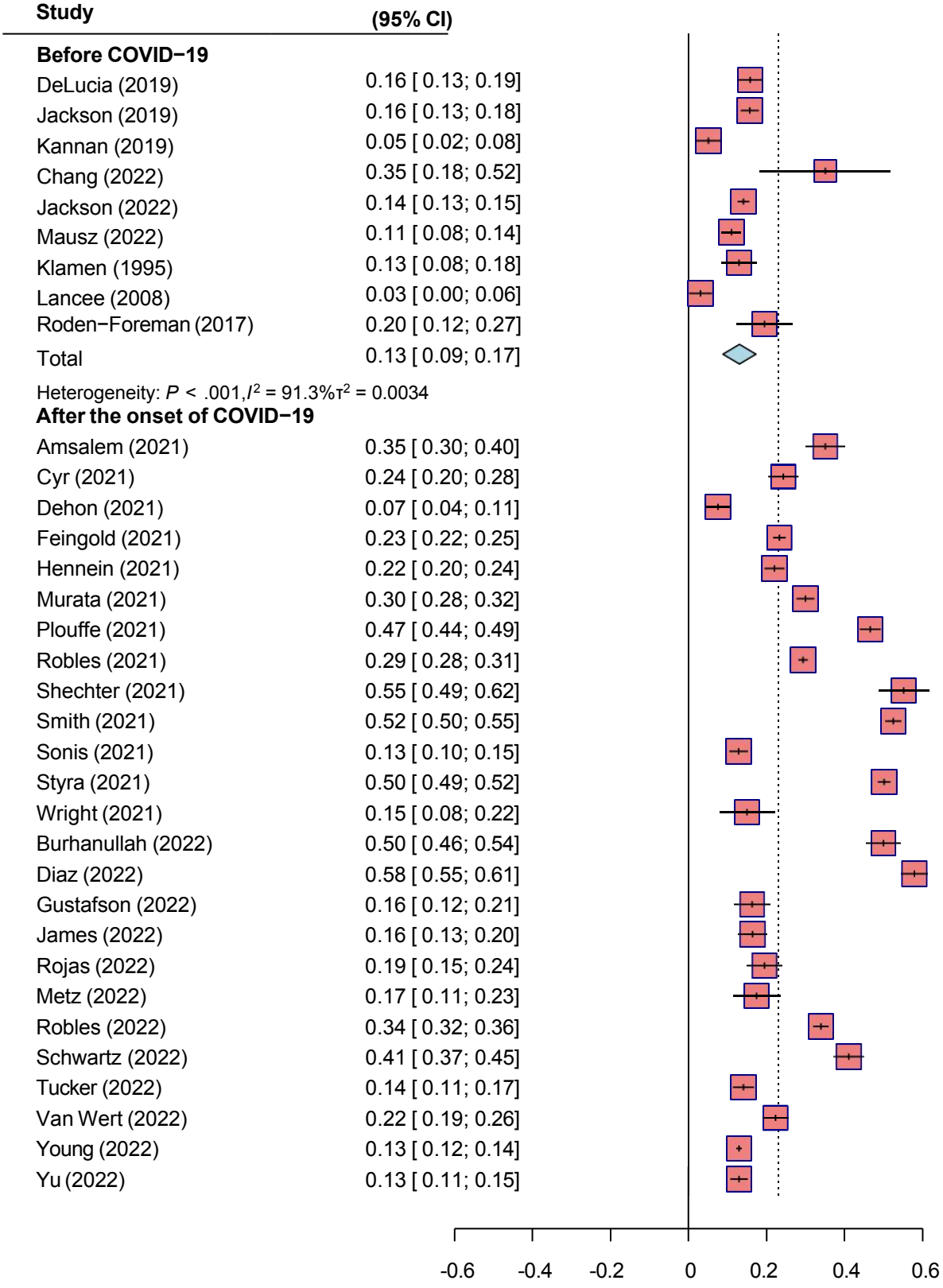
Study	(95% CI)
Kobelski (2023)	0.82 [0.78; 0.87]
Lowry (2023)	0.28 [0.26; 0.30]
Negri (2023)	0.40 [0.33; 0.46]
Ferreira (2023)	0.35 [0.29; 0.41]
Portillo−Van Diest (2023)	0.22 [0.21; 0.23]
Renzi (2023)	0.57 [0.52; 0.62]
Rice (2023)	0.11 [0.10; 0.13]
Scott (2023)	0.38 [0.28; 0.48]
Tabano (2023)	0.16 [0.07; 0.24]
Azoulay (2024)	0.36 [0.33; 0.39]
Dempsey (2024)	0.13 [0.12; 0.13]
Douplat (2024)	0.11 [0.07; 0.15]
Echeverria (2023)	0.43 [0.28; 0.57]
Fournier (2025)	0.19 [0.17; 0.22]
Gascon−Santos (2024)	0.22 [0.16; 0.27]
Ghafoori (2024)	0.18 [0.11; 0.25]
Giménez−Díez (2024)	0.43 [0.40; 0.46]
Guzzon (2024)	0.49 [0.43; 0.54]
Hovland (2023)	0.06 [0.03; 0.09]
Melander (2024)	0.04 [0.03; 0.05]
Molina (2024)	0.27 [0.24; 0.30]
Ntalouka (2024)	0.20 [0.12; 0.28]
Rigas (2025)	0.25 [0.21; 0.29]
Ripoll (2024)	0.28 [0.23; 0.33]
Rodríguez−Rey (2024)	0.36 [0.33; 0.40]
Rollin (2024)	0.18 [0.13; 0.22]
Rzonca (2024)	0.14 [0.11; 0.18]
Wojnar−Gruszka (2025)	0.47 [0.39; 0.55]
Total	0.28 [0.25; 0.31]
Heterogeneity: P < .001, I^2 = 99.4% τ^2 = 0.0247	
Total	0.27 [0.24; 0.30]

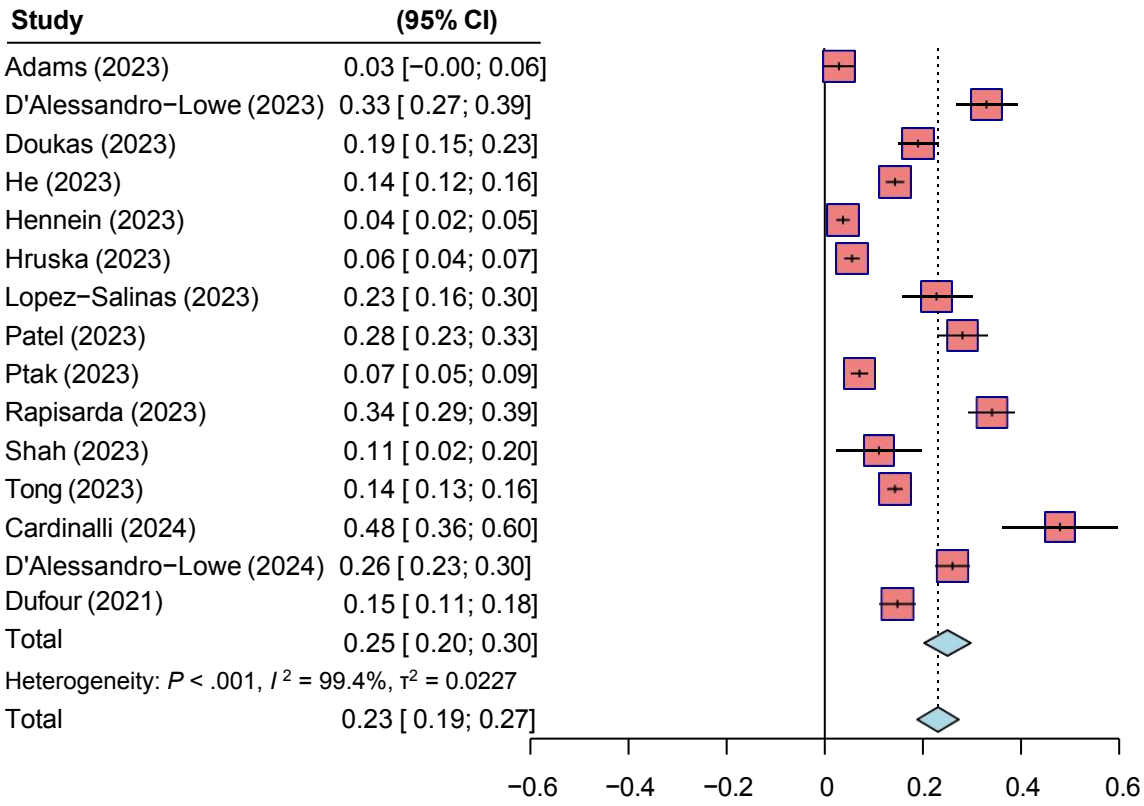
Heterogeneity: P < .001, I^2 = 99.4%, τ^2 = 0.0244

Heterogeneity between groups: P = 0.001



(m3) Prevalence of PTSD in healthcare workers in Nouth America.

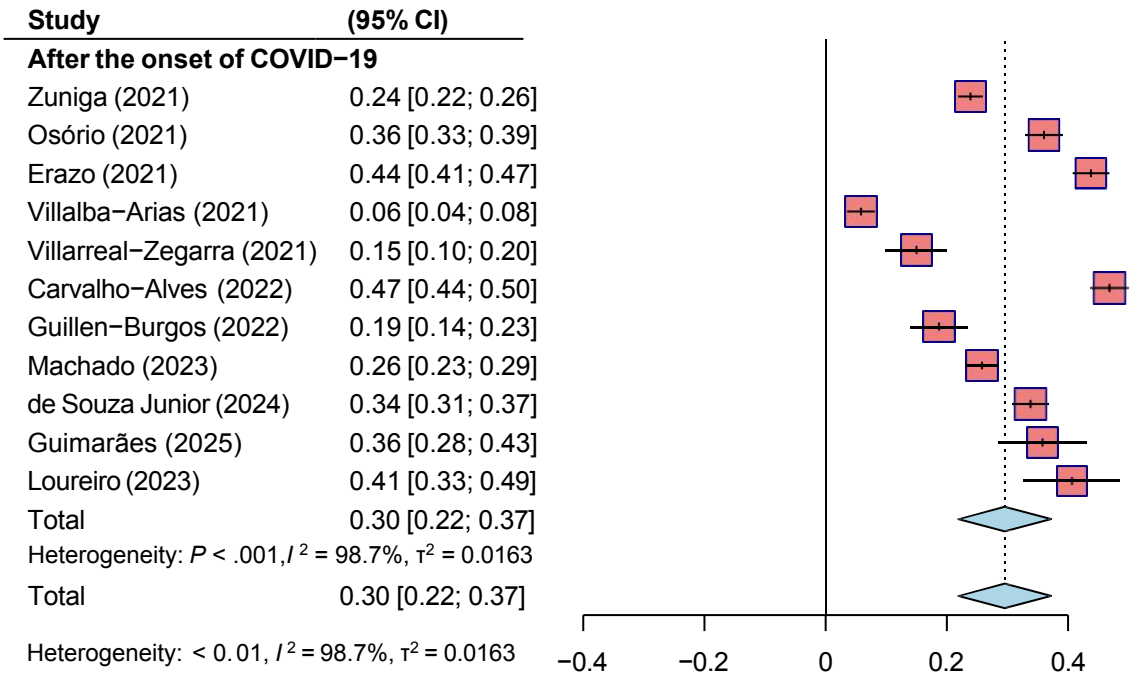




Heterogeneity: $P < .001$, $I^2 = 99.3\%$, $\tau^2 = 0.0214$

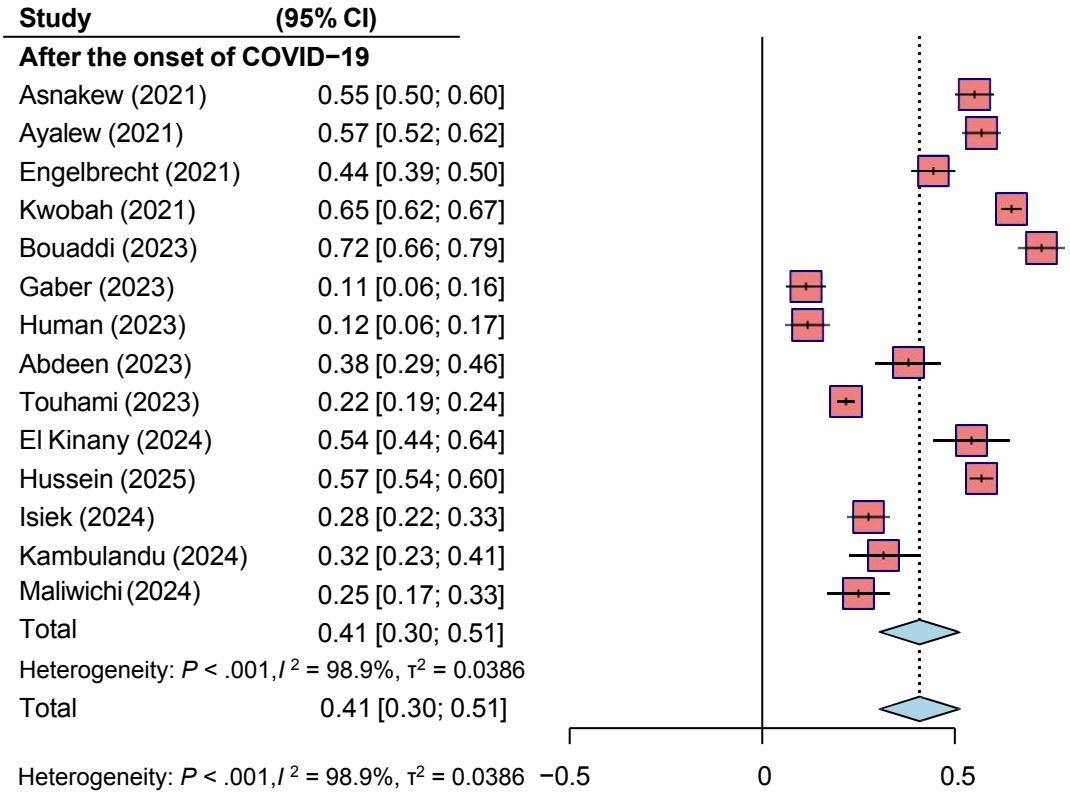
Heterogeneity between groups: $P < .001$

(m4) Prevalence of PTSD in healthcare workers in South America.

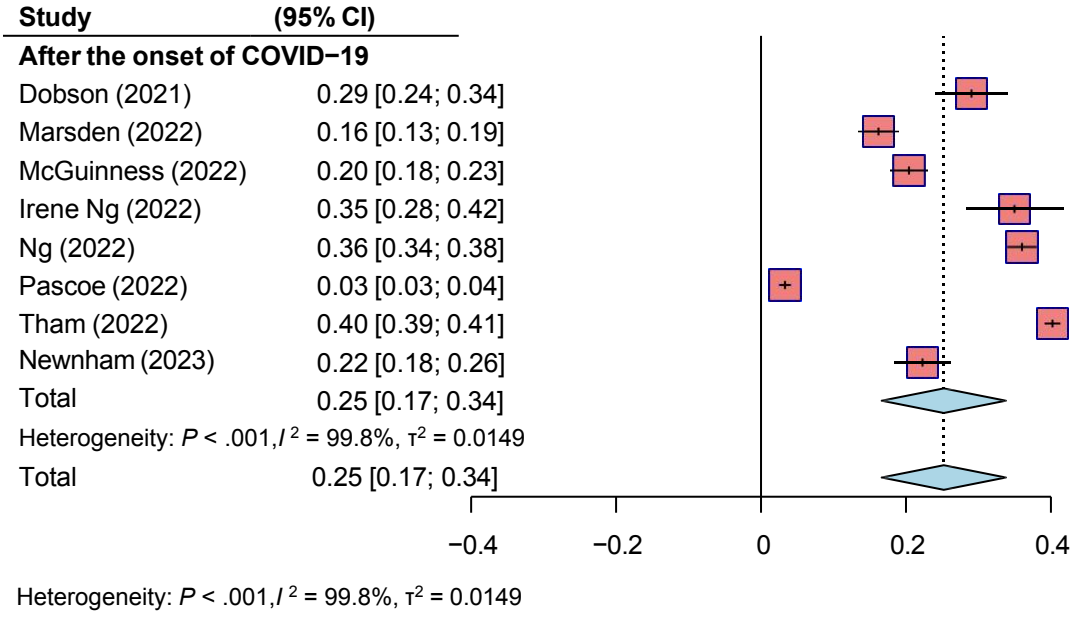


Heterogeneity: < 0.01, $I^2 = 98.7\%$, $\tau^2 = 0.0163$

(m5) Prevalence of PTSD in healthcare workers in Africa.

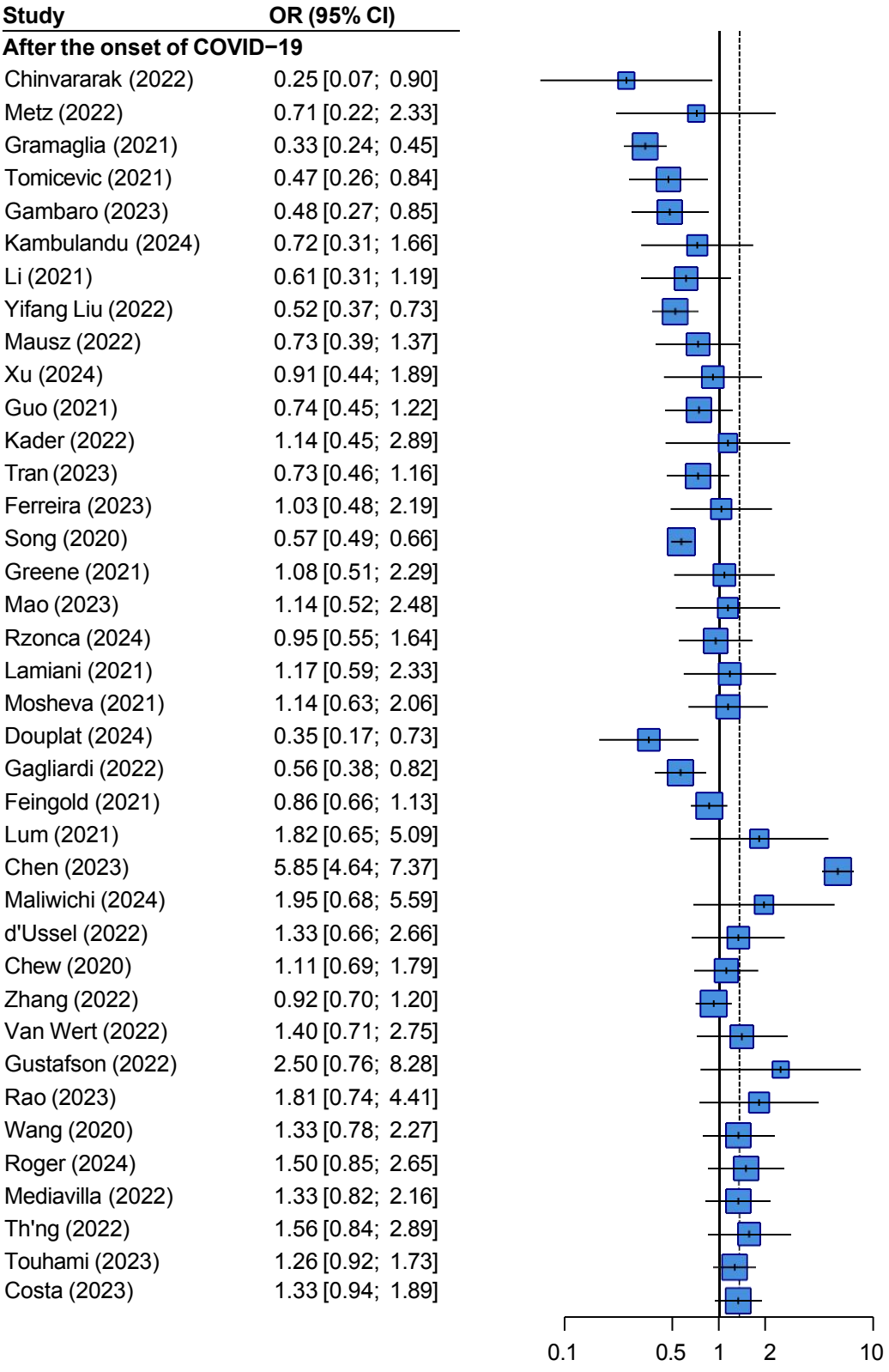


(m6) Prevalence of PTSD in healthcare workers in Australia.

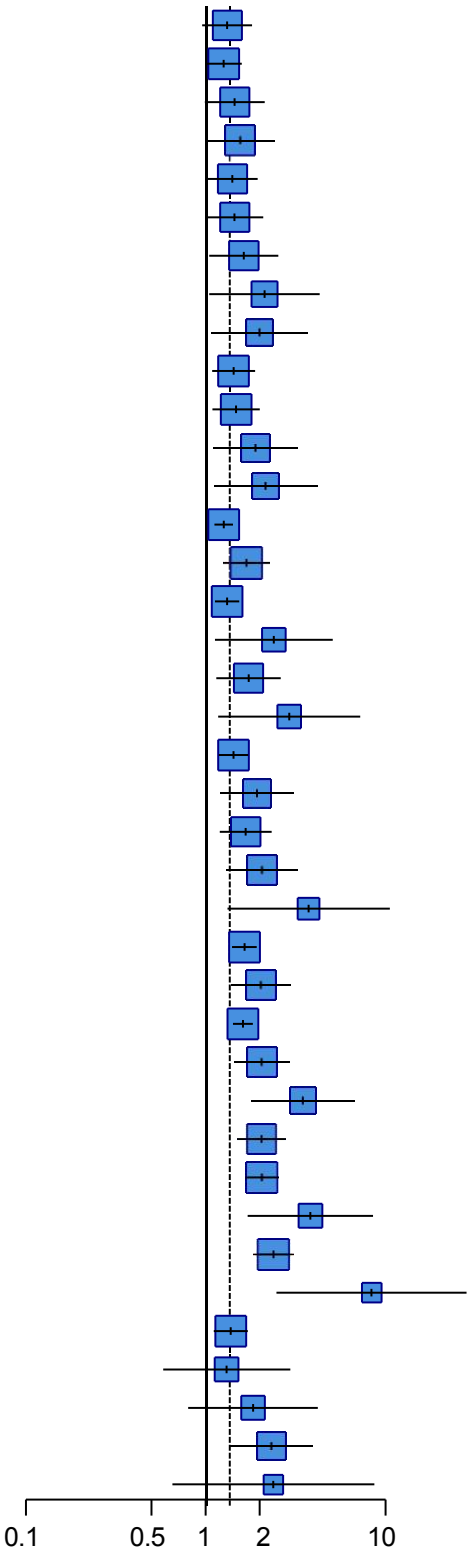


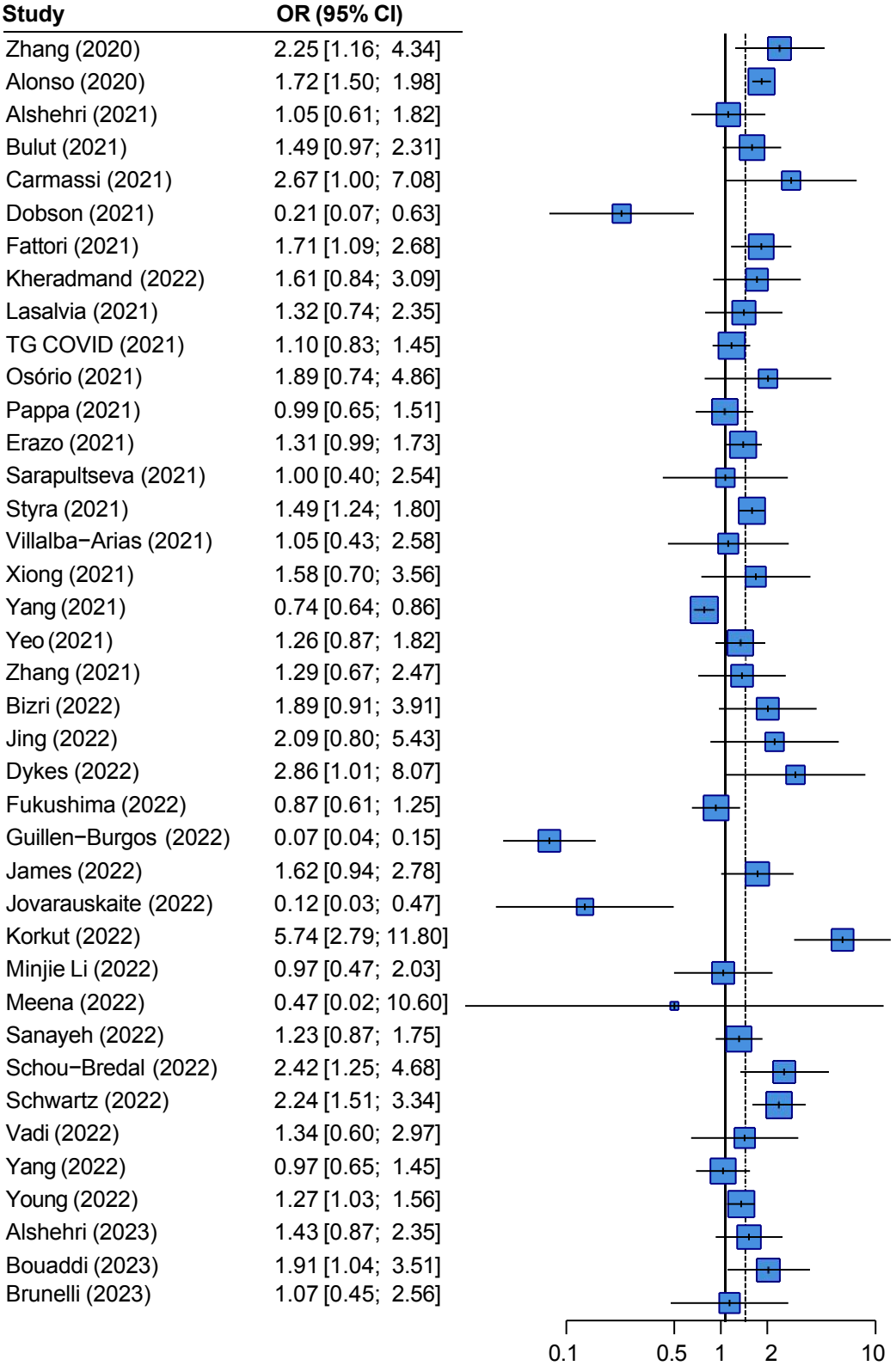
Heterogeneity: P < .001, I^2 = 99.8%, τ^2 = 0.0149

Appendix M: Figure 4. The forest plots of factors in the risk of PTSD. (a) By sex: female (ref: male).

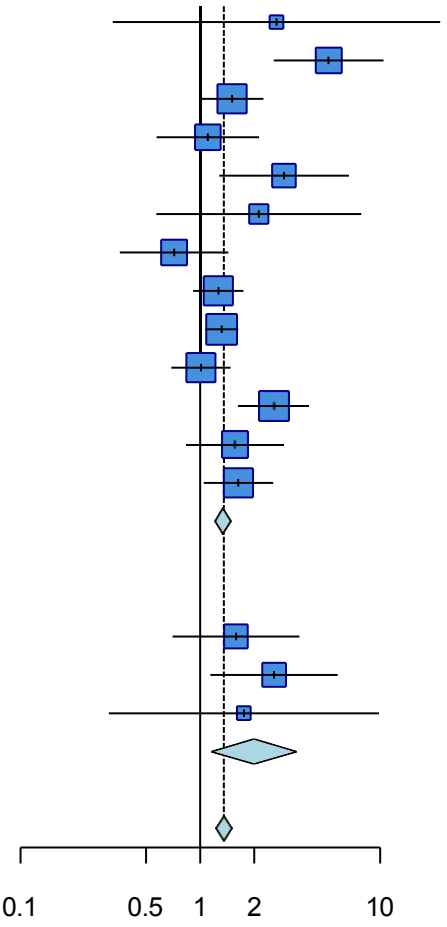


Study	OR (95% CI)
Rice (2023)	1.31 [0.95; 1.80]
Laurent (2022)	1.25 [0.99; 1.58]
Bonzini (2022)	1.44 [0.98; 2.11]
Asnakew (2021)	1.54 [0.99; 2.39]
Jackson (2022)	1.40 [1.02; 1.93]
Lowry (2023)	1.44 [1.00; 2.08]
Gesi (2023)	1.62 [1.04; 2.52]
Ripoll (2024)	2.11 [1.04; 4.27]
Banakar (2023)	1.97 [1.06; 3.67]
Riaz (2023)	1.42 [1.08; 1.87]
Kwobah (2021)	1.47 [1.09; 1.99]
Renzi (2023)	1.88 [1.09; 3.23]
Yu (2022)	2.14 [1.10; 4.16]
Marsden (2022)	1.25 [1.11; 1.41]
Lamb (2021)	1.67 [1.24; 2.24]
Wu (2024)	1.31 [1.12; 1.53]
Lo Moro (2024)	2.38 [1.12; 5.06]
Machado (2023)	1.72 [1.14; 2.60]
Costantini (2022)	2.90 [1.17; 7.20]
Portillo−Van Diest (2023)	1.42 [1.18; 1.71]
Ayalew (2021)	1.91 [1.19; 3.06]
Huang (2023)	1.66 [1.19; 2.32]
Hennein (2021)	2.05 [1.30; 3.23]
Lopez−Salinas (2023)	3.71 [1.31; 10.49]
Zara (2021)	1.63 [1.39; 1.91]
Pascoe (2022)	2.03 [1.39; 2.97]
Robles (2021)	1.60 [1.41; 1.81]
Azoulay (2024)	2.04 [1.43; 2.91]
Zheng (2022)	3.45 [1.78; 6.69]
Rodriguez (2021)	2.03 [1.49; 2.77]
Robles (2022)	2.03 [1.64; 2.51]
Mani (2023)	3.80 [1.70; 8.48]
Bayazit (2022)	2.37 [1.84; 3.05]
Satilmis (2024)	8.32 [2.46; 28.10]
Piacentini (2022)	1.37 [1.10; 1.70]
Dosil (2020)	1.30 [0.58; 2.93]
Huang (2020)	1.82 [0.79; 4.18]
Johnson (2020)	2.30 [1.36; 3.90]
Yin (2020)	2.37 [0.65; 8.63]

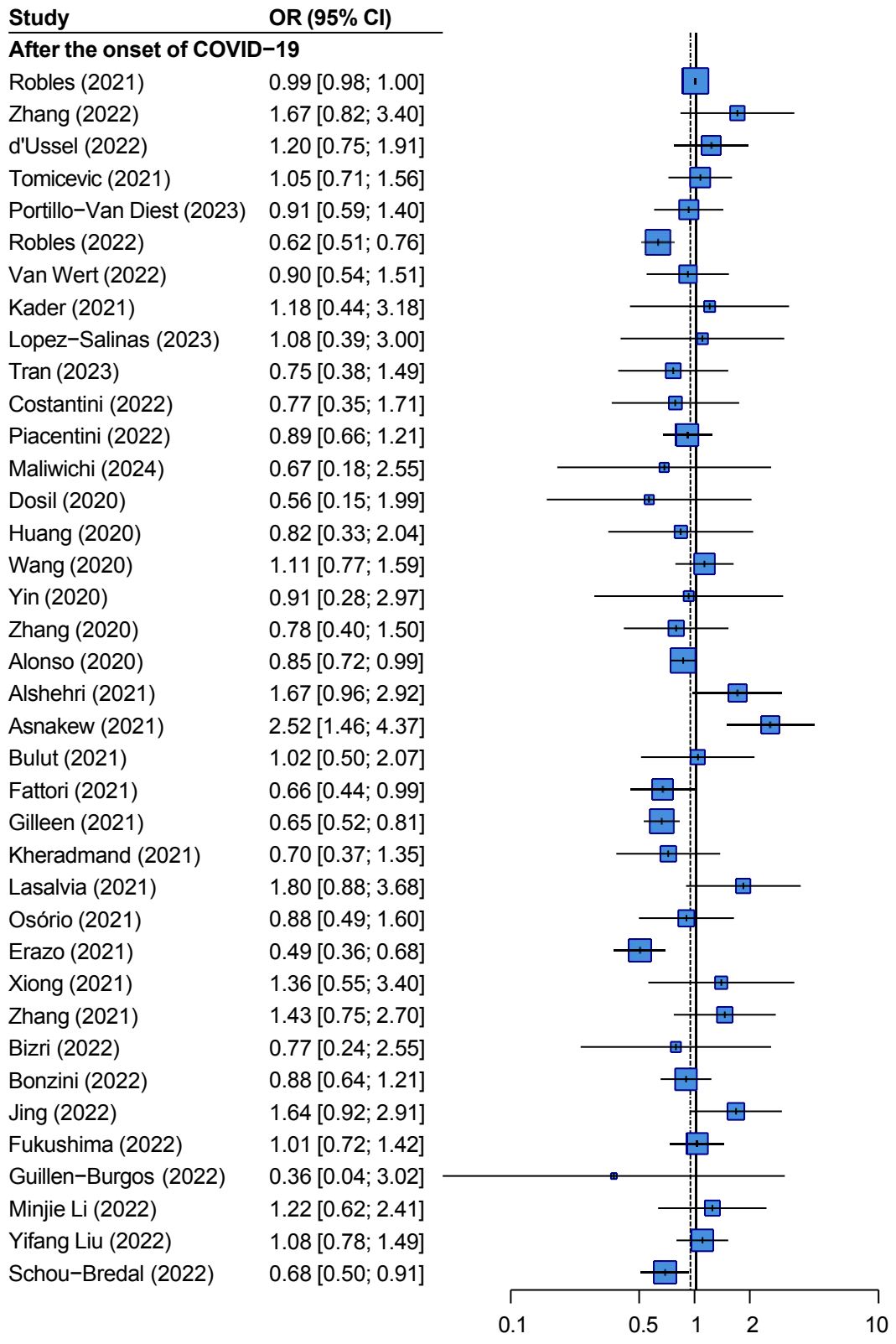


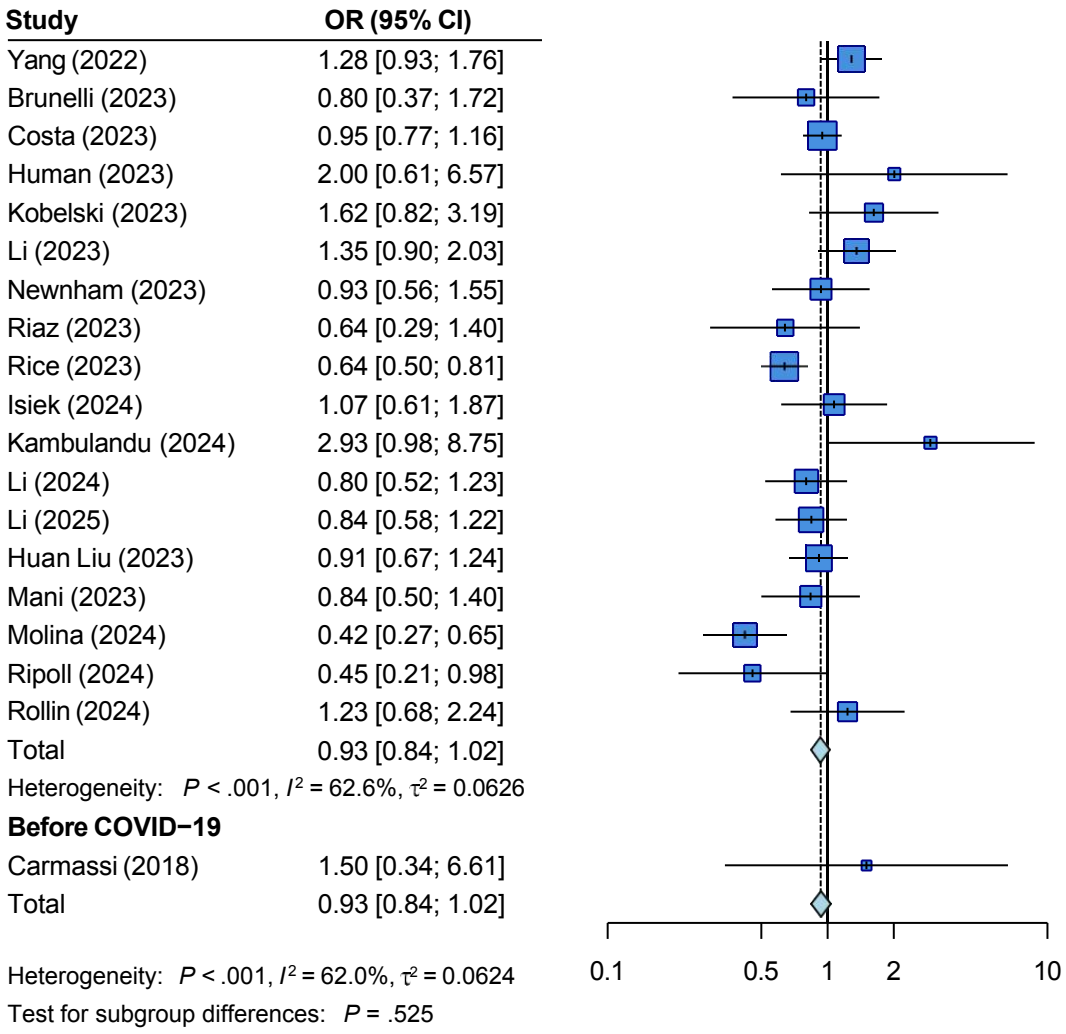

Study
OR (95% CI)
Zhang (2020) 2.25 [1.16; 4.34]
Alonso (2020) 1.72 [1.50; 1.98]
Alshehri (2021) 1.05 [0.61; 1.82]
Bulut (2021) 1.49 [0.97; 2.31]
Carmassi (2021) 2.67 [1.00; 7.08]
Dobson (2021) 0.21 [0.07; 0.63]
Fattori (2021) 1.71 [1.09; 2.68]
Kheradmand (2022) 1.61 [0.84; 3.09]
Lasalvia (2021) 1.32 [0.74; 2.35]
TG COVID (2021) 1.10 [0.83; 1.45]
Osório (2021) 1.89 [0.74; 4.86]
Pappa (2021) 0.99 [0.65; 1.51]
Erazo (2021) 1.31 [0.99; 1.73]
Sarapultseva (2021) 1.00 [0.40; 2.54]
Styra (2021) 1.49 [1.24; 1.80]
Villalba−Arias (2021) 1.05 [0.43; 2.58]
Xiong (2021) 1.58 [0.70; 3.56]
Yang (2021) 0.74 [0.64; 0.86]
Yeo (2021) 1.26 [0.87; 1.82]
Zhang (2021) 1.29 [0.67; 2.47]
Bizri (2022) 1.89 [0.91; 3.91]
Jing (2022) 2.09 [0.80; 5.43]
Dykes (2022) 2.86 [1.01; 8.07]
Fukushima (2022) 0.87 [0.61; 1.25]
Guillen−Burgos (2022) 0.07 [0.04; 0.15]
James (2022) 1.62 [0.94; 2.78]
Jovarauskaite (2022) 0.12 [0.03; 0.47]
Korkut (2022) 5.74 [2.79; 11.80]
Minjie Li (2022) 0.97 [0.47; 2.03]
Meena (2022) 0.47 [0.02; 10.60]
Sanayeh (2022) 1.23 [0.87; 1.75]
Schou−Bredal (2022) 2.42 [1.25; 4.68]
Schwartz (2022) 2.24 [1.51; 3.34]
Vadi (2022) 1.34 [0.60; 2.97]
Yang (2022) 0.97 [0.65; 1.45]
Young (2022) 1.27 [1.03; 1.56]
Alshehri (2023) 1.43 [0.87; 2.35]
Bouaddi (2023) 1.91 [1.04; 3.51]
Brunelli (2023) 1.07 [0.45; 2.56]
0.1
0.5
1
2
10

Study	OR (95% CI)
Human (2023)	2.66 [0.33; 21.63]
Kobelski (2023)	5.18 [2.56; 10.45]
Li (2023)	1.50 [1.01; 2.25]
Newnham (2023)	1.10 [0.57; 2.12]
Abdeen (2023)	2.93 [1.27; 6.71]
Ghafoori (2024)	2.11 [0.57; 7.84]
Isiek (2024)	0.72 [0.36; 1.43]
Li (2024)	1.26 [0.91; 1.74]
Li (2025)	1.32 [1.06; 1.63]
Huan Liu (2023)	1.01 [0.69; 1.48]
Molina (2024)	2.57 [1.63; 4.05]
Rollin (2024)	1.55 [0.83; 2.91]
Sahin (2024)	1.63 [1.04; 2.54]
Total	1.34 [1.22; 1.48]
Heterogeneity: $P < .001$, $I^2 = 85.4\%$, $\tau^2 = 0.2437$	
Before COVID−19	
Moallef (2021)	1.58 [0.70; 3.56]
Klamen (1995)	2.58 [1.14; 5.82]
Carmassi (2018)	1.75 [0.31; 9.87]
Total	1.99 [1.15; 3.43]
Heterogeneity: $P = .70$, $I^2 = 0\%$, $\tau^2 = 0$	
Total	1.35 [1.22; 1.49]
Heterogeneity: $P < .001$, $I^2 = 85.1\%$, $\tau^2 = 0.2408$	
Heterogeneity between groups: $P = .025$	



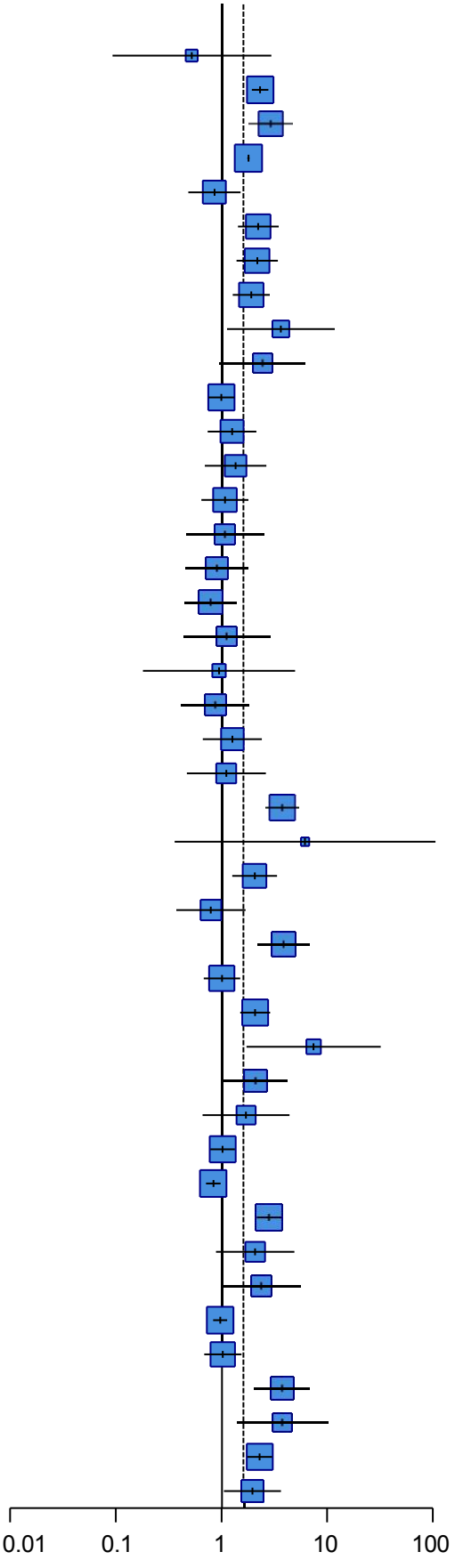
(b) By age: ≥40 (ref: <40).

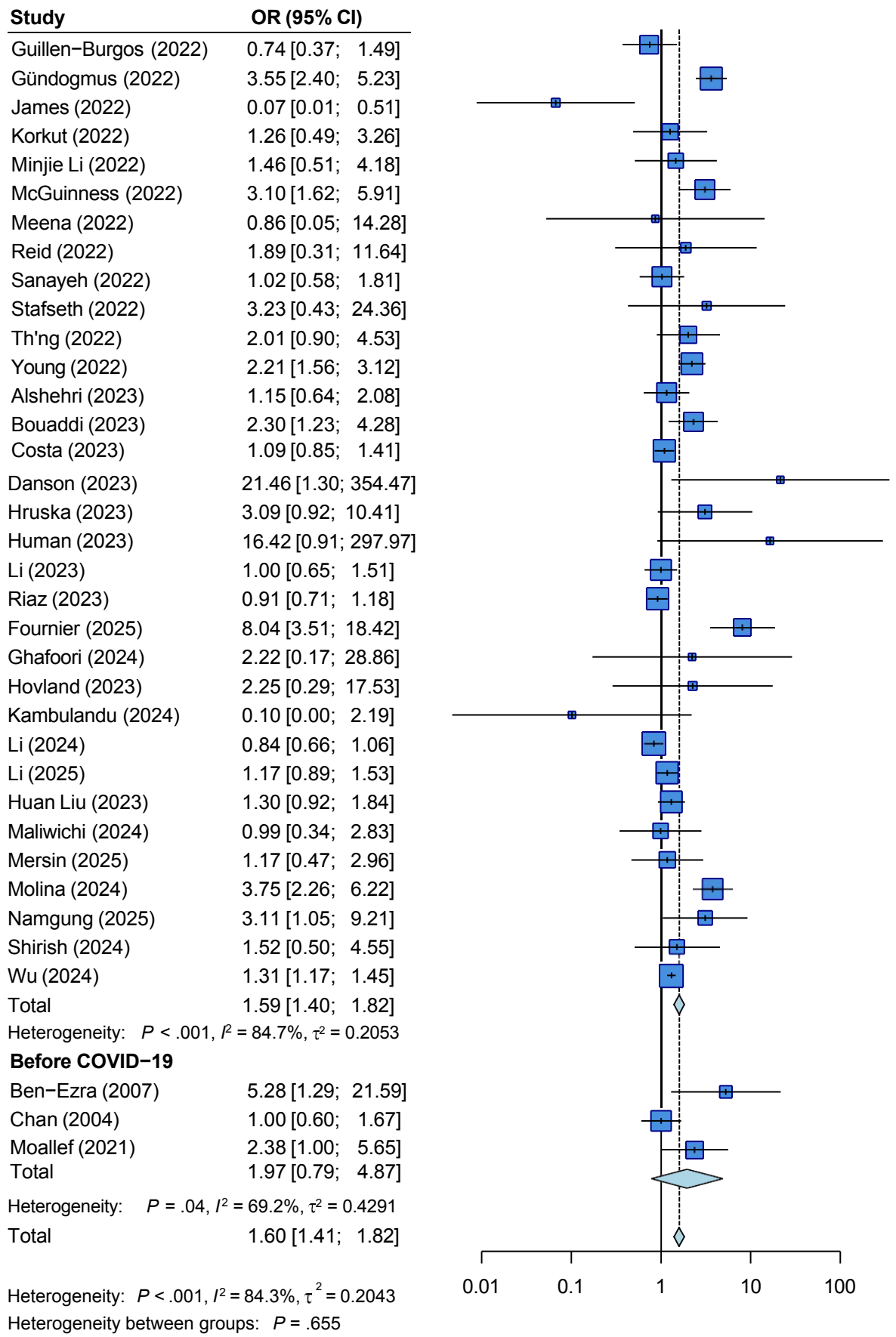



Study
OR (95% CI)
Yang (2022) 1.28 [0.93; 1.76]
Brunelli (2023) 0.80 [0.37; 1.72]
Costa (2023) 0.95 [0.77; 1.16]
Human (2023) 2.00 [0.61; 6.57]
Kobelski (2023) 1.62 [0.82; 3.19]
Li (2023) 1.35 [0.90; 2.03]
Newnham (2023) 0.93 [0.56; 1.55]
Riaz (2023) 0.64 [0.29; 1.40]
Rice (2023) 0.64 [0.50; 0.81]
Isiek (2024) 1.07 [0.61; 1.87]
Kambulandu (2024) 2.93 [0.98; 8.75]
Li (2024) 0.80 [0.52; 1.23]
Li (2025) 0.84 [0.58; 1.22]
Huan Liu (2023) 0.91 [0.67; 1.24]
Mani (2023) 0.84 [0.50; 1.40]
Molina (2024) 0.42 [0.27; 0.65]
Ripoll (2024) 0.45 [0.21; 0.98]
Rollin (2024) 1.23 [0.68; 2.24]
Total 0.93 [0.84; 1.02]
Heterogeneity: P < .001, I^2 = 62.6%, τ^2 = 0.0626
Before COVID−19
Carmassi (2018) 1.50 [0.34; 6.61]
Total 0.93 [0.84; 1.02]
Heterogeneity: P < .001, I^2 = 62.0%, τ^2 = 0.0624
Test for subgroup differences: P = .525
0.1
0.5
1
2
10

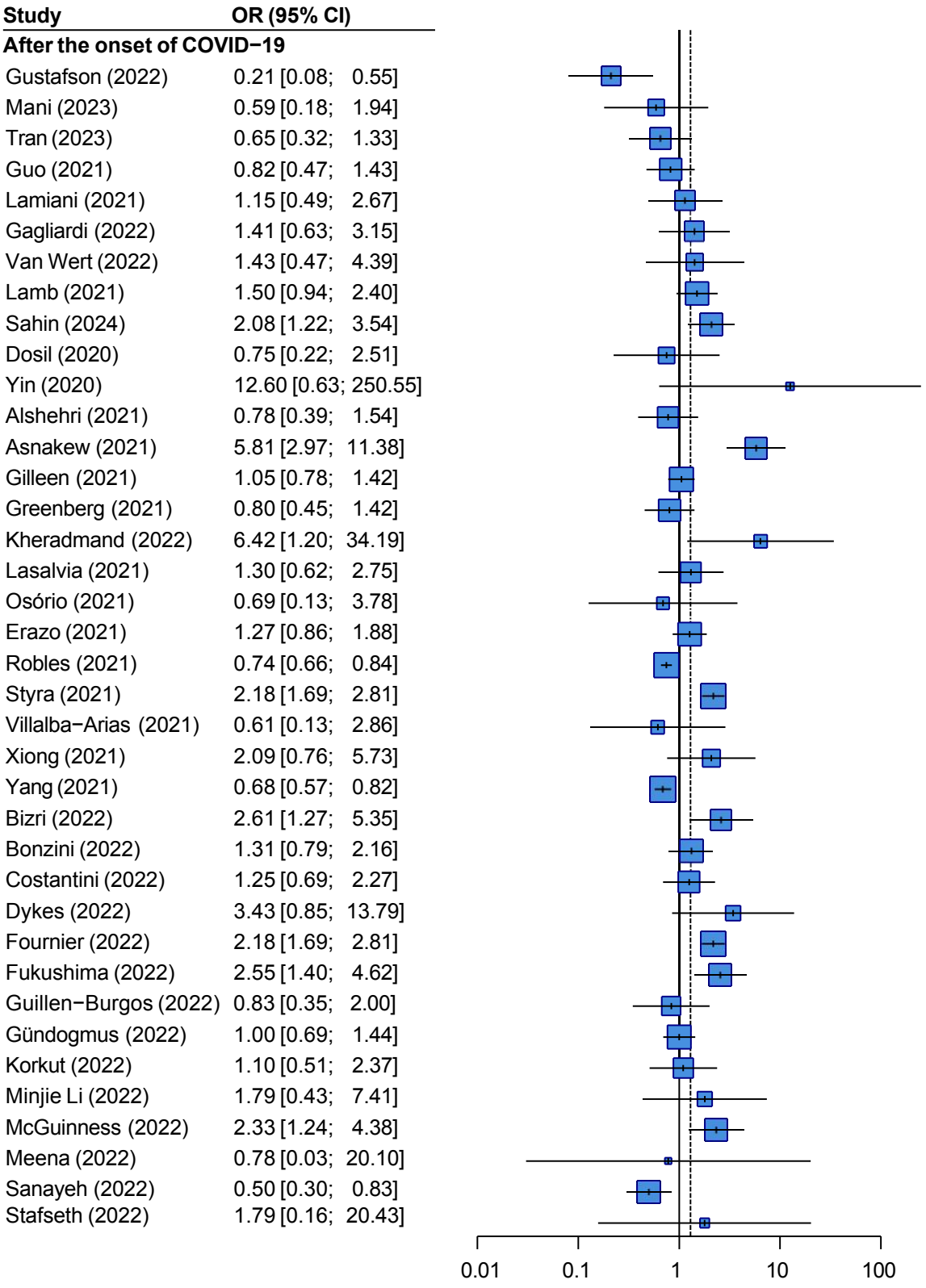
(c) By occupation: Nurse (ref: physician).

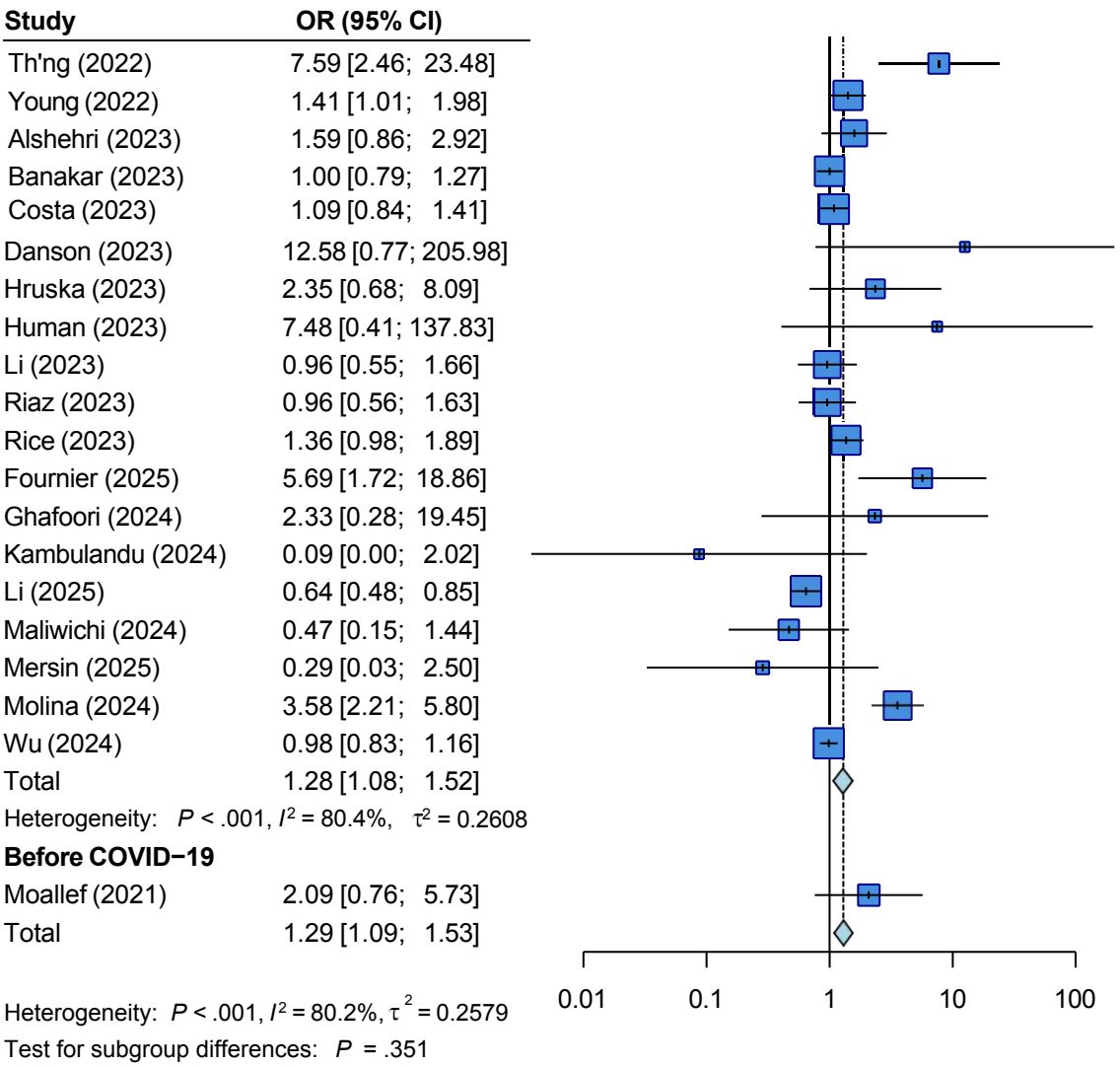
Study	OR (95% CI)
After the onset of COVID−19	
Kader (2022)	0.52 [0.09; 2.93]
Portillo−Van Diest (2023)	2.31 [1.93; 2.77]
Bonzini (2022)	2.90 [1.80; 4.68]
Zara (2021)	1.79 [1.75; 1.84]
Mosheva (2021)	0.85 [0.48; 1.50]
Gilleen (2021)	2.21 [1.42; 3.44]
Sahin (2024)	2.16 [1.38; 3.38]
Lamb (2021)	1.90 [1.27; 2.84]
Satilmis (2024)	3.62 [1.12; 11.71]
Lopez−Salinas (2023)	2.42 [0.95; 6.18]
Zhang (2022)	0.99 [0.75; 1.31]
Hennein (2021)	1.25 [0.73; 2.13]
Gagliardi (2022)	1.35 [0.69; 2.64]
Tran (2023)	1.07 [0.64; 1.78]
Costantini (2022)	1.07 [0.46; 2.50]
Guo (2021)	0.89 [0.45; 1.76]
Tomicevic (2021)	0.78 [0.44; 1.38]
Rao (2023)	1.11 [0.43; 2.86]
Mani (2023)	0.94 [0.18; 4.94]
Dosil (2020)	0.87 [0.42; 1.82]
Huang (2020)	1.26 [0.66; 2.40]
Lu (2020)	1.10 [0.47; 2.61]
Wang (2020)	3.74 [2.61; 5.38]
Yin (2020)	6.12 [0.36; 105.25]
Zhang (2020)	2.04 [1.25; 3.32]
Alshehri (2021)	0.79 [0.37; 1.68]
Asnakew (2021)	3.86 [2.19; 6.80]
Bahadirli (2021)	1.00 [0.67; 1.49]
Greenberg (2021)	2.06 [1.49; 2.86]
Kheradmand (2022)	7.38 [1.71; 31.94]
Lasalvia (2021)	2.09 [1.04; 4.20]
Osório (2021)	1.69 [0.66; 4.37]
Erazo (2021)	1.02 [0.78; 1.33]
Robles (2021)	0.83 [0.71; 0.97]
Styra (2021)	2.78 [2.13; 3.62]
Villalba−Arias (2021)	2.06 [0.88; 4.84]
Xiong (2021)	2.38 [1.00; 5.65]
Yang (2021)	0.96 [0.82; 1.12]
Yeo (2021)	1.02 [0.68; 1.53]
Brady (2022)	3.72 [2.02; 6.84]
Dykes (2022)	3.73 [1.38; 10.04]
Fournier (2022)	2.28 [1.74; 2.98]
Fukushima (2022)	1.95 [1.05; 3.63]



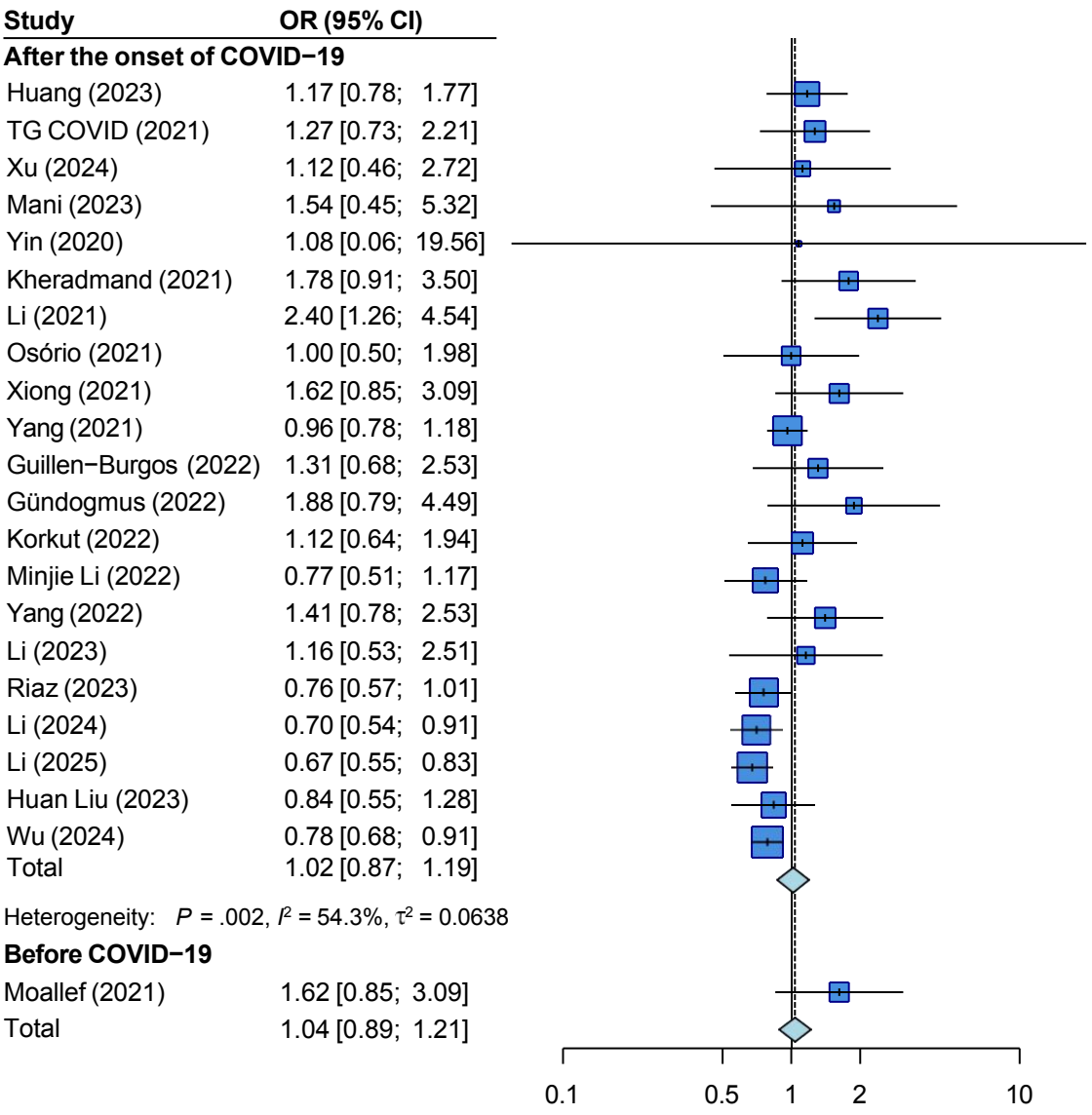

Study
OR (95% CI)
Guillen−Burgos (2022) 0.74 [0.37; 1.49]
Gündogmus (2022) 3.55 [2.40; 5.23]
James (2022) 0.07 [0.01; 0.51]
Korkut (2022) 1.26 [0.49; 3.26]
Minjie Li (2022) 1.46 [0.51; 4.18]
McGuinness (2022) 3.10 [1.62; 5.91]
Meena (2022) 0.86 [0.05; 14.28]
Reid (2022) 1.89 [0.31; 11.64]
Sanayeh (2022) 1.02 [0.58; 1.81]
Stafseth (2022) 3.23 [0.43; 24.36]
Th'ng (2022) 2.01 [0.90; 4.53]
Young (2022) 2.21 [1.56; 3.12]
Alshehri (2023) 1.15 [0.64; 2.08]
Bouaddi (2023) 2.30 [1.23; 4.28]
Costa (2023) 1.09 [0.85; 1.41]
Danson (2023) 21.46 [1.30; 354.47]
Hruska (2023) 3.09 [0.92; 10.41]
Human (2023) 16.42 [0.91; 297.97]
Li (2023) 1.00 [0.65; 1.51]
Riaz (2023) 0.91 [0.71; 1.18]
Fournier (2025) 8.04 [3.51; 18.42]
Ghafoori (2024) 2.22 [0.17; 28.86]
Hovland (2023) 2.25 [0.29; 17.53]
Kambulandu (2024) 0.10 [0.00; 2.19]
Li (2024) 0.84 [0.66; 1.06]
Li (2025) 1.17 [0.89; 1.53]
Huan Liu (2023) 1.30 [0.92; 1.84]
Maliwichi (2024) 0.99 [0.34; 2.83]
Mersin (2025) 1.17 [0.47; 2.96]
Molina (2024) 3.75 [2.26; 6.22]
Namgung (2025) 3.11 [1.05; 9.21]
Shirish (2024) 1.52 [0.50; 4.55]
Wu (2024) 1.31 [1.17; 1.45]
Total 1.59 [1.40; 1.82]
Heterogeneity: P < .001, I² = 84.7%, τ² = 0.2053
Before COVID−19
Ben−Ezra (2007) 5.28 [1.29; 21.59]
Chan (2004) 1.00 [0.60; 1.67]
Moallef (2021) 2.38 [1.00; 5.65]
Total 1.97 [0.79; 4.87]
Heterogeneity: P = .04, I² = 69.2%, τ² = 0.4291
Total 1.60 [1.41; 1.82]
Heterogeneity: P < .001, I² = 84.3%, τ² = 0.2043
Heterogeneity between groups: P = .655
0.01
0.1
1
10
100

(d) By occupation: Other occupations (ref: physician).




Study
OR (95% CI)
Th'ng (2022) 7.59 [2.46; 23.48]
Young (2022) 1.41 [1.01; 1.98]
Alshehri (2023) 1.59 [0.86; 2.92]
Banakar (2023) 1.00 [0.79; 1.27]
Costa (2023) 1.09 [0.84; 1.41]
Danson (2023) 12.58 [0.77; 205.98]
Hruska (2023) 2.35 [0.68; 8.09]
Human (2023) 7.48 [0.41; 137.83]
Li (2023) 0.96 [0.55; 1.66]
Riaz (2023) 0.96 [0.56; 1.63]
Rice (2023) 1.36 [0.98; 1.89]
Fournier (2025) 5.69 [1.72; 18.86]
Ghafoori (2024) 2.33 [0.28; 19.45]
Kambulandu (2024) 0.09 [0.00; 2.02]
Li (2025) 0.64 [0.48; 0.85]
Maliwichi (2024) 0.47 [0.15; 1.44]
Mersin (2025) 0.29 [0.03; 2.50]
Molina (2024) 3.58 [2.21; 5.80]
Wu (2024) 0.98 [0.83; 1.16]
Total 1.28 [1.08; 1.52]
Heterogeneity: $P < .001$, $I^2 = 80.4\%$, $\tau^2 = 0.2608$
Before COVID−19
Moallef (2021) 2.09 [0.76; 5.73]
Total 1.29 [1.09; 1.53]
Heterogeneity: $P < .001$, $I^2 = 80.2\%$, $\tau^2 = 0.2579$
Test for subgroup differences: $P = .351$
0.01
0.1
1
10
100

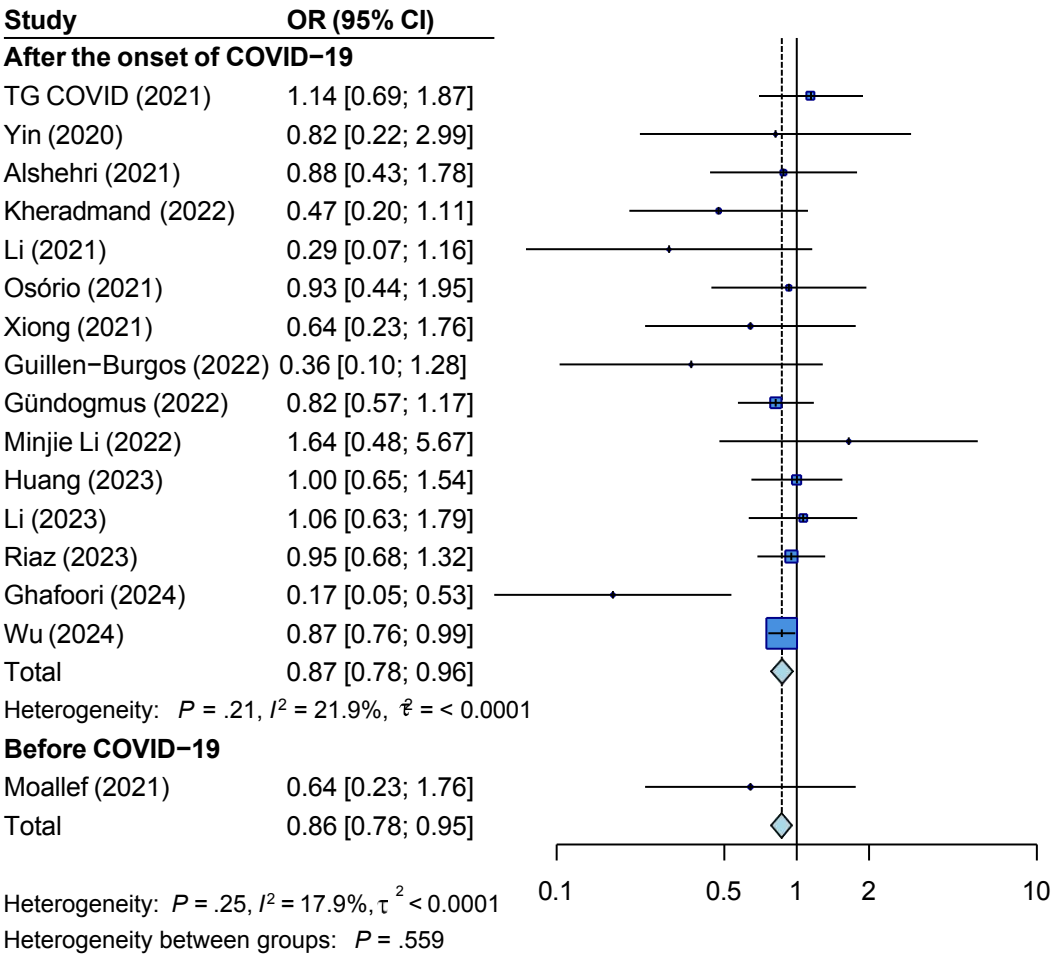
(e) By education: Below or equal to high school (ref: graduate).



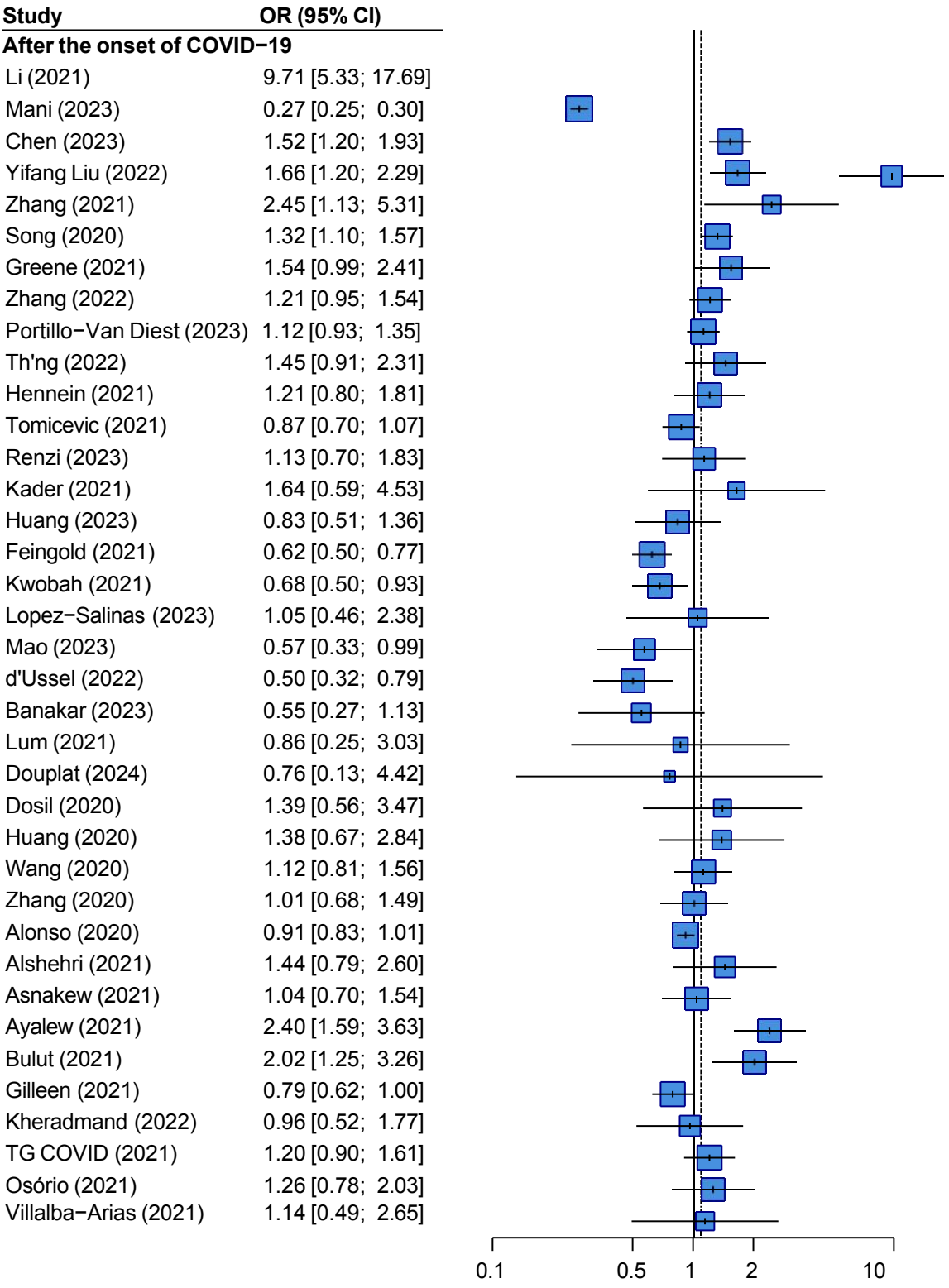
Heterogeneity: $P < .001$, $I^2 = 55.6\%$, $\tau^2 = 0.0684$

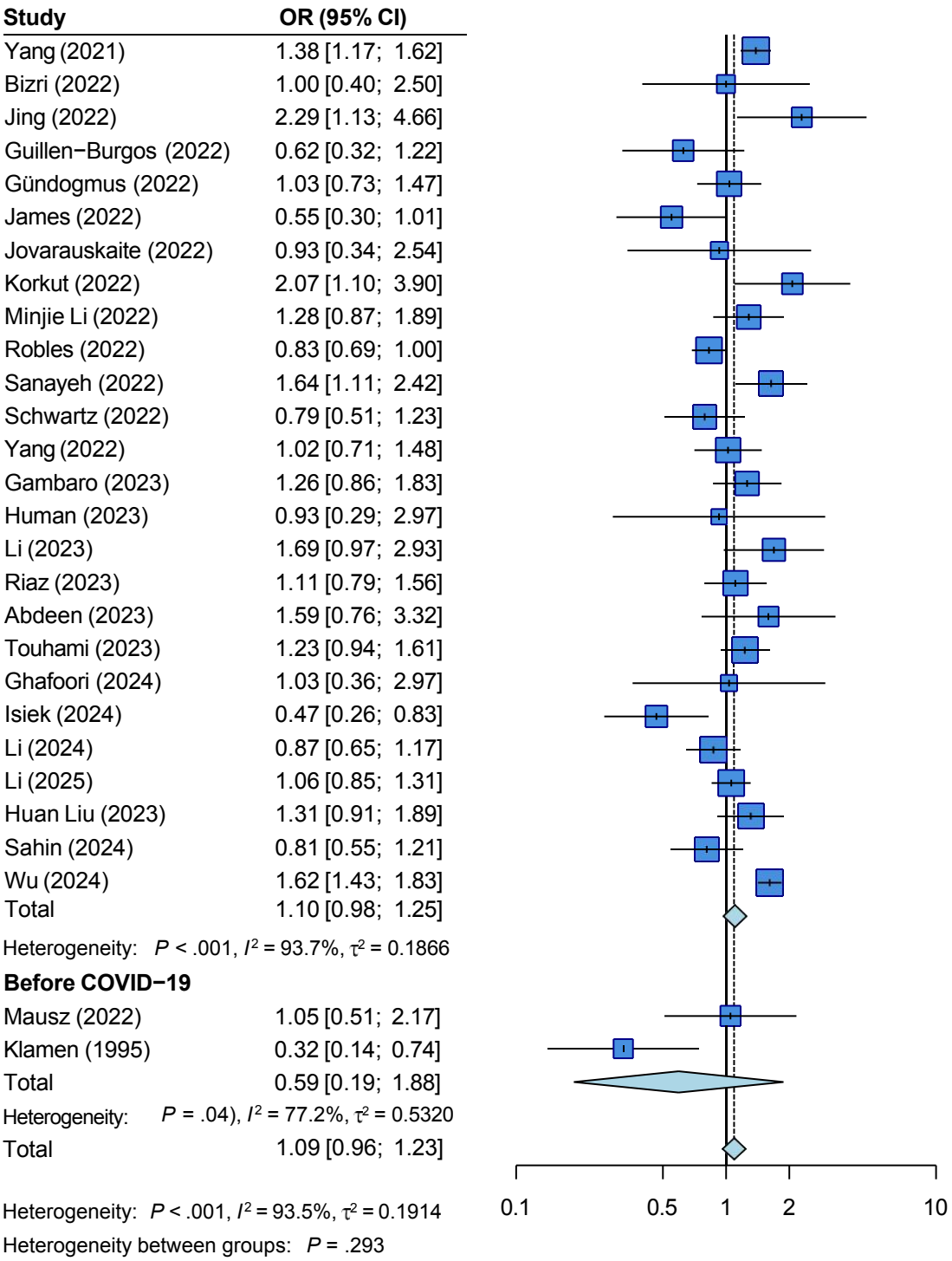
Heterogeneity between groups: $P = .165$

(f) By education: Post-graduate (ref: graduate).

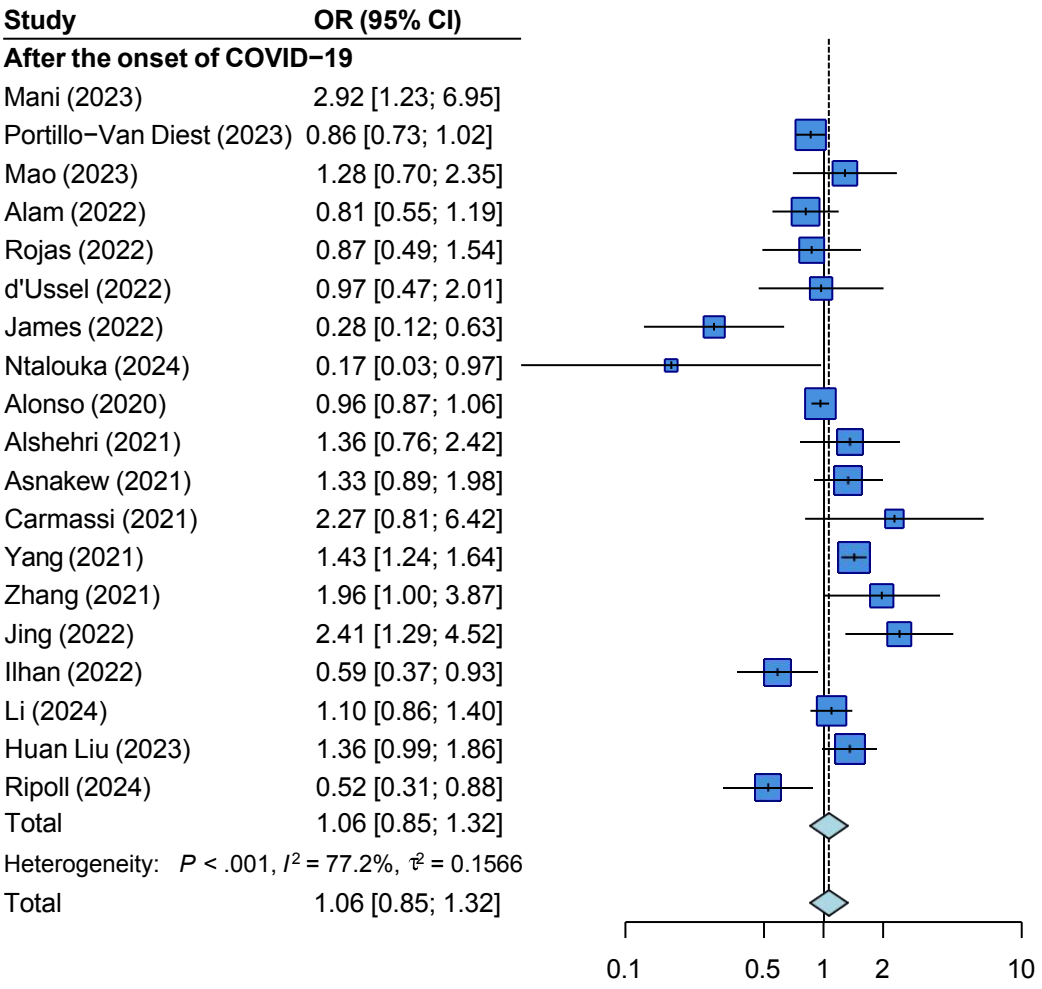


(g) By marital status: married (ref: unmarried).

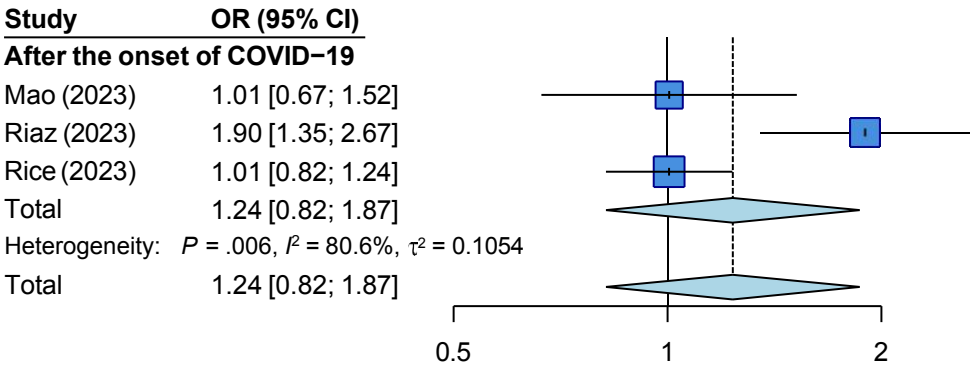



Study
OR (95% CI)
Yang (2021) 1.38 [1.17; 1.62]
Bizri (2022) 1.00 [0.40; 2.50]
Jing (2022) 2.29 [1.13; 4.66]
Guillen−Burgos (2022) 0.62 [0.32; 1.22]
Gündogmus (2022) 1.03 [0.73; 1.47]
James (2022) 0.55 [0.30; 1.01]
Jovarauskaite (2022) 0.93 [0.34; 2.54]
Korkut (2022) 2.07 [1.10; 3.90]
Minjie Li (2022) 1.28 [0.87; 1.89]
Robles (2022) 0.83 [0.69; 1.00]
Sanayeh (2022) 1.64 [1.11; 2.42]
Schwartz (2022) 0.79 [0.51; 1.23]
Yang (2022) 1.02 [0.71; 1.48]
Gambaro (2023) 1.26 [0.86; 1.83]
Human (2023) 0.93 [0.29; 2.97]
Li (2023) 1.69 [0.97; 2.93]
Riaz (2023) 1.11 [0.79; 1.56]
Abdeen (2023) 1.59 [0.76; 3.32]
Touhami (2023) 1.23 [0.94; 1.61]
Ghafoori (2024) 1.03 [0.36; 2.97]
Isiek (2024) 0.47 [0.26; 0.83]
Li (2024) 0.87 [0.65; 1.17]
Li (2025) 1.06 [0.85; 1.31]
Huan Liu (2023) 1.31 [0.91; 1.89]
Sahin (2024) 0.81 [0.55; 1.21]
Wu (2024) 1.62 [1.43; 1.83]
Total 1.10 [0.98; 1.25]
Heterogeneity: P < .001, I² = 93.7%, τ² = 0.1866
Before COVID−19
Mausz (2022) 1.05 [0.51; 2.17]
Klamen (1995) 0.32 [0.14; 0.74]
Total 0.59 [0.19; 1.88]
Heterogeneity: P = .04), I² = 77.2%, τ² = 0.5320
Total 1.09 [0.96; 1.23]
Heterogeneity: P < .001, I² = 93.5%, τ² = 0.1914
Heterogeneity between groups: P = .293
0.1
0.5
1
2
10

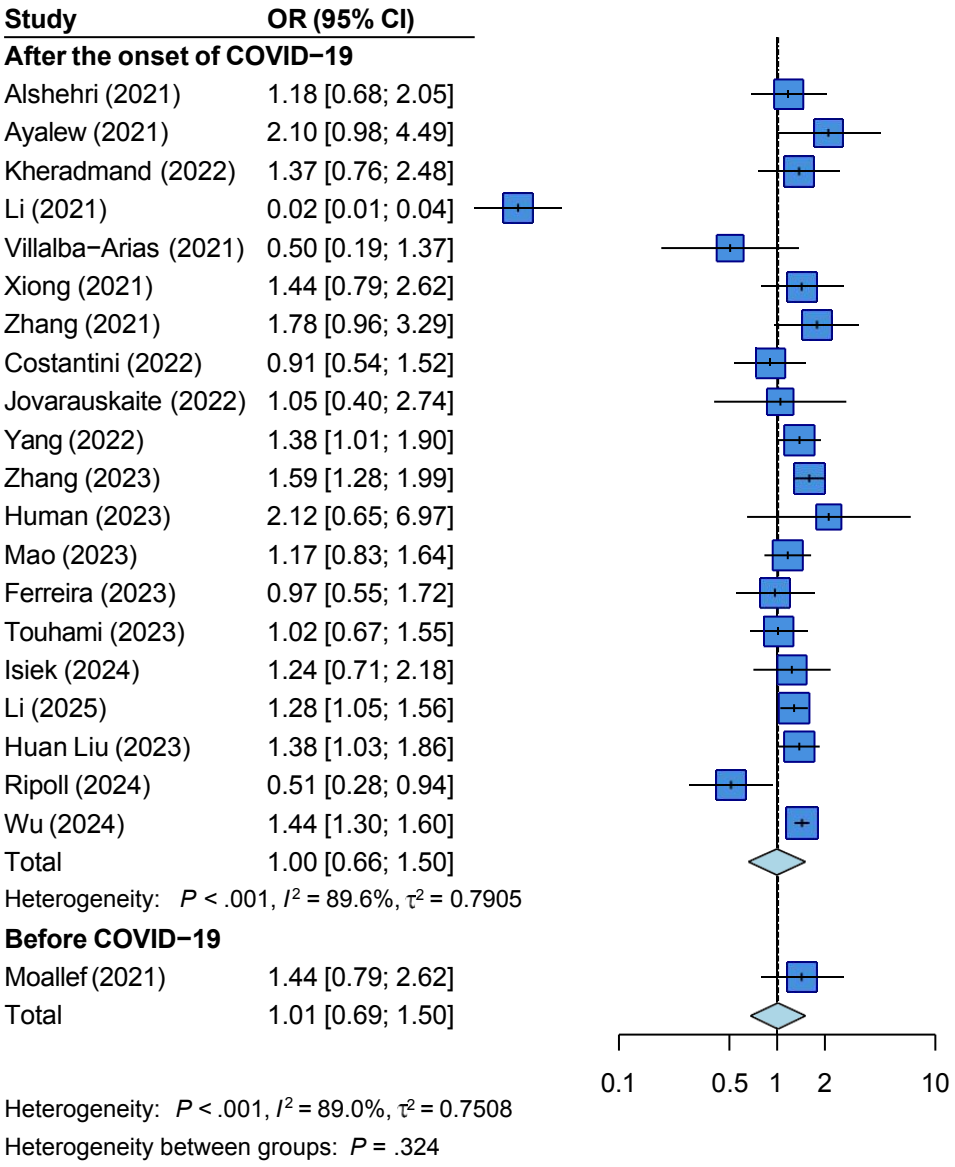
(h) By parental status: yes (ref: no).



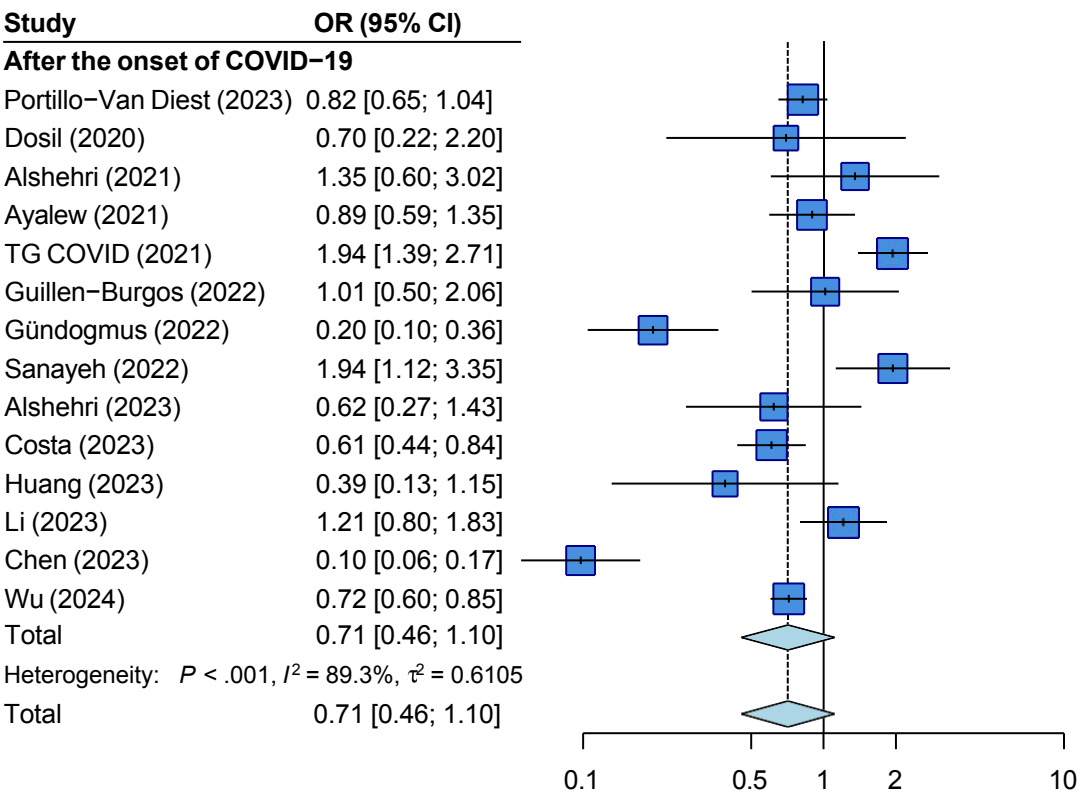
(i) By average weekly working hours: ≥40 (ref: <40)



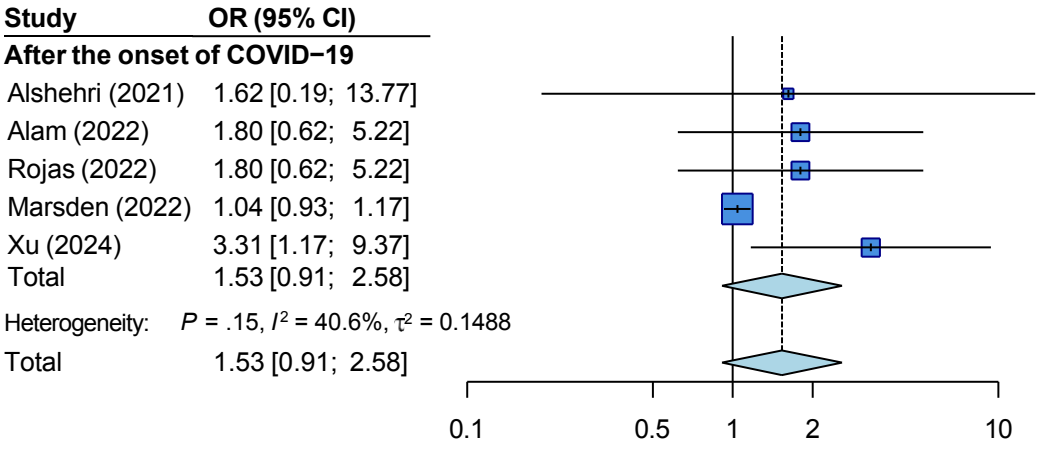
(j) By year of practice: ≥10 (ref: <10).



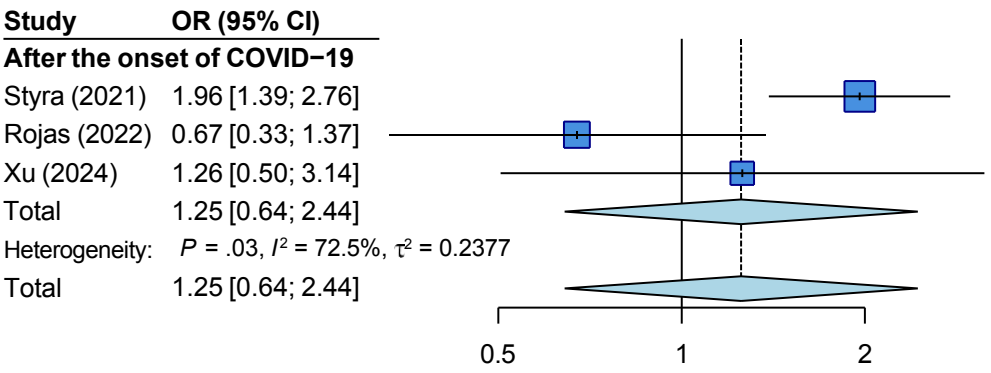
(k) By income: high (ref: low).



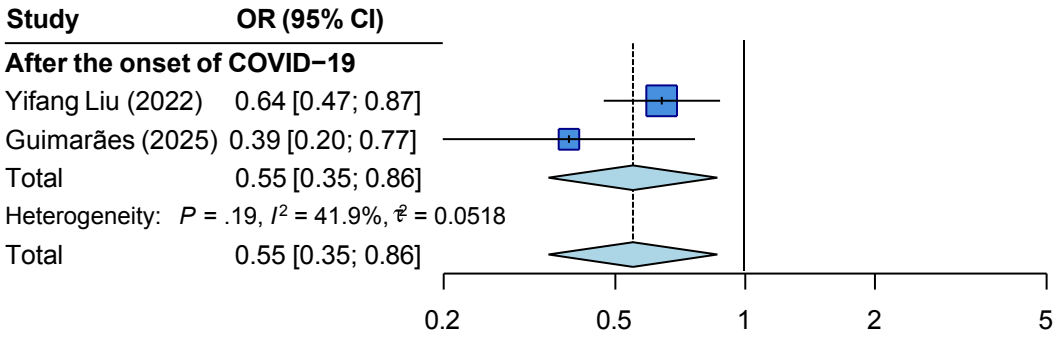
(l) By smoking or not: yes (ref: no)



(m) By drinking: yes (ref: no).

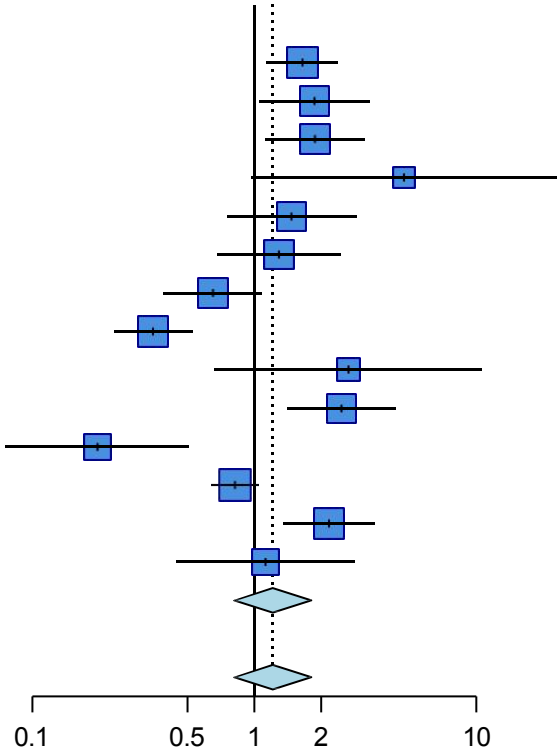


(n) By physical activity: yes (ref: no).



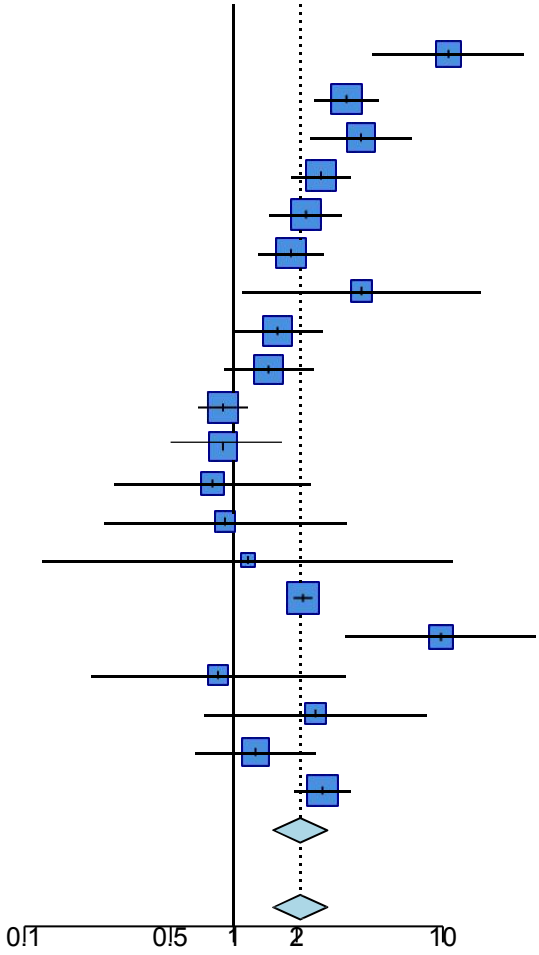
(o) By history of physical disorder: yes (ref: no)

Study	OR (95% CI)
After the onset of COVID−19	
Touhami (2023)	1.64 [1.13; 2.38]
Portillo−Van Diest (2023)	1.87 [1.06; 3.31]
Sahin (2024)	1.88 [1.13; 3.14]
Li (2023)	4.73 [0.97; 23.04]
Guimarães (2025)	1.47 [0.75; 2.87]
Alshehri (2023)	1.29 [0.68; 2.44]
Mao (2023)	0.65 [0.39; 1.08]
Tomicevic (2021)	0.35 [0.23; 0.53]
Carmassi (2021)	2.65 [0.66; 10.58]
Osório (2021)	2.47 [1.40; 4.35]
Korkut (2022)	0.20 [0.08; 0.51]
Yifang Liu (2022)	0.82 [0.64; 1.05]
Gambaro (2023)	2.17 [1.35; 3.48]
Bizri (2022)	1.12 [0.44; 2.82]
Total	1.21 [0.81; 1.81]
Heterogeneity: P < .001, I^2 = 84.8%, τ^2= 0.4564	
Total	1.21 [0.81; 1.81]
Heterogeneity: P < .001, I^2 = 84.8%, τ^2= 0.4564	

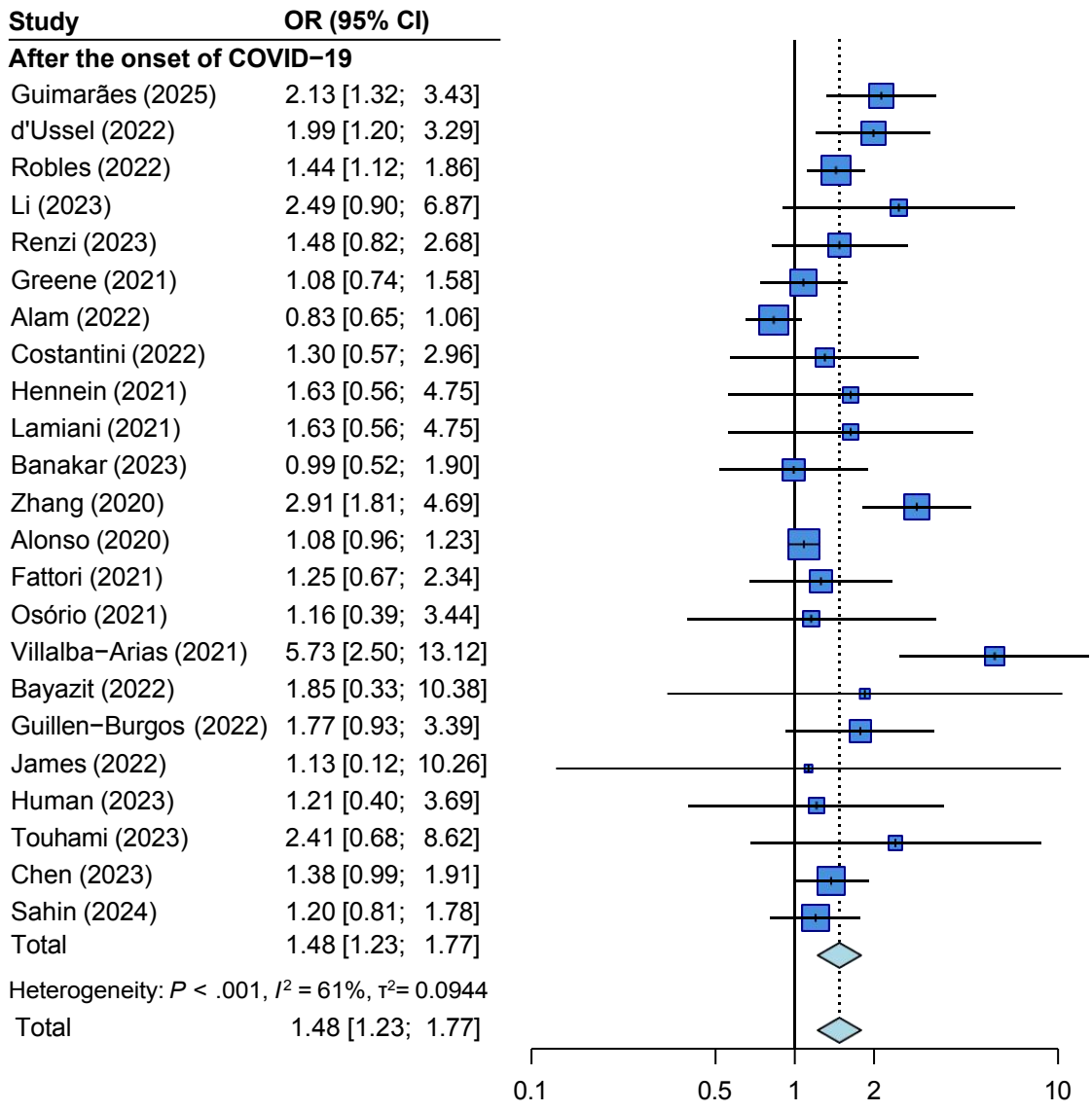


(p) By history of mental disorder: yes (ref: no)

Study	OR (95% CI)
After the onset of COVID−19	
Mani (2023)	10.62 [4.60; 24.50]
Portillo−Van Diest (2023)	3.46 [2.42; 4.94]
Tran (2023)	4.06 [2.33; 7.09]
Machado (2023)	2.61 [1.88; 3.62]
Li (2023)	2.21 [1.48; 3.30]
Hennein (2021)	1.88 [1.31; 2.69]
Chinvararak (2022)	4.06 [1.09; 15.12]
Mosheva (2021)	1.62 [0.99; 2.65]
d'Ussel (2022)	1.47 [0.90; 2.41]
Feingold (2021)	0.89 [0.68; 1.17]
Rojas (2022)	0.89 [0.50; 1.59]
Alshehri (2023)	0.79 [0.27; 2.33]
Th'ng (2022)	0.91 [0.24; 3.47]
Kader (2021)	1.17 [0.12; 11.19]
Alonso (2020)	2.13 [1.93; 2.36]
Asnakew (2021)	9.78 [3.42; 27.90]
Carmassi (2021)	0.84 [0.21; 3.42]
Kheradmand (2022)	2.45 [0.72; 8.36]
Korkut (2022)	1.27 [0.65; 2.46]
Molina (2024)	2.65 [1.94; 3.62]
Total	2.08 [1.54; 2.80]
Heterogeneity: P < .001, I^2 = 80.9%, τ^2= 0.3253	
Total	2.08 [1.54; 2.80]
Heterogeneity: P < .001, I^2 = 80.9%, τ^2= 0.3253	

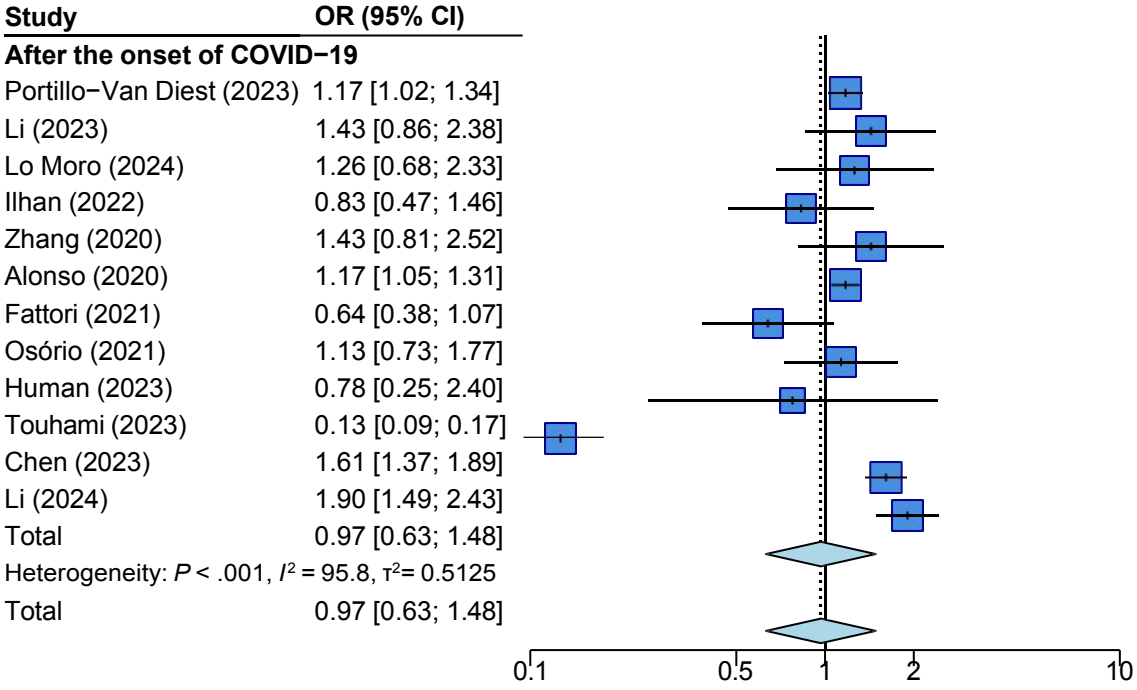


(q) By COVID-19 infection status: yes (ref: no)



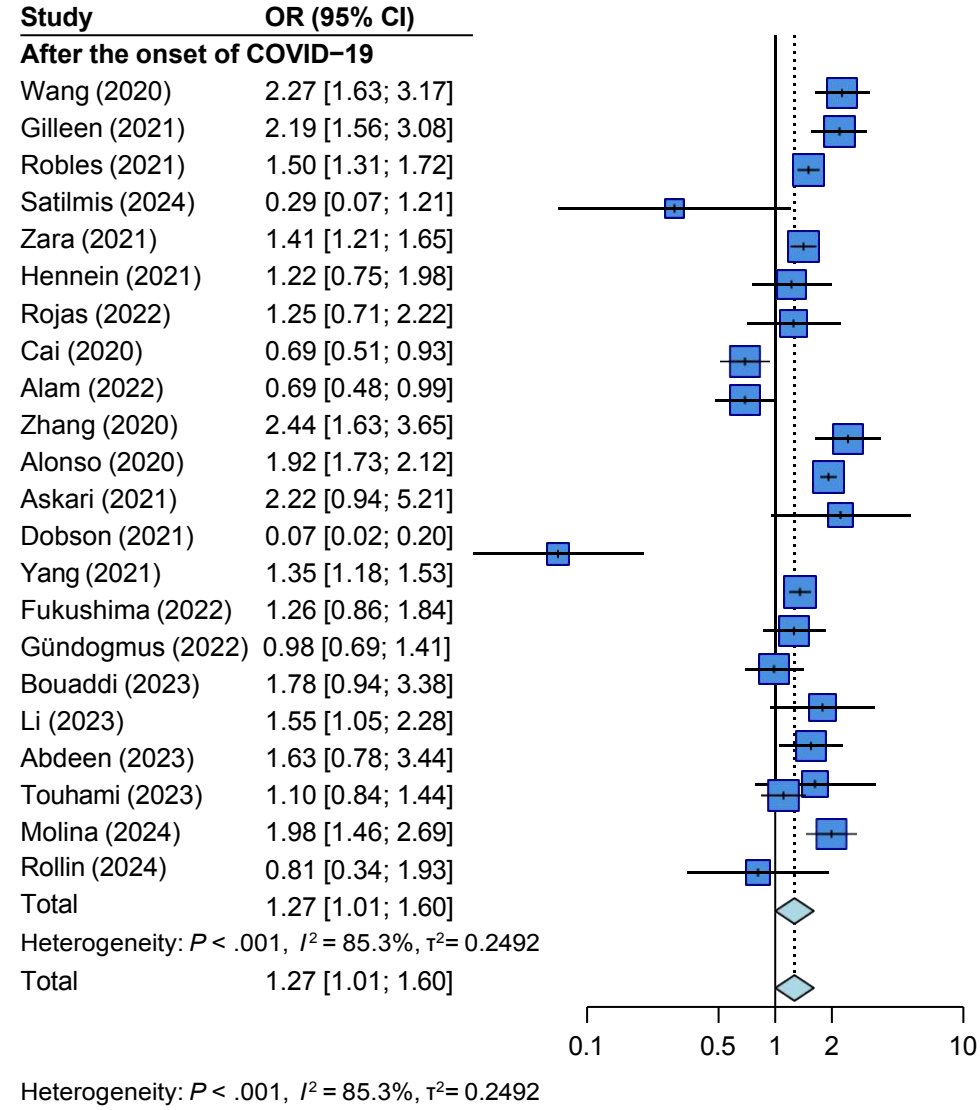
Heterogeneity: P < .001, I^2 = 61.0%, τ^2= 0.0944

(r) By being quarantined: yes (ref: no)



Heterogeneity: $P < .001$, $I^2 = 95.8\%$, $\tau^2 = 0.5125$

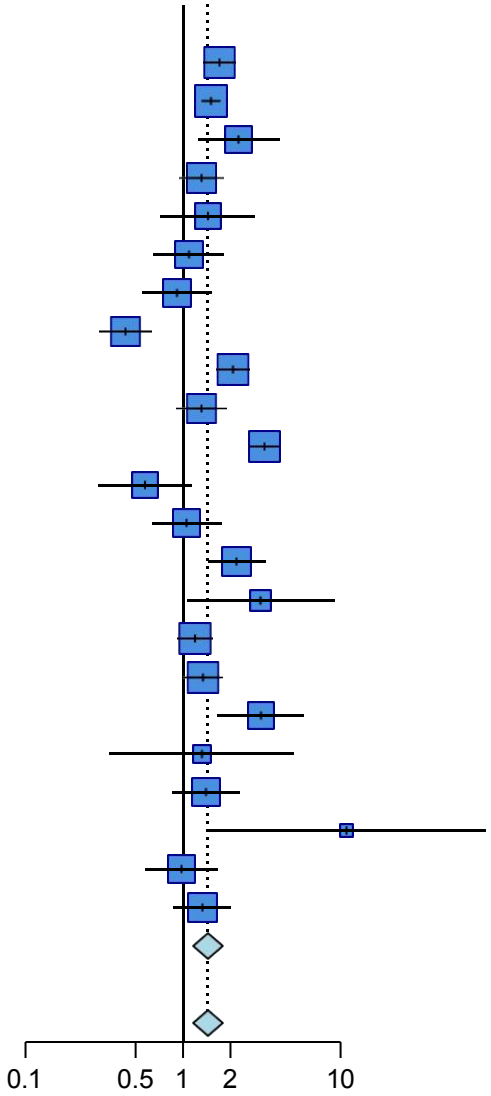
(s) By being frontline workers: yes (ref: no)



Heterogeneity: $P < .001$, $I^2 = 85.3\%$, $\tau^2 = 0.2492$

(t) By direct contact with COVID-19: yes (ref: no)

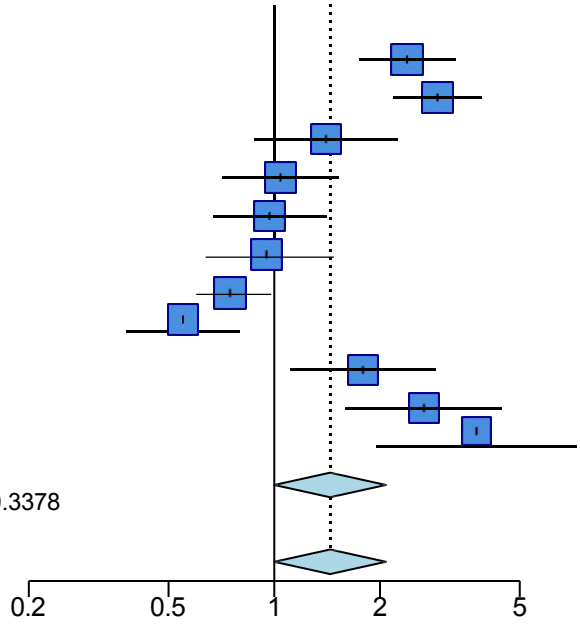
Study	OR (95% CI)
After the onset of COVID−19	
Wu (2024)	1.70 [1.34; 2.15]
Erazo (2021)	1.50 [1.31; 1.72]
Ripoll (2024)	2.25 [1.24; 4.07]
Zhang (2022)	1.31 [0.94; 1.82]
Lamiani (2021)	1.44 [0.72; 2.87]
Li (2023)	1.09 [0.65; 1.82]
Greene (2021)	0.92 [0.55; 1.53]
Alam (2022)	0.43 [0.29; 0.63]
Haravuori (2020)	2.09 [1.64; 2.65]
Johnson (2020)	1.30 [0.90; 1.87]
Alonso (2020)	3.31 [2.68; 4.07]
Kheradmand (2022)	0.57 [0.29; 1.13]
Osório (2021)	1.05 [0.63; 1.75]
Da'seh (2022)	2.19 [1.44; 3.33]
Guillen−Burgos (2022)	3.10 [1.06; 9.09]
Yifang Liu (2022)	1.19 [0.93; 1.53]
Robles (2022)	1.33 [1.01; 1.77]
Schwartz (2022)	3.11 [1.66; 5.85]
Human (2023)	1.32 [0.34; 5.07]
Newnham (2023)	1.39 [0.85; 2.29]
Ferreira (2023)	10.88 [1.42; 83.14]
Chan (2004)	0.98 [0.58; 1.67]
Sahin (2024)	1.32 [0.87; 2.02]
Total	1.43 [1.16; 1.77]
Heterogeneity: $P < .001$, $I^2 = 84.5\%$, $\tau^2 = 0.1918$	
Total	1.43 [1.16; 1.77]



Heterogeneity: $P < .001$, $I^2 = 84.5\%$, $\tau^2 = 0.1918$

(u) By personal protective equipment: poor (ref: good)

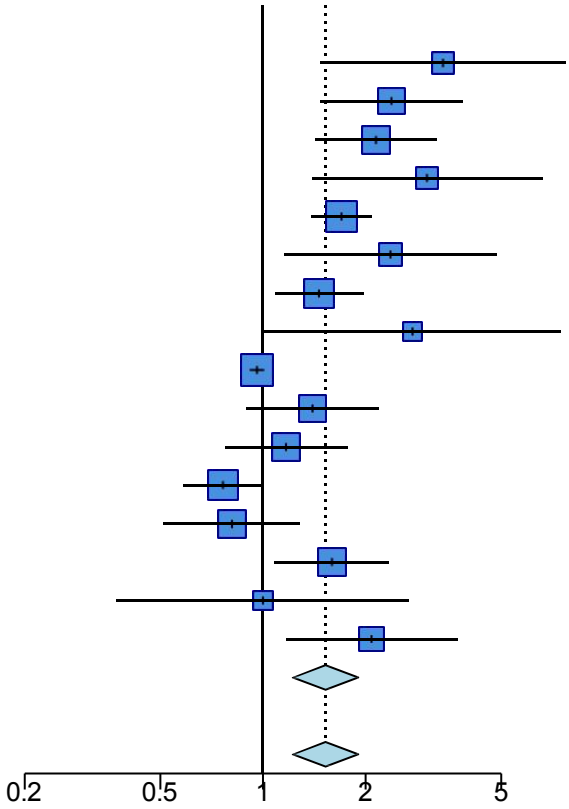
Study	OR (95% CI)
After the onset of COVID−19	
Machado (2023)	2.39 [1.74; 3.28]
Zuniga (2021)	2.92 [2.18; 3.90]
Roger (2024)	1.40 [0.88; 2.24]
Greene (2021)	1.04 [0.71; 1.52]
Hennein (2021)	0.97 [0.67; 1.41]
Wang (2020)	0.95 [0.64; 1.42]
Feingold (2021)	0.75 [0.60; 0.94]
Cai (2020)	0.55 [0.38; 0.80]
Asnakew (2021)	1.79 [1.11; 2.89]
Gambaro (2023)	2.66 [1.60; 4.45]
Tran (2023)	3.77 [1.96; 7.26]
Total	1.44 [1.00; 2.08]
Heterogeneity: P < .001, I^2 = 91.2% τ^2 = 0.3378	
Total	1.44 [1.00; 2.08]



Heterogeneity: P < .001, I^2 = 91.2%, τ^2 = 0.3378

(v) By symptomatic COVID-19-positive family members/friends: yes (ref: no)

Study	OR (95% CI)
After the onset of COVID−19	
Villalba−Arias (2021)	3.37 [1.47; 7.71]
Li (2023)	2.38 [1.47; 3.85]
Azoulay (2024)	2.14 [1.42; 3.23]
Banakar (2023)	3.03 [1.39; 6.59]
Robles (2021)	1.70 [1.39; 2.08]
James (2022)	2.36 [1.15; 4.85]
Gramaglia (2021)	1.46 [1.08; 1.97]
Lamiani (2021)	2.75 [1.01; 7.48]
Th'ng (2022)	0.96 [0.92; 1.01]
Roger (2024)	1.40 [0.90; 2.19]
Bonzini (2022)	1.17 [0.77; 1.77]
Portillo−Van Diest (2023)	0.76 [0.58; 0.99]
Renzi (2023)	0.81 [0.51; 1.28]
Zhang (2020)	1.59 [1.08; 2.34]
Carmassi (2021)	1.00 [0.37; 2.68]
Osório (2021)	2.08 [1.16; 3.72]
Total	1.53 [1.22; 1.90]
Heterogeneity: P < .001, I^2 = 85.6%, τ^2 = 0.1375	
Total	1.53 [1.22; 1.90]



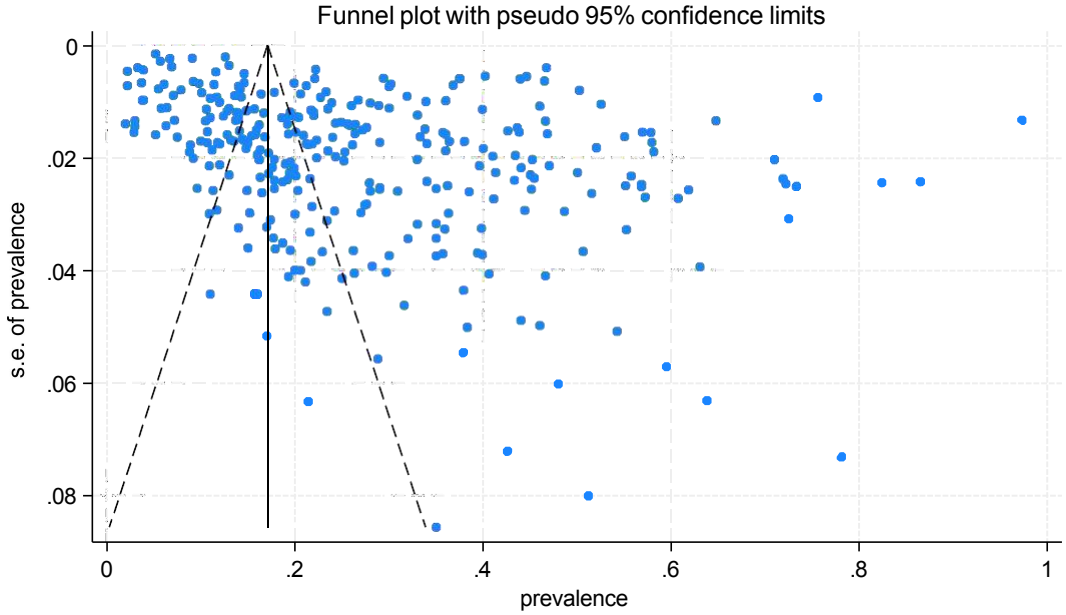
Heterogeneity: P < .001, I^2 = 85.6%, τ^2 = 0.1375

Appendix N: Figure 5 The results of funnel plots and p-value of Egger's test (overall, before and after the onset of COVID-19). *Note: The overall and post-pandemic funnel plots are identical due to absence of pre-pandemic data.

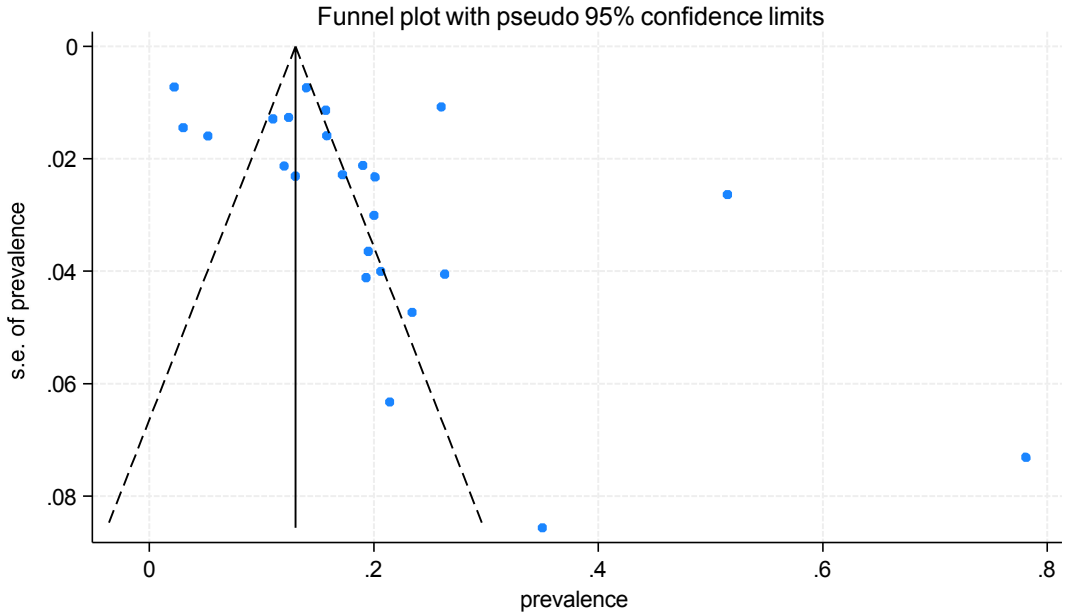
(a-f) The funnel plots of PTSD prevalence of healthcare workers (overall, before and after the onset of COVID-19).

(a1-a3) The funnel plots of the pooled PTSD prevalence.

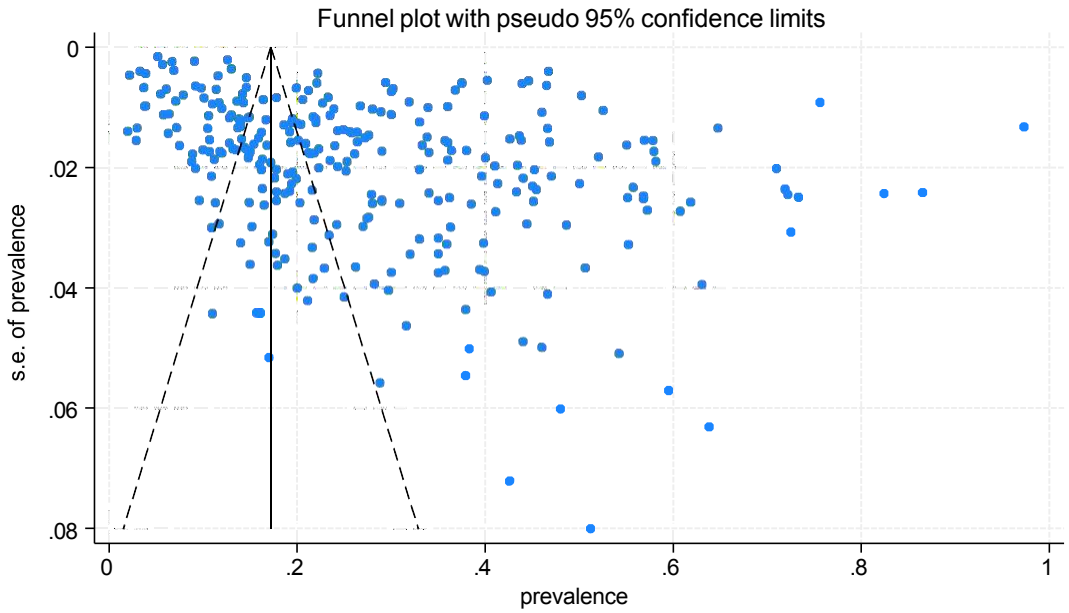
(a1) total ***t*=8.40 *p*<0.001**



(a2) total before COVID-19 ***t*=2.56 *p*=0.018**

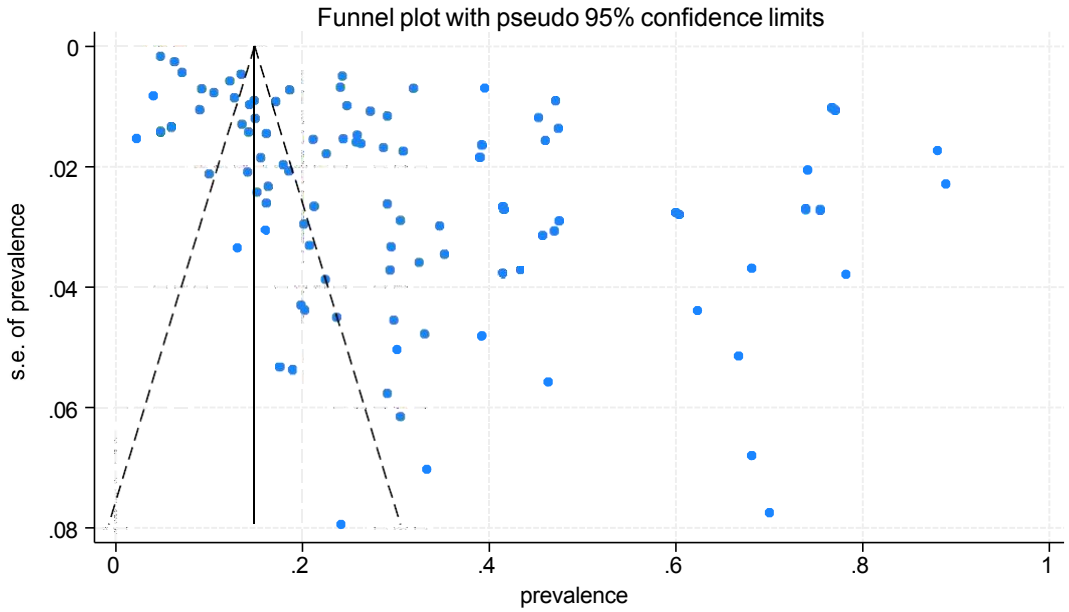


(a3) total after the onset of COVID-19 ***t*=8.47 *p*<0.001**

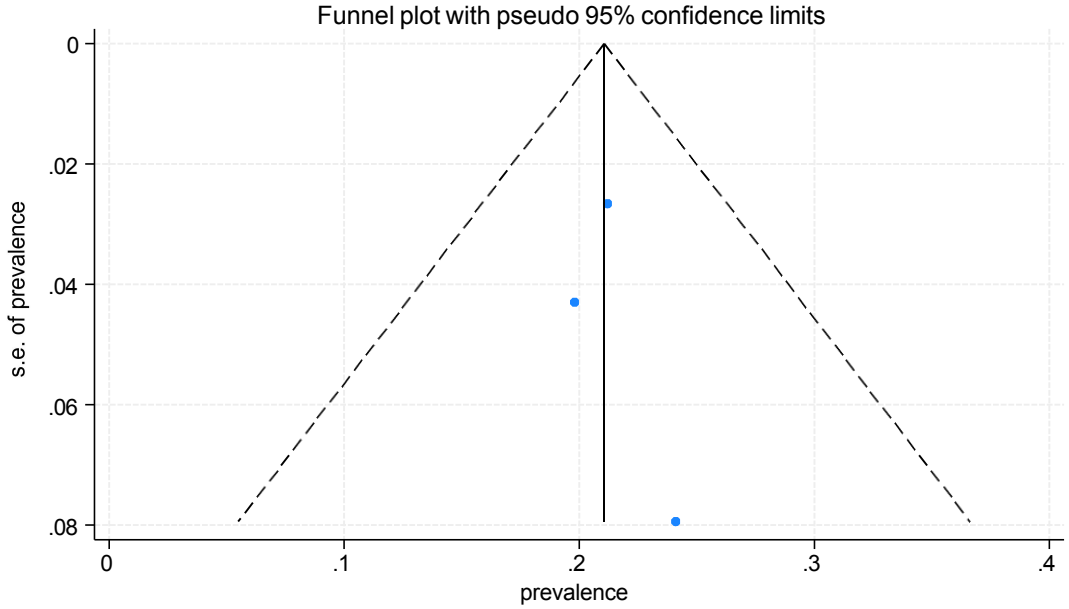


(b1-b6) The funnel plots of PTSD prevalence by sex.

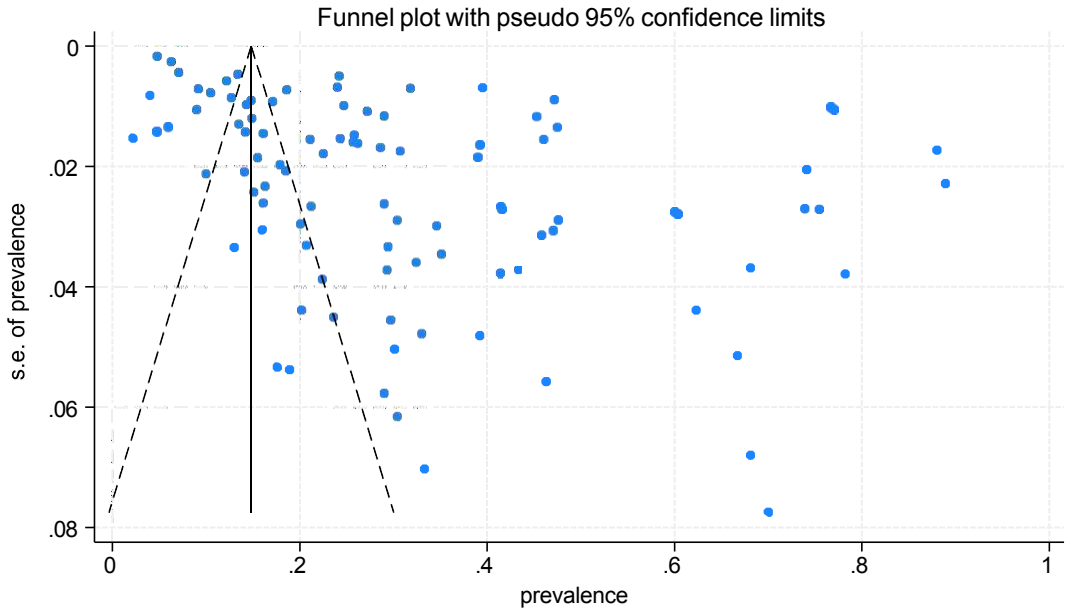
(b1) female ***t*=6.65 *p*<0.001**



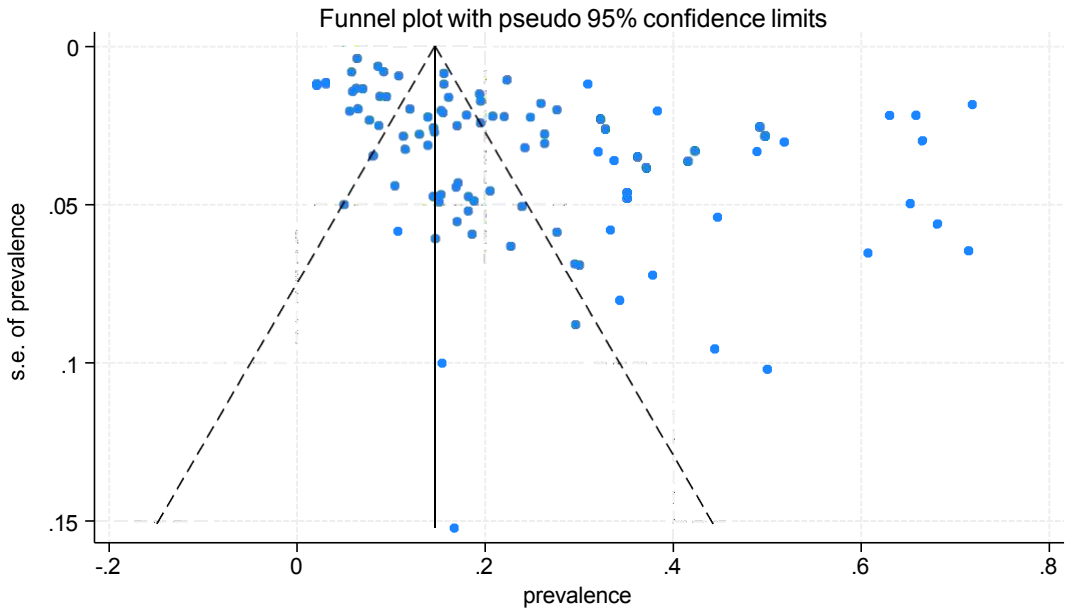
(b2) female before COVID-19 ***t*=0.49 *p*=0.709**



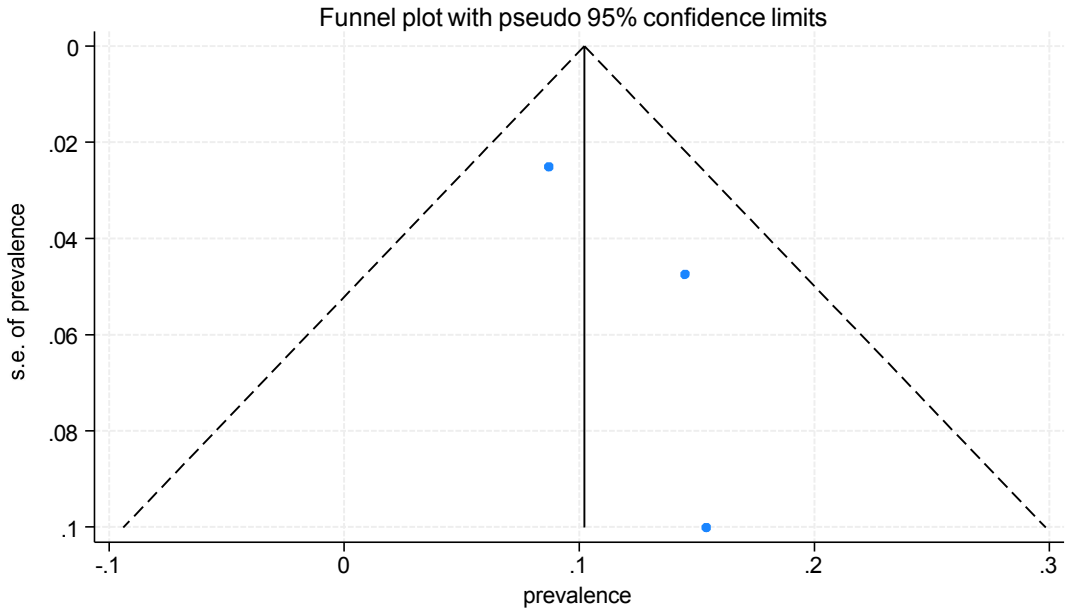
(b3) female after the onset of COVID-19 ***t*=6.69 *p*<0.001**



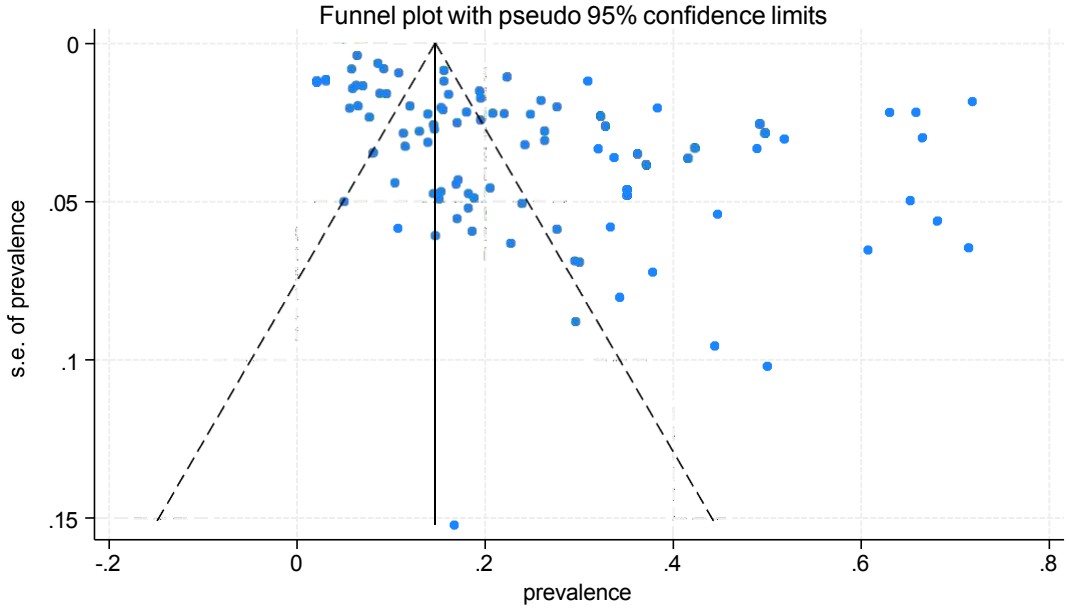
(b4) male ***t*=5.75 *p*<0.001**



(b5) male before COVID-19 ***t*=1.57 *p*=0.361**

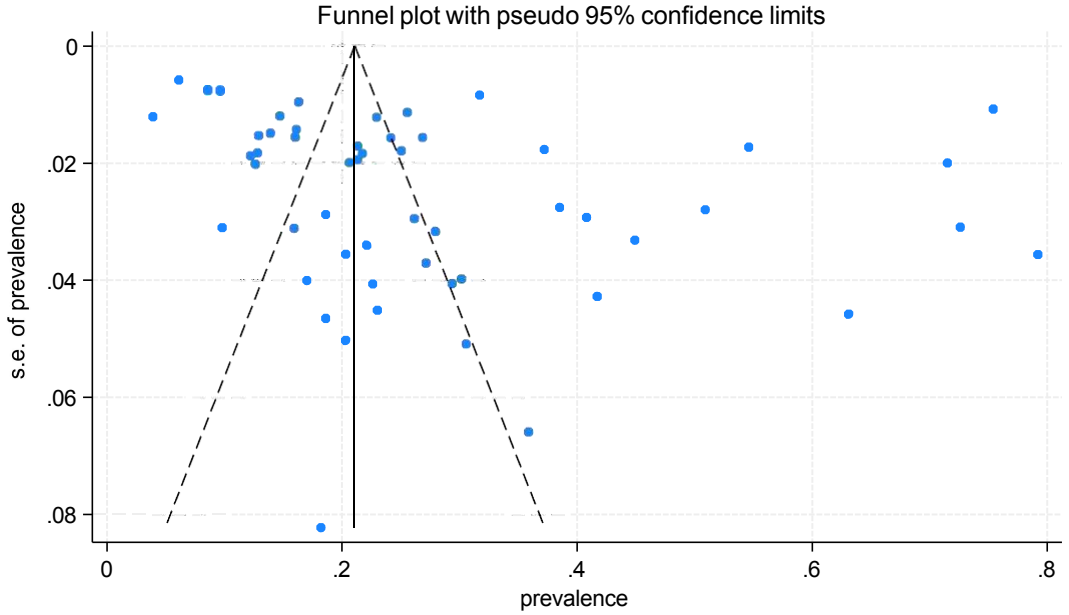


(b6) male after the onset of COVID-19 ***t*=1.57 *p*<0.001**

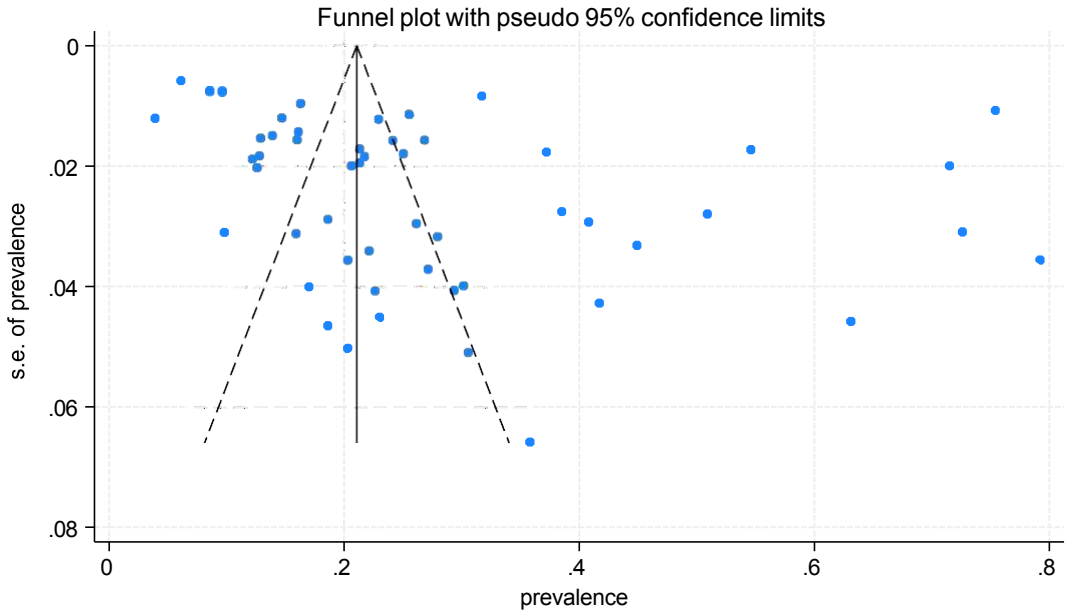


(c1-c4) The funnel plots of PTSD prevalence by age.

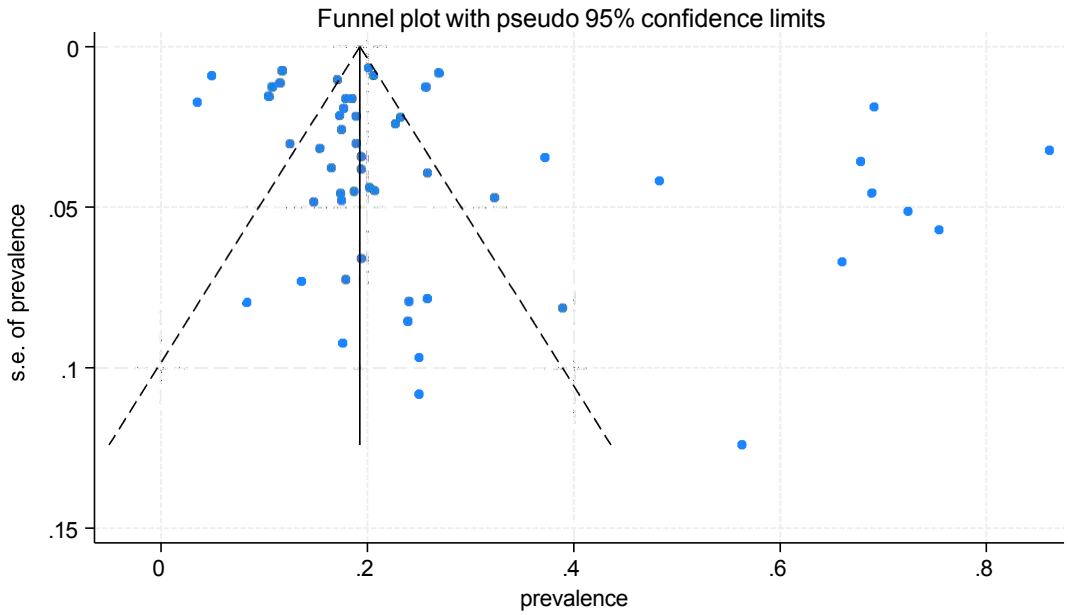
(c1) healthcare workers <40 years old ***t*=2.50 *p*=0.016**



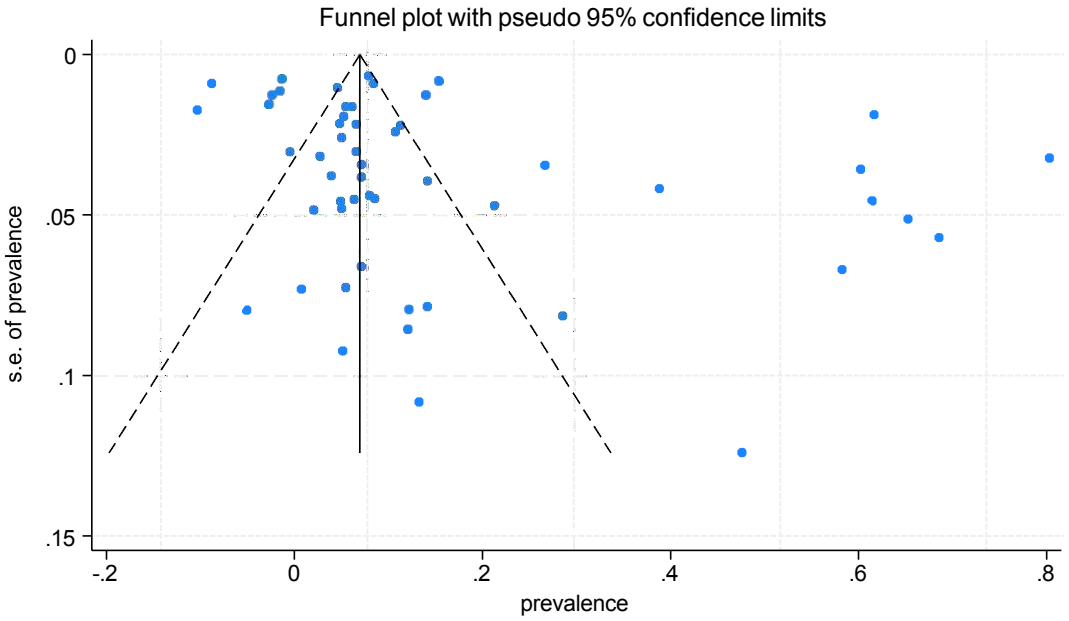
(c2) healthcare workers <40 years old after the onset of COVID-19
***t*=2.55 *p*=0.014**



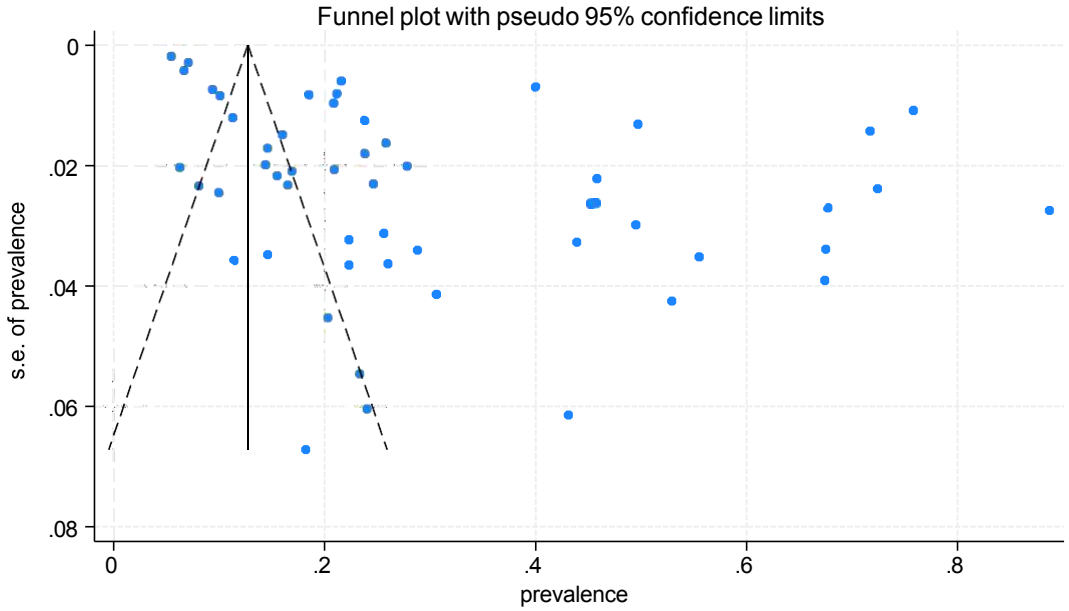
(c3) healthcare workers ≥40 years old ***t*=2.47 *p*=0.017**



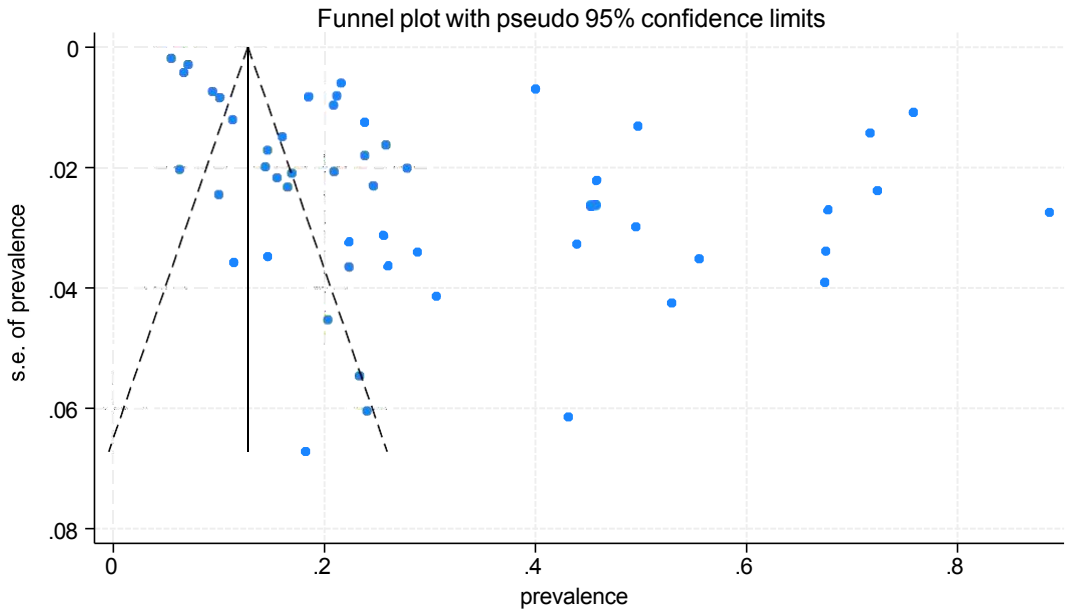
(c4) healthcare workers ≥40 years old after the onset of COVID-19
***t*=2.48 *p*=0.017**



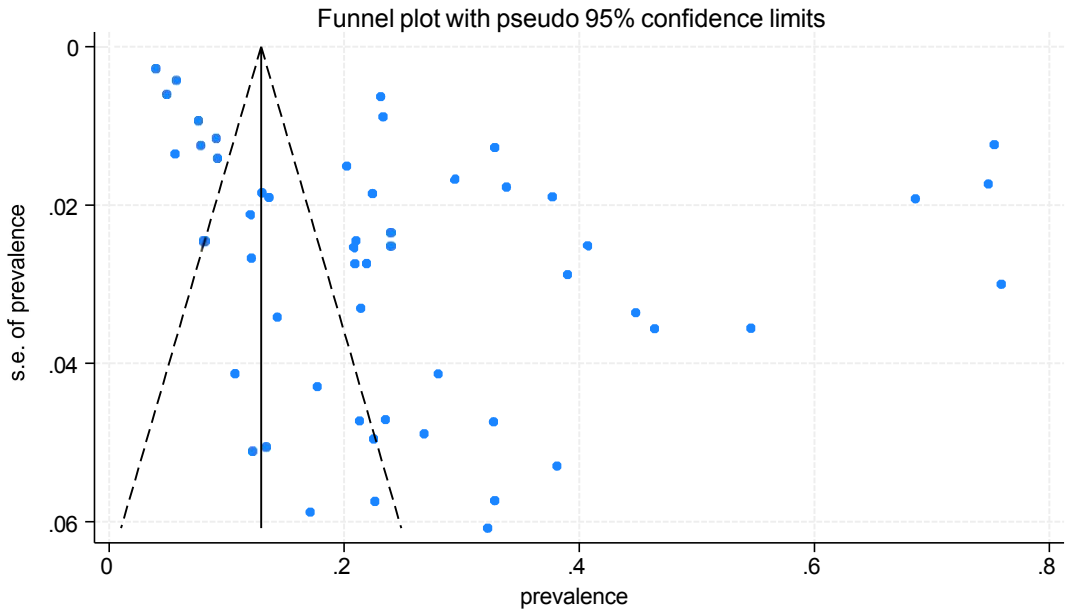
(d1-d4) The funnel plots of PTSD prevalence by marriage status.
(d1) married healthcare workers ***t*=5.28 *p*<0.001**



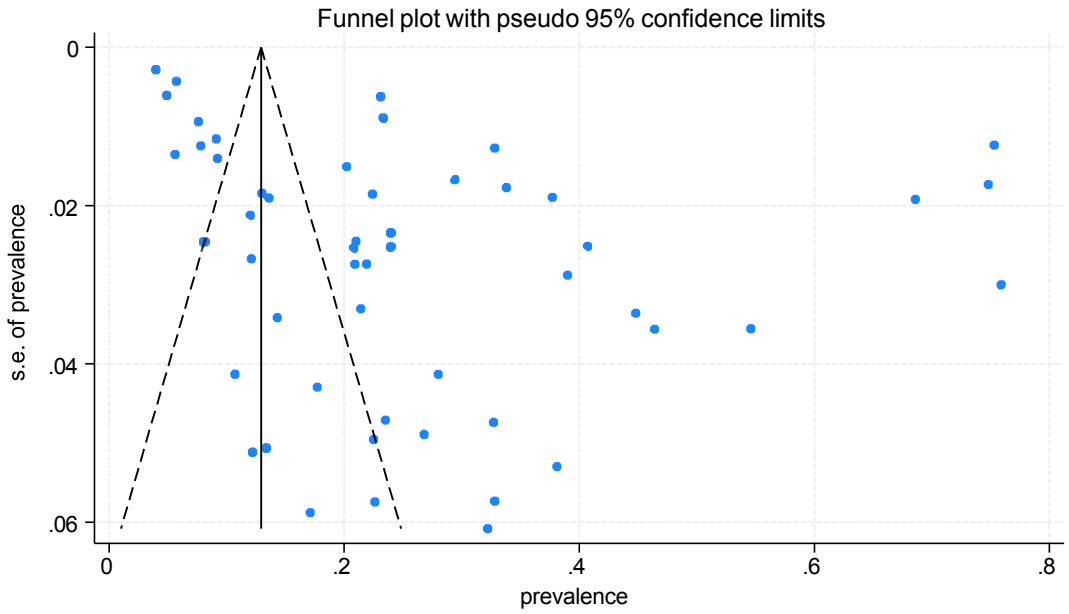
(d2) married healthcare workers after the onset of COVID-19
***t*=5.33 *p*<0.001**



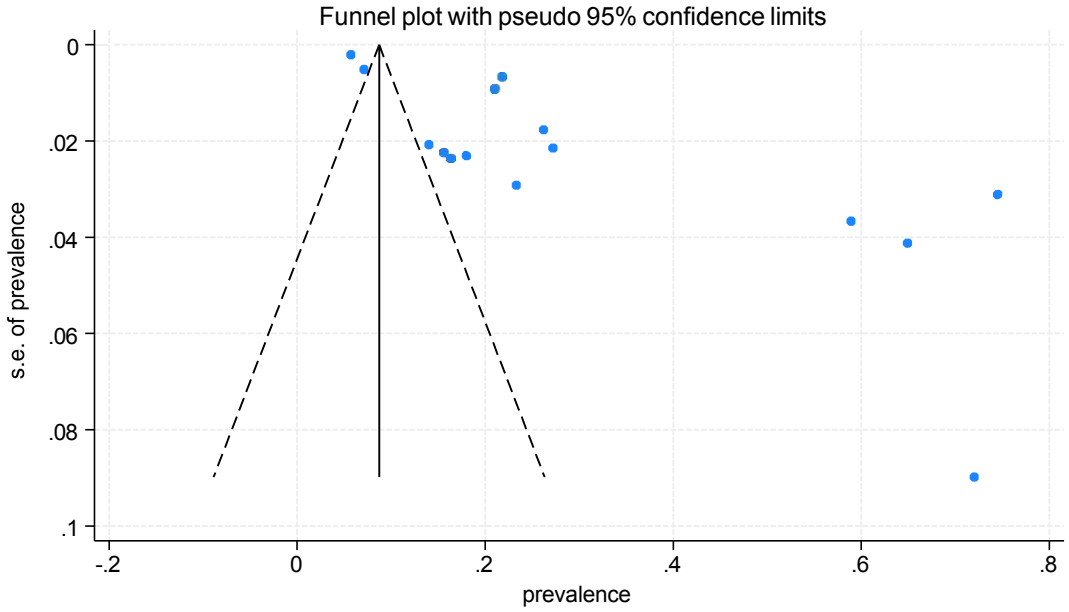
(d3) unmarried healthcare workers ***t*=4.23 *p*<0.001**



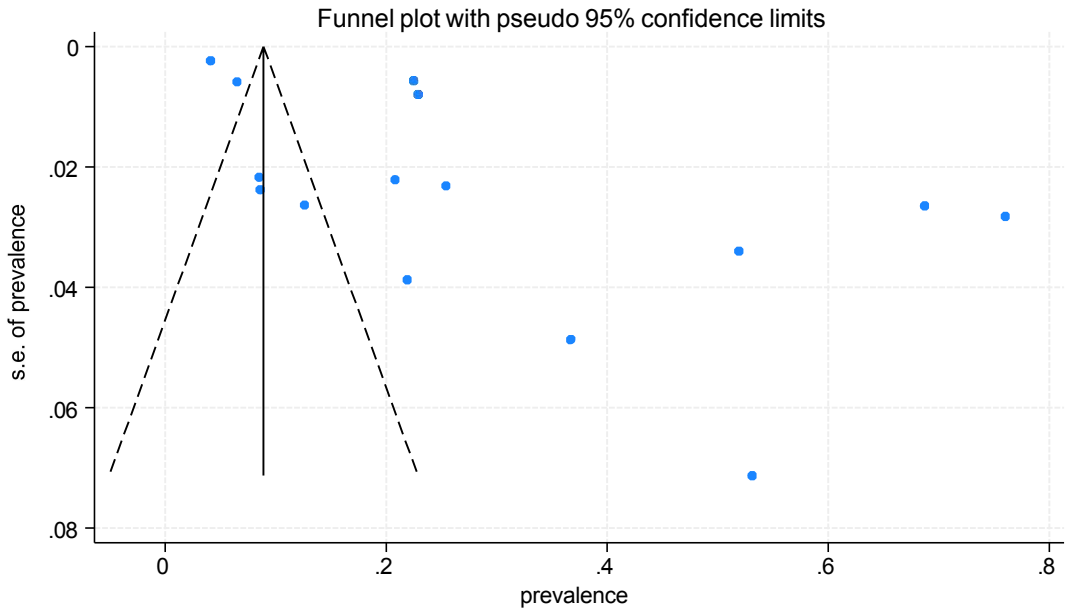
(d4) unmarried healthcare workers after the onset of COVID-19
***t*=4.23 *p*<0.001**



(e1-e2) The funnel plots of PTSD prevalence by having children (no pre-pandemic data).
***(e1) healthcare workers with children** ***t*=4.95 *p*<0.001**

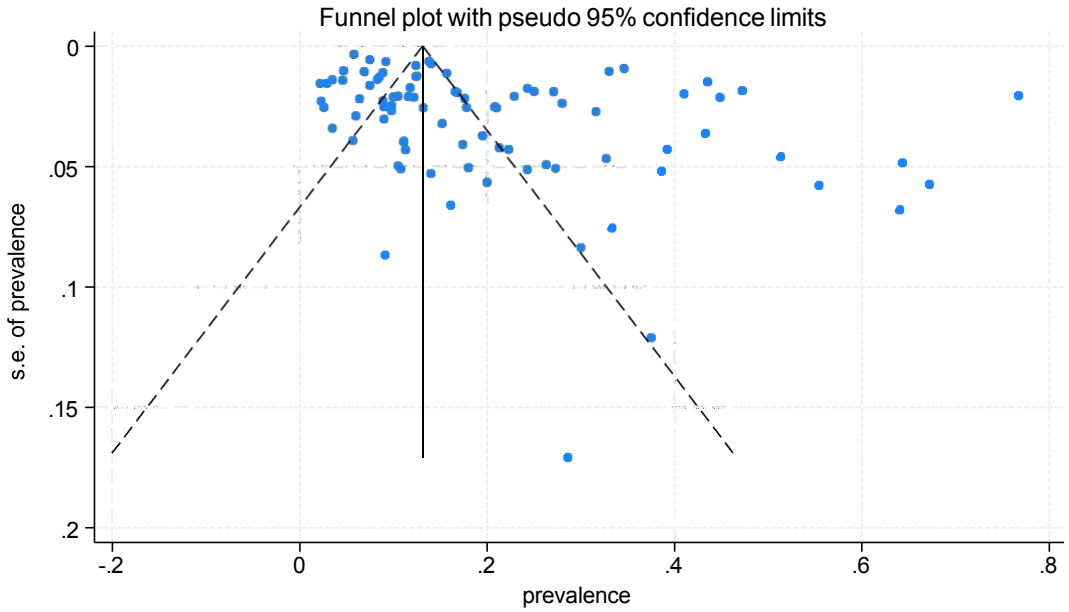


***(e2) healthcare workers without children** ***t*=3.26 *p*=0.006**

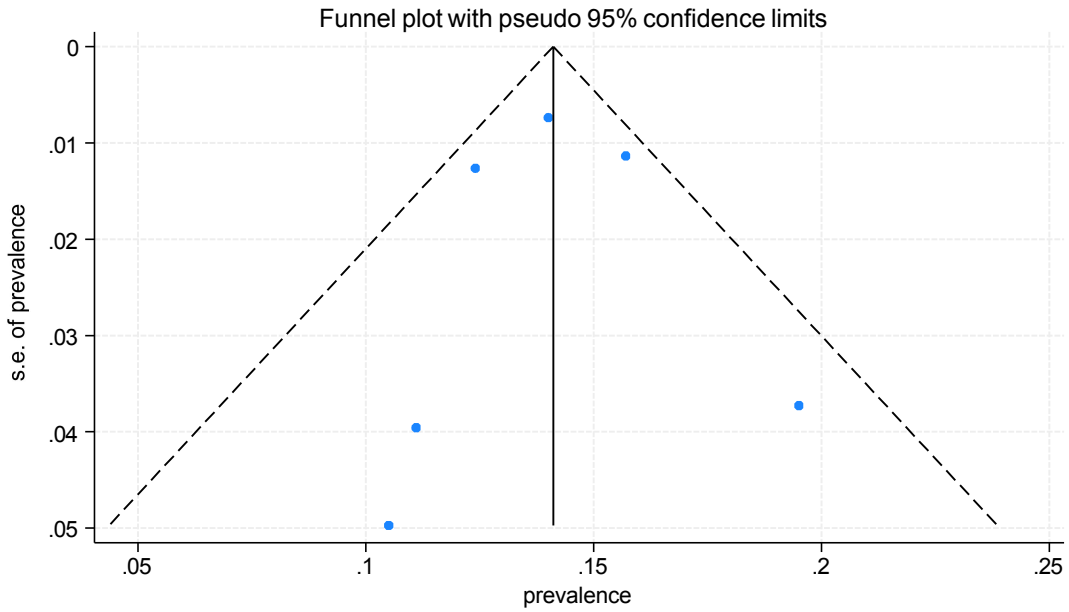


(f1-f8) The funnel plots of PTSD prevalence by occupation.

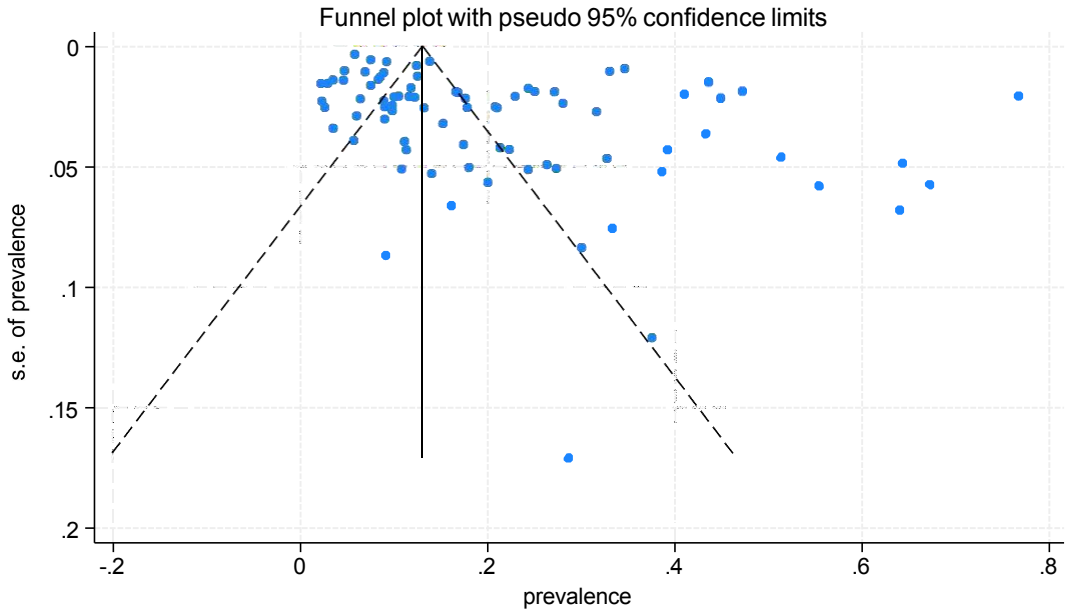
(f1) physicians ***t*=3.86 *p*<0.001**



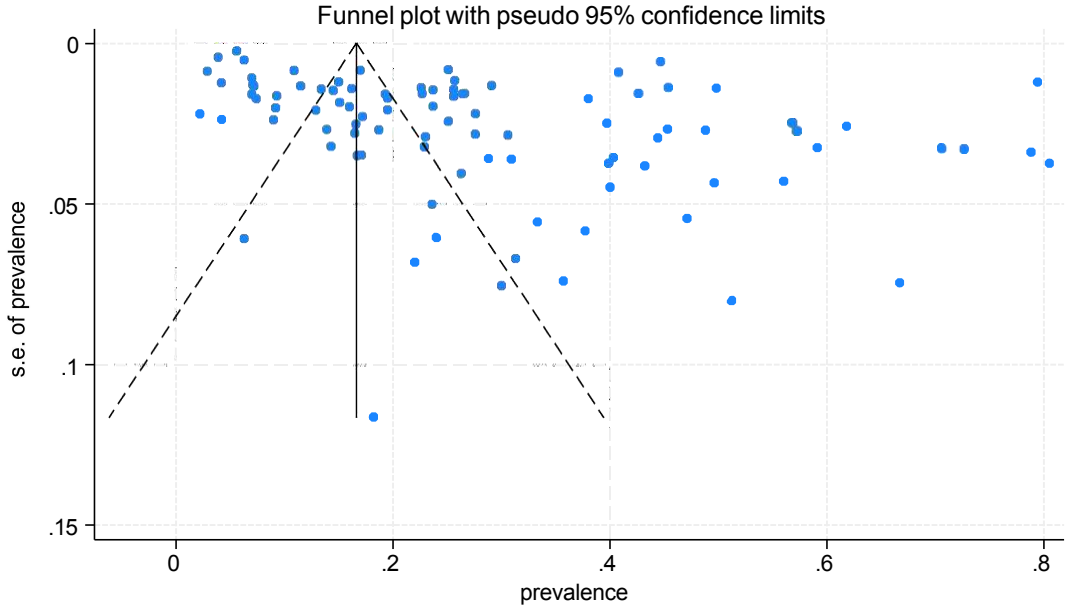
(f2) physicians before COVID-19 ***t*=-0.08 *p*=0.0.937**



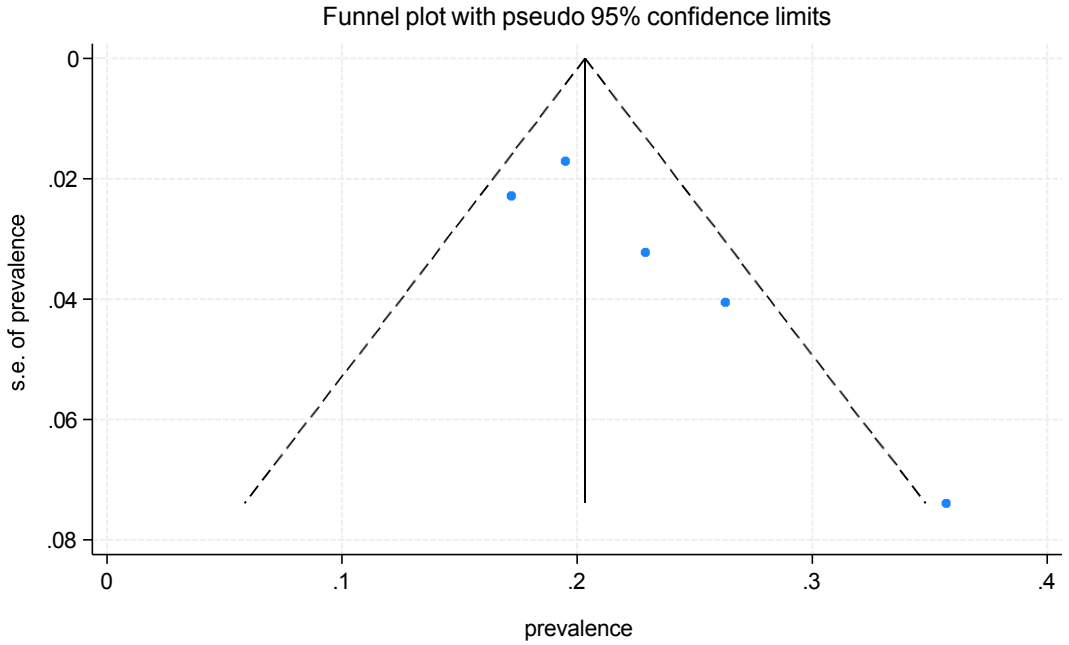
(f3) physicians after the onset of COVID-19 ***t*=3.86 *p*<0.001**



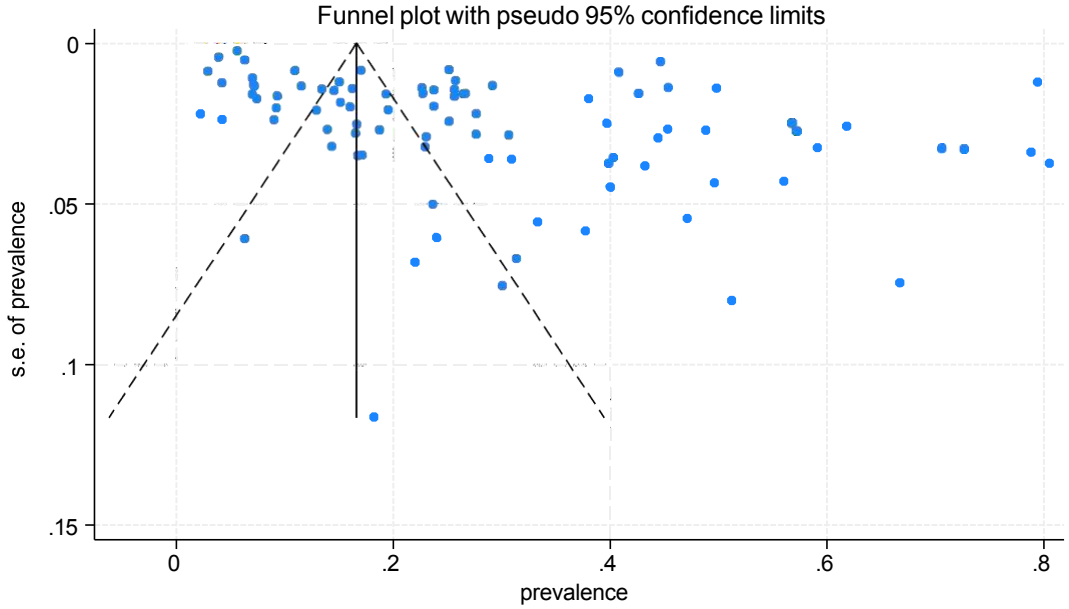
(f4) nurses ***t*=5.34 *p*<0.001**



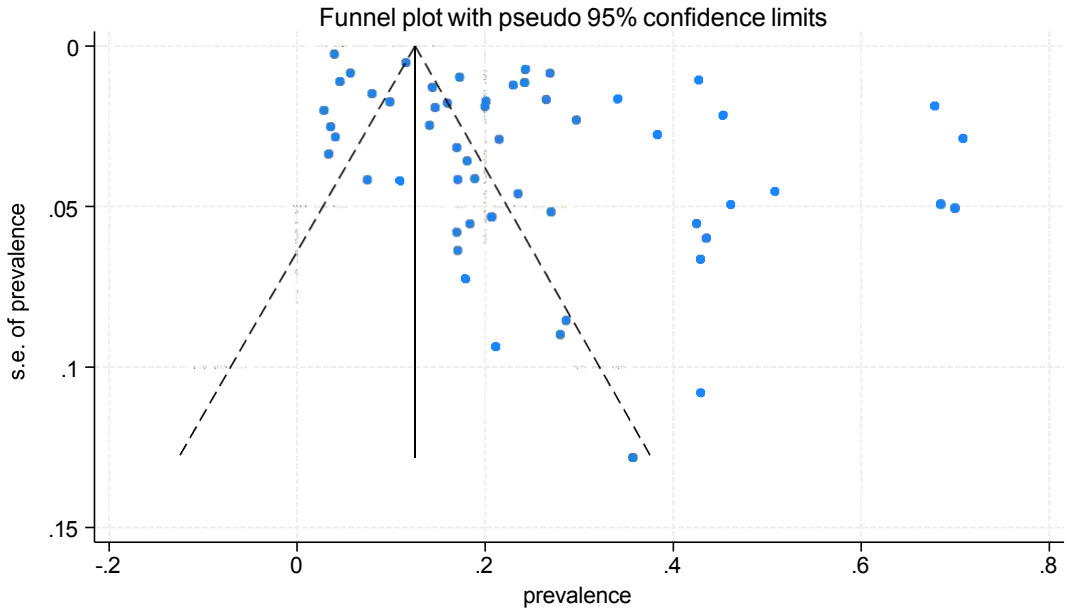
(f5) nurses before COVID-19 ***t*=3.22 *p*=0.048**



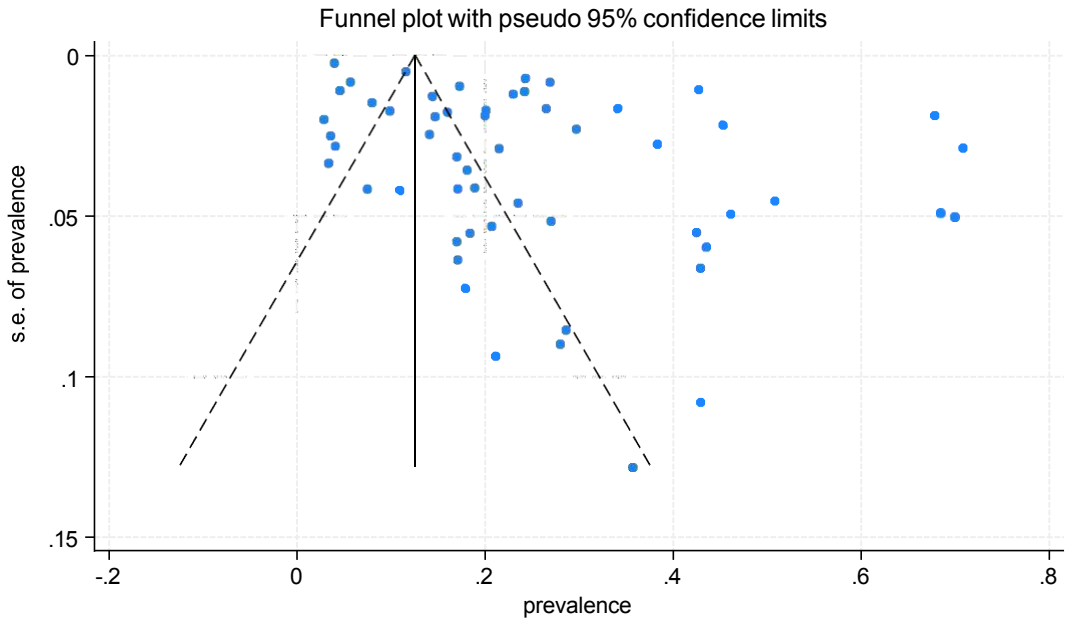
(f6) nurses after the onset of COVID-19 ***t*=5.09 *p*<0.001**



(f7) other occupations ***t*=4.43 *p*<0.001**

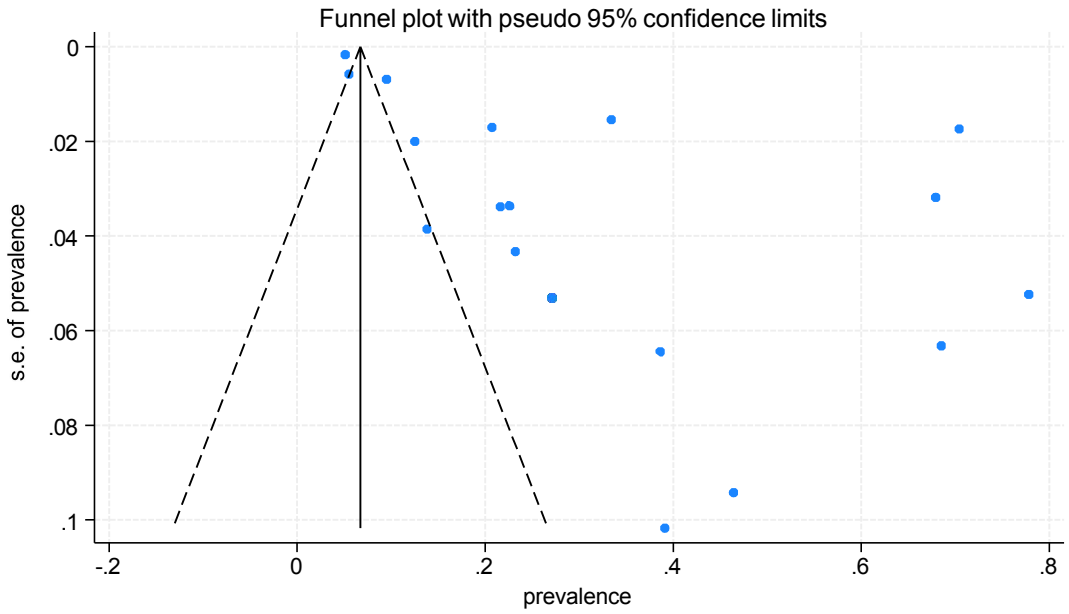


(f8) other occupations after the onset of COVID-19 ***t*=4.42 *p*<0.001**

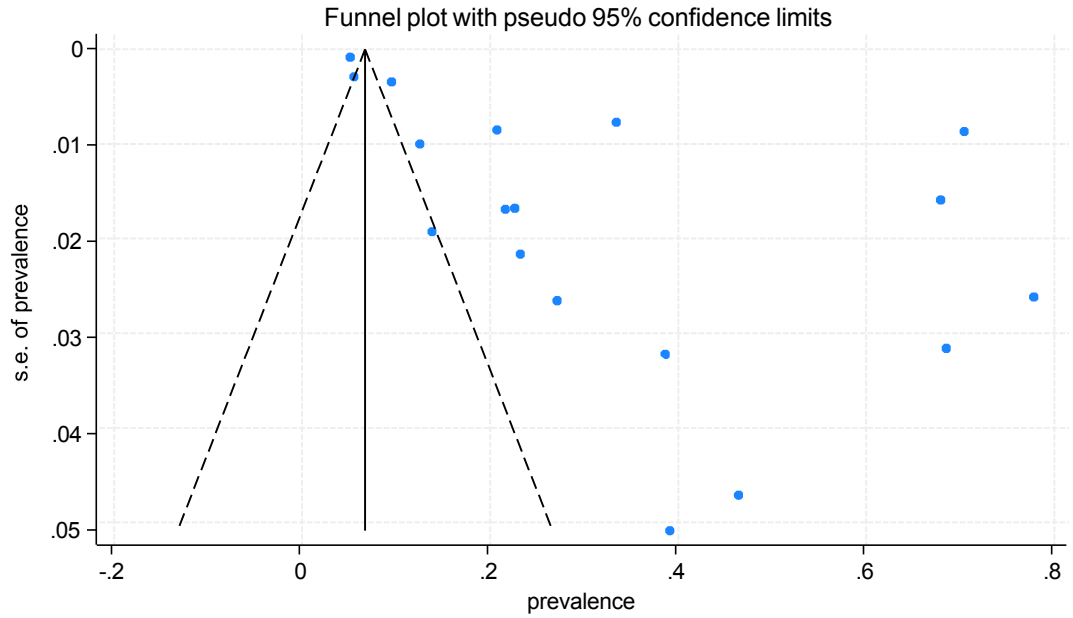


(g1-g6) The funnel plots of PTSD prevalence by education level.

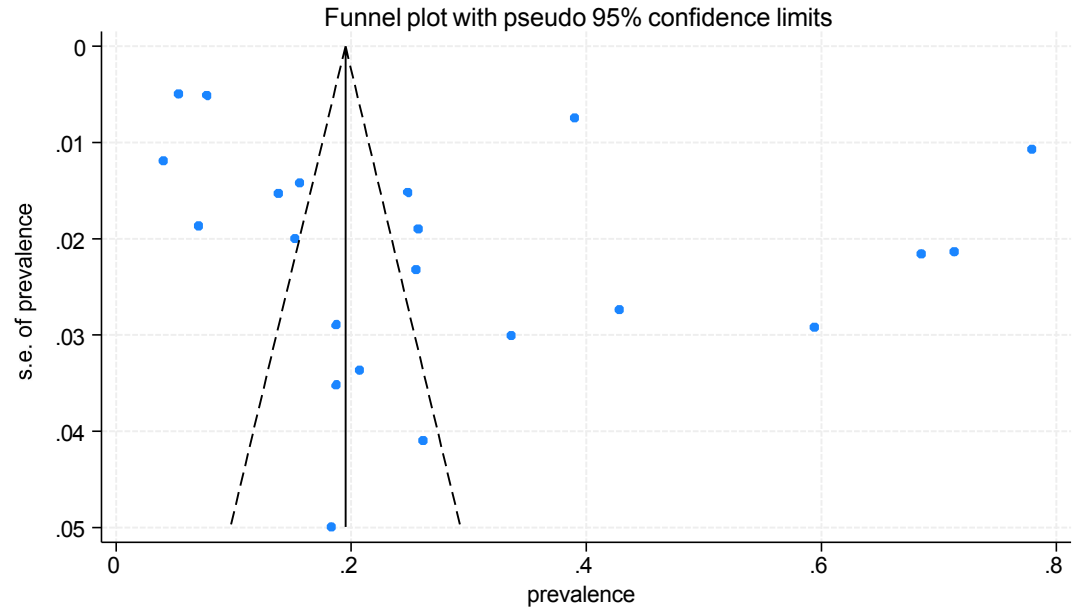
(g1) below or equal to high school ***t*=3.95 *p*=0.001**



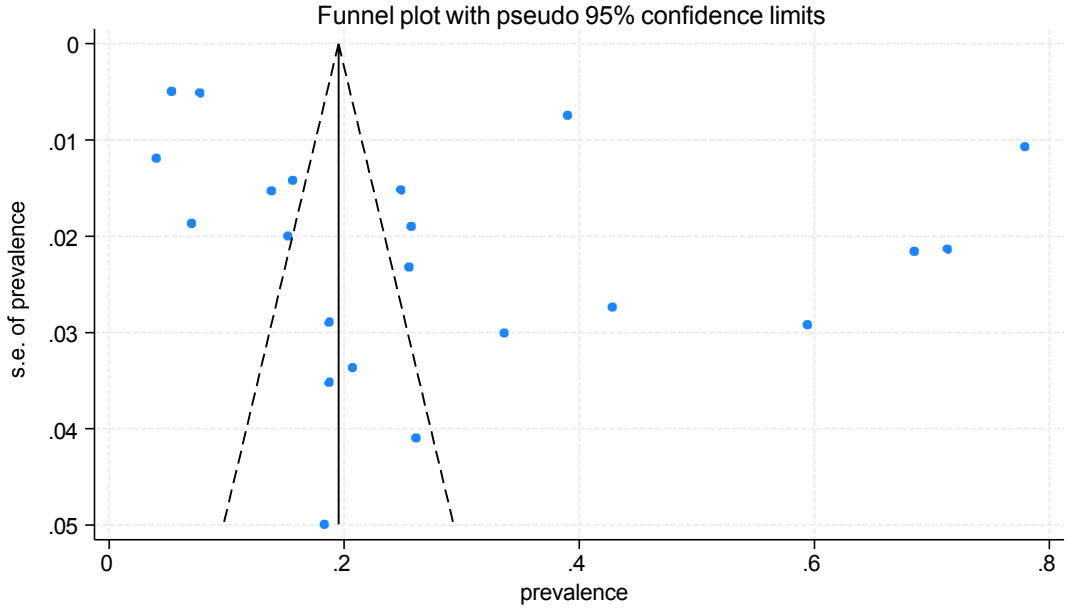
(g2) below or equal to high school after the onset of COVID-19
***t*=3.88 *p*=0.001**



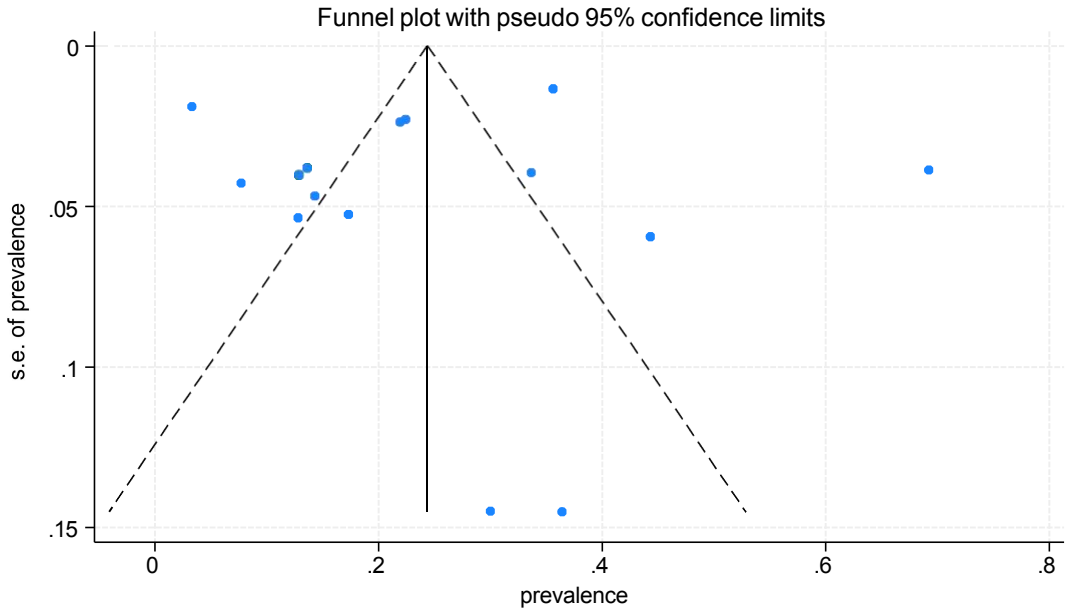
(g3) graduate ***t*=1.76 *p*=0.092**



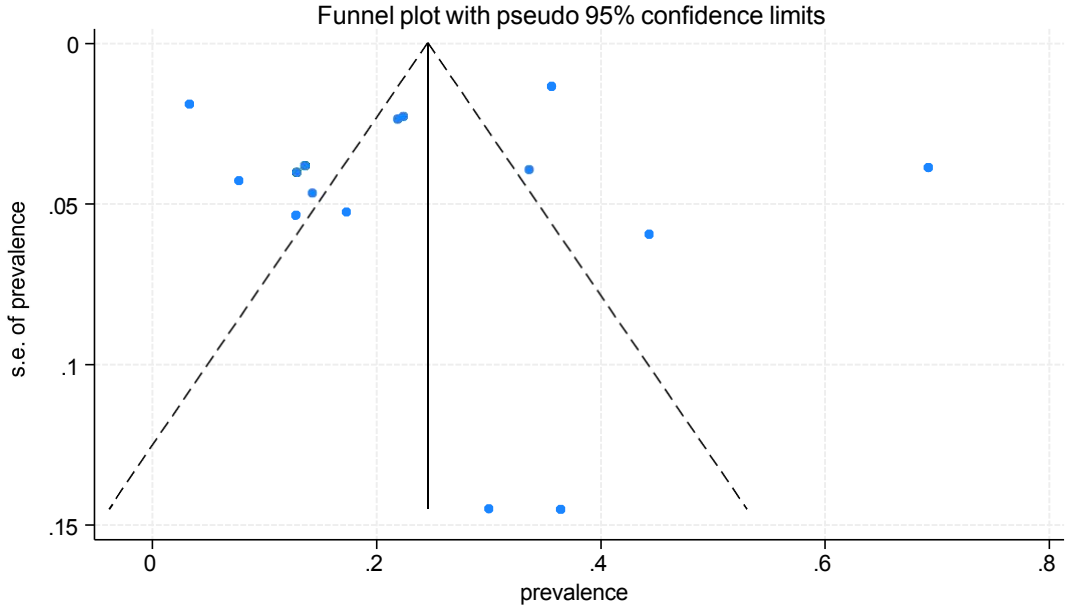
(g4) graduate after the onset of COVID-19 ***t*=1.78 *p*=0.090**



(g5) post-graduate ***t*=-0.31 *p*=0.763**

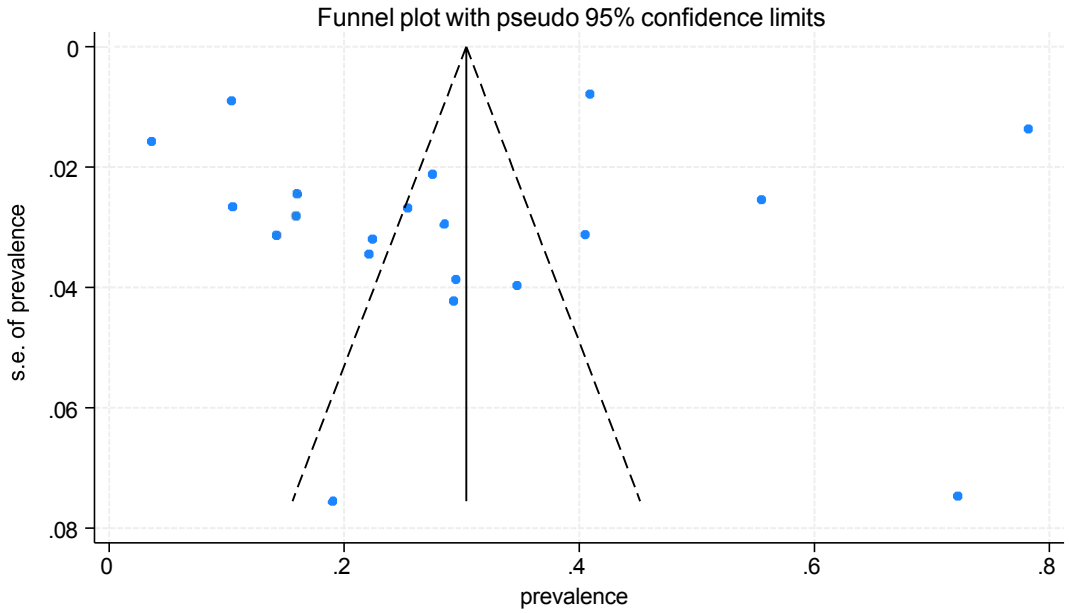


(g6) post-graduate after the onset of COVID-19 ***t*=-0.20 *p*=0.841**

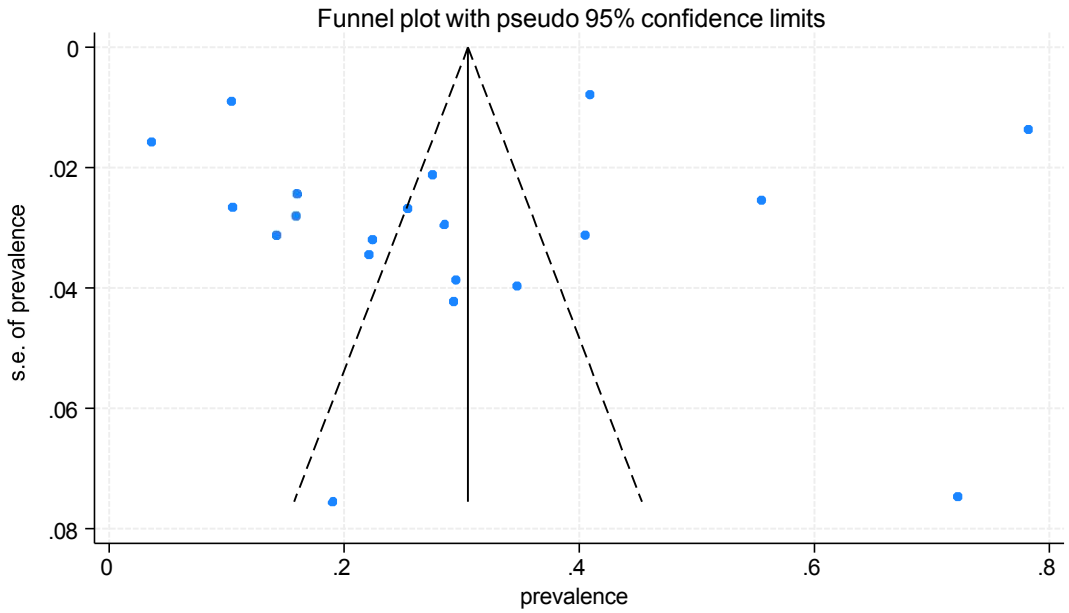


(h1-h4) The funnel plots of PTSD prevalence by practicing years.

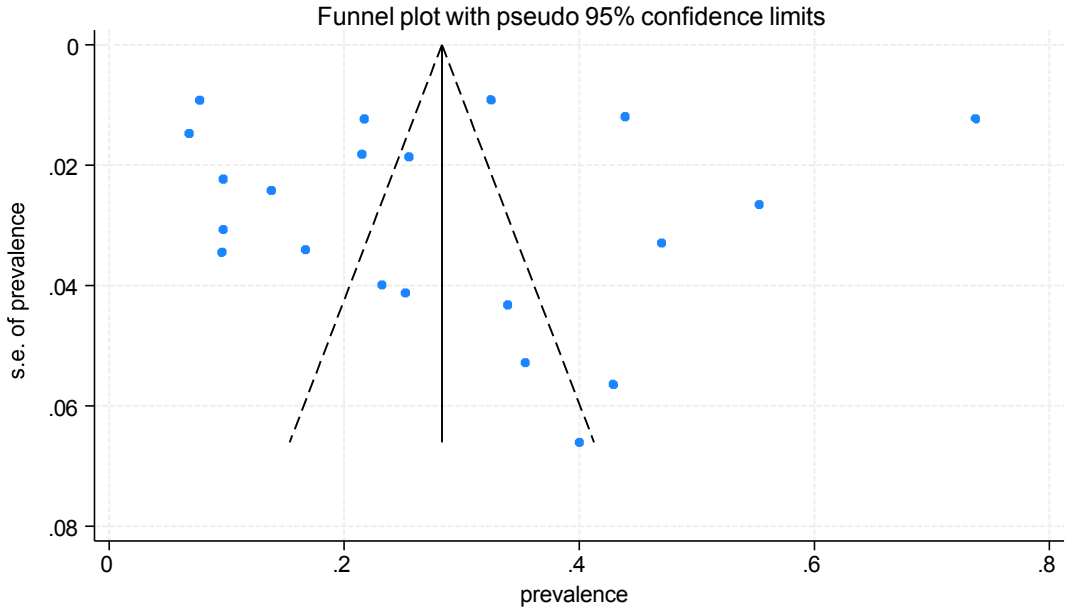
(h1) practicing years: ≥10 ***t*=-0.28 *p*=0.780**



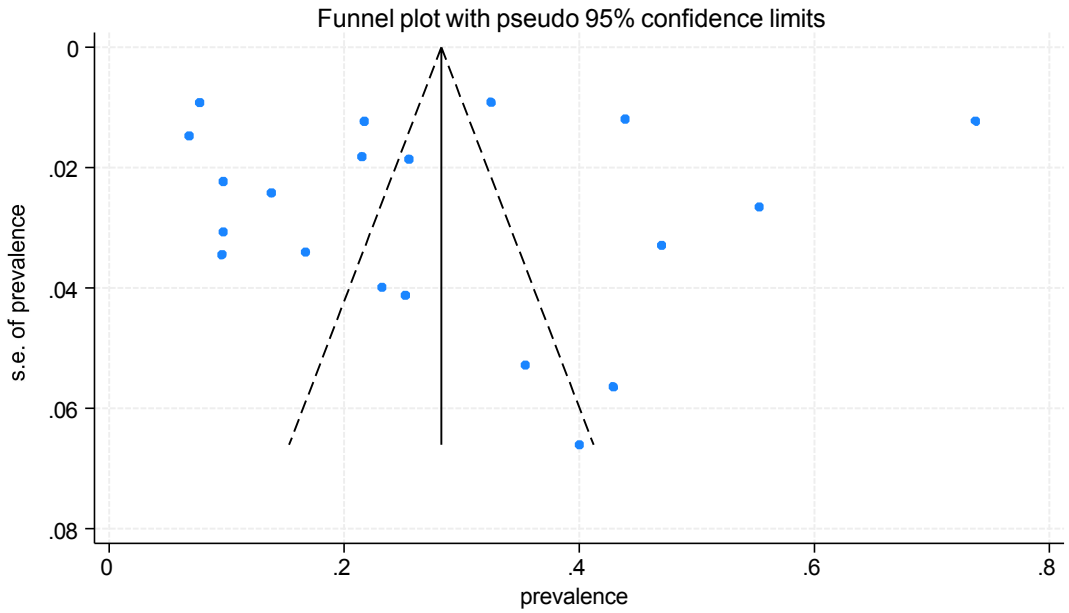
(h2) practicing years: ≥10, after the onset of COVID-19 ***t*=-0.24 *p*=0.814**



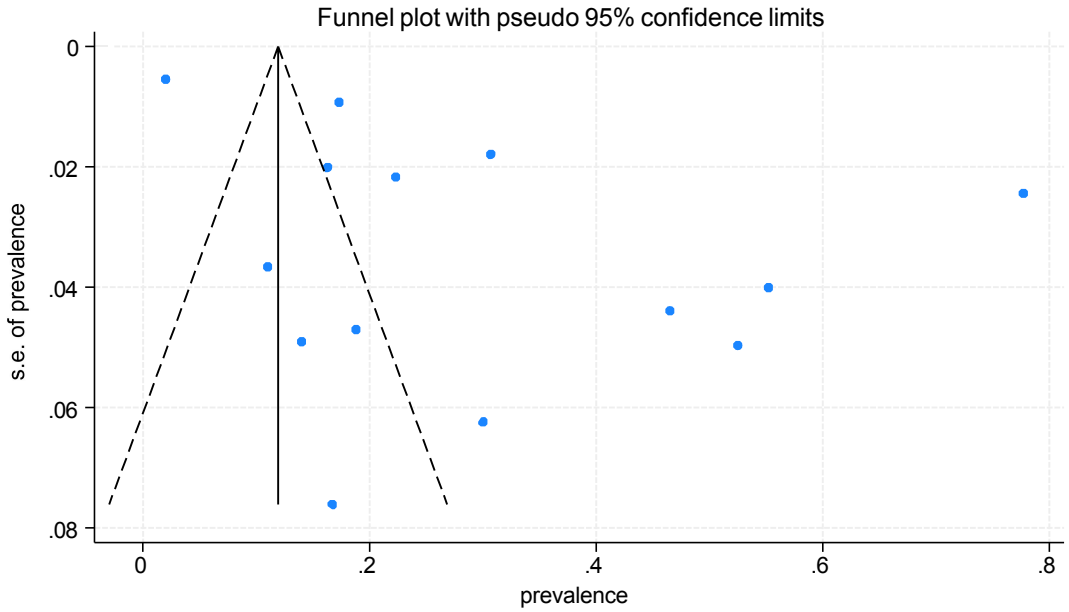
(h3) practicing years: <10 ***t*=-0.06 *p*=0.956**



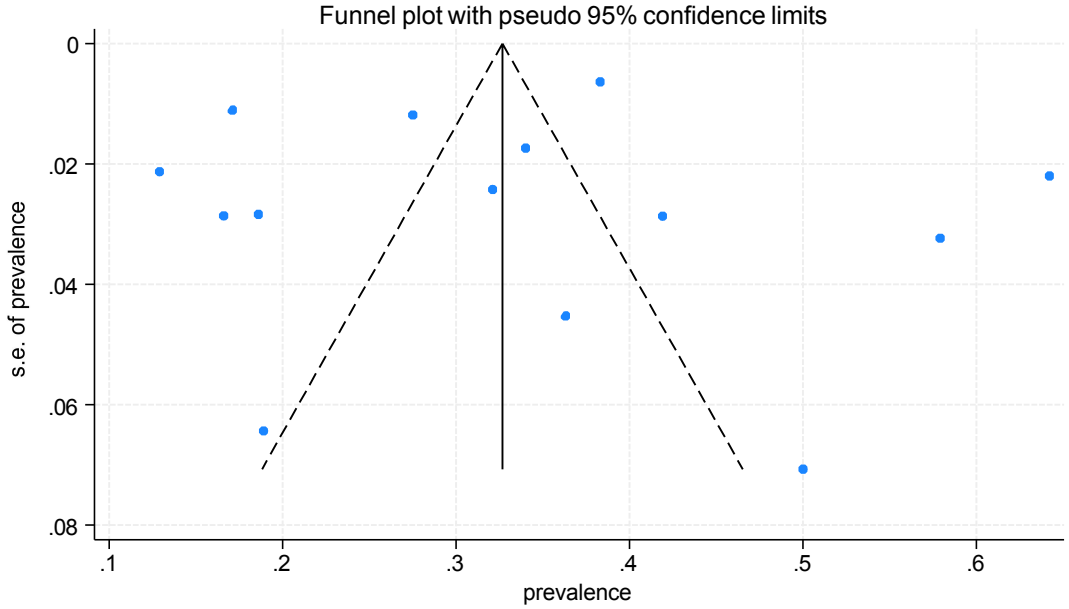
(h4) practicing years: <10, after the onset of COVID-19 ***t*=-0.09 *p*=0.931**



(i1-i2) The funnel plots of PTSD prevalence by income.
***(i1) healthcare workers with high income** ***t*=2.87 *p*=0.014**

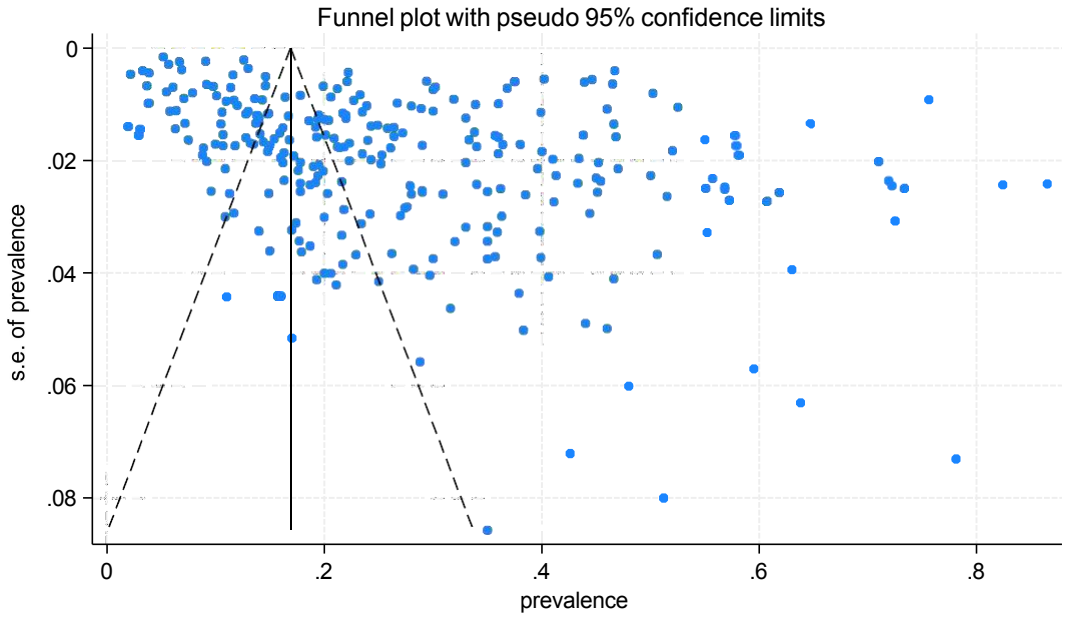


***(i2) healthcare workers with low income** ***t*=-0.15 *p*=0.886**

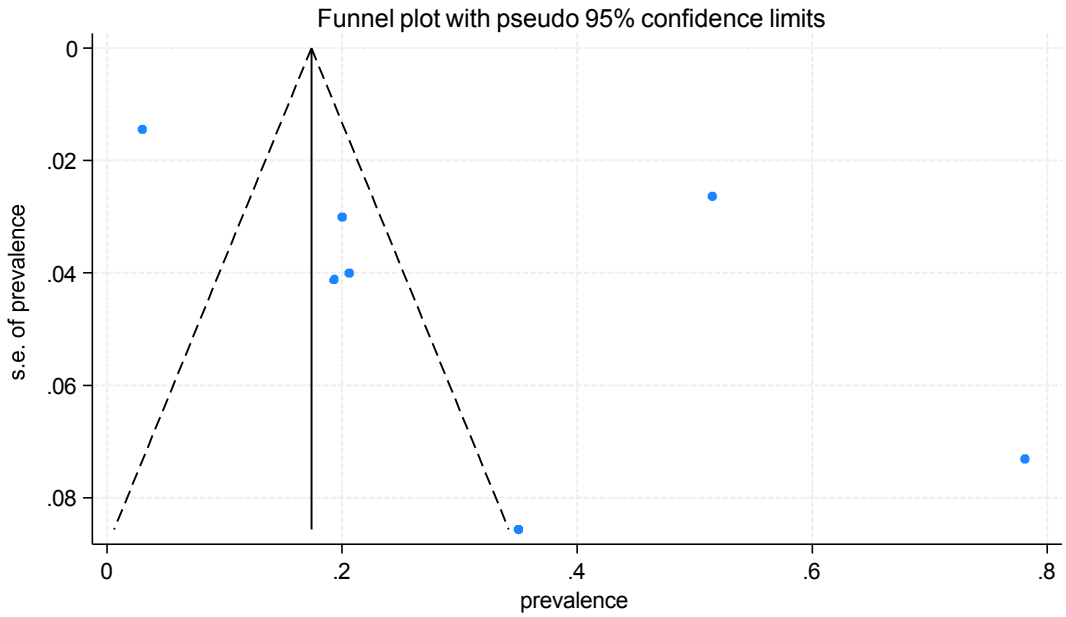


(j1-j9) The funnel plots of PTSD prevalence by traumatic events.

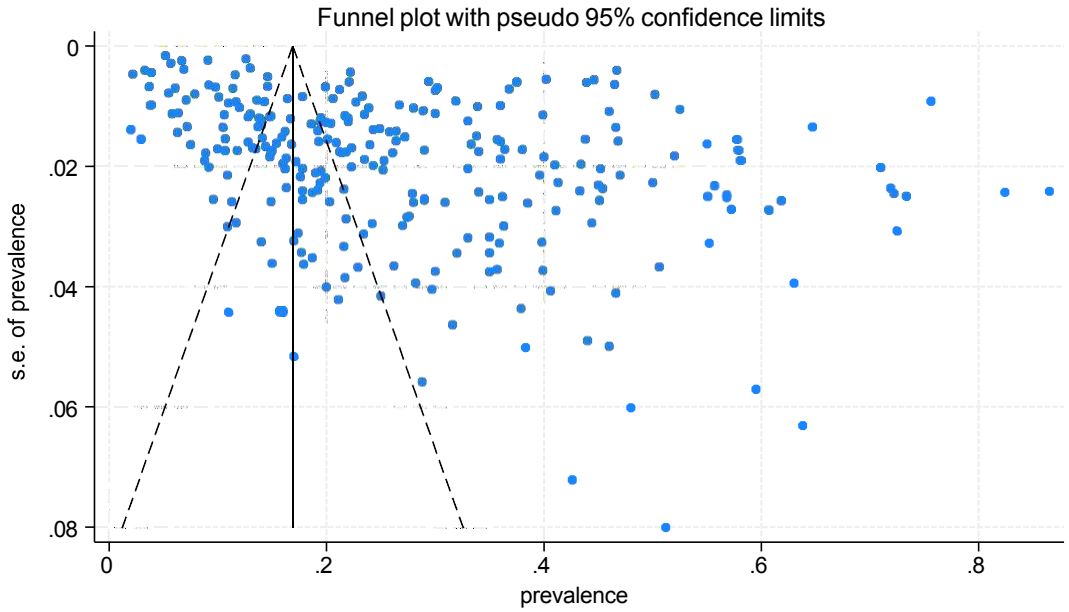
(j1) epidemic ***t*=8.24 *p*<0.001**



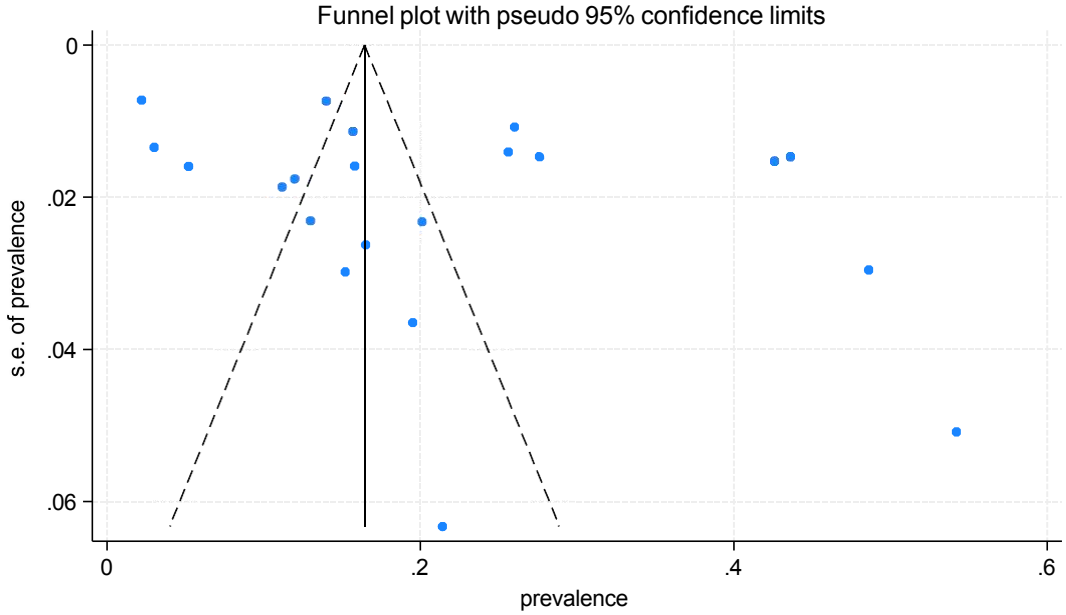
(j2) epidemic before COVID-19 ***t*=1.80 *p*=0.132**



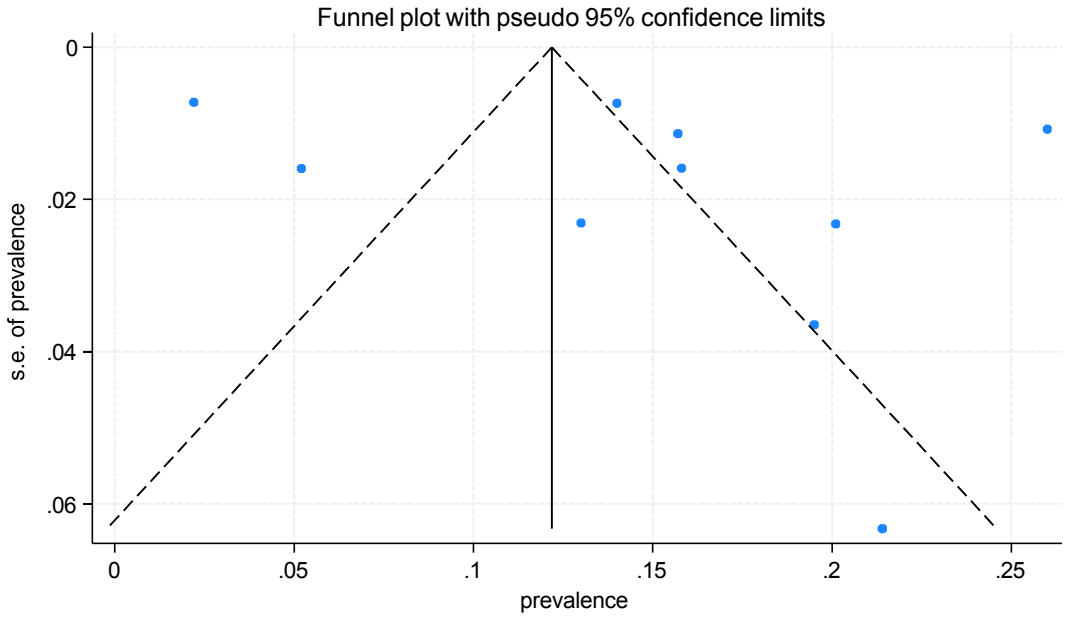
(j3) epidemic after the onset of COVID-19 ***t*=8.23 *p*<0.001**



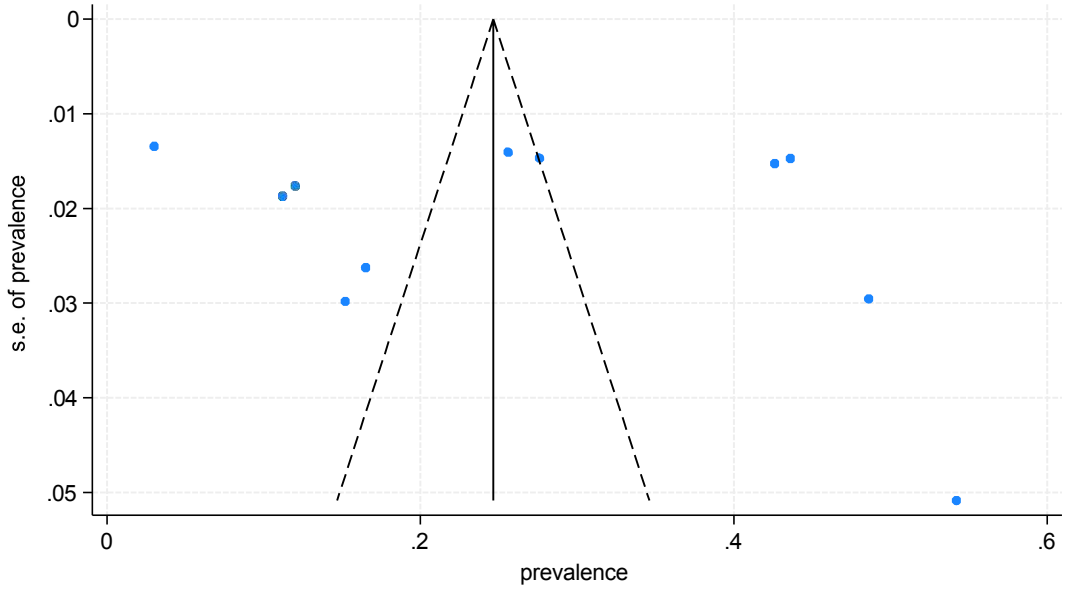
(j4) work-related events ***t*=1.81 *p*=0.086**



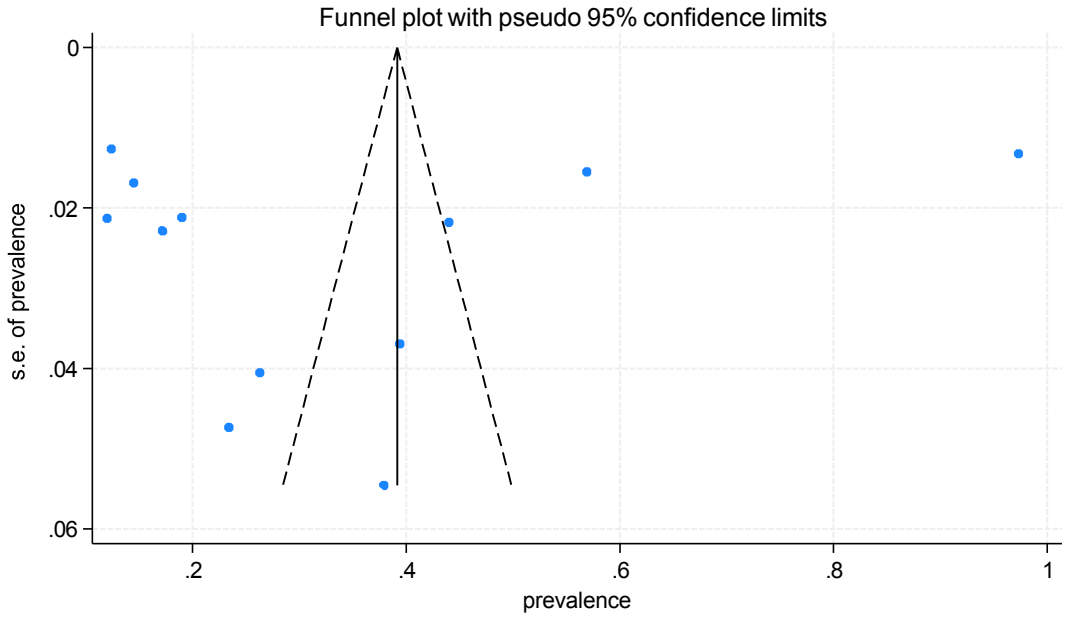
(j5) work-related events before COVID-19 ***t*=0.91 *p*=0.388**



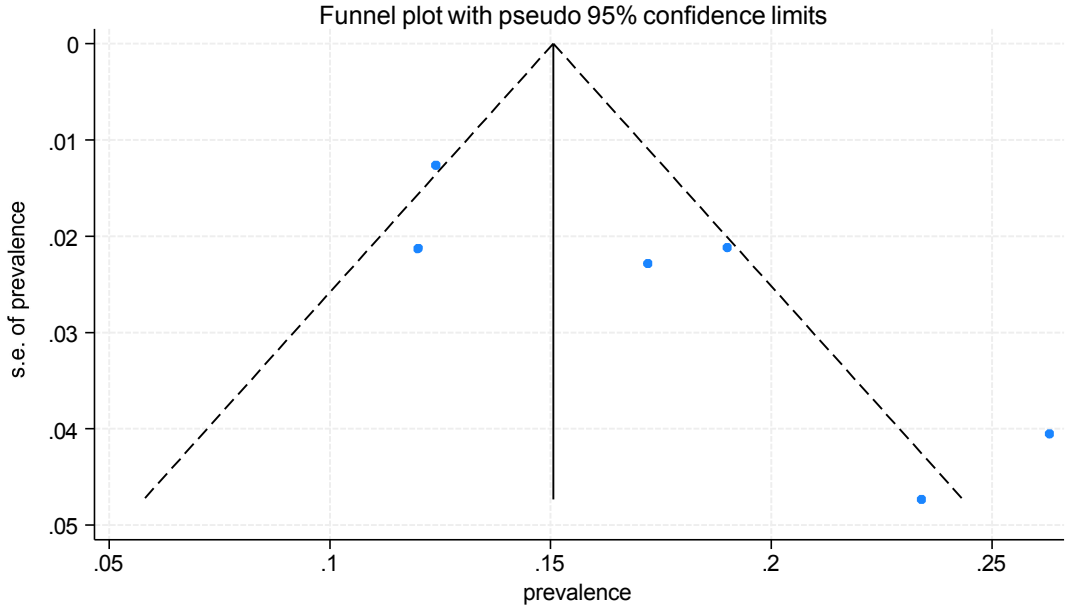
(j6) work-related events after the onset of COVID-19 ***t*=0.45 *p*=0.661**



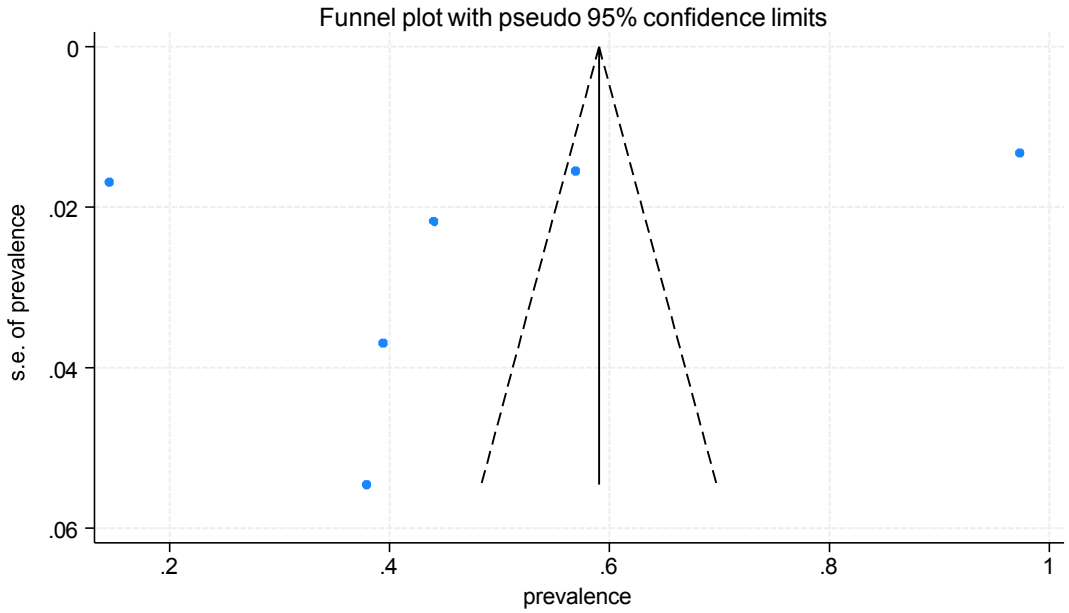
(j7) mass casualty incidents ***t*=-0.71 *p*=0.492**



(j8) mass casualty incidents before COVID-19 ***t*=3.06 *p*=0.038**

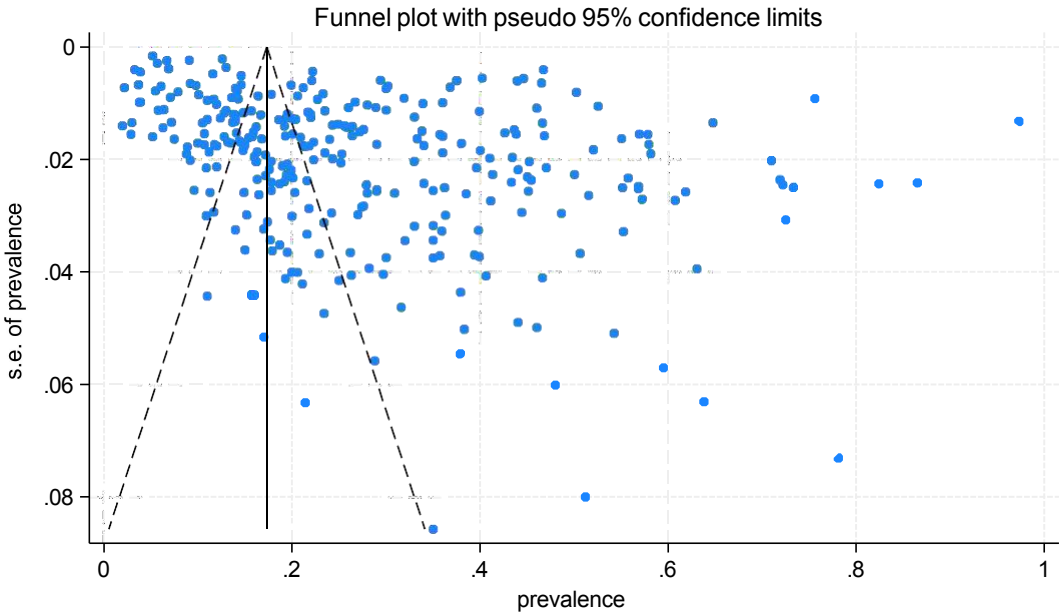


(j9) mass casualty incidents after the onset of COVID-19
***t*=-0.85 *p*=0.443**

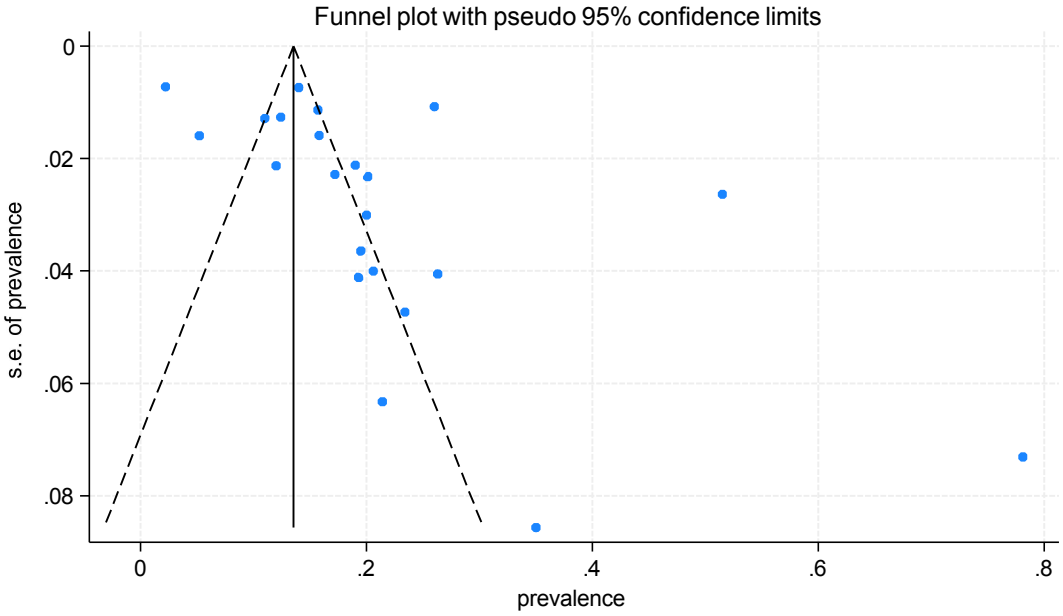


(k1-k5) The funnel plots of PTSD prevalence by PTSD assessment.

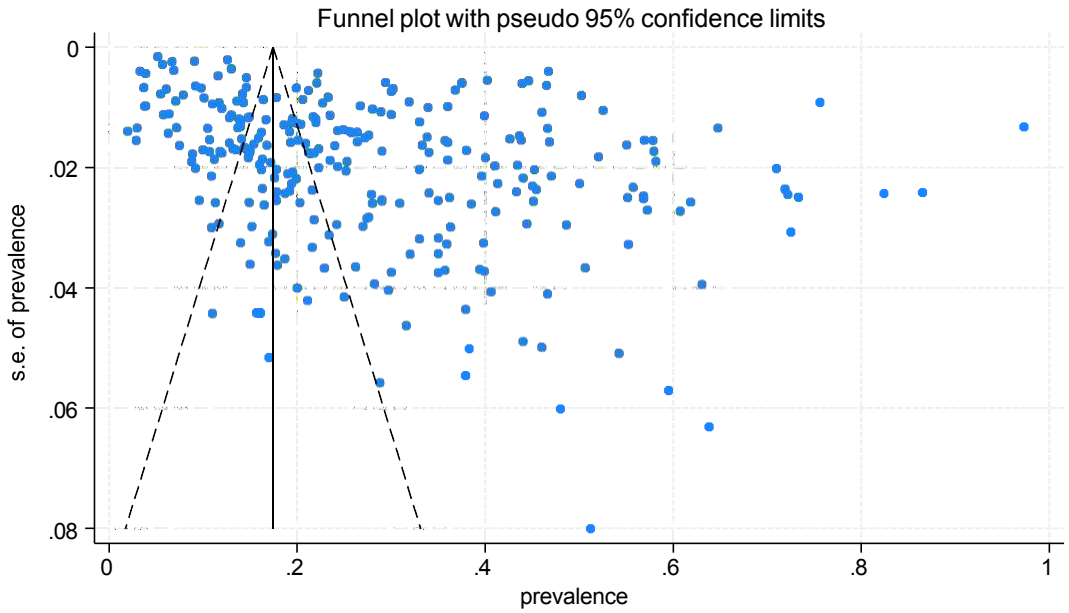
(k1) Self-Report Measures ***t*=8.17 *p*<0.001**



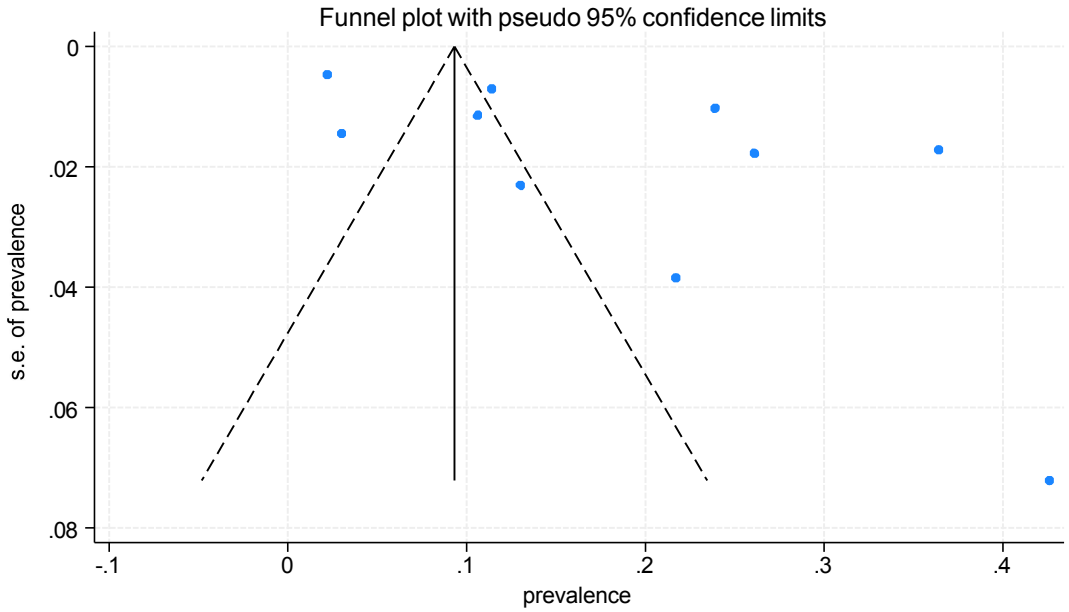
(k2) Self-Report Measures before COVID-19 ***t*=2.66 *p*=0.015**



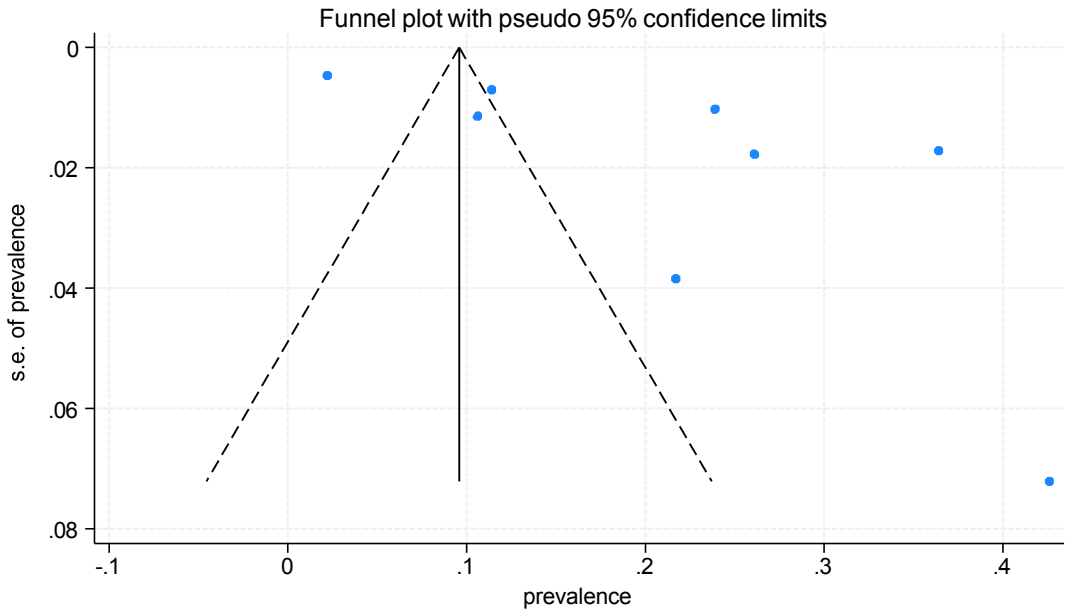
(k3) Self-Report Measures after the onset of COVID-19 ***t*=8.17 *p*<0.001**



(k4) Clinician-Administered Measures ***t*=2.33 *p*=0.492**

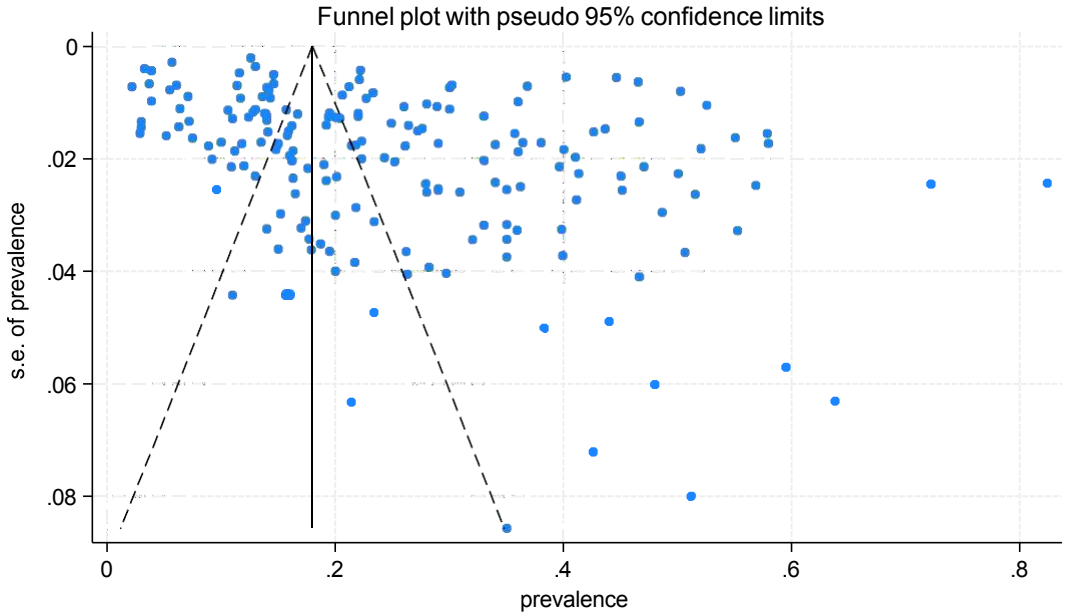


(k5) Clinician-Administered Measures after the onset of COVID-19 ***t*=2.67 *p*=0.037**

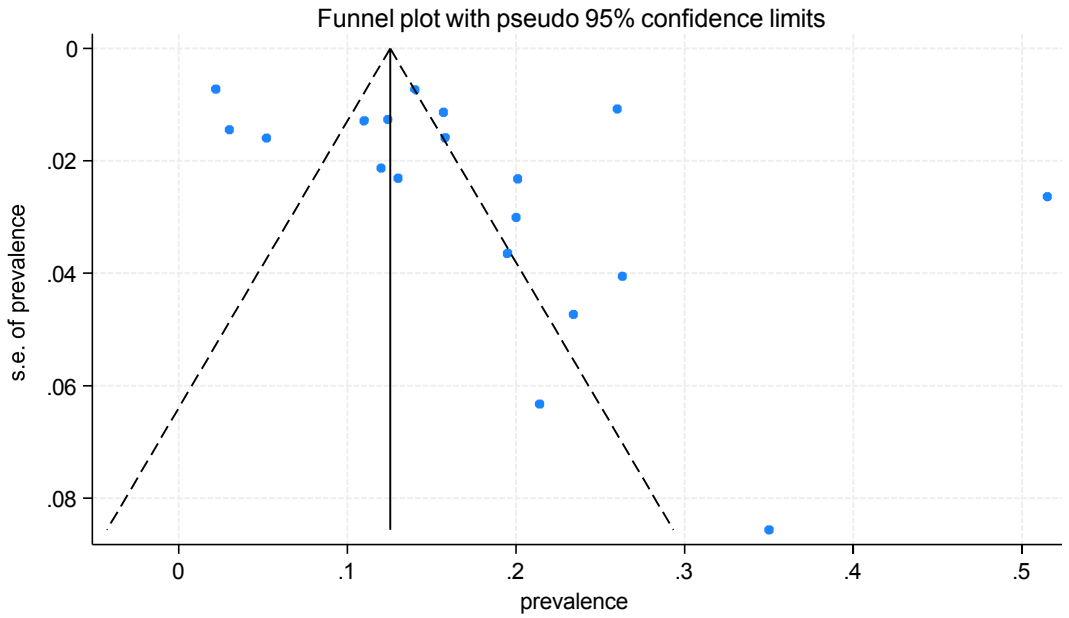


(l1-l6) The funnel plots of PTSD prevalence by country income levels.

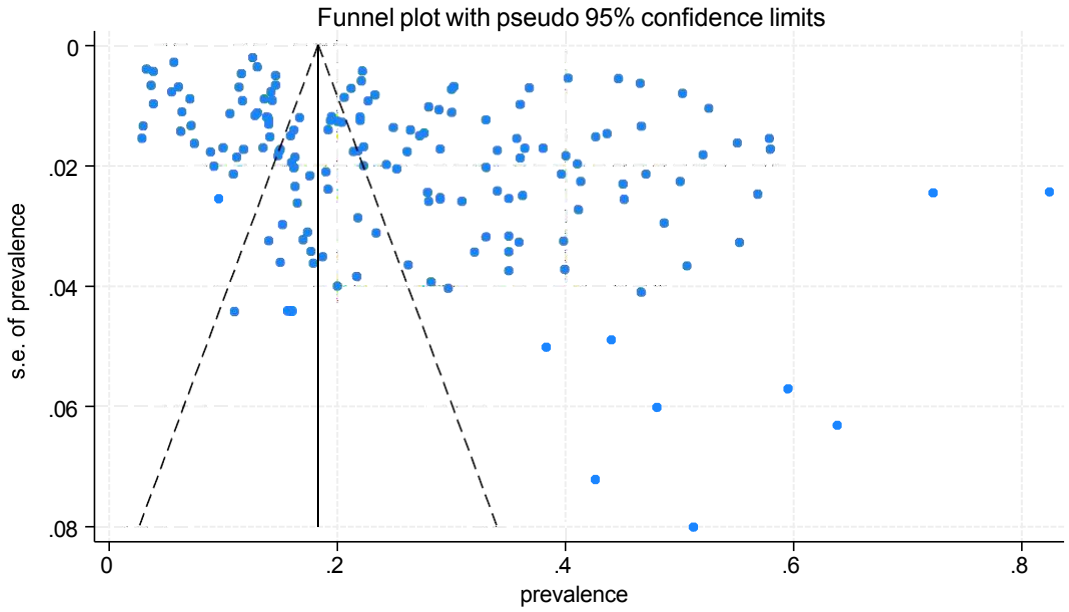
(l1) high-income countries ***t*=5.24 *p*<0.001**



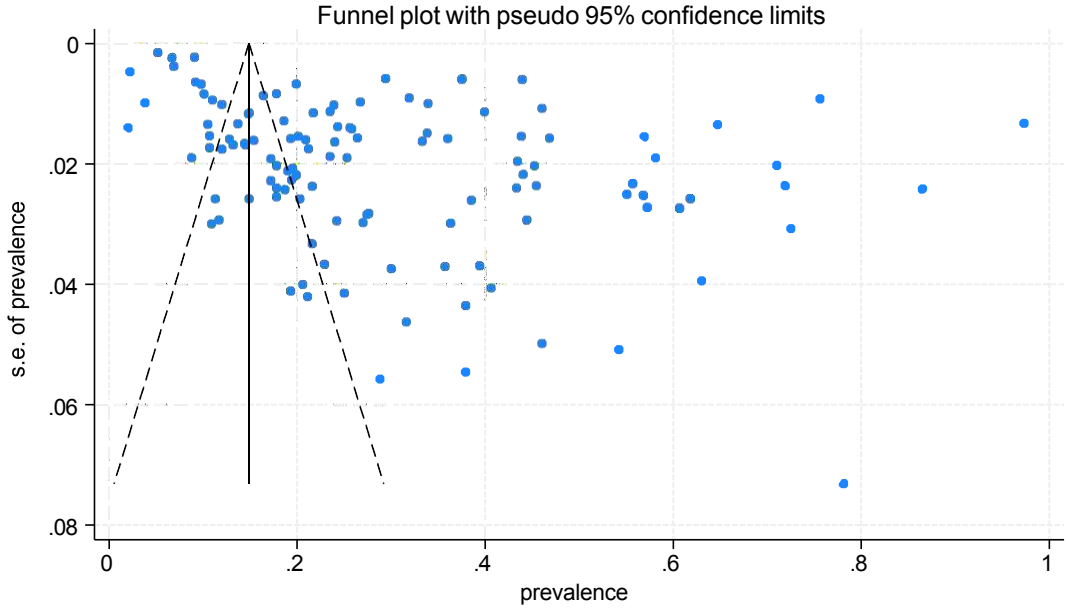
(I2) high-income countries before COVID-19 ***t*=1.83 *p*=0.085**



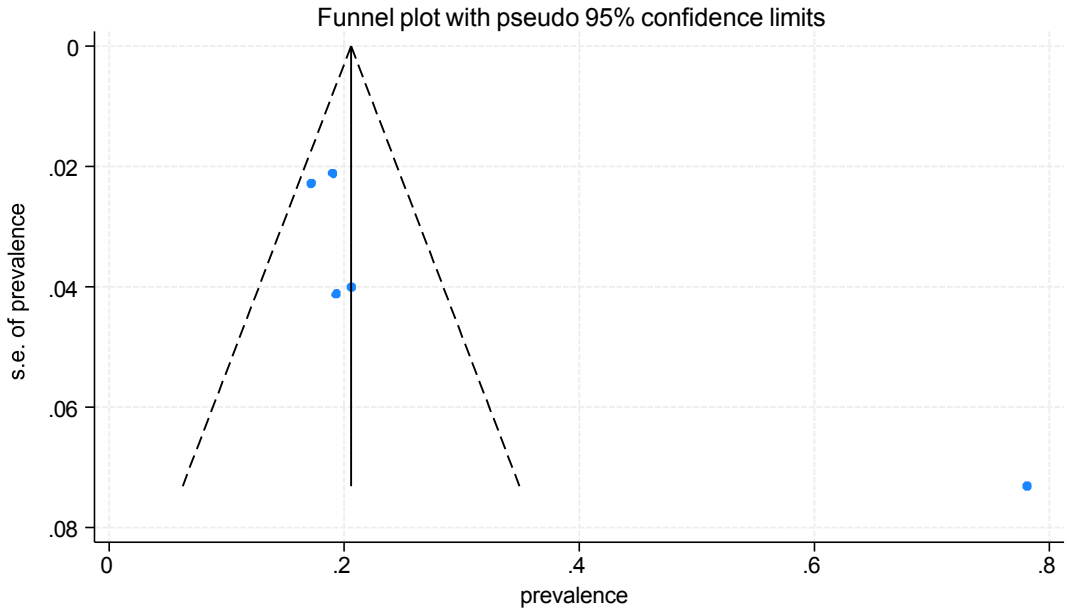
(I3) high-income countries after the onset of COVID-19 ***t*=5.32 *p*<0.001**



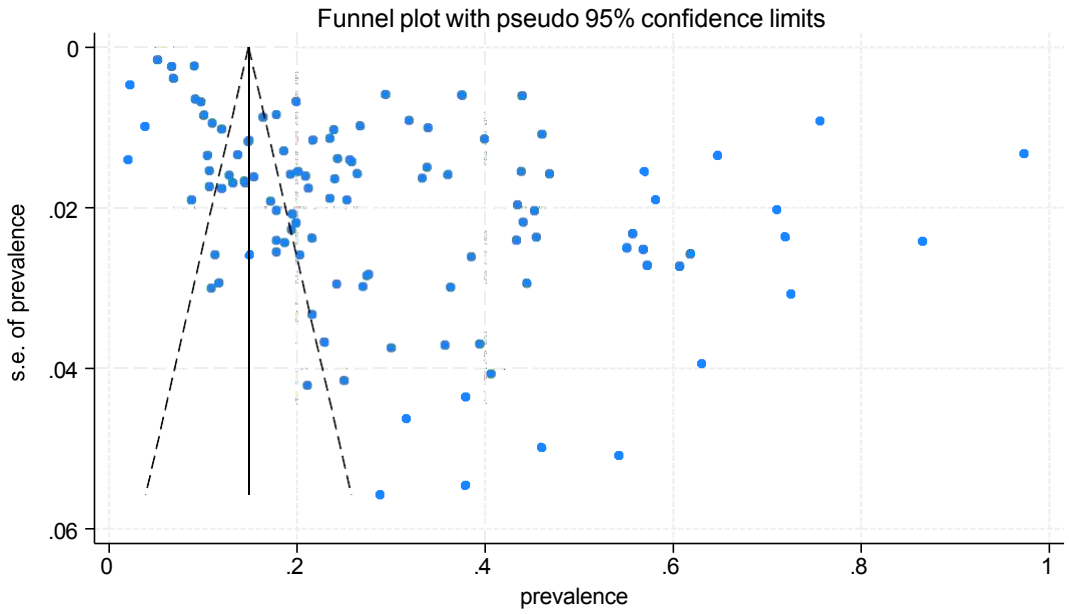
(I4) low- and middle-income countries ***t*=7.28 *p*<0.001**



(I5) low- and middle-income countries before COVID-19 ***t*=2.14 *p*=0.122**

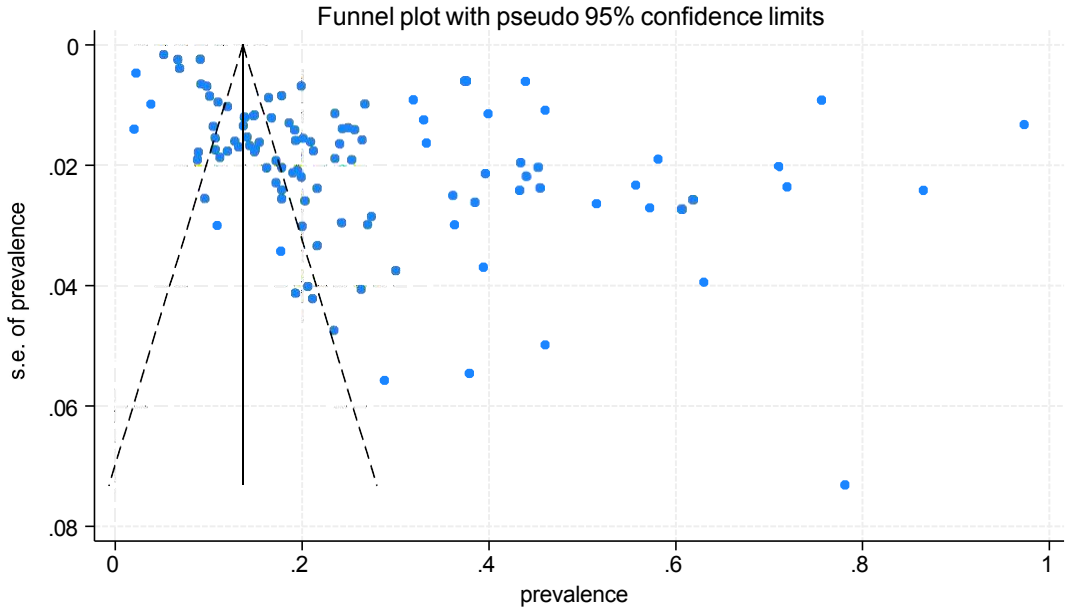


(I6) low- and middle-income countries after the onset of COVID-19 *t*=7.26 *p*<0.001

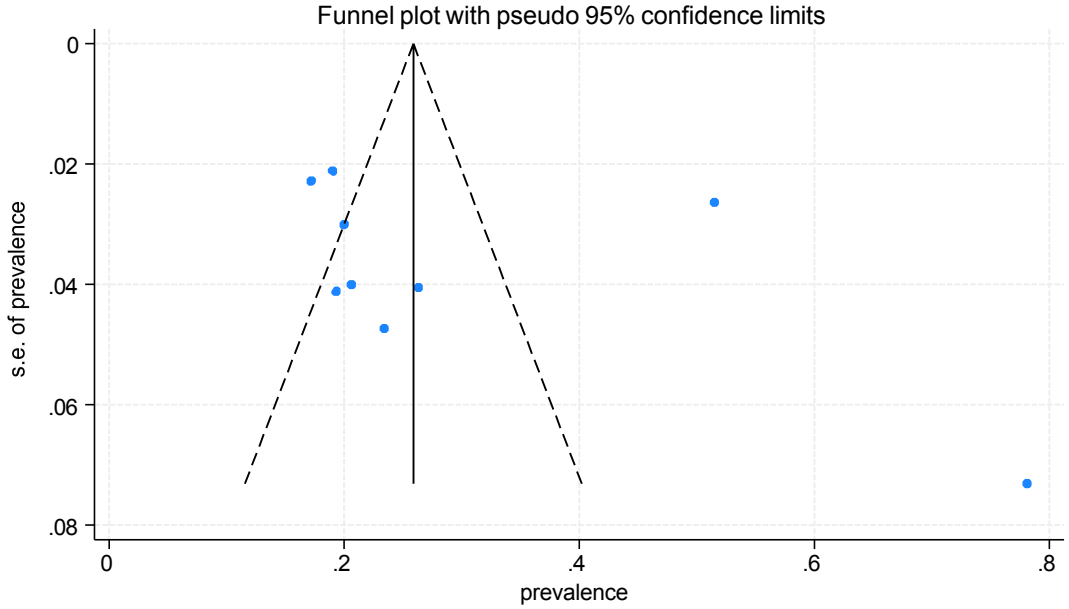


(m1-m12) The funnel plots of PTSD prevalence by continent.

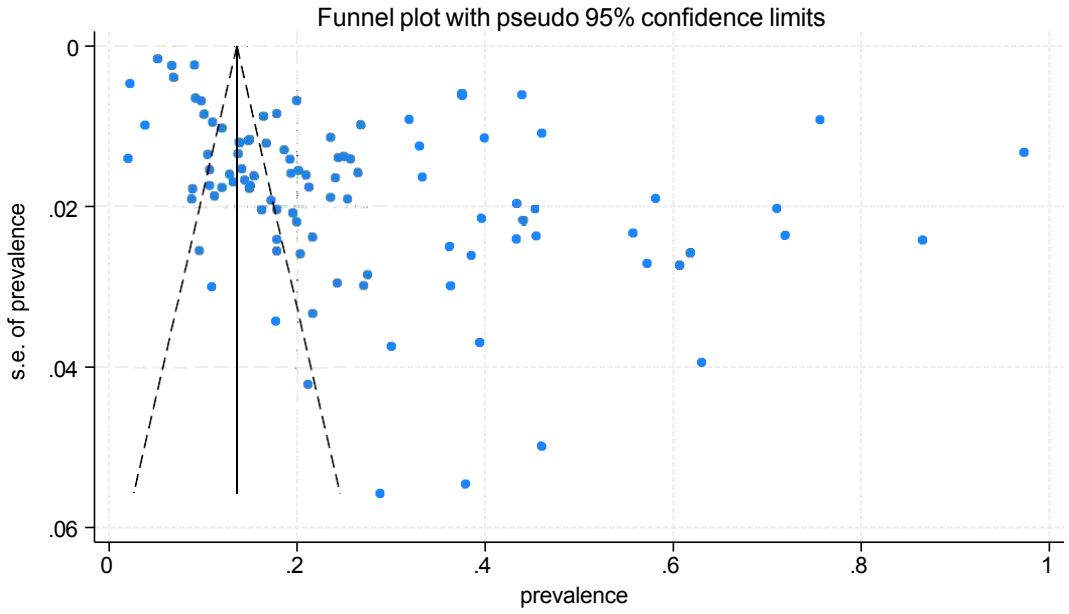
(m1) Asia *t*=6.46 *p*<0.001



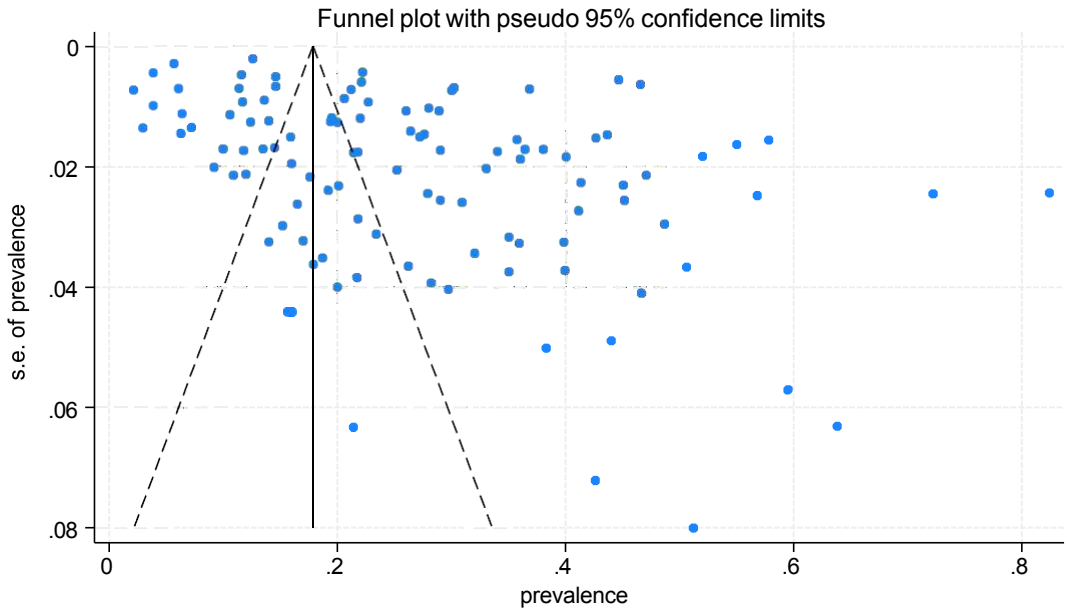
(m2) Asia before COVID-19 ***t*=0.96 *p*=0.371**



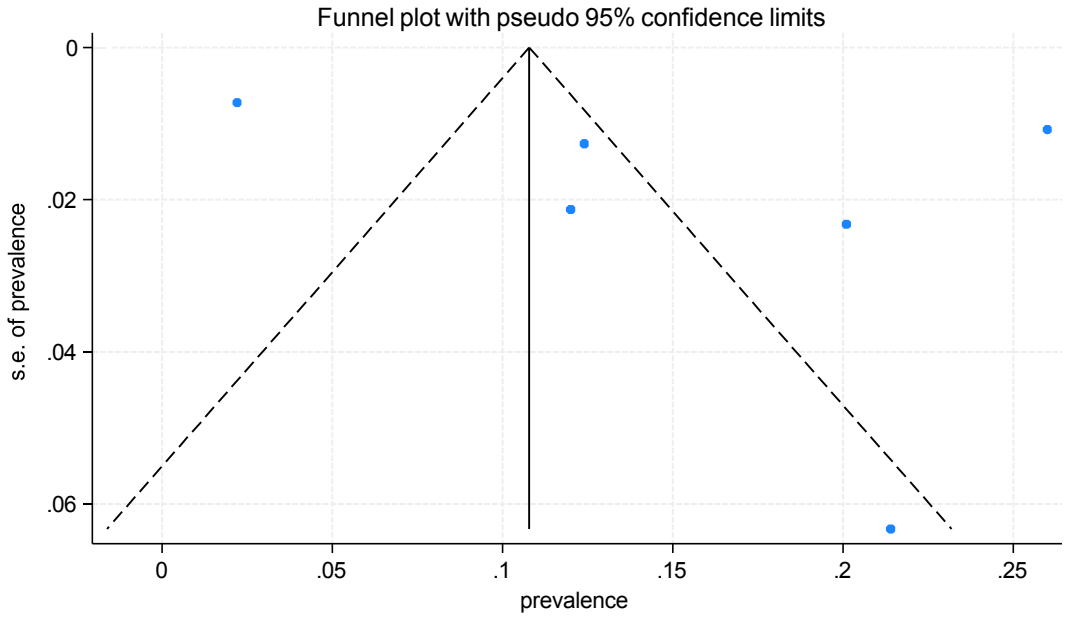
(m3) Asia after the onset of COVID-19 ***t*=6.31 *p*<0.001**



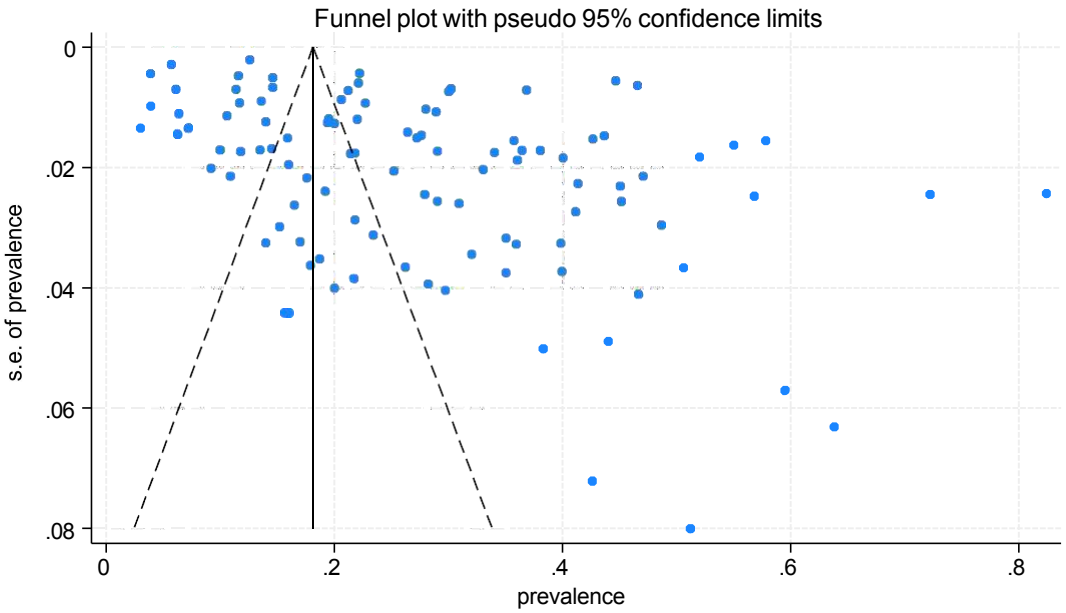
(m4) Europe ***t*=4.84 *p*<0.001**



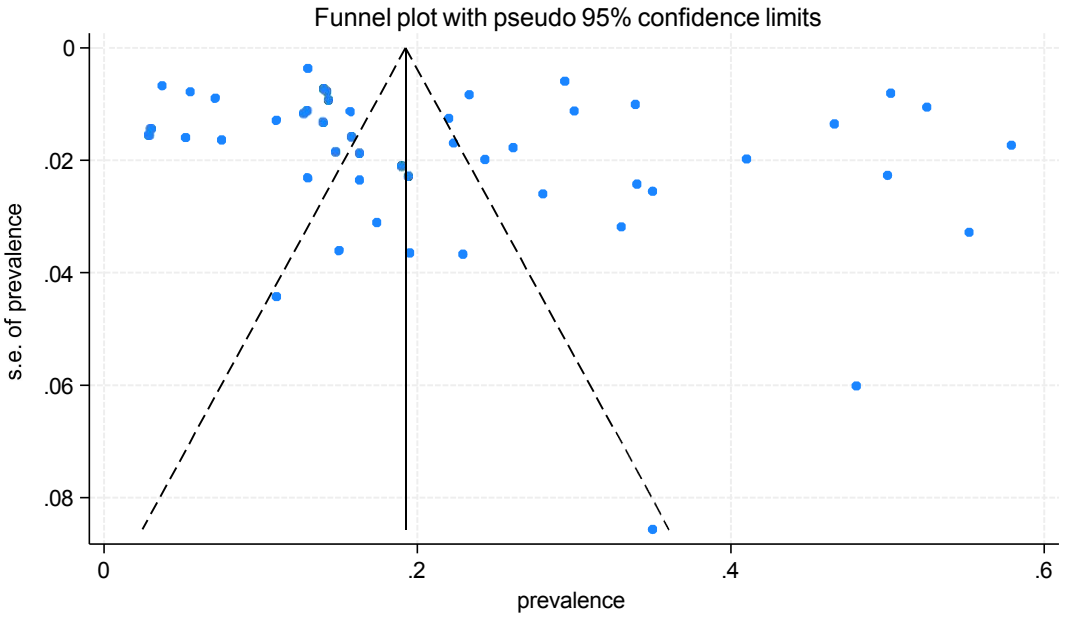
(m5) Europe before COVID-19 ***t*=0.94 *p*=0.402**



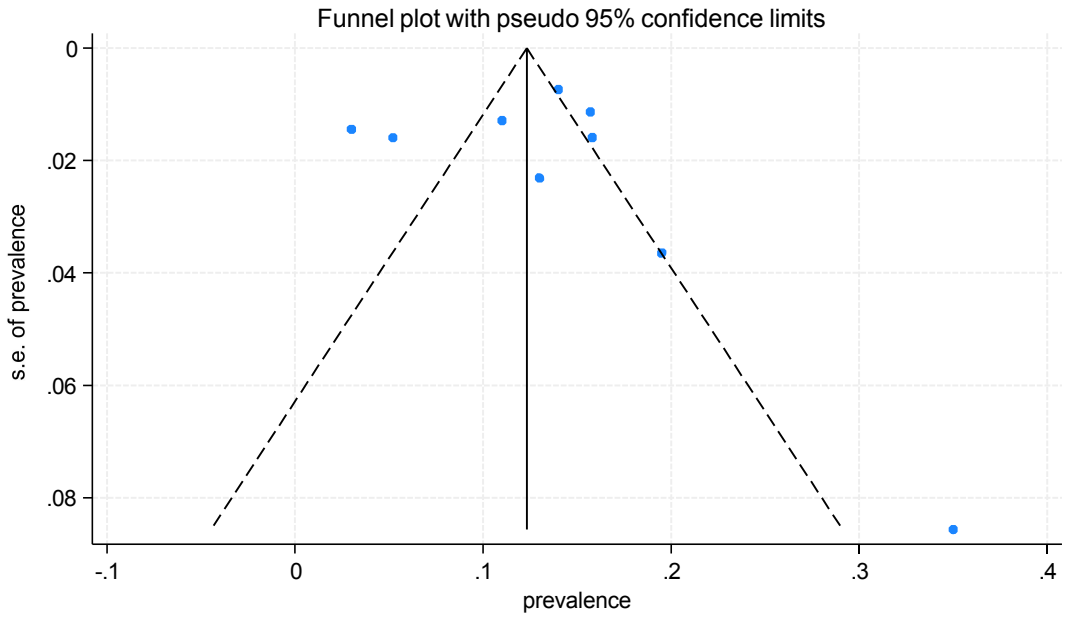
(m6) Europe after the onset of COVID-19 ***t*=4.92 *p*<0.001**



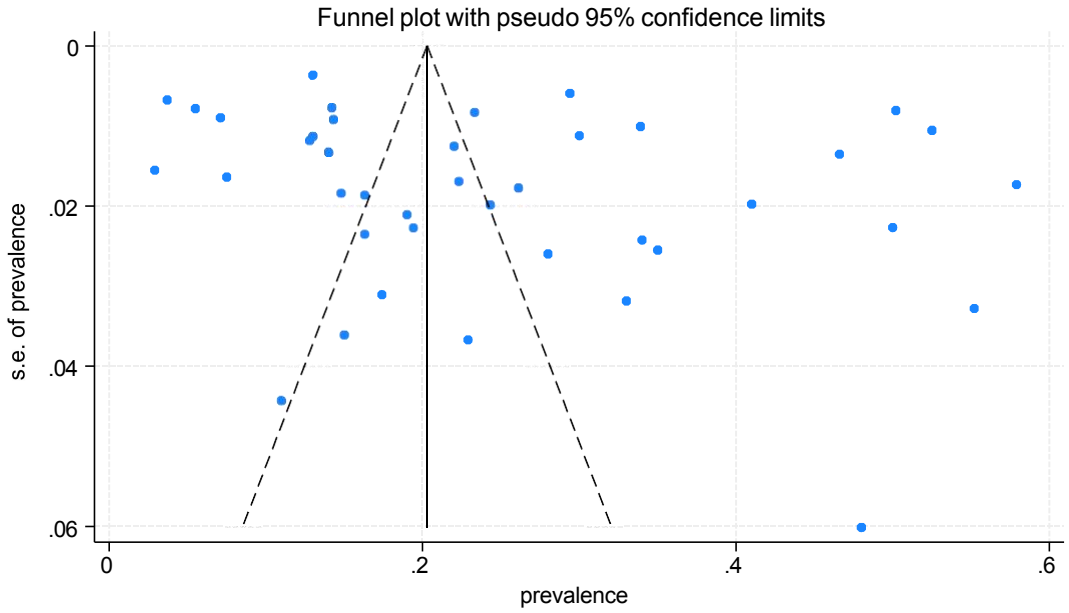
(m7) North America ***t*=1.52 *p*=0.136**



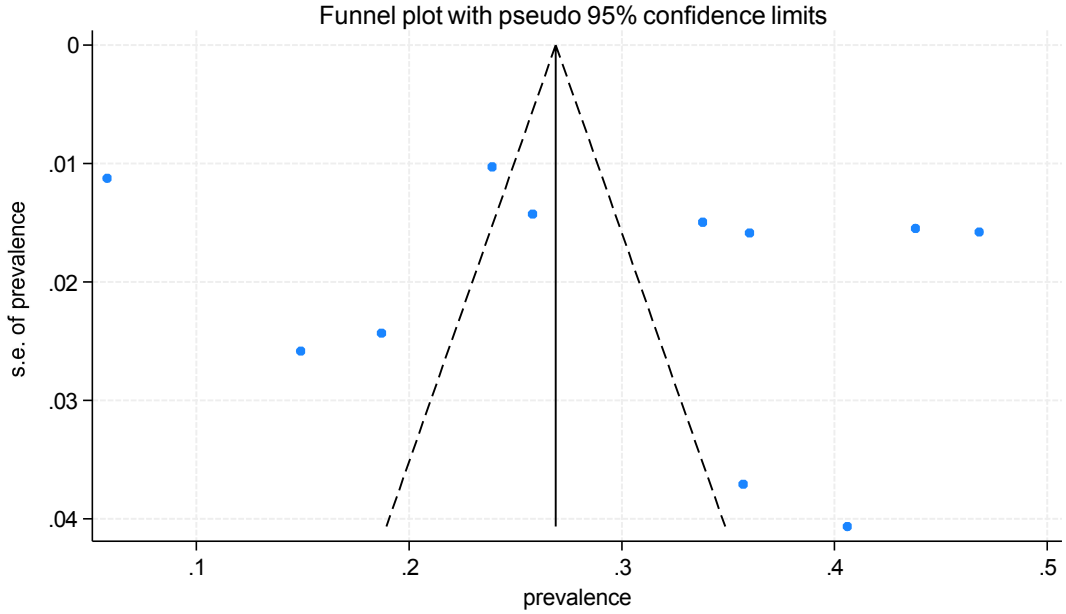
(m8) North America before COVID-19 ***t*=0.08 *p*=0.939**



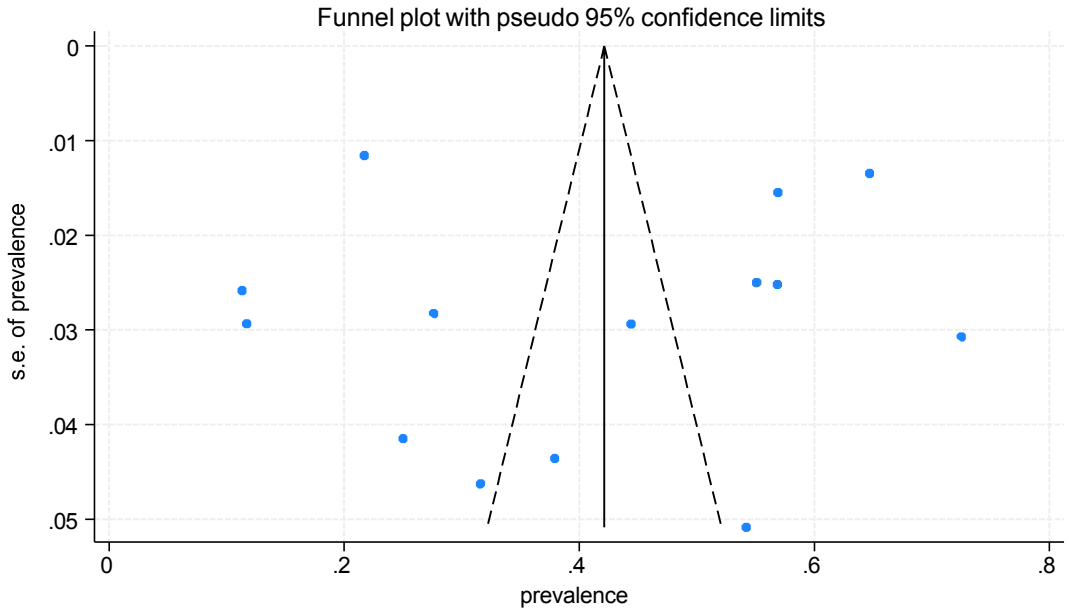
(m9) North America after the onset of COVID-19 ***t*=1.76 *p*=0.086**



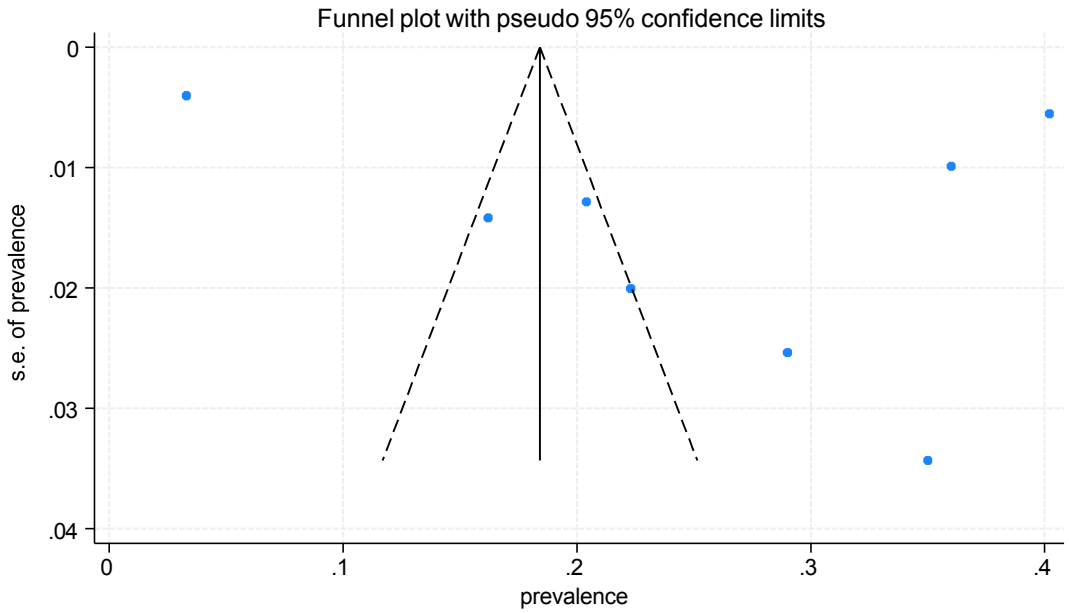
***(m10) South America after the onset of COVID-19** ***t*=0.89 *p*=0.397**



***(m11) Africa after the onset of COVID-19** ***t*=-0.14 *p*=0.894**

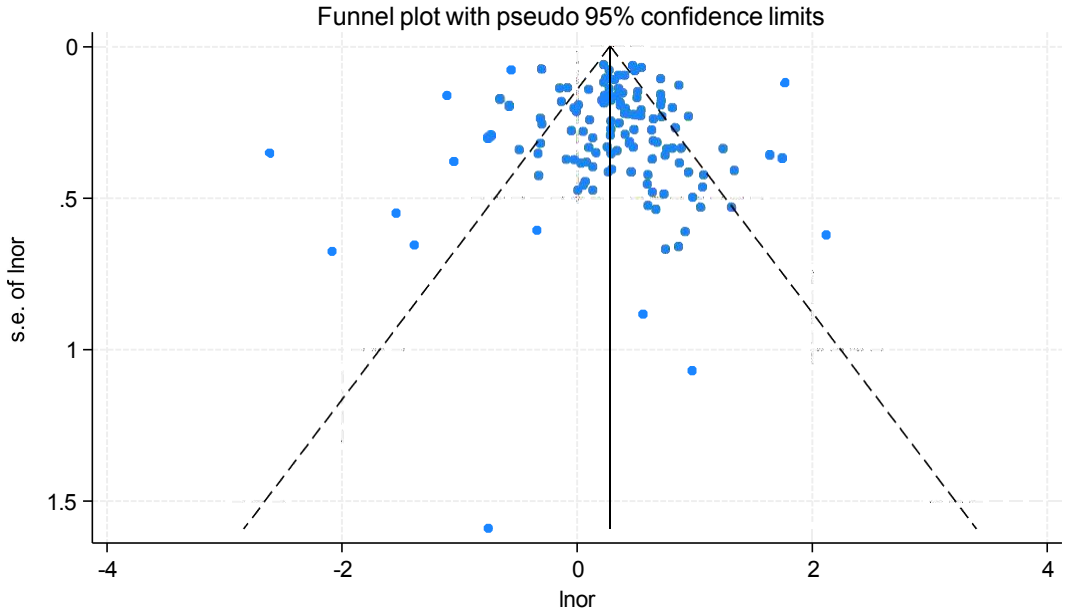


***(m12) Australia after the onset of COVID-19 *t*=0.83 *p*=0.439**

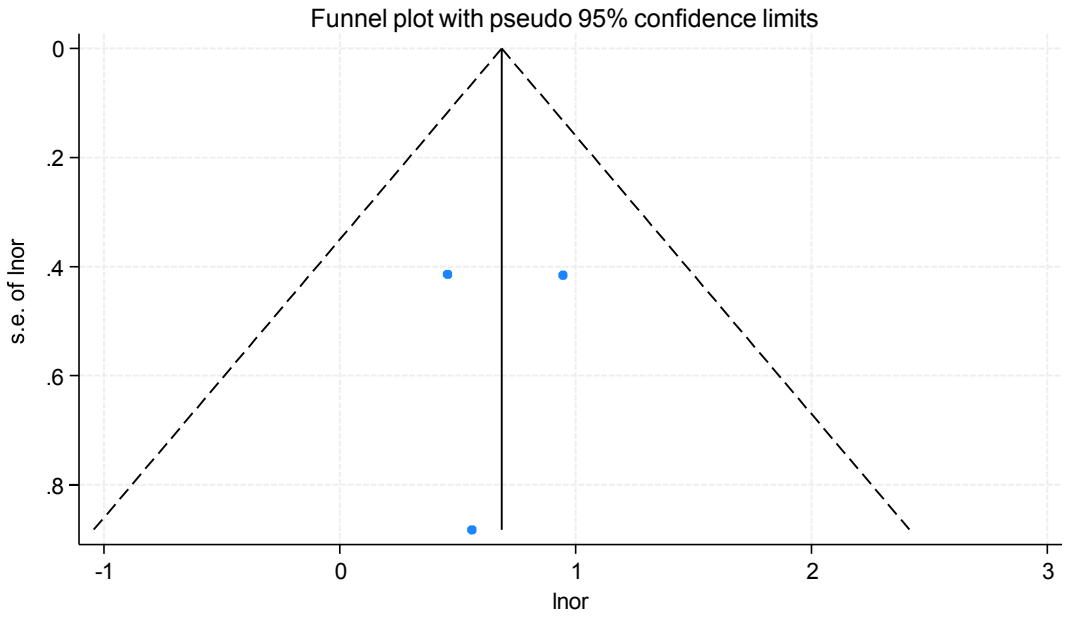


(n-ag) The funnel plots of factors associated with PTSD (overall, before and after the onset of COVID-19).

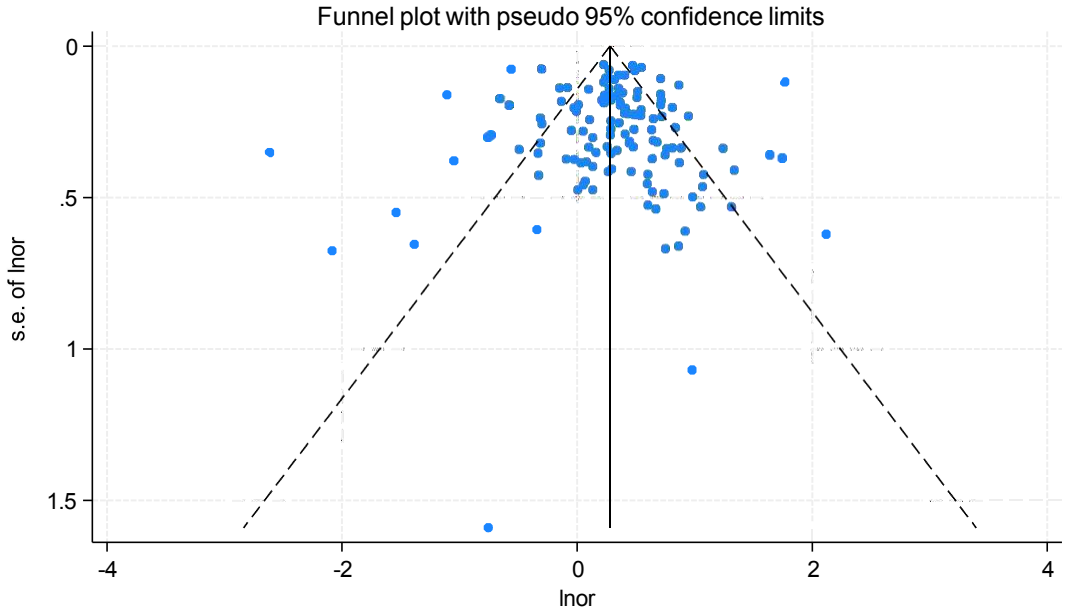
(n1) By sex: female (ref: male) *t*=0.49 *p*=0.622



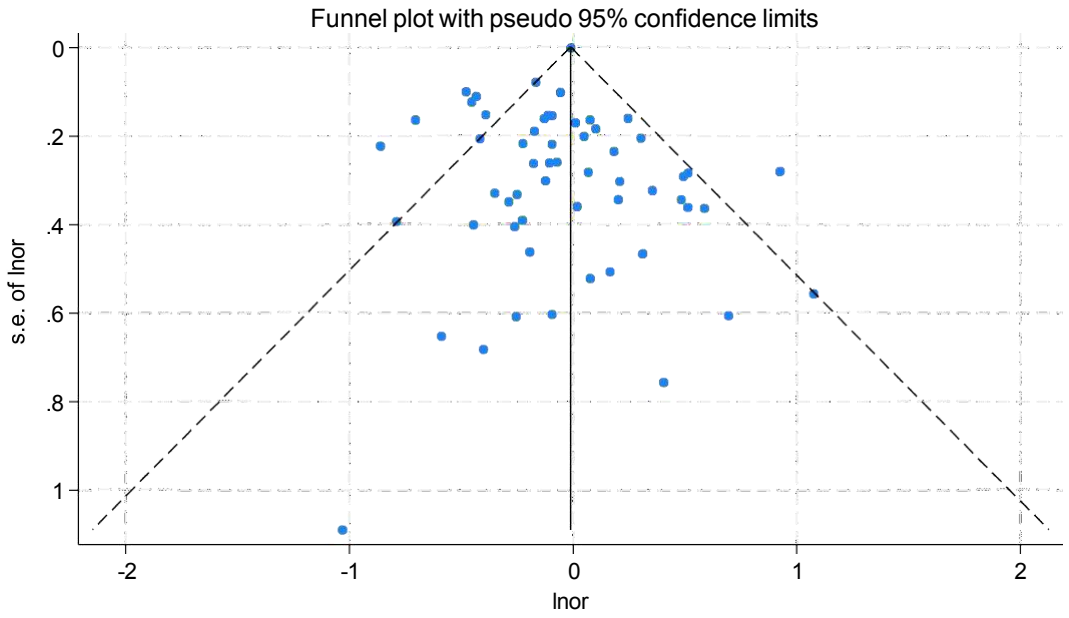
(n2) By sex: female (ref: male) before COVID-19 ***t*=-0.18 *p*=0.889**



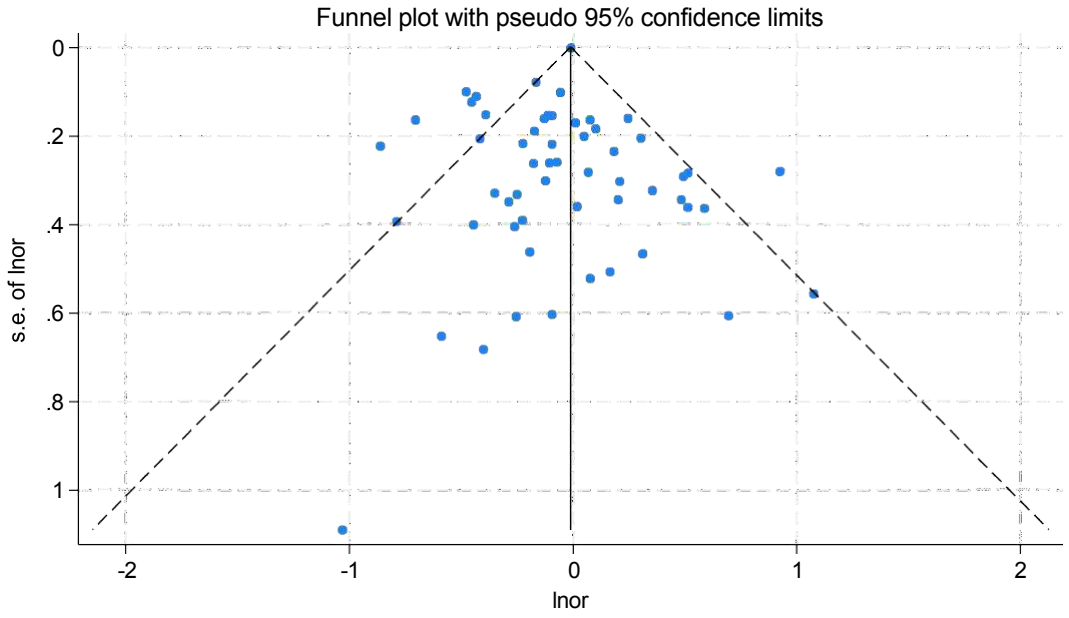
(n3) By sex: female (ref: male) after the onset of COVID-19
***t*=0.40 *p*=0.686**



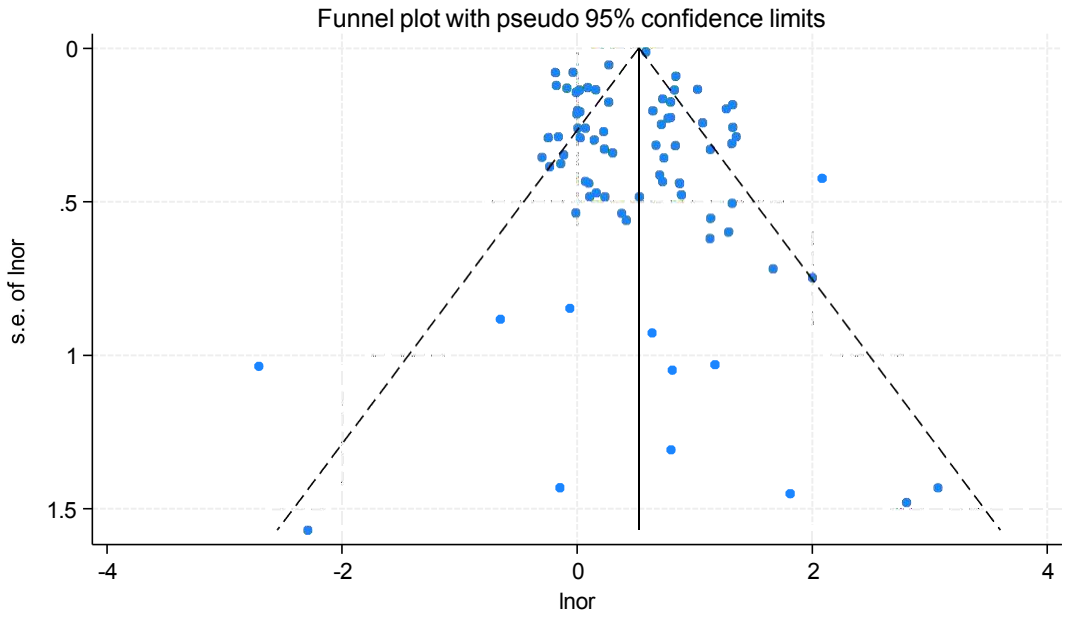
(o1) By age: ≥40 (ref: <40) ***t*=-1.48 *p*=0.146**



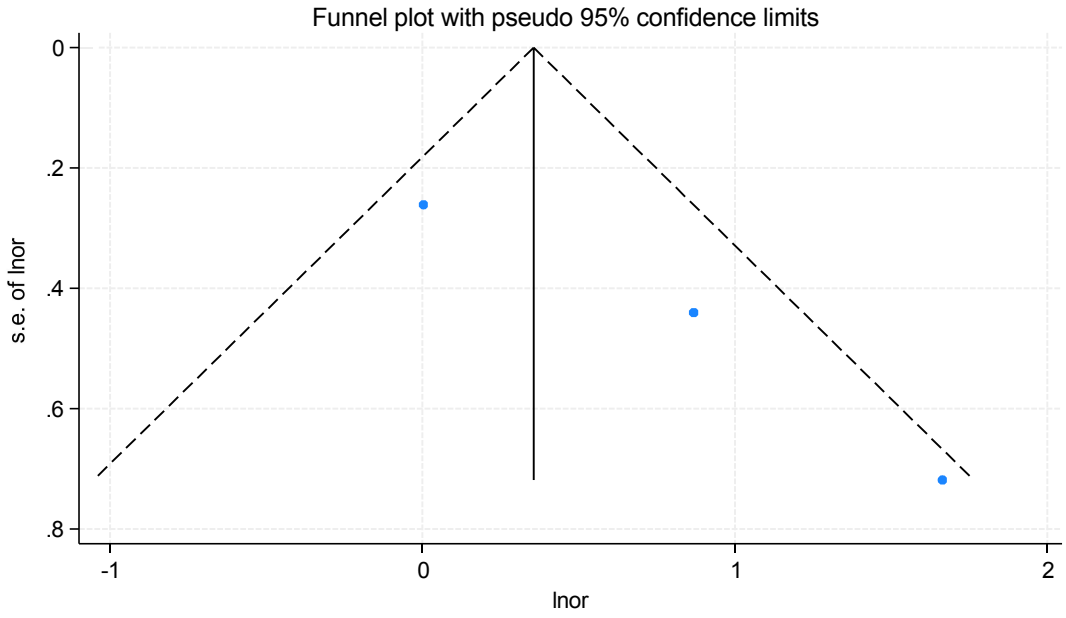
(o2) By age: ≥40 (ref: <40) after the onset of COVID-19 ***t*=-1.25 *p*=0.218**



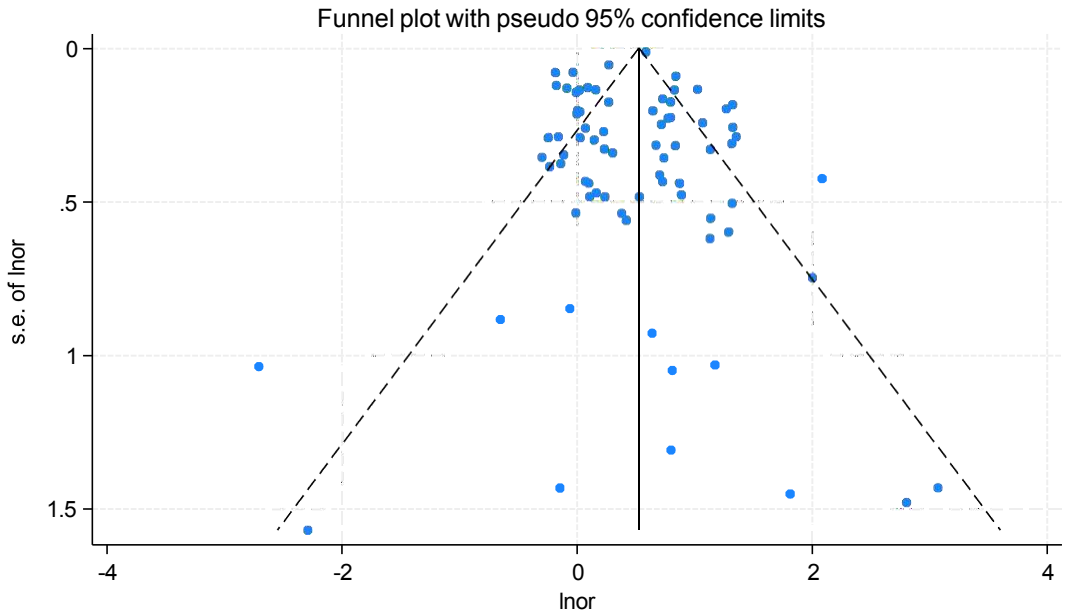
(p1) By occupation: Nurse (ref: doctor) ***t*=-1.26 *p*=0.210**



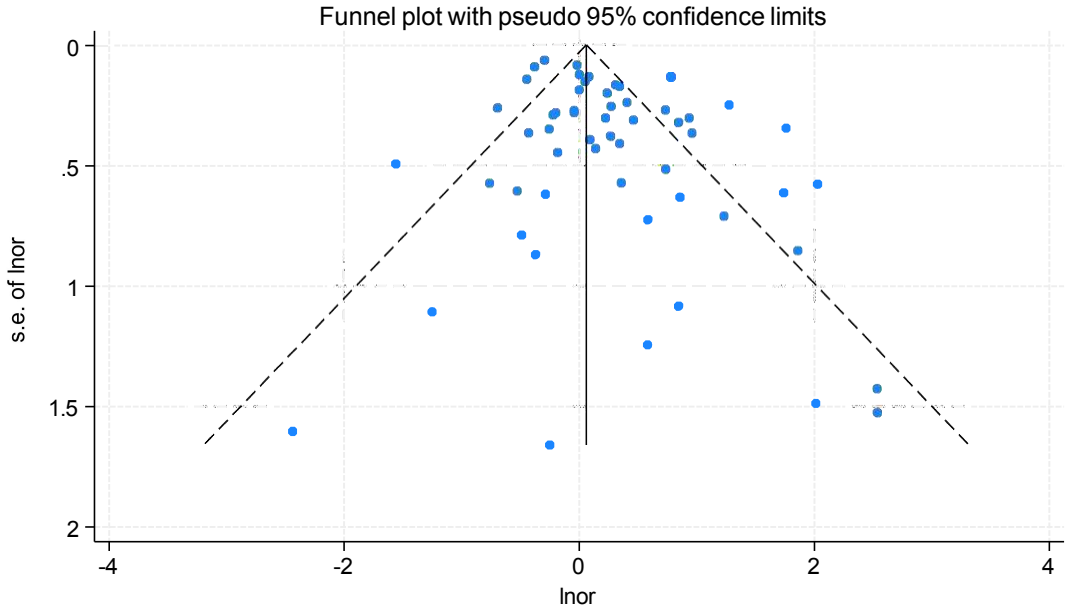
(p2) By occupation: Nurse (ref: doctor) before COVID-19 ***t*=6.43 *p*=0.197**



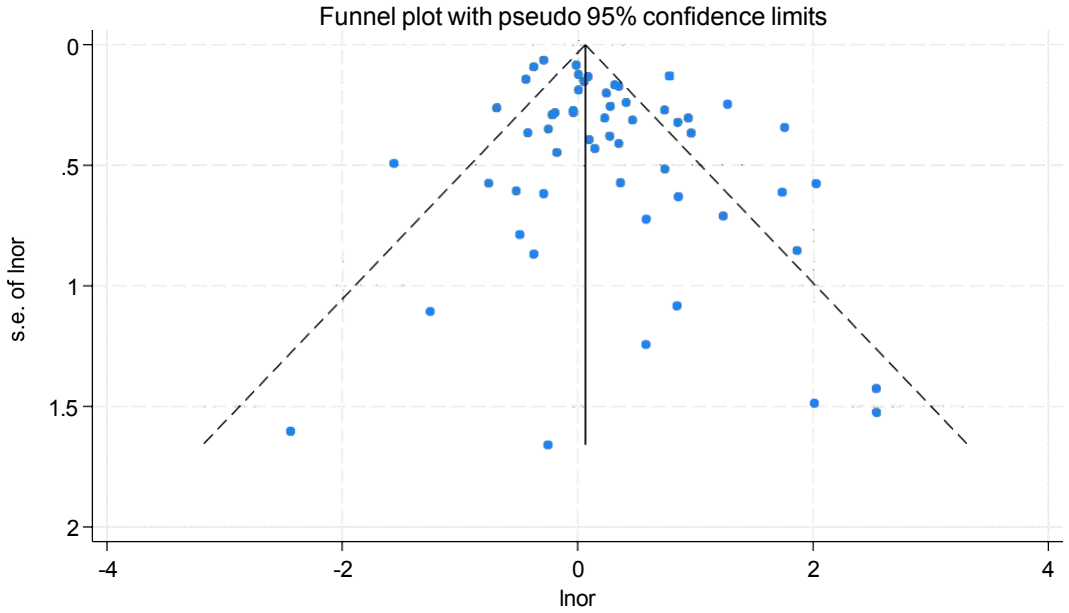
(p3) By occupation: Nurse (ref: doctor) after the onset of COVID-19 *t*=-1.30 *p*=0.197



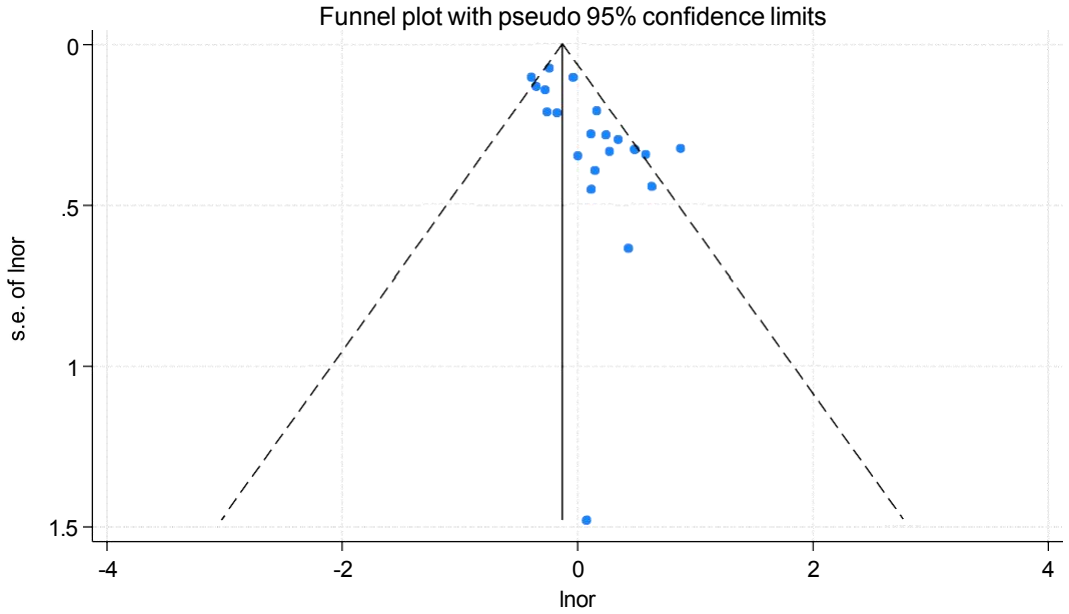
(p4) By occupation: other occupation (ref: doctor) *t*=2.61 *p*=0.012



(p5) By occupation: other occupation (ref: doctor) after the onset of COVID-19 ***t*=2.53 *p*=0.014**



(q1) By education: below or equal to high school (ref: graduate). *t*=4.61 *p*<0.001



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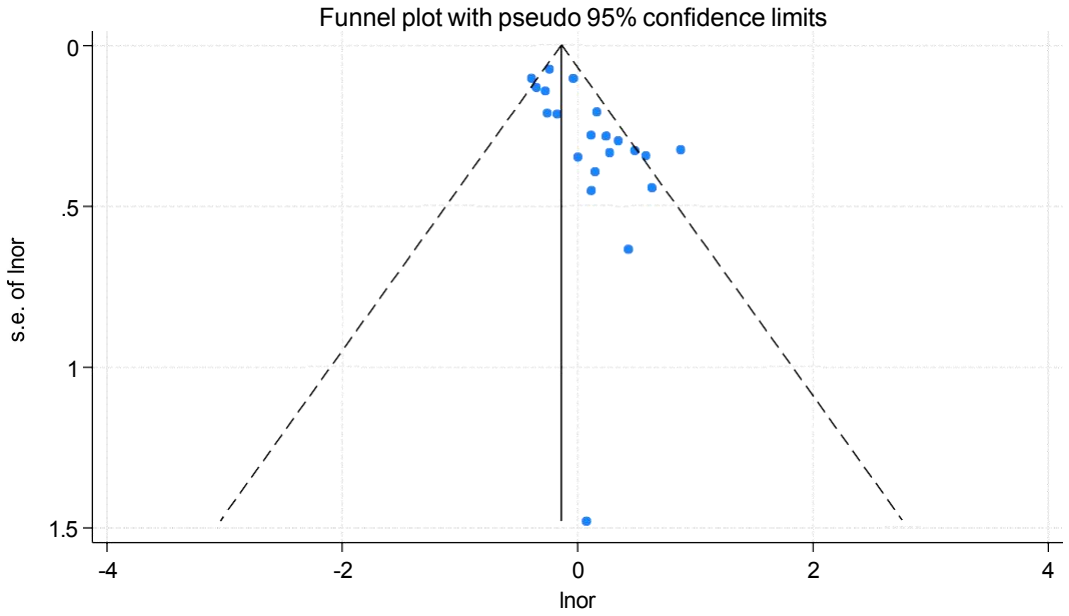
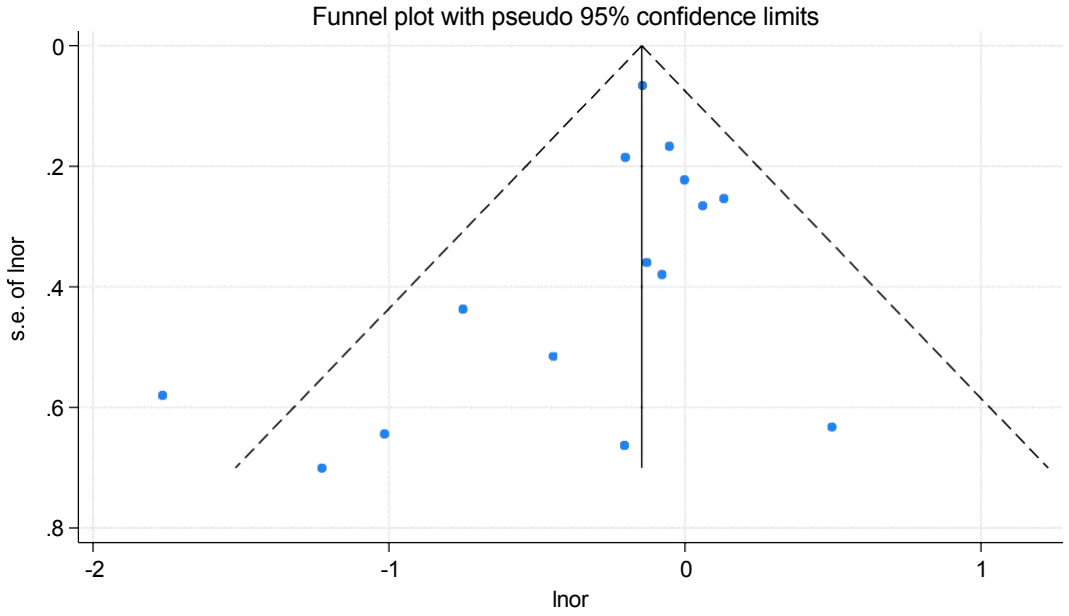
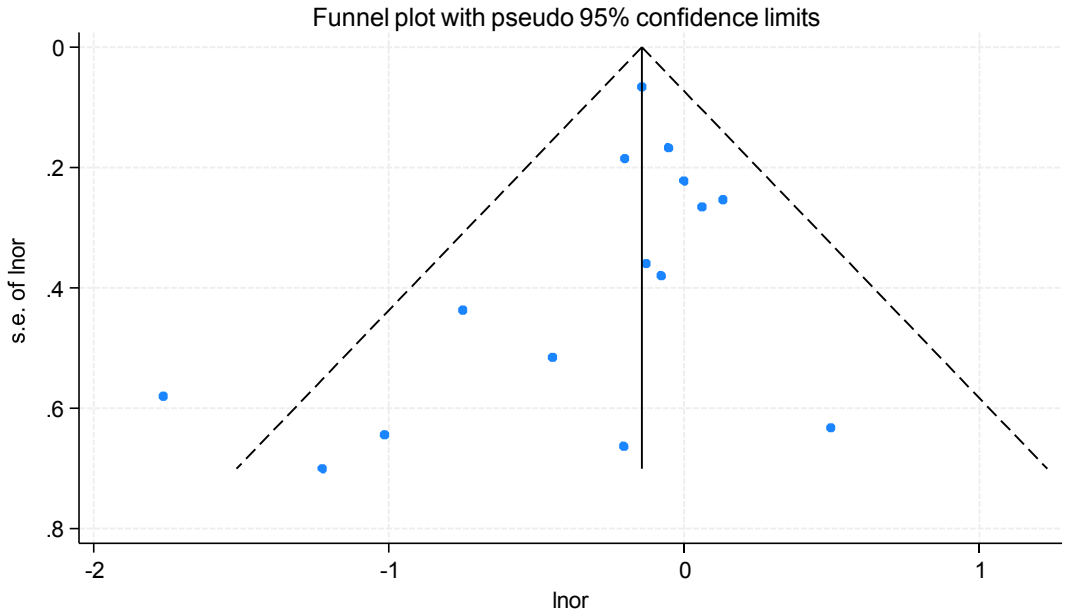


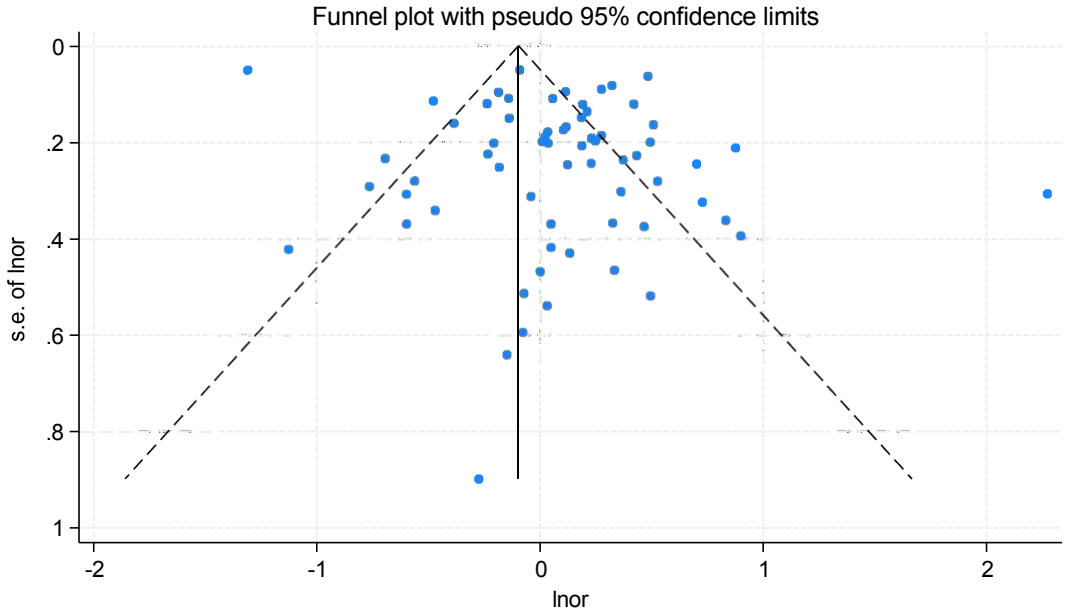
(q3) By education: post-graduate (ref: graduate) *t*=-1.49 *p*=0.157



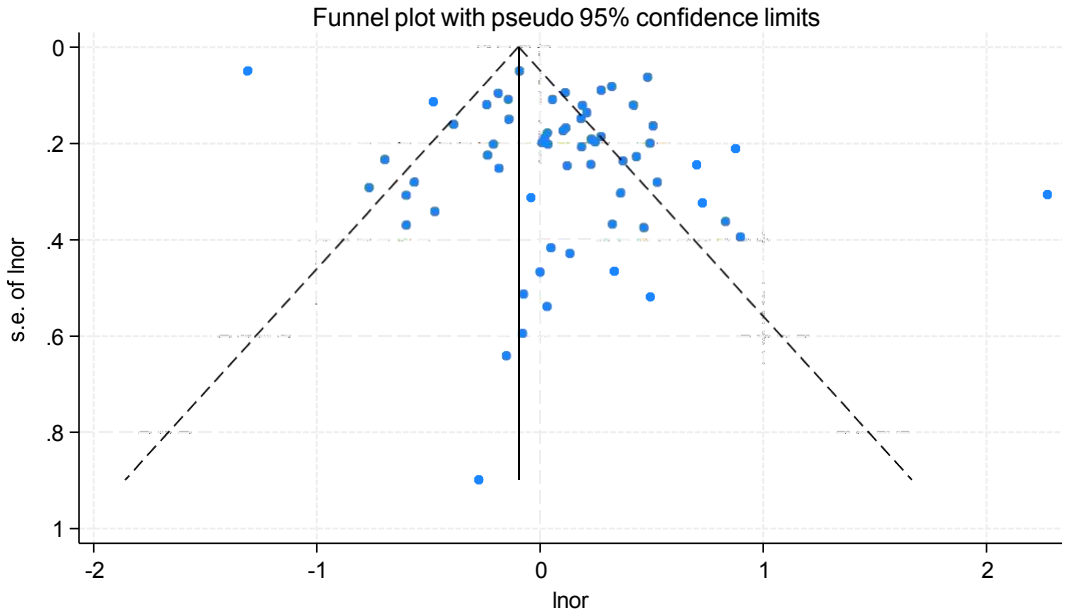
(q4) By education: post-graduate (ref: graduate) after the onset of COVID-19 *t*=-1.35 *p*=0.200



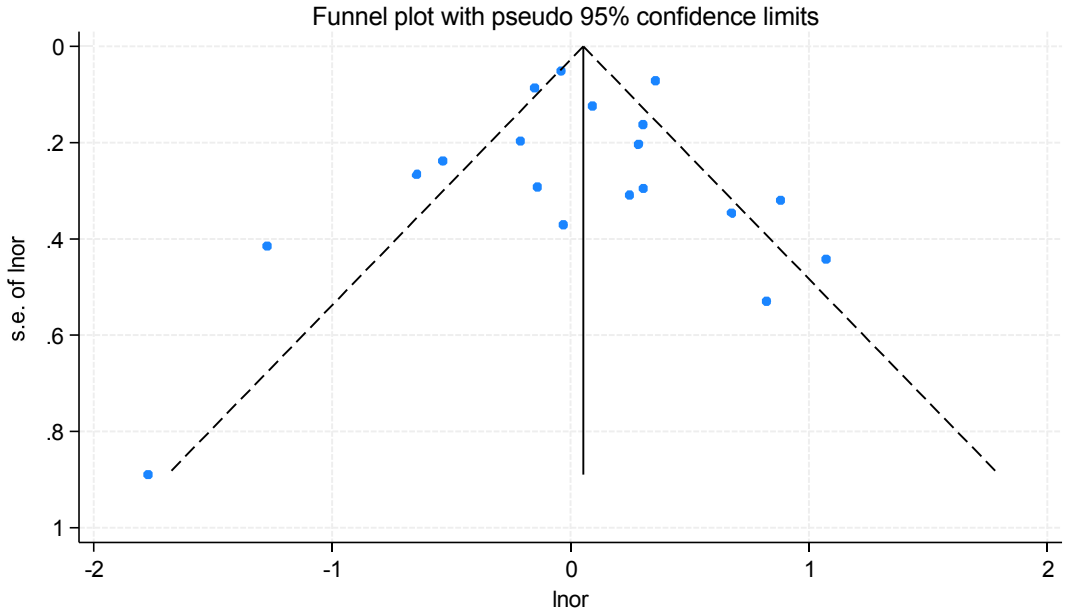
(r1) By marriage status: married (ref: unmarried) *t*=2.50 *p*=0.015



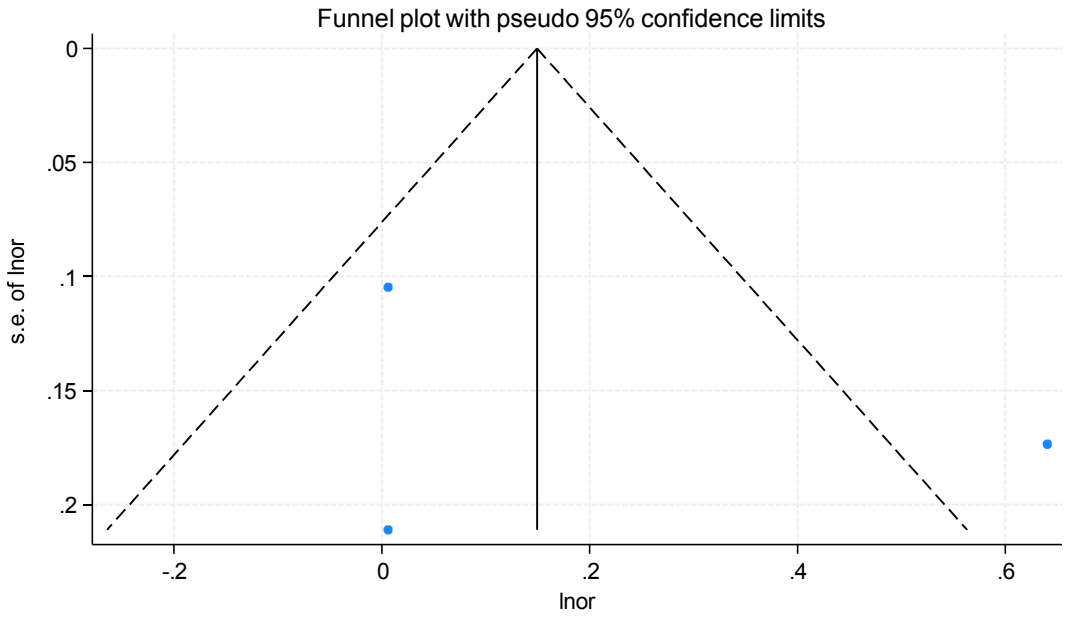
(r2) By marriage status: married (ref: unmarried) after the onset of COVID-19 *t*=2.63 *p*=0.011



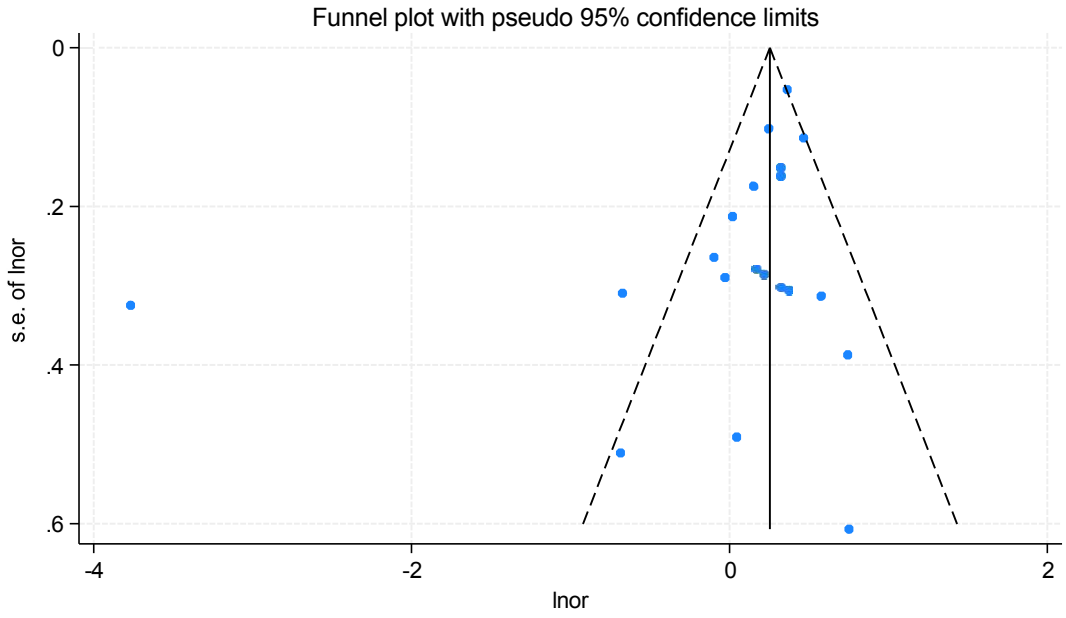
***(s) By having children (ref: no) *t*=0.01 *p*=0.996**



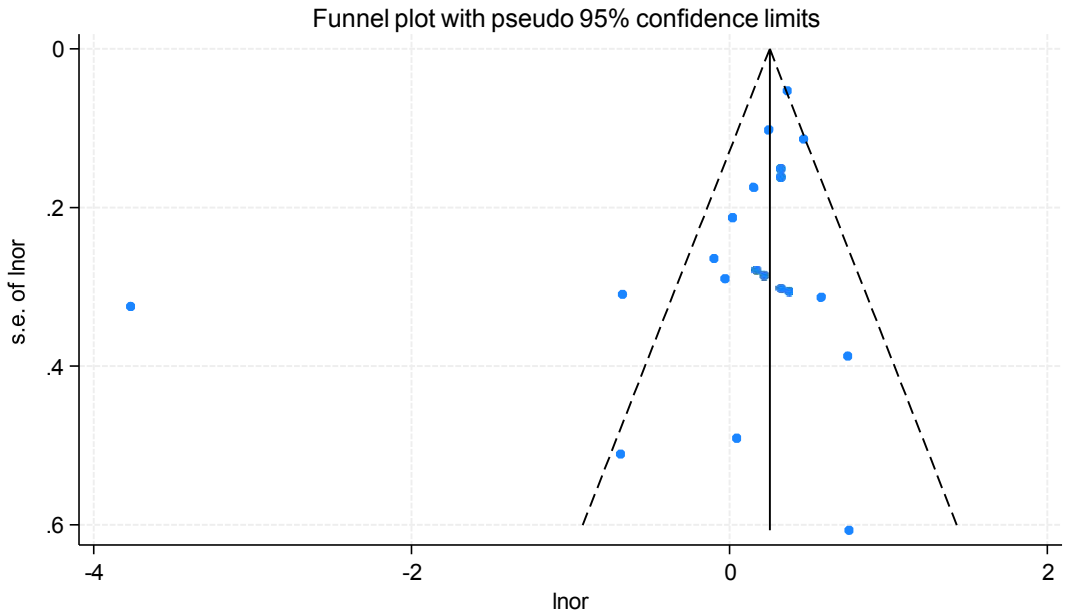
***(t) By average weekly hours worked: ≥40 (ref: <40)** ***t*=0.54 *p*=0.686**



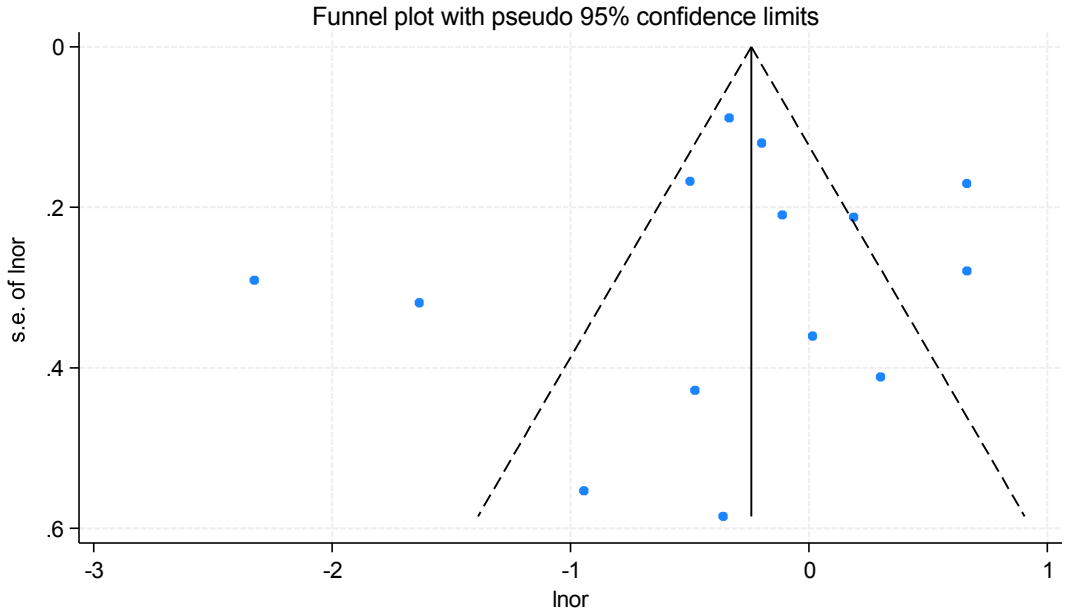
(u1) By years of practice: ≥10 (ref: <10) ***t*=-1.65 *p*=0.115**



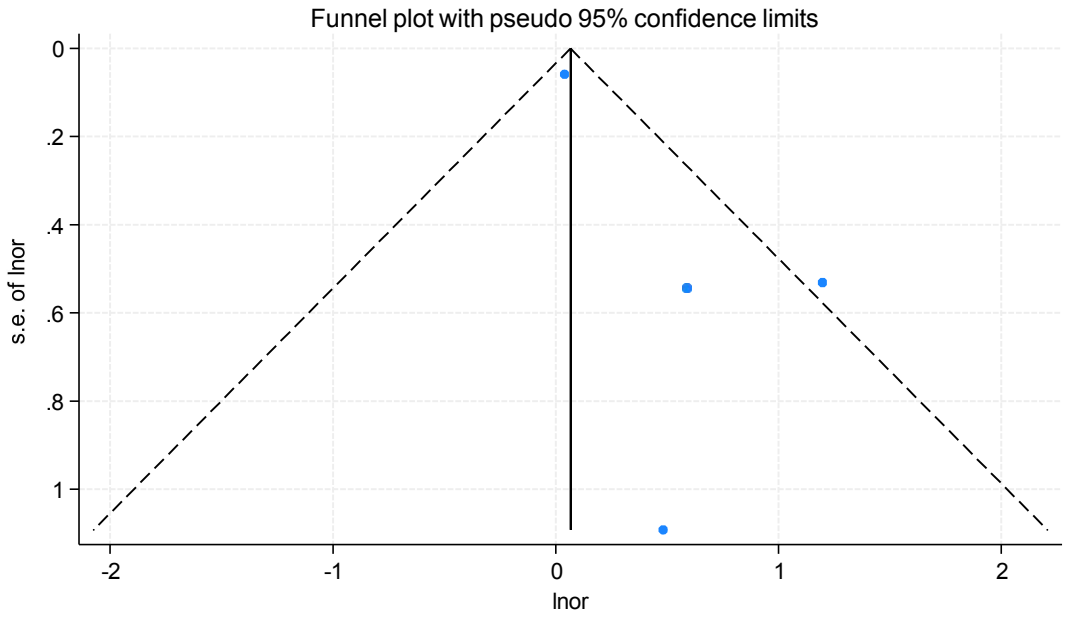
(u2) By years of practice: ≥10 (ref: <10) after the onset of COVID-19 *t*=-1.68 *p*=0.110



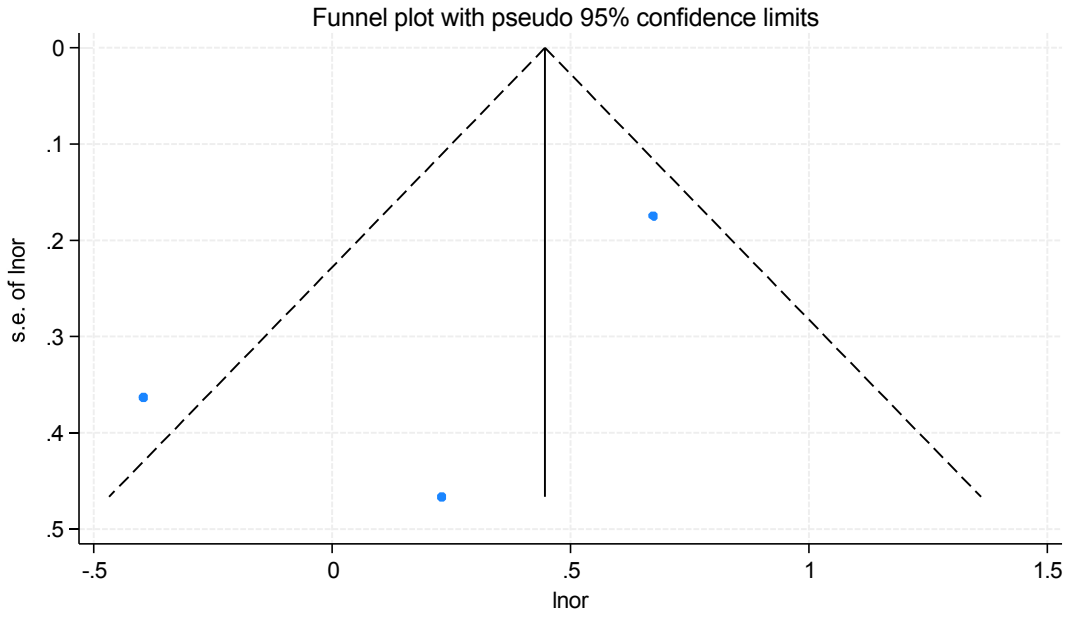
***(v) By income: high (ref: low)** ***t*=-0.43 *p*=0.673**



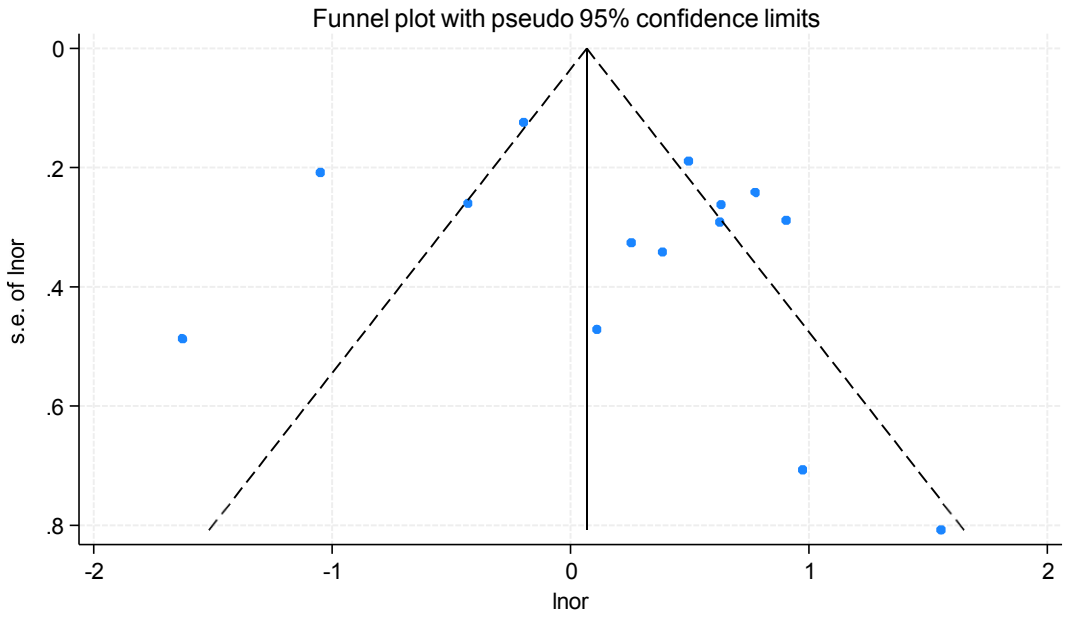
***(w) By smoking or not: yes (ref: no)** ***t*=2.91 *p*=0.062**



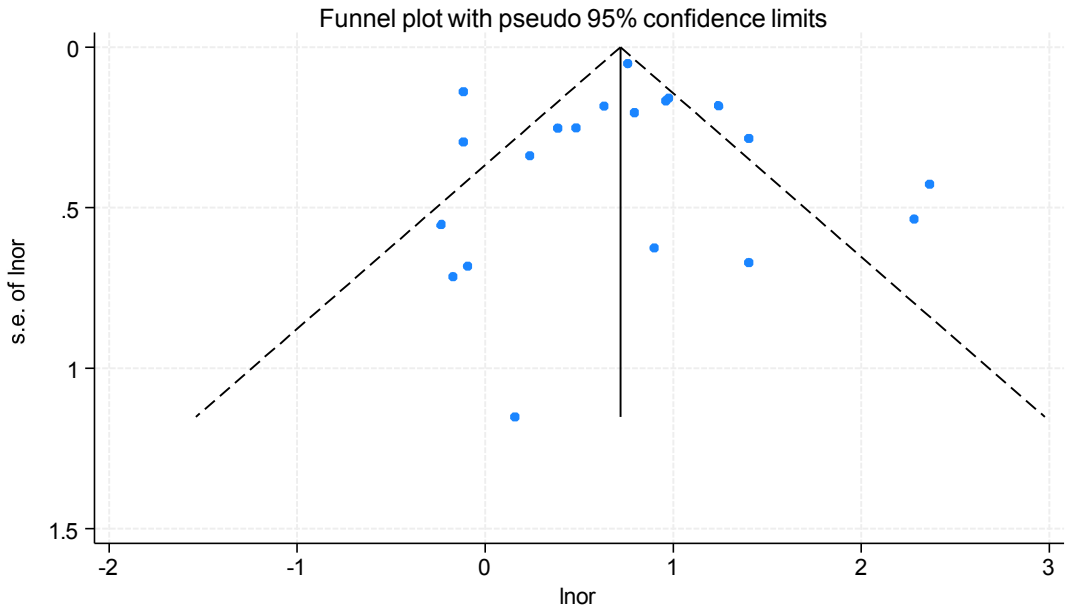
***(x) By drinking (ref: no)** ***t*=-1.30 *p*=0.418**



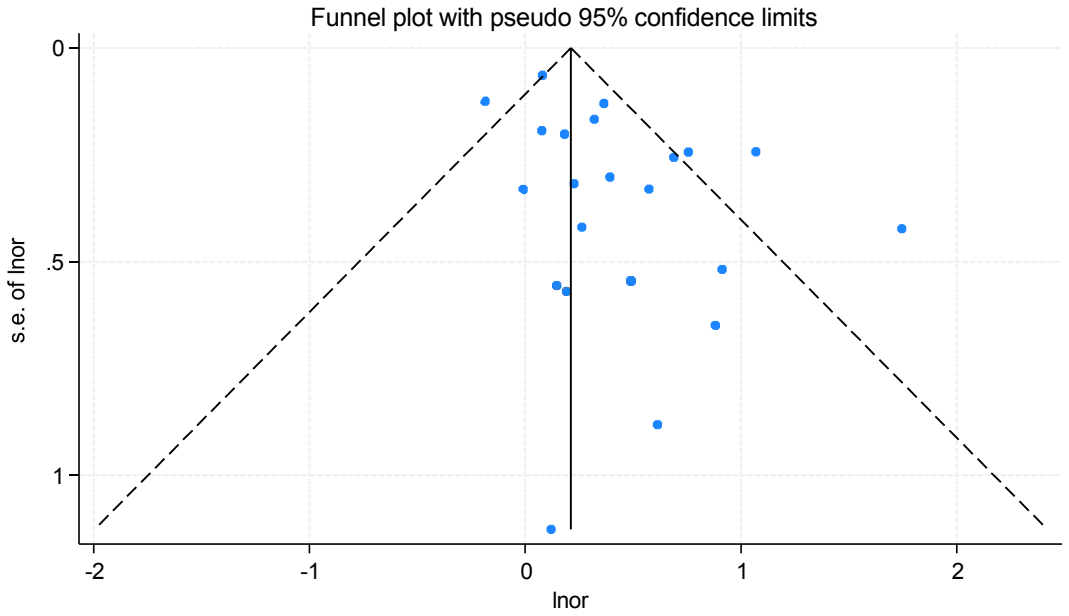
***(y) By history of physical disorder: yes (ref: no) *t*=0.95 *p*=0.363**



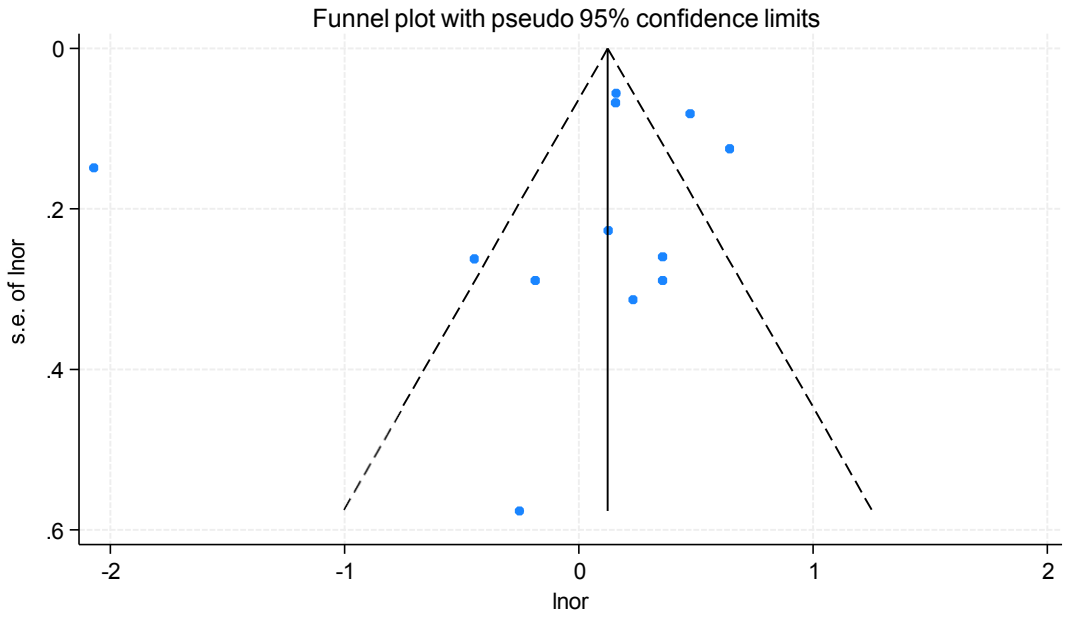
***(z) By history of mental disorder: yes (ref: no)** ***t*=-0.03 *p*=0.980**



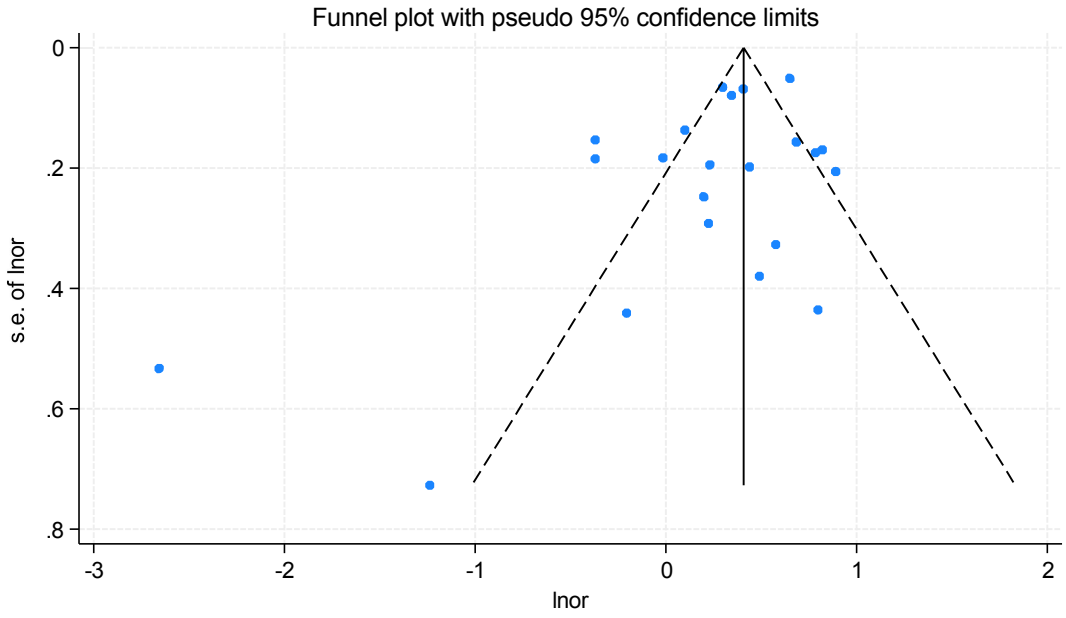
***(aa) By COVID-19 infection status: yes (ref: no)** ***t*=2.78 *p*=0.011**



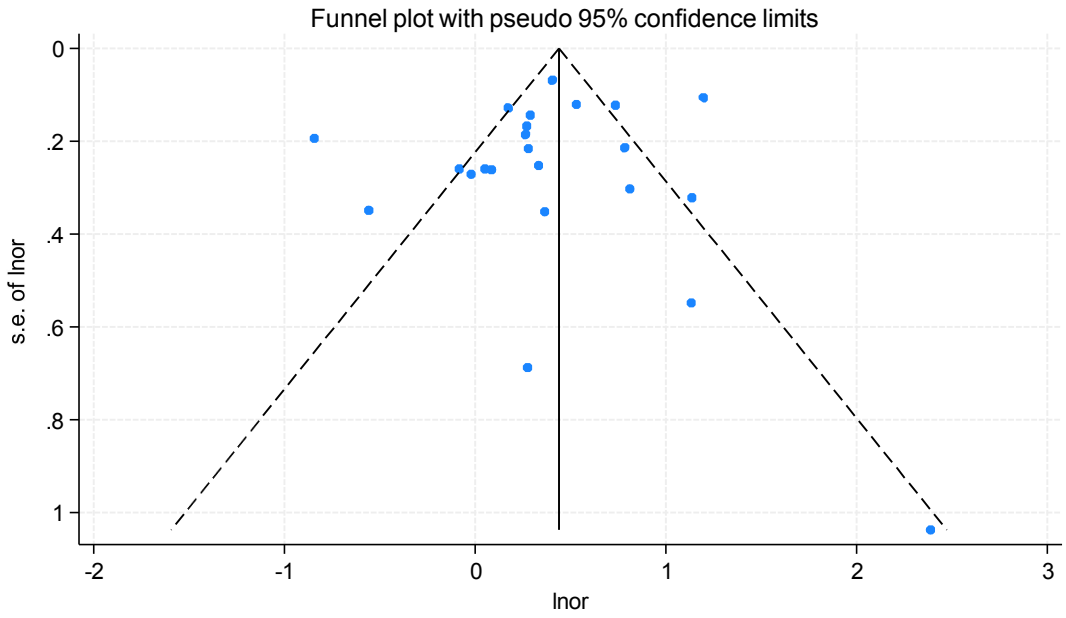
***(ab) By being quarantined: yes (ref: no)** ***t*=-0.69 *p*=0.505**



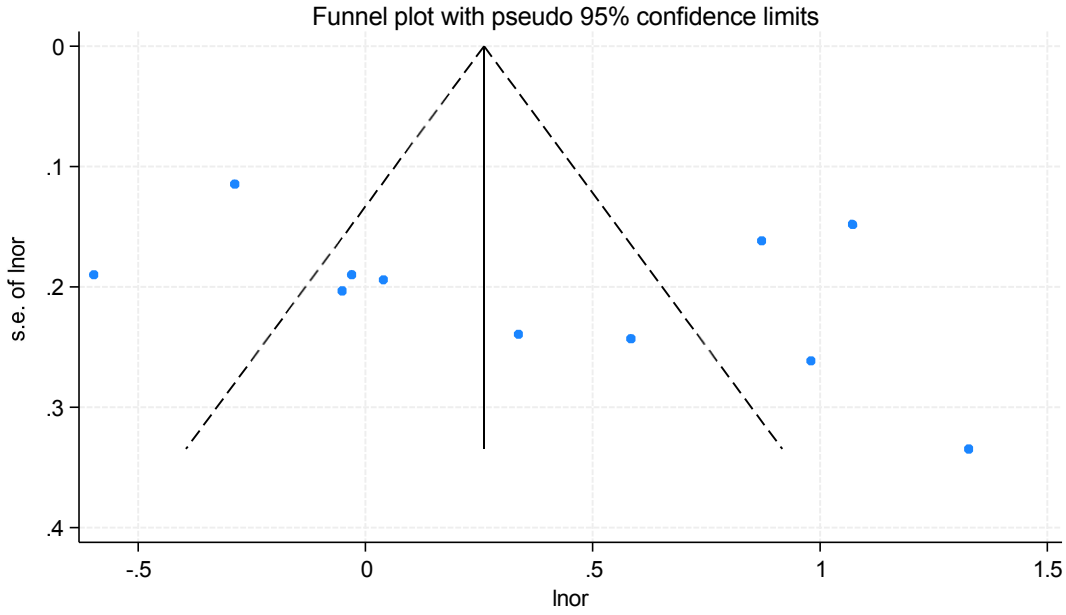
***(ac) By being frontline workers: yes (ref: no)** ***t*=-1.88 *p*=0.074**



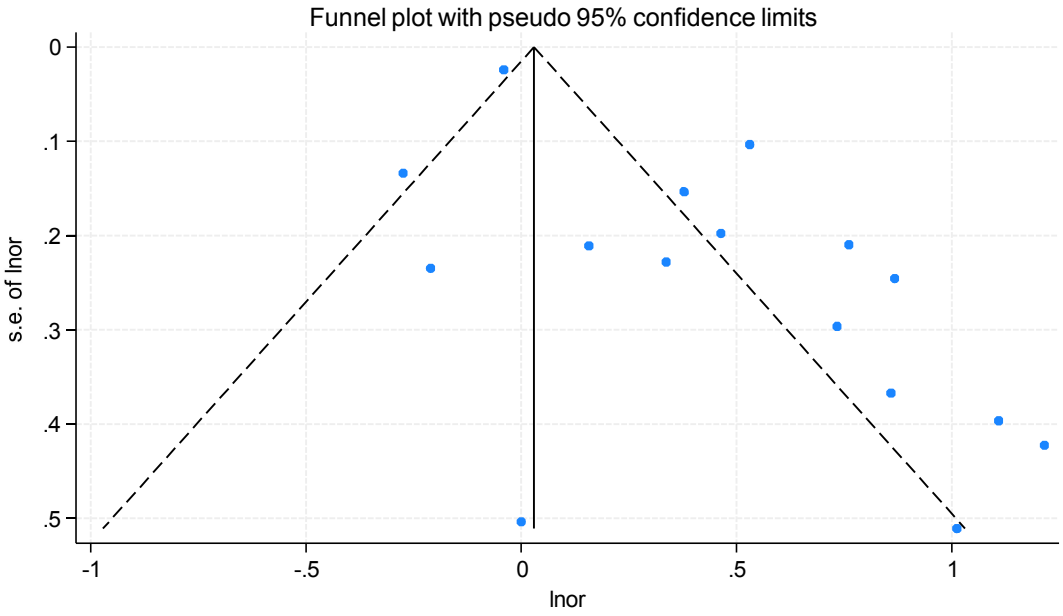
***(ad) By direct contact with COVID-19: yes (ref: no) *t*=-0.77 *p*=0.453**



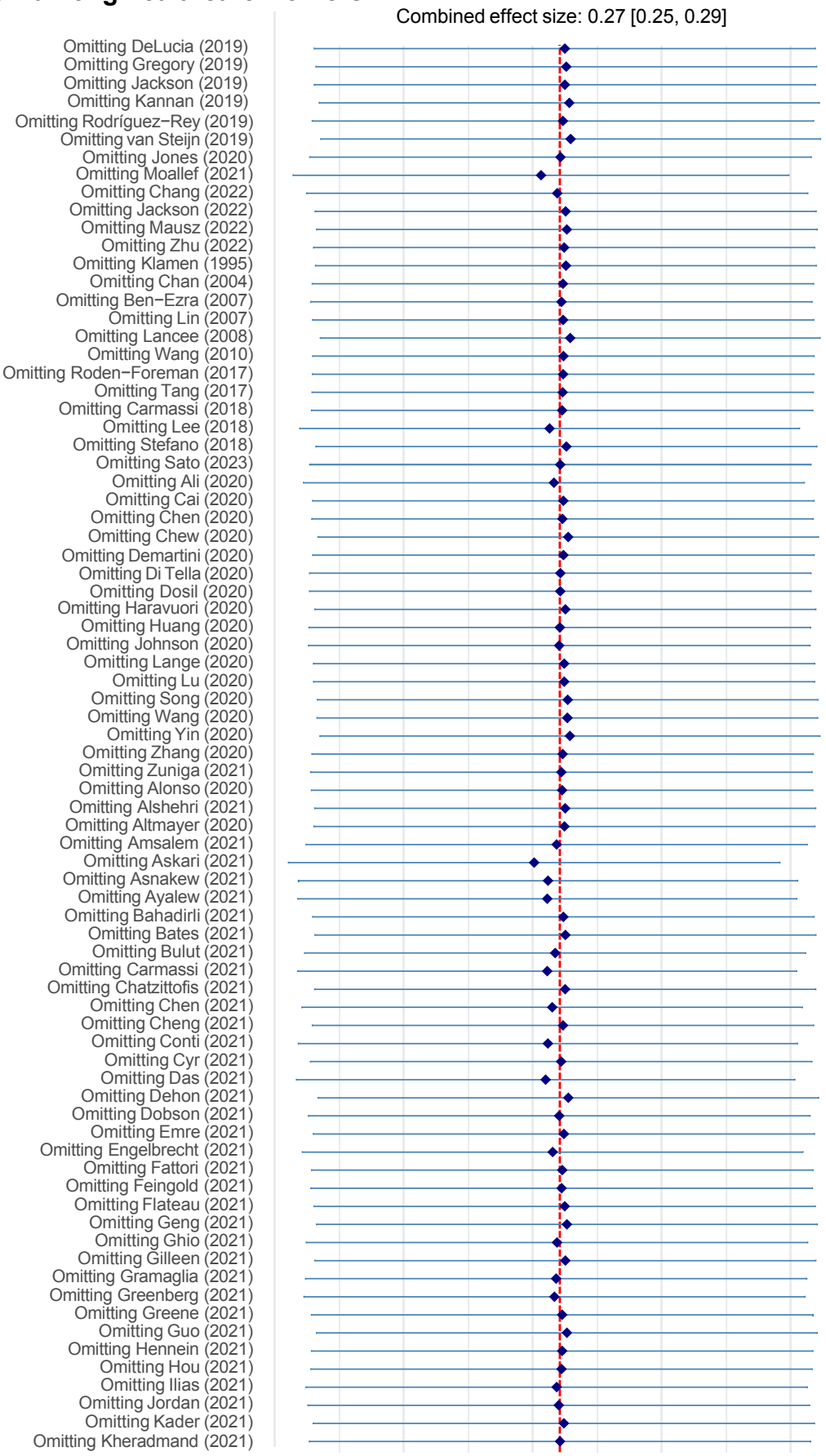
***(ae) By personal protective equipment: poor (ref: good)**
** *t*=1.08 *p*=0.310**

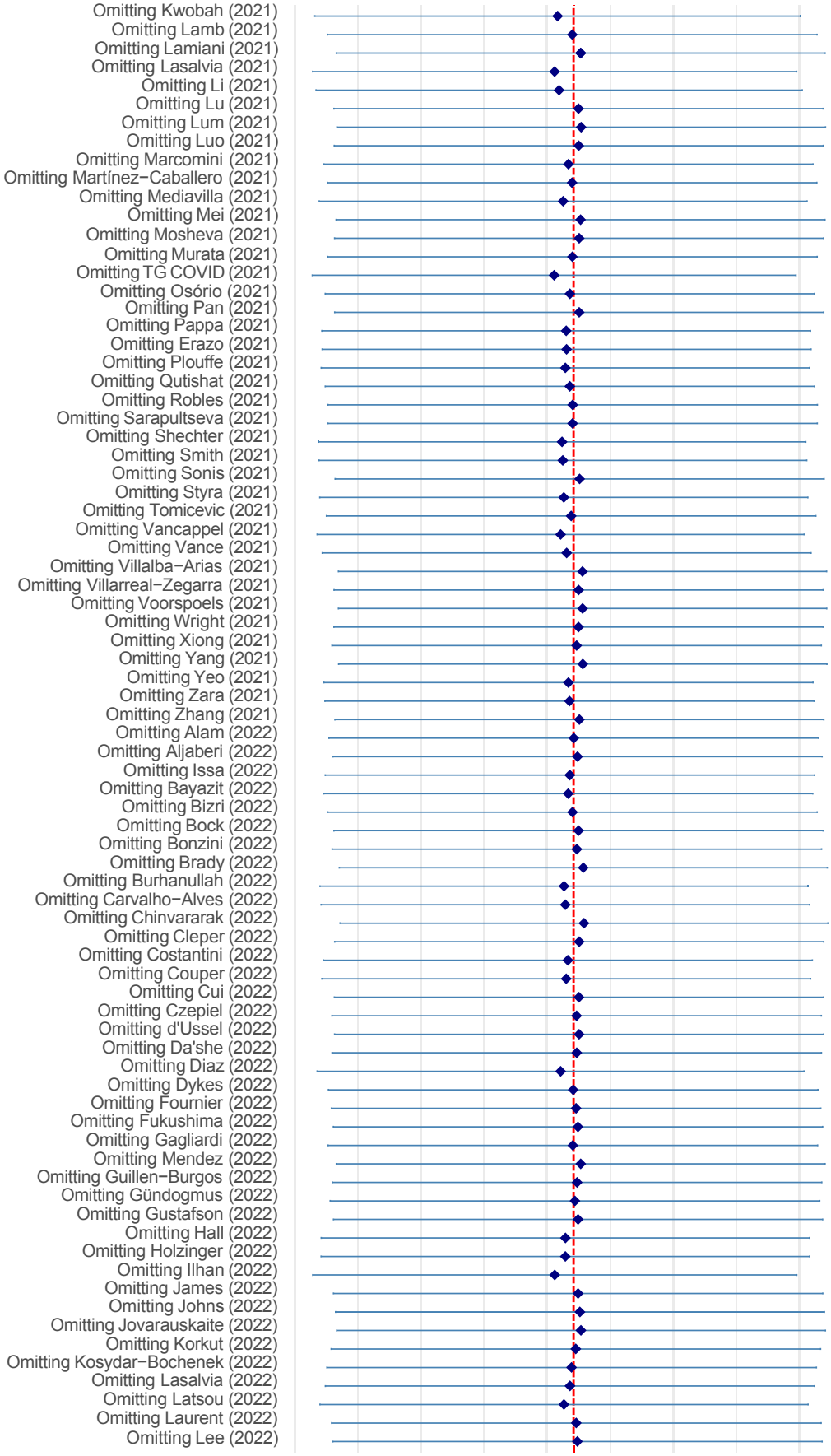


***(af) By symptomatic COVID-19-positive family members/friends: yes (ref: no) *t*=3.95 *p*=0.001**



Appendix O: Figure 6. Sensitivity analysis of the overall prevalence of PTSD among healthcare workers.

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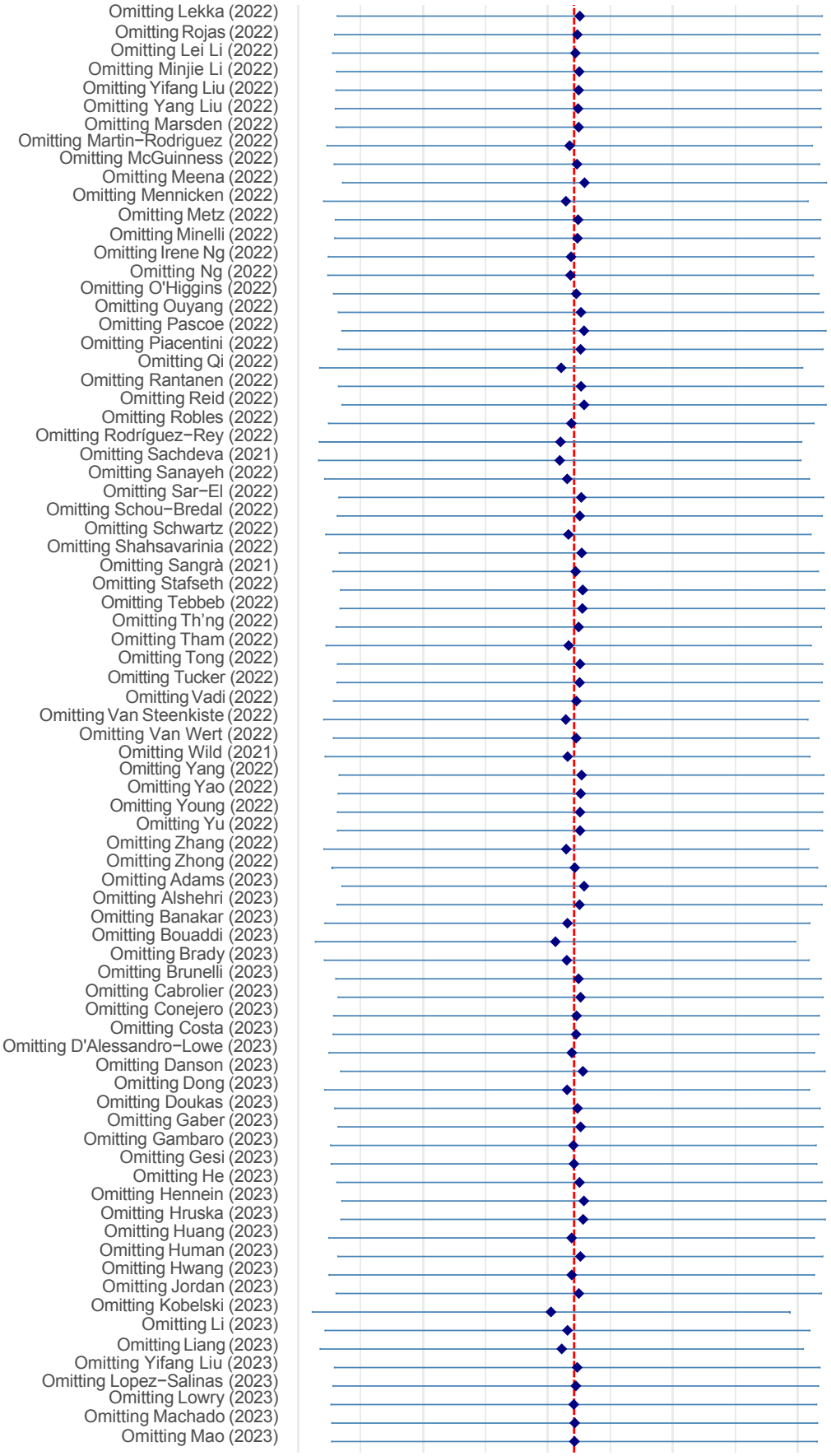
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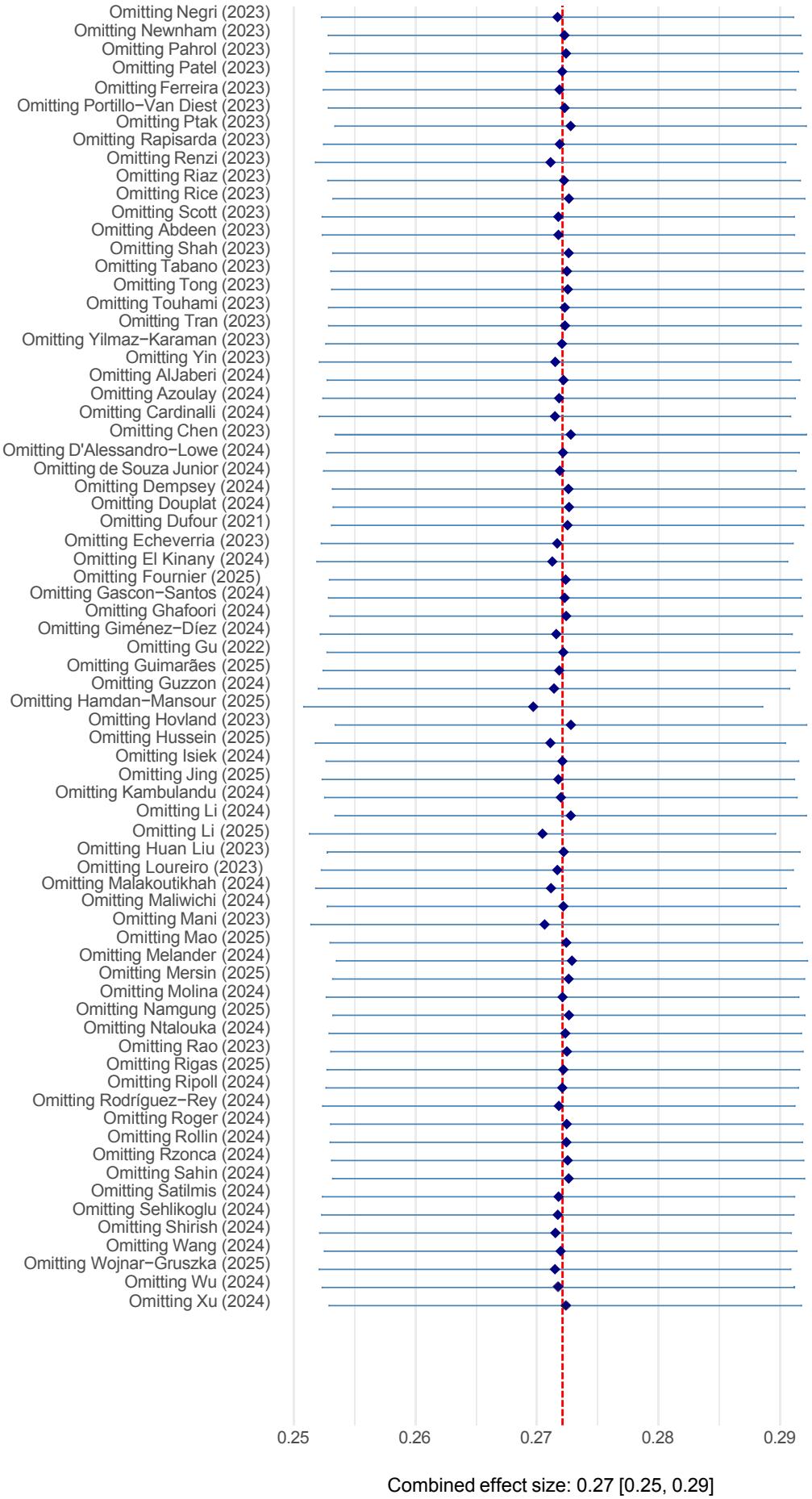
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Appendix P: References

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