Supplementary Online Content

Rotenstein LS, Torre M, Ramos MA, et al. Prevalence of Burnout Among Physicians: A Systematic Review. *JAMA.* doi:10.1001/jama.2018.12777

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eAppendix 1. Search Strategy Used in this Systematic Review

MEDLINE/PubMed

Searches	Results	Type
(burnout OR “burned out” OR depersonalization or "emotional exhaustion" or burnout, professional [MESH] or emotional stress [MESH] or psychological stress [MESH] or stress, psychological [MESH] OR compassion fatigue [MESH]) AND ("attending physician" OR physician or physicians [MESH] OR doctor or medical staff, hospital [MESH] OR physicians, primary care [MESH] or osteopathic physician [MESH]) AND ((Cohort design) OR (Cohort stud*) OR (Cohort studies [MeSH]) OR (Cross-sectional analysis) OR (Cross-sectional design) OR (Cross-sectional stud*) OR (Cross-sectional studies [MeSH]) OR (Epidemiologic stud*) OR (Epidemiologic studies [MeSH]) OR (Incidence) OR (Longitudinal design) OR (Longitudinal stud*) OR (Meta-analy*) OR (Meta-analysis [Publication Type]) OR (Observational stud*) OR (Population stud*) OR (Prevalence) OR (Prospective design) OR (Prospective stud*) OR (Prospective studies [MeSH]) OR (Retrospective design) OR (Retrospective stud*) OR (Retrospective studies [MeSH]) OR (Review) OR (Review [Publication Type]))	3524	Advanced

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ERIC/psycARTICLES/psycINFO

Searches	Results	Type
(burnout OR “burned out” OR depersonalization or "emotional exhaustion" or burnout, professional or emotional stress or psychological stress or stress, psychological OR compassion fatigue) AND ("attending physician" OR physician or physicians OR doctor or medical staff, hospital OR physicians, primary care or osteopathic physician) AND ((Cohort design) OR (Cohort stud*) OR (Cohort studies) OR (Cross-sectional analysis) OR (Cross-sectional design) OR (Cross-sectional stud*) OR (Cross-sectional studies) OR (Epidemiologic stud*) OR (Epidemiologic studies) OR (Incidence) OR (Longitudinal design) OR (Longitudinal stud*) OR (Meta-analy*) OR (Meta-analysis) OR (Observational stud*) OR (Population stud*) OR (Prevalence) OR (Prospective design) OR (Prospective stud*) OR (Prospective studies) OR (Retrospective design) OR (Retrospective stud*) OR (Retrospective studies) OR (Review))	964	Advanced

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Embase

Searches	Results	Type
(burnout OR “burned out” OR depersonalization or "emotional exhaustion" or burnout, professional or emotional stress or psychological stress or stress, psychological OR “compassion fatigue”) AND ("attending physician" OR physician or physicians OR doctor or medical staff, hospital OR physicians, primary care or osteopathic physician) AND ((Cohort design) OR (Cohort stud*) OR (Cohort studies) OR (Cross-sectional analysis) OR (Cross-sectional design) OR (Cross-sectional stud*) OR (Cross-sectional studies) OR (Epidemiologic stud*) OR (Epidemiologic studies) OR (Incidence) OR (Longitudinal design) OR (Longitudinal stud*) OR (Meta-analy*) OR (Meta-analysis) OR (Observational stud*) OR (Population stud*) OR (Prevalence) OR (Prospective design) OR (Prospective stud*) OR (Prospective studies) OR (Retrospective design) OR (Retrospective stud*) OR (Retrospective studies) OR (Review))	96	Advanced

Legend: MeSH, Medical Subject Heading in MEDLINE.

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eAppendix 2. Modified Newcastle-Ottawa risk-of-bias scoring guide

(**1) Representativeness of the sample:**

1 point: Population contained multiple specialties at multiple institutions.
0 points: Population contained either a single specialty, a single institution, or both.

(2) Sample size:

1 point: Sample size was ≥300 participants.
0 points: Sample size was <300 participants.

(3) Non-respondents:

1 point: Comparability between respondent and non-respondent characteristics was established, or the response "rate" was 95% or greater.
0 points: The comparability between respondents and non-respondents was unsatisfactory, the response "rate" was unsatisfactory, or there was no description of the response "rate" or the characteristics of the responders or non-responders.

(4) Ascertainment of burnout:

1 point: Well described and/or validated measurement tool, *e.g.*, the MBI.
0 points: Poorly described measurement tool of uncertain validity or non-validated single-question screening tool.

(5) Quality of descriptive statistics reporting:

1 point: Reported descriptive statistics to describe the population (*e.g.*, age, sex) with proper measures of dispersion (*e.g.*, mean, standard deviation).
0 points: Descriptive statistics were not reported, were incomplete, or did not include proper measures of dispersion.

Note: This scale assesses quality in several domains: sample representativeness and size, comparability between respondents and non-respondents, ascertainment of burnout, and statistical reporting quality.

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eAppendix 3. Study Protocol

1. Review Question
    a. To characterize the methods used to assess the prevalence of symptoms of burnout among practicing physicians worldwide by systematic review.
    b. To estimate prevalence in this population by meta-analysis (if possible) or systematic review alone (if studies not combinable).
2. Search Strategy
    a. Search of EMBASE, ERIC, MEDLINE/PubMed, psycARTICLES, and psycINFO without language restriction for studies on the prevalence of symptoms of burnout in practicing physicians (*i.e.*, excluding medical students and resident physicians) published before June 1st, 2018.
    b. Scanning of the reference lists of studies to identify additional relevant publications.
3. Condition or Domain Being Studied
    a. The condition of interest is burnout. Burnout is a term used to characterize the psychological response to job-related stress and has been used to characterize the stress of medical practice. It is typically considered to consist of feelings of exhaustion, depersonalization or cynicism, and a low sense of personal accomplishment or professional efficacy.
4. Participants/Population
    a. This review examines burnout among practicing physicians. It explicitly excludes trainees, including medical students, resident physicians, and fellows. It also excludes other health professionals such as dentists, nurses, pharmacists, and physician assistants.
5. Interventions/Exposures
    a. This review examines burnout in the setting of exposure to the medical practice environment. If an included study assessed burnout before or after an intervention, pre-intervention data were extracted if possible.
6. Comparators/Controls
    a. Not applicable.
7. Types of Studies Included
    a. Cross-sectional and longitudinal studies reporting extractable prevalence estimates of burnout were included. Studies had to specifically provide a burnout prevalence estimate in practicing physicians only, or the prevalence had to be deducible based on the presented data. Studies did not have to consider burnout the primary outcome of interest for inclusion in this review.
8. Main Outcomes
    a. Prevalence of burnout assessed by questionnaire.
    b. The prevalence estimates of participants meeting criteria for overall burnout (as defined by each study) were extracted. For studies reporting subscale scores, the prevalence estimates of participants meeting cutoff scores for each subscale were also extracted.
9. Additional Outcomes
    a. If studies reported prevalence estimates of individuals screening positive for major depression, these values were also recorded.

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10. Data Extraction and Coding
    a. Three authors independently conducted the computer-based literature searches and scanned the reference lists of identified articles.
    b. Three authors independently extracted the following data from each article using a standardized data extraction form: study design; geographic location; year(s) of survey; sample size; specialty; average age of participants; number and percentage of male and female participants; diagnostic or screening method used; outcome definition (*i.e.*, specific diagnostic criteria or screening instrument cutoff); and reported prevalence estimates of overall burnout, its subcomponents emotional exhaustion, depersonalization, and a low sense of personal accomplishment, or both. Depressive symptom prevalence was also recorded if reported.
    c. If the total number of physicians assessed for a specific burnout measure differed from the total number in the study (*e.g.*, due to missing data), the former number was utilized for calculating prevalence estimates (*i.e.*, the prevalence estimates calculated in this review may differ slightly from the estimates reported in the studies themselves). If only the prevalence value (*i.e.*, the percent prevalence) and the total number of physicians (*i.e.*, the denominator) were reported by a study, the number of physicians experiencing burnout (*i.e.*, the numerator) was inferred accordingly.
    d. Data extraction was verified by the senior author prior to publication.
11. Risk of Bias/Quality Assessment
    a. Three authors independently assessed the risk of bias of included studies using a modified version of the Newcastle-Ottawa scale, and the senior author adjudicated discrepancies.
12. Strategy for Data Synthesis
    a. The intention of this review was to perform a meta-analysis. After doing so, the pooled quantitative summary estimates were judged to not be reliable. Therefore, the entire body of studies was summarized descriptively, and a qualitative synthesis of a subset of larger studies was performed.
13. Analysis of Subgroups or Subsets
    a. Meta-analyses were performed on subgroups of studies reporting emotional exhaustion, depersonalization, personal accomplishment, and overall burnout. Analyses were stratified by specialty, burnout assessment method, depression assessment method, country, and continent or region.

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eAppendix 4. Statistical Methods Used to Conduct the Meta-analyses

Prevalence estimates of burnout and depressive symptoms were calculated by pooling the study-specific estimates using random effects meta-analyses that accounted for between-study heterogeneity.[1] When longitudinal studies reported prevalence estimates made at different time periods within the year, the overall period prevalence was used. Standard $\chi 2$ tests and the I^2 statistic (*i.e.*, the percentage of variability in prevalence estimates due to heterogeneity rather than sampling error, or chance, with values ≥75% indicating considerable heterogeneity), were used to assess between-study heterogeneity.[2,3] Sensitivity analyses were performed by serially excluding each study to determine the influence of individual studies on the overall prevalence estimates (not shown). Results from studies grouped according to pre-specified study-level characteristics (diagnostic criteria or screening instrument cutoff, country, continent or region, specialty, year of baseline survey, age, and sex) were also compared using stratified meta-analysis and meta-regression.[4,5] Among studies reporting data on both outcomes, correlations between burnout and depressive symptom prevalence estimates were assessed using Pearson correlation analysis. Bias secondary to small study effects was investigated by funnel plot and Egger's test.[6,7] All analyses were performed using R 3.4.2 (R Foundation for Statistical Computing, Vienna, Austria).[8] Statistical tests were 2-sided and used a significance threshold of P <0.05.

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eAppendix 5. Sample Items from the Maslach Burnout Inventory Assessment Forms

A. MBI-Human Services Survey (MBI-HSS) Form Sample Instructions and Items

The purpose of this survey is to discover how various persons in the human services or helping professions view their job and the people with whom they work closely.

Because persons in a wide variety of occupations will answer this survey, it uses the term recipients to refer to the people for whom you provide your service, care, treatment, or instructions. When answering this survey, please think of these people as recipients of the service you provide, even though you may use another term in your work (*NB*: the word “patients” is commonly used in studies of physician burnout).

Instructions: On the following pages are 22 statements of job-related feelings. Please read each statement carefully and decide if you ever feel this way about your job.

If you have never had this feeling, check the box under the Never column. If you have had this feeling, indicate how often you feel it by selecting the phrase that best describes how frequently you feel that way.

The phrases describing the frequency are:

How often:
Never
A few times a year or less
Once a month or less
A few times a month
Once a week
A few times a week
Every day

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MBI-HSS Sample Items:

	Never	A few times a year or less	Once a month or less	A few times a month	Once a week	A few times a week	Every day
I feel emotionally drained from my work							
I have accomplished many worthwhile things in this job							
I don't really care what happens to some recipients							

B. MBI-General Survey (MBI-GS) Form Sample Instructions and Items

The purpose of this survey is to assess how staff members view their job and their reactions to their work.

Instructions: On the following pages are 16 statements of job-related feelings. Please read each statement carefully and decide if you ever feel this way about your job.

If you have never had this feeling, check the box under the Never column. If you have had this feeling, indicate how often you feel it by selecting the phrase that best describes how frequently you feel that way.

The phrases describing the frequency are:

How Often:
Never
A few times a year or less
Once a month or less
A few times a month
Once a week
A few times a week
Every day

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MBI-GS Sample Items:

	Never	A few times a year or less	Once a month or less	A few times a month	Once a week	A few times a week	Every day
I feel emotionally drained from my work							
In my opinion, I am good at my job							
I doubt the significance of my work							

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MBI-GS: ©1996 W.B. Schaufeli, M.P. Leiter, C. Maslach & S.E. Jackson. All rights reserved. Published by Mind Garden, Inc.

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eTable 1. Selected Characteristics of the 182 Studies Included in this Systematic Review

Source	Continent	Country	Survey Years	Specialty	Total Participants, No.[b]	Age, y[c]	Men, No. (%)[c]	Burnout Assessment Instrument[d,e]	Emotional Exhaustion Definition[f,g]	Depersonalization Definition[f,g]	Low Personal Accomplishment Definition[f,g]	Overall Burnout Definition[f,g]	Depression Screening Instrument and Definition[e]
Massou, 2013[9]	Africa	Morocco	2009	Intensive Care	51	NR	NR	22-item MBI-HSS	NR	NR	NR	MBI (Specific Criteria Not Stated)	NR
Margaryan, 2010[10]	Asia	Armenia	2009	Multiple Specialties	130	Mean: 48.9, SD: 11.9	14 (10.4)	22-item MBI-HSS	EE≥27	DP≥10	PA≤33	EE≥27 and DP≥10 and PA≤33	NR
Xiao, 2014[11]	Asia	China	2012	Emergency Medicine	205	NR	125 (61)	15-item Chinese MBI-GS	NR	NR	NR	EX≥14 and/or CY≥10 and/or PE≤17	HADS≥9
Wu, 2013[12]	Asia	China	2010	Multiple Specialties	1202	Mean: 38.7, SD: 8.8	555 (46.2)	16-item MBI-GS	NR	NR	NR	EX≥14 and CY≥10 and PE≤17	NR
Wang, 2014[13]	Asia	China	2008	Multiple Specialties	457	Mean: 39.1, SD: 9.6	185 (40.5)	19-item Revised Chinese MBI-HSS	NR	NR	NR	Score≥4.5	NR
Siu, 2012[14]	Asia	China	2009	Multiple Specialties	226	Mean: 37, IQR: 30.5-44.0	151 (66.8)	22-item MBI-HSS	EE≥27	DP≥13	PA≤33	EE≥27 and DP≥10 and PA≤33	NR
Li, 2018[15]	Asia	China	2015	Anesthesia	1696	NR	NR	22-item MBI-HSS	NR	NR	NR	EE≥27 and/or DP≥13	NR
Das, 2016[16]	Asia	India	2014-2015	Emergency Medicine	4	NR	NR	22-item MBI-HSS	EE≥30	DP≥12	PA≤33	EE≥30 and MBI≥12 and PA≤33	NR
Langade, 2016[17]	Asia	India	2014-2016	Multiple Specialties	482	NR	322 (66.8)	9-item Abbreviated MBI-HSS	EE≥13	DP≥13	PA≤6	NR	NR
Nishimura, 2014[18]	Asia	Japan	2011	Multiple Specialties	2635	Mean: 47.2	2422 (91.9)	16-item MBI-GS	NR	NR	NR	EX>4.0 and (CY>2.6 and/or PE<4.17)	NR
Saijo, 2014[19]	Asia	Japan	2009	Multiple Specialties	488	NR	391 (80.1)	16-item MBI-GS	NR	NR	NR	EX>4.2 and (CY>2.4 and/or PE<2.5)	PHQ-9≥5
Asai, 2007[20]	Asia	Japan	2000	Multiple Specialties	697	Mean: 45, SD: 8.2	639 (93.7)	22-item MBI-HSS	EE≥27	DP≥10	PA≤33	NR	GHQ-12≥4
Zafar, 2016[21]	Asia	Pakistan	2013	Emergency Medicine	170	NR	74 (41.3)	22-item MBI-HSS	EE≥30	DP≥12	NR	NR	GHQ-12≥4
Sadat-Ali, 2005[22]	Asia	Saudi Arabia	2003-2004	Orthopedic Surgery	69	Mean: 45.7, SD: 6.8	NR	MBI (Version Not Specified)	EE High	DP High	PA Low	NR	NR
See, 2016[23]	Asia	Singapore	2013	Internal Medicine	45	NR	NR	19-item CBI	Personal Burnout≥50	Work-Related Burnout≥50	Patient-Related Burnout≥50	Personal Burnout≥50 and/or Work-Related Burnout≥50 and/or Patient-Related Burnout≥50	NR
Chou, 2014[24]	Asia	Taiwan	2012	Multiple Specialties	101	Mean: 45.3, SD: 7.5	84 (83.2)	16-item Chinese CBI	Personal Burnout≥50	Work-Related Burnout≥50	Patient-Related Burnout≥50	NR	NR
Chen, 2013[25]	Asia	Taiwan	2012	Multiple Specialties	531	NR	NR	16-item MBI-GS	EX≥3.2	CY>2.2	PE≤4.0	NR	NR
Schooley, 2016[26]	Asia	Turkey	2014	Emergency Medicine	38	NR	NR	22-item MBI-HSS	EE≥28	DP≥11	PA≤32	NR	NR
Wurm, 2016[27]	Europe	Austria	2010-2011	Multiple Specialties	5897	Mean: 44.4, SD: 10.5	3273 (55.5)	40-item HBI	NR	NR	NR	Score≥145	MDI≥20
Eelen, 2014[28]	Europe	Belgium	NR	Oncology	70	NR	40 (51.9)	20-item MBI-UBOS	EE High	DP High	PA Low	NR	NR
Vandenbroeck, 2017[29]	Europe	Belgium	2012	Multiple Specialties	1169	Mean: 43.5, SD 10.9	617 (52.7)	20-item MBI-UBOS	EE≥2.5	DP≥1.6 (women)/DP≥1.8 (men)	PA≤3.7	EE≥2.5 and DP≥1.6 (women)/DP≥1.8 (men) and PA≤3.7	NR
Selmanovic, 2011[30]	Europe	Bosnia and Herzegovina	2007	Multiple Specialties	147	NR	NR	22-item MBI-HSS	EE≥15	DP≥10	PA≤29	NR	NR
Stanetic, 2013[31]	Europe	Bosnia and Herzegovina	2010	Primary Care	239	NR	40 (16.7)	22-item MBI-HSS	EE≥31	DP≥13	PA≤32	NR	NR
Ozvacic Adzic Z, 2013[32]	Europe	Croatia	NR	Family Medicine	125	Mean: 46, SD: 7	23 (18.4)	22-item MBI-HSS	EE≥27	DP≥10	PA≤33	NR	NR
Pedersen, 2013[33]	Europe	Denmark	2004, 2012	General Practice	381	NR	232 (60.9)	22-item MBI-HSS	EE≥27	DP≥10	PA≤33	EE≥27 and DP≥10 and PA≤33	NR
Pedersen, 2016[34]	Europe	Denmark	2014	Multiple Specialties	1186	NR	690 (54.6)	22-item MBI-HSS	EE≥27	DP≥10	PA≤33	EE≥27 and DP≥10 and PA≤33	NR
Pedersen, 2018[35]	Europe	Denmark	2012	General Practice	588	NR	306 (52.4)	22-item MBI-HSS	EE≥27	DP≥10	PA≤33	EE≥27 and/or DP≥10	NR
Brondt, 2008[36]	Europe	Denmark	2004	General Practice	379	Mean: 51.8, SD: 6.7	229 (60.7)	22-item MBI-HSS	NR	NR	NR	EE≥27 and DP≥10 and PA≤33	NR
Lesage, 2013[37]	Europe	France	2011	Occupational Medicine	1440	Mean: 52.6	418 (29.0)	22-item MBI-HSS	EE≥27	DP≥10	PA≤31	EE≥27 and DP≥10 and PA≤33	NR
Dreano-Hartz, 2015[38]	Europe	France	2012-2013	Palliative Care	309	Mean: 47.2, SD: 9.2	101 (32.7)	22-item MBI-HSS	EE≥30	DP≥12	PA≤38	NR	NR
Lamothe, 2014[39]	Europe	France	NR	General Practice	294	Mean: 51, SD: 9.4	151 (51.4)	22-item MBI-HSS	NR	NR	NR	MBI Global Mean Score≥30	NR
Embriaco, 2007[40]	Europe	France	2004	Intensive Care	606	NR	418 (69.0)	22-item MBI-HSS	NR	NR	NR	Score≥−8 to ≤34	NR
Bohle, 2001[41]	Europe	Germany	NR	Urology	51	NR	NR	22-item MBI-HSS	EE High	DP High	PA Low	NR	NR
Richter, 2014[42]	Europe	Germany	2007	Multiple Specialties	272	NR	219 (78.8)	22-item MBI-HSS	EE≥26	NR	NR	NR	NR
Pantenburg, 2016[43]	Europe	Germany	2012-2013	Multiple Specialties	1784	Mean: 32.8, SD: 4	698 (39.1)	22-item MBI-HSS	EE≥27	DP≥10	PA≤33	EE≥27 and DP≥10 and PA≤33	NR

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Source	Continent	Country	Survey Years	Specialty	Total Participants, No.[b]	Age, y[c]	Men, No. (%)[c]	Burnout Assessment Instrument[d,e]	Emotional Exhaustion Definition[f,g]	Depersonalization Definition[f,g]	Low Personal Accomplishment Definition[f,g]	Overall Burnout Definition[f,g]	Depression Screening Instrument and Definition[e]
Panagopoulou, 2006[44]	Europe	Greece	2004	Internal Medicine	103	Mean: 45, SD: 12	71 (68.9)	14-item MBI-HSS for EE and DP Only	EE>Top Quartile	DP>Top Quartile	NR	NR	NR
O'Kelly, 2016[45]	Europe	Ireland, United Kingdom	2014	Urology	575	NR	503 (87.5)	22-item MBI-HSS	EE≥27	DP≥13	PA≤31	EE≥27 and (DP≥13 and/or PA≤31)	NR
Bressi, 2009[46]	Europe	Italy	2007	Psychiatry	81	Mean: 46.8, SD: 8.6	34 (42)	22-item MBI-HSS	EE≥22	DP≥6	PA≤30	NR	GHQ-12≥4
Bressi, 2008[47]	Europe	Italy	2005	Hematology/Oncology	121	Mean: 39.2, SD: 10.7	50 (41.3)	22-item MBI-HSS	EE≥24	DP≥9	PA≤29	NR	GHQ-12≥4
Raggio, 2007[48]	Europe	Italy	NR	Intensive Care	25	Mean: 43.5, Range: 37-59	17 (68)	22-item MBI-HSS	EE≥24	DP≥9	PA≤29	NR	NR
Grassi, 2000[49]	Europe	Italy	NR	Internal Medicine	328	Mean: 39.9	228 (69.5)	22-item MBI-HSS	EE>Top Tertile	DP>Top Tertile	PA<Lowest Tertile	NR	GHQ-12≥4
Mattei, 2017[50]	Europe	Italy	2015	Multiple Specialties	77	NR	NR	22-item MBI-HSS	NR	NR	NR	EE≥24 and/or DP≥9	NR
Volpe, 2014[51]	Europe	Italy	NR	Psychiatry	50	Mean: 31.9, SD: 3.7	24 (48)	22-item MBI-HSS	NR	NR	NR	EE≥27 and DP≥10 and PA≤33	BDI-II≥14
Travado, 2005[52]	Europe	Italy, Portugal, Spain	NR	Oncology	121	Mean: 41.8, SD: 9.7	58 (46.4)	22-item MBI-HSS	EE≥27	DP≥10	PA≤33	NR	NR
Pranckeviciene, 2016[53]	Europe	Lithuania	2015	Neurosurgery	31	NR	31 (100)	16-item MBI-GS	EX>Top Tertile	CY>Top Tertile	PE<Lowest Tertile	NR	NR
Mikalauskas, 2018[54]	Europe	Lithuania	2017	Anesthesia	220	NR	84 (38.2)	22-item MBI-HSS	EE≥27	DP≥13	PA≤31	EE≥27 and DP≥10 and PA≤31	PRIME-MD≥3
Mikalauskas, 2012[55]	Europe	Lithuania	2009	Multiple Specialties	59	Mean: 44.1, SD: 9.7	49 (83.1)	22-item MBI-HSS	EE≥28	DP≥11	PA≤32	EE≥28 and/or DP≥11 and/or PA≤32	PRIME-MD≥1
Ruitenburg, 2012[56]	Europe	Netherlands	2009	Multiple Specialties	216	Mean: 47, SD: 8.9	119 (52)	13-item MBI-UBOS for EE and DP Only	NR	NR	NR	EE≥27 and DP≥10	BSI≥0.41
van der Ploeg, 2003[57]	Europe	Netherlands	NR	Forensics	84	Mean: 42.2, SD: 7.1	57 (67.9)	15-item MBI-UBOS	EE High	DP High	PA Low	(EE High and DP High) and/or PA Low	NR
Meynaar, 2015[58]	Europe	Netherlands	2013	Multiple Specialties	272	Mean: 46, SD: 8	187 (68.8)	20-item MBI-UBOS	EE≥2.38	DP≥1.6 (women)/DP≥1.8 (men)	PA≤3.7	EE≥2.38 and (DP≥ 1.6 [women]/1.8 [men] and/or PA≤3.7)	NR
van der Wal, 2016[59]	Europe	Netherlands	2012	Anesthesia	514	Mean: 47.2, Range: 30-67	335 (62.5)	20-item MBI-UBOS	NR	NR	NR	EE>Top Quartile and (DP>Top Quartile and/or PA<Lowest Quartile)	GHQ-12≥2
Twellaar, 2008[60]	Europe	Netherlands	2002	General Practice	349	Mean: 45.9, SD: 7	180 (51.6)	20-item MBI-UBOS	NR	NR	NR	EE>Top Quartile and (DP>Top Quartile and/or PA<Lowest Quartile)	NR
Glebocka, 2017[61]	Europe	Poland	NR	Multiple Specialties	48	Mean: 43, SD: 11.1	NR	MBI (Version Not Specified)	EE High	DP High	NR	NR	NR
Maroco, 2016[62]	Europe	Portugal	2011-2013	Multiple Specialties	466	Mean: 38.7, SD: 11	196 (42)	15-item Modified MBI-HSS	NR	NR	NR	Average Subscale Score≥3	NR
Marcelino, 2012[63]	Europe	Portugal	2010-2011	Primary Care	150	Mean: 54.5, SD: 9	67 (45.3)	22-item MBI-HSS	EE≥27	DP≥10	PA≤33	EE≥27 and DP≥10 and PA≤33	NR
Teixeira, 2013[64]	Europe	Portugal	NR	Intensive Care	73	NR	NR	22-item MBI-HSS	NR	NR	NR	EE≥25 and DP≥10 and PA≤32	NR
Hagau, 2012[65]	Europe	Romania	2011	Anesthesia	68	Mean: 41.7, SD: 6.3	20 (29.4)	22-item MBI-HSS	EE≥28	DP≥14	PA≤30	NR	NR
Stojanovic-Tasic, 2018[66]	Europe	Serbia	2016	Primary Care	210	Mean: 48.3, SD 9.6	36 (17.1)	22-item MBI-HSS	EE High	DP High	PA Low	NR	NR
Vicentic, 2013[67]	Europe	Serbia	NR	Multiple Specialties	120	Mean: 42, Range: 27-65	24 (20)	22-item MBI-HSS	EE≥27	DP≥10	PA≤33	NR	NR
Milenovic, 2016[68]	Europe	Serbia	2013	Anesthesia	205	Mean: 48.2, SD: 8.3	60 (29.3)	22-item MBI-HSS	EE≥27	DP≥13	PA≤31	EE≥27 and DP≥13 and PA≤31	NR
Putnik, 2011[69]	Europe	Serbia	2008	Primary Care	373	Mean: 47	60 (16)	MBI (Version Not Specified)	EX>2.5	CY>1.6	PE≤3.7	NR	NR
Yuguero Torres, 2015[70]	Europe	Spain	2014	General Practice	108	Mean: 49.3	39 (36.1)	22-item MBI-HSS	EE High	DP High	PA Low	MBI (Specific Criteria Not Stated)	NR
Yuguero, 2017[71]	Europe	Spain	2014	General Practice	136	NR	NR	22-item MBI-HSS	EE High	DP High	PA Low	MBI (Specific Criteria Not Stated)	NR
Chivato-Perez, 2011[72]	Europe	Spain	2008	Allergy and Immunology	404	Mean: 43.9, SD: 8.8	183 (45.2)	22-item MBI-HSS	EE≥25	DP≥10	PA≤32	NR	NR
Frutos-Llanes, 2014[73]	Europe	Spain	2011	Primary Care	141	Mean: 48.6, SD: 8.2	74 (52.5)	22-item MBI-HSS	EE≥27	DP≥10	PA≤33	EE≥27 and DP≥10 and PA≤33	NR
Martínez de la Casa Muñoz, 2003[74]	Europe	Spain	NR	Multiple Specialties	144	Mean: 45, SD: 7.7	104 (72.2)	22-item MBI-HSS	EE≥27	DP≥10	PA≤33	EE≥27 and/or DP≥10 and/or PA≤33	NR
Vila Falgueras, 2014[75]	Europe	Spain	2010	Primary Care	293	NR	NR	22-item MBI-HSS	EE≥27	DP≥10	PA≤33	EE≥27 and/or DP≥10 and/or PA≤33	NR
Atalaya, 2008[76]	Europe	Spain	NR	Obstetrics and Gynecology	21	Mean: 49.2, SD: 9	14 (66.7)	22-item MBI-HSS	EE≥27	DP≥10	PA≤33	NR	NR
Riquelme, 2018[77]	Europe	Spain	2015	Multiple Specialties	301	NR	196 (65.1)	22-item MBI-HSS	EE>Top Quartile	DP>Top Quartile	PA<Lowest Quartile	EE>Top Quartile and DP>Top Quartile and PA<Lowest Quartile	NR
Yuguero, 2017[78]	Europe	Spain	2016	Emergency Medicine	43	NR	NR	22-item MBI-HSS	NR	NR	NR	(EE + DP + PA)≥47	NR
Escriba-Aguir, 2007[79]	Europe	Spain	2000-2001	Emergency Medicine	353	NR	233 (65.4)	9-item MBI-HSS for EE Only	EE≥27	NR	NR	NR	NR

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Arigoni, 2009[80]	Europe	Switzerland	NR	Multiple Specialties	371	NR	241 (65.5)	22-item MBI-HSS	EE≥27	DP≥10	PA≤33	EE≥27 and DP≥10 and PA≤33	GHQ-12≥4
Goehring, 2005[81]	Europe	Switzerland	2002	Primary Care	1755	Mean: 50.8	1468 (83.6)	22-item MBI-HSS	EE≥27	DP≥10	PA≤33	EE≥27 and DP≥10 and PA≤33	NR
Merlani, 2011[82]	Europe	Switzerland	2006-2007	Intensive Care	459	NR	272 (58.5)	22-item MBI-HSS	NR	NR	NR	Score≥−8 to ≤34	NR
Hammig, 2012[83]	Europe	Switzerland	2007	Multiple Specialties	53	NR	NR	8-item Modified CBI	NR	NR	NR	Average CBI Subscale≥50	NR
Upton, 2012[84]	Europe	United Kingdom	NR	Surgery	313	NR	282 (92.2)	16-item MBI-GS	EX>Top Tertile	CY>Top Tertile	NR	EX>Top Tertile and CY>Top Tertile	NR
Orton, 2012[85]	Europe	United Kingdom	NR	General Practice	564	NR	378 (68.5)	22-item MBI-HSS	EE High	DP High	PA Low	NR	NR
Taylor, 2005[86]	Europe	United Kingdom	2002	Multiple Specialties	1294	NR	1059 (81)	22-item MBI-HSS	EE≥27	NR	NR	NR	GHQ-12≥4
Colville, 2017[87]	Europe	United Kingdom	2012-2014	Intensive Care	74	NR	NR	9-item Abbreviated MBI-HSS	NR	NR	NR	EE≥27 and/or DP≥10	NR
Sharma, 2008[88]	Europe	United Kingdom	2005	Surgery	496	Mean: 47.4, SD: 7.4	460 (91.8)	MBI (Version Not Specified)	EE High	DP High	PA Low	NR	GHQ-12≥4
Soltanifar, 2018[89]	Middle East	Iran	2016-2017	Emergency Medicine	77	Median: 36, Range: 30-48	0 (0)	22-item MBI-HSS	EE≥27	DP≥10	PA≤33	NR	NR
Ahmadpanah, 2015[90]	Middle East	Iran	2011	General Practice	100	Mean: 32.9, SD: 5.1	71 (71)	22-item MBI-HSS	Mean EE≥4	Mean DP≥4	Mean PA≤4	NR	NR
Kushnir, 2014[91]	Middle East	Israel	2007-2008	Primary Care	136	Mean: 52.2, SD: 7.0	43 (31.6)	22-item MBI-HSS	EE≥27	DP≥10	PA≤33	EE≥27 and/or DP≥10	NR
Al-Shoraian, 2011[92]	Middle East	Kuwait	2010-2011	Family Medicine	200	NR	88 (44)	22-item MBI-HSS	EE≥27	DP≥10	PA≤33	EE≥27 and DP≥10 and PA≤33	NR
Hamdan, 2017[93]	Middle East	Palestine	2013	Emergency Medicine	142	NR	NR	22-item MBI-HSS	EE High	DP High	PA Low	EE High and DP High and PA Low	NR
Abdulla, 2011[94]	Middle East	Qatar	NR	General Practice	183	NR	93 (50.8)	16-item AMBQ	NR	NR	NR	Score>19	Positive Single-item Screen
Al-Dubai, 2010[95]	Middle East	Yemen	2006-2007	Multiple Specialties	563	Mean: 33.3, SD: 5.7	335 (59.5)	22-item MBI-HSS	EE≥27	DP≥13	PA≤31	EE≥27 and DP≥13 and PA≤31	NR
Amanullah, 2017[96]	North America	Canada	NR	Multiple Specialties	55	NR	NR	16-item MBI-GS	EX High	CY High	PE Low	NR	NR
Wright, 2014[97]	North America	Canada	NR	Multiple Specialties	210	Mean: 46.7, SD: 9.1	125 (59.4)	19-item CBI	Personal Burnout (Cutoff Not Specified)	Work-Related Burnout (Cutoff Not Specified)	Patient-Related Burnout (Cutoff Not Specified)	NR	NR
Helewa, 2013[98]	North America	Canada	2010	Surgery	18	Median: 44, Range: 33-58	18 (94.7)	22-item MBI-HSS	EE≥27	DP≥10	PA≤33	EE≥27 and/or DP≥10 and/or PA≤33	NR
Lee, 2008[99]	North America	Canada	NR	Primary Care	123	Median: 47	77 (62.6)	22-item MBI-HSS	EE≥27	DP≥10	PA≤33	NR	NR
Lloyd, 1994[100]	North America	Canada	1990	Emergency Medicine	268	Mean: 38	233 (87)	22-item MBI-HSS	EE≥40	DP≥15	PA≤36	NR	NR
Elit, 2004[101]	North America	Canada	2002	Gynecologic Oncology	35	NR	22 (64.7)	MBI (Version Not Specified)	EE High	DP High	PA Low	NR	GHQ-12≥4
Viviers, 2008[102]	North America	Canada	NR	Ophthalmology	124	Mean: 50.3, SD: 10.5	86 (65.6)	MBI (Version Not Specified)	EE High	DP High	PA Low	NR	NR
Dyrbye, 2009[103]	North America	Canada, United States	2007	Internal Medicine	78	Mean: 45.6, SD: 7.2	48 (62.3)	MBI (Version Not Specified)	EE High	DP High	PA Low	EE High and/or DP High	NR
Puffer, 2017[104]	North America	United States	NR	Primary Care	2099	NR	NR	10-item Mini Z	NR	NR	NR	Score≥3	NR
Johns, 2005[105]	North America	United States	NR	ENT	107	Mean: 56, Range: 34-75	NR	12-item Abbreviated MBI-HSS	EE≥27	DP≥10	PA≤33	EE≥27 and DP≥10 and PA≤33	NR
Gabbe, 2002[106]	North America	United States	NR	Obstetrics and Gynecology	119	Mean: 55, SD: 7.1	110 (92.4)	12-item Abbreviated MBI-HSS	EE≥27	DP≥10	PA≤33	EE≥27 and DP≥10 and PA≤33	NR
Cruz OA, 2007[107]	North America	United States	NR	Ophthalmology	101	Mean: 56.9, SD: 7.9	98 (97)	12-item Abbreviated MBI-HSS	EE≥27	DP≥13	PA≤31	EE≥27 and DP≥13 and PA≤31	NR
De Oliveira, 2011[108]	North America	United States	NR	Anesthesia	96	NR	72 (72)	12-item Abbreviated MBI-HSS	NR	NR	NR	EE≥27 and DP≥10 and PA≤31	NR
Garcia, 2015[109]	North America	United States	NR	Psychiatry	109	Mean: 51.7, SD: 9.7	60 (49.6)	16-item MBI-GS	EX≥17	CY≥12	PE≤9	NR	NR
Rao, 2017[110]	North America	United States	2014	Multiple Specialties	1774	NR	1027 (57.9)	16-item MBI-GS	NR	NR	NR	EX≥3.2 and CY≥2.6 and PE≤3.8	NR
Shenoi, 2018[111]	North America	United States	2015	Pediatric Critical Care	253	NR	153 (60.5)	22-item MBI-HSS	EE High	DP High	PA Low	EE High and (DP High and/or PA Low)	GHQ-12≥4
Aggarwal, 2015[112]	North America	United States	2014	Radiation Oncology	47	NR	NR	22-item MBI-HSS	EE High	DP High	PA Low	EE High and DP High and PA Low	NR
Lu, 2015[113]	North America	United States	2013	Emergency Medicine	54	NR	NR	22-item MBI-HSS	EE High	DP High	PA Low	EE High and/or DP High	PRIME-MD≥1
Rath, 2015[114]	North America	United States	2013	Obstetrics and Gynecology	398	Median: 48, IQR: 40-57	261 (62.4)	22-item MBI-HSS	EE High	DP High	PA Low	EE High and/or DP High	PRIME-MD≥1
Kroll, 2016[115]	North America	United States	2013	Pain Medicine	207	Mean: 47.4, SD: 8.6	176 (85)	22-item MBI-HSS	EE High	DP High	PA Low	NR	NR

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Streu, 2014[116]	North America	United States	NR	Surgery	506	NR	250 (49.5)	22-item MBI-HSS	EE High	DP High	PA Low	NR	NR
Jesse, 2015[117]	North America	United States	2013	Surgery	217	Mean: 48.4, SD: 9.1	189 (86.7)	22-item MBI-HSS	EE High	DP High	PA Low	NR	NR
Bertges Yost, 2005[118]	North America	United States	NR	Surgery	209	Mean: 49, SD: 7.7	197 (94.3)	22-item MBI-HSS	EE High	DP High	PA Low	NR	NR
Shanafelt, 2014[119]	North America	United States	2012-2013	Oncology	1083	Median: 52	554 (50.4)	22-item MBI-HSS	EE≥27	DP≥10	PA≤32	EE≥27 and/or DP≥10	NR
Golub, 2008[120]	North America	United States	2005	ENT	351	Mean: 52, Range: 33-87	306 (87.2)	22-item MBI-HSS	EE≥27	DP≥10	PA≤33	EE≥27 and DP≥10 and PA≤33	NR
Fletcher, 2012[121]	North America	United States	2008	ENT	115	NR	NR	22-item MBI-HSS	EE≥27	DP≥10	PA≤33	EE≥27 and DP≥10 and PA≤33	NR
Simons, 2016[122]	North America	United States	NR	Orthopedic Surgery	12	Mean: 39.1, SD: 4.5	NR	22-item MBI-HSS	EE≥27	DP≥10	PA≤33	EE≥27 and DP≥10 and PA≤33	NR
Shanafelt, 2012[123]	North America	United States	2011	Multiple Specialties	7288	Median: 55	5241 (71.9)	22-item MBI-HSS	EE≥27	DP≥10	PA≤33	EE≥27 and/or DP≥10	PRIME-MD≥1
Shanafelt, 2015[124]	North America	United States	2014	Multiple Specialties	6822	Median: 56	4497 (67.5)	22-item MBI-HSS	EE≥27	DP≥10	PA≤33	EE≥27 and/or DP≥10	PRIME-MD≥1
Shanafelt, 2009[125]	North America	United States	2007	Internal Medicine	459	NR	345 (77.2)	22-item MBI-HSS	EE≥27	DP≥10	PA≤33	EE≥27 and/or DP≥10	NR
Busis, 2017[126]	North America	United States	2016	Neurology	1616	Mean: 51, SD: 12	1091 (65.3)	22-item MBI-HSS	EE≥27	DP≥10	PA≤33	EE≥27 and/or DP≥10	NR
Klimo, 2013[127]	North America	United States	NR	Neurosurgery	81	NR	82 (96.5)	22-item MBI-HSS	EE≥27	DP≥10	PA≤33	EE≥27 and/or DP≥10	NR
McPhillips, 2007[128]	North America	United States	NR	Pediatrics	137	NR	128 (88.9)	22-item MBI-HSS	EE≥27	DP≥10	PA≤33	EE≥27 and/or DP≥10	NR
Contag, 2010[129]	North America	United States	NR	ENT	60	Mean: 41, Range: 32-57	53 (88.3)	22-item MBI-HSS	EE≥27	DP≥13	PA≤31	EE≥27 and DP≥10 and PA≤33	NR
Guest, 2011[130]	North America	United States	2009	Surgery	71	NR	NR	22-item MBI-HSS	EE≥27	DP≥13	PA≤31	EE≥27 and/or DP≥10	GHQ-12≥4
Evans, 2015[131]	North America	United States	2014	Headache Medicine	127	NR	81 (63.8)	22-item MBI-HSS	EE≥27	DP≥13	PA≤31	EE≥27 and/or PA≥13	NR
Campbell, 2001[132]	North America	United States	NR	Surgery	577	Mean: 50	492 (94.4)	22-item MBI-HSS	EE≥27	DP≥13	PA≤31	NR	NR
Saleh, 2007[133]	North America	United States	NR	Orthopedic Surgery	193	Mean: 53.7, Range: 32-83	NR	22-item MBI-HSS	EE≥27	DP≥13	PA≤31	NR	NR
Kamal, 2016[134]	North America	United States	2013	Palliative Care	691	NR	NR	22-item MBI-HSS	EE≥27	DP≥13	NR	EE≥27 and/or DP≥13	NR
Shanafelt, 2009[135]	North America	United States	2008	Surgery	7830	Median: 51, IQR: 43-59	6815 (86.7)	22-item MBI-HSS	EE≥28	DP≥11	PA≤32	EE≥28 and/or DP≥11	PRIME-MD≥1
Qureshi, 2014[136]	North America	United States	2010	Surgery	1605	Mean: 50.8, Range: 33-74	1243 (73.5)	22-item MBI-HSS	EE≥28	DP≥11	PA≤32	EE≥28 and/or DP≥11	NR
De Stefano, 2018[137]	North America	United States	2016	Emergency Medicine	23	Median: 34	14 (60.9)	22-item MBI-HSS	EE≥28	DP≥14	PA≤29	EE≥28 and DP≥14 and PA≤29	BDI≥19
Saleh, 2009[138]	North America	United States	NR	Orthopedic Surgery	104	NR	NR	22-item MBI-HSS	EE≥28	NR	NR	NR	NR
Guntupalli, 1996[139]	North America	United States	NR	Intensive Care	253	Mean: 41.6, SD: 6.7	220 (88.7)	22-item MBI-HSS	EE≥30	DP≥12	PA≤33	NR	NR
West, 2013[140]	North America	United States	2010	Internal Medicine	282	Mean: 51.4, SD: 8.2	195 (69.9)	2-item Modified MBI-HSS for EE and DP Only	Single-item Measure of EE≥4	Single-item Measure of DP≥4	NR	Single-item EE≥4 and/or Single-item DP≥4	PRIME-MD≥1
West, 2014[141]	North America	United States	2010-2012	Internal Medicine	424	NR	324 (76.4)	2-item Modified MBI-HSS for EE and DP Only	Single-item Measure of EE≥4	Single-item Measure of DP≥4	NR	Single-item EE≥4 and/or Single-item DP≥4	PRIME-MD≥1
Balch, 2011[142]	North America	United States	2010	Surgery	7164	Median: 53, IQR: 45-61	6116 (85.4)	2-item Modified MBI-HSS for EE and DP Only	Single-item Measure of EE≥4	Single-item Measure of DP≥4	NR	Single-item EE≥4 and/or Single-item DP≥4	PRIME-MD≥1
Gorelick, 2016[143]	North America	United States	2013	Emergency Medicine	895	NR	414 (46.3)	2-item Modified MBI-HSS for EE and DP Only	Single-item Measure of EE≥4	Single-item Measure of DP≥4	NR	NR	NR
Salmoirago-Blotcher, 2016[144]	North America	United States	2014	Emergency Medicine	138	Mean: 47.8, SD: 10.5	95 (71.4)	2-item Modified MBI-HSS for EE and DP Only	NR	NR	NR	Single-item EE≥4 and/or Single-item DP≥4	NR
Tak, 2017[145]	North America	United States	2011	Multiple Specialties	1289	NR	815 (63.2)	2-item Modified MBI-HSS for EE and DP Only	NR	NR	NR	Single-item EE≥4 and/or Single-item DP≥4	NR
Weintraub, 2016[146]	North America	United States	2011	Neonatology	433	NR	198 (47.3)	54-item Modified CFST	NR	NR	NR	CFST>"High-End" Cutoff	NR
Kase, 2017[147]	North America	United States	NR	Palliative Care	102	NR	NR	54-item Modified CFST	NR	NR	NR	CFST>"Natural High-End Cut Point"	NR
Yoon, 2010[148]	North America	United States	2008-2009	Obstetrics and Gynecology	1128	Mean: 47.8, SD: 9.2	617 (53.5)	5-item MBI-GS for EX Only	EX≥3.2	NR	NR	NR	NR
Chew, 2017[149]	North America	United States	2016	Radiology	413	NR	339 (79.2)	7-item Modified MBI-HSS	Single-item Measure of EE≥27	Single-item Measure of DP≥10	5-item Measure of PA≤33	Single-item EE≥27 and/or Single-item DP≥10 and/or 5-item PA≤33	NR
Deckard, 1992[150]	North America	United States	1987	Infectious Disease	1484	Mean: 44.8, Range: 29-84	1601 (87)	Golembiewski et al. Modified MBI	EE≥18	DP≥26	PA≤22	NR	NR
Deckard, 1994[151]	North America	United States	NR	Multiple Specialties	235	NR	143 (60.9)	Golembiewski et al. Modified MBI	EE≥18	DP≥26	PA≤22	NR	NR

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Fields, 1995[152]	North America	United States	1991	Pediatric Critical Care	389	Mean: 39.6, SD: NR	312 (80.6)	Pines and Aronson Burnout Measure	NR	NR	NR	Pines and Aronson Burnout Measure Score>4	NR
Hinami, 2012[153]	North America	United States	2009-2010	Hospitalist Medicine	776	Median: 42	516 (66.5)	Rohland et al. Single-item Measure of Self-Perceived Burnout	NR	NR	NR	Rohland et al. Score≥3	NR
Jager, 2017[154]	North America	United States	2014-2015	Multiple Specialties	2239	Mean: 52.6, SD: 11.2	1528 (67.5)	Rohland et al. Single-item Measure of Self-Perceived Burnout	NR	NR	NR	Rohland et al. Score≥3	NR
Rohland, 2004[155]	North America	United States	2000	Multiple Specialties	299	Mean: 44, SD: 4	221 (74)	Rohland et al. Single-item Measure of Self-Perceived Burnout	NR	NR	NR	Rohland et al. Score≥3	NR
Yoon, 2016[156]	North America	United States	2010-2011	Multiple Specialties	1119	NR	756 (65.4)	Rohland et al. Single-item Measure of Self-Perceived Burnout	NR	NR	NR	Rohland et al. Score≥3	NR
Yoon, 2017[157]	North America	United States	2009-2010	Multiple Specialties	1208	NR	749 (62.0)	Rohland et al. Single-item Measure of Self-Perceived Burnout	NR	NR	NR	Rohland et al. Score≥3	NR
Helfrich, 2013[158]	North America	United States	2012	Primary Care	1769	NR	NR	Rohland et al. Single-item Measure of Self-Perceived Burnout	NR	NR	NR	Rohland et al. Score≥3	NR
Starmer, 2016[159]	North America	United States	2013	Pediatrics	836	NR	332 (39.7)	Single-item Measure of Self-Perceived Burnout	NR	NR	NR	Positive Single-item Screen	Positive Single-item Screen
Doan-Wiggins, 1995[160]	North America	United States	1989	Emergency Medicine	737	Mean: 40.5	687 (89.5)	Single-item Measure of Self-Perceived Burnout	NR	NR	NR	Positive Single-item Screen	NR
Johnson, 1993[161]	North America	United States	NR	ENT	380	Mean: 48	NR	Single-item Measure of Self-Perceived Burnout	NR	NR	NR	Positive Single-item Screen	NR
Glasheen, 2011[162]	North America	United States	NR	Hospitalist Medicine	265	NR	140 (54.0)	Single-item Measure of Self-Perceived Burnout	NR	NR	NR	Positive Single-item Screen	NR
Whippen, 1991[163]	North America	United States	1990	Oncology	594	NR	NR	Single-item Measure of Self-Perceived Burnout	NR	NR	NR	Positive Single-item Screen	NR
Coleman, 2015[164]	North America	United States	2014	Multiple Specialties	1016	Mean: 52, SD: 10.1	683 (67.2)	Single-item Measure of Self-Perceived Burnout	NR	NR	NR	Positive Single-item Screen	NR
Silver, 2017[165]	North America	United States	2016	Multiple Specialties	88	NR	40 (45)	Single-item Measure of Self-Perceived Burnout	NR	NR	NR	Positive Single-item Screen	NR
Allegra, 2005[166]	North America	United States	2003	Oncology	1740	NR	NR	Single-item Measure of Self-Perceived Burnout	NR	NR	NR	Positive Single-item Screen	NR
Pozdnyakova, 2018[167]	North America	United States	2017	Primary Care	6	NR	NR	Single-item Measure of Self-Perceived Burnout	NR	NR	NR	Positive Single-item Screen	NR
Dolan, 2014[168]	North America	United States	2012	Primary Care	1769	NR	NR	Single-item Modified MBI-HSS	Single-item Measure of EE≥4	NR	NR	NR	NR
Stafford, 2010[169]	Oceania	Australia	2008	Gynecologic Oncology	29	NR	24 (82.8)	22-item MBI-HSS	EE High	DP High	PA Low	NR	GHQ-12≥4
Ifediora, 2016[170]	Oceania	Australia	2013-2014	Concierge Medicine	168	NR	135 (80.4)	22-item MBI-HSS	EE High Frequency Percentage	DP High Frequency Percentage	PA High Frequency Percentage	NR	NR
Dunwoodie, 2007[171]	Oceania	Australia	2005-2006	Palliative Care	40	Mean: 50, Range: 35-66	29 (70.7)	22-item MBI-HSS	EE≥27	DP≥10	PA≤33	EE≥27 and/or DP≥10	GHQ-12≥4
Kluger, 2003[172]	Oceania	Australia	NR	Anesthesia	422	NR	350 (83)	22-item MBI-HSS	EE≥28	DP≥11	PA≤39	NR	NR
Winefield, 1991[173]	Oceania	Australia	1987	General Practice	929	Mean: 42.8	748 (79.7)	22-item MBI-HSS	Mean EE>3	Mean DP>3	Mean PA<3	NR	NR
Pit, 2014[174]	Oceania	Australia	2011	General Practice	92	NR	55 (59.8)	9-item MBI-HSS for EE Only	EE High	NR	NR	NR	NR
Leung, 2015[175]	Oceania	Australia, New Zealand	2013	Radiation Oncology	220	Median: 45.4	132 (60)	22-item MBI-HSS	EE≥27	DP≥10	PA≤32	EE≥27 and DP≥10 and PA≤32	NR
Surgenor, 2009[176]	Oceania	New Zealand	2006-2007	Multiple Specialties	267	Mean: 48, SD: 7.7	195 (73)	22-item MBI-HSS	EE≥27	DP≥10	PA≤33	EE≥27 and (DP≥10 and/or PA≤33)	NR
Bruce, 2005[177]	Oceania	New Zealand	2002	General Practice	50	NR	42 (85.7)	22-item MBI-HSS	EE≥27	DP≥10	PA≤33	EE≥27 and DP≥10 and PA≤33	GHQ-12≥4
Kumar, 2007[178]	Oceania	New Zealand	NR	Psychiatry	239	NR	149 (62.6)	22-item MBI-HSS	EE≥27	DP≥13	PA≤31	NR	NR
Gil-Monte, 2008[179]	South America	Argentina	2006	Pediatrics	123	Mean: 42.4, Range: 24-70	34 (27.6)	22-item MBI-HSS	EE≥27	DP≥13	PA≤31	EE≥27 and DP≥13 and PA≤31	NR
Barbosa, 2017[180]	South America	Brazil	2014	Anesthesia	43	Mean: 49.8, SD: 12.1	22 (51.2)	22-item MBI-HSS	EE≥27	DP≥10	PA≤33	EE≥27 and DP≥10 and PA≤33	NR
Barbosa, 2012[181]	South America	Brazil	2011	Intensive Care	67	Mean: 43.9, SD: 9.0	30 (44.8)	22-item MBI-HSS	EE≥27	DP≥10	PA≤33	EE≥27 and DP≥10 and PA≤33	NR
Garcia, 2014[182]	South America	Brazil	NR	Pediatrics	70	Mean: 36.2, SD: 8.4	15 (21.4)	22-item MBI-HSS	EE≥27	DP≥13	PA≤30	EE≥27 and/or DP≥13 and/or PA≤30	NR
Barros, 2008[183]	South America	Brazil	2006	Intensive Care	297	Mean: 34.2, SD: 6.9	208 (71.7)	22-item MBI-HSS	EE≥27	DP≥13	PA≤31	EE≥27 and DP≥13 and PA≤31	NR
Tironi, 2010[184]	South America	Brazil	2007	Multiple Specialties	296	Mean: 34.2, SD: 6.9	208 (71.7)	22-item MBI-HSS	EE≥27	DP≥13	PA≤31	EE≥27 and DP≥13 and PA≤31	NR
Zanatta, 2015[185]	South America	Brazil	2012	Pediatrics	36	Mean: 39.5	NR	22-item MBI-HSS	EE>Top Quartile	DP>Top Quartile	PA<Lowest Quartile	EE>Top Quartile and DP>Top Quartile and PA<Lowest Quartile	NR
Govêia, 2018[186]	South America	Brazil	2014-2015	Anesthesia	41	Mean: 42, SD 9.7	21 (51.2)	MBI (Version Not Specified)	EE≥26	DP≥9	PA≤33	EE≥26 and DP≥9 and PA≤33	NR
Aguirre Roldan, 2015[187]	South America	Colombia	NR	Multiple Specialties	106	Mean: 29.8, SD: 5	44 (41.5)	20-item CESQT	CESQT-EE>Top Tertile	CESQT-DP>Top Tertile	CESQT-PA<Lowest Tertile	CESQT-EE>Top Tertile and CESQT-DP>Top Tertile and CESQT-PA>Top Tertile	NR

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Source	Continent	Country	Survey Years	Specialty	Total Participants, No.[b]	Age, y[c]	Men, No. (%)[c]	Burnout Assessment Instrument[d,e]	Emotional Exhaustion Definition[f,g]	Depersonalization Definition[f,g]	Low Personal Accomplishment Definition[f,g]	Overall Burnout Definition[f,g]	Depression Screening Instrument and Definition[e]
Maticorena-Quevedo J, 2014[188]	South America	Peru	2014	Multiple Specialties	2228	NR	1697 (76.2)	22-item MBI-HSS	EE≥27	DP≥10	PA≤33	EE≥27 and DP≥10 and PA≤33	NR
Burghi, 2016[189]	South America	Uruguay	NR	Intensive Care	82	NR	NR	MBI (Version Not Specified)	NR	NR	NR	Score≥−8 to ≤34	NR
Arayago, 2016[190]	South America	Venezuela	2015	Anesthesia	34	NR	NR	22-item MBI-HSS	NR	NR	NR	EE≥19 and/or DP≥6 and/or PA≤39	NR

Abbreviations: aMBI, abbreviated MBI; BDI, Beck Depression Inventory; BSI, Brief Symptom Inventory; CY, cynicism; DP, depersonalization; EE, emotional exhaustion; ENT, otorhinolaryngology; EX, exhaustion; GHQ-12, 12-item General Health Questionnaire; HBI, Hamburg Burnout Inventory; IQR, interquartile range; MBI, Maslach Burnout Inventory; MBI-GS, MBI-General Survey; MBI-HSS, MBI-Human Services Survey; MBI-UBOS, MBI-Utrechtse Burnout Schaal (Dutch adaptation of the MBI); MDI, Major Depression Inventory; NR, not reported; PA, personal accomplishment; PE, professional efficacy; PHQ-9, 9-item Patient Health Questionnaire; PRIME-MD, Primary Care Evaluation of Mental Disorders; SD, standard deviation. Note that these abbreviations are also used in subsequent tables.

[a]Studies are ordered alphabetically by continent and then by country and medical specialty.

[b]Number of participants who were practicing physicians (*i.e.*, not medical students or resident physicians) for whom burnout data were available.

[c]If age and sex data for the entire population of included practicing physicians were not explicitly reported by the study, they were back calculated or inferred when possible.

[d]If the burnout assessment method was not explicitly reported by the study, it was inferred when possible based on the manuscripts or manuals the study cited.

[e]Studies for which a specific instrument is not specified (*e.g.*, "Single-item Measure of Self-Perceived Burnout") used variably worded short-form screening instruments.

[f]If the cutoff was not explicitly reported by the study, it was inferred when possible based on the manuscripts or manuals the study cited. If it was not possible to infer the cutoff, then the cutoff was listed simply as “high” or “low.”

[g]Note that the MBI-GS uses the terms “exhaustion,” “cynicism,” and “professional efficiency” rather than “emotional exhaustion,” “depersonalization,” and “personal accomplishment.”

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eTable 2. Summary of the Countries and Continents or Regions in Which Studies Were Conducted

Country	No. of Studies	%
Argentina	1	0.5%
Armenia	1	0.5%
Australia	6	3.3%
Austria	1	0.5%
Belgium	2	1.1%
Bosnia and Herzegovina	2	1.1%
Brazil	7	3.8%
Canada	7	3.8%
China	5	2.7%
Colombia	1	0.5%
Croatia	1	0.5%
Denmark	4	2.2%
France	4	2.2%
Germany	3	1.6%
Greece	1	0.5%
India	2	1.1%
Iran	2	1.1%
Israel	1	0.5%
Italy	6	3.3%
Japan	3	1.6%
Kuwait	1	0.5%
Lithuania	3	1.6%
Morocco	1	0.5%
Multiple Countries	4	2.2%
Netherlands	5	2.7%
New Zealand	3	1.6%
Pakistan	1	0.5%
Palestine	1	0.5%
Peru	1	0.5%
Poland	1	0.5%
Portugal	3	1.6%
Qatar	1	0.5%
Romania	1	0.5%
Saudi Arabia	1	0.5%
Serbia	4	2.2%
Singapore	1	0.5%
Spain	10	5.5%
Switzerland	4	2.2%
Taiwan	2	1.1%

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Country	No. of Studies	%
Turkey	1	0.5%
United Kingdom	5	2.7%
United States	65	35.7%
Uruguay	1	0.5%
Venezuela	1	0.5%
Yemen	1	0.5%
Continent or Region	**No. of Studies**	**%**
Africa	1	0.5%
Asia	17	9.1%
Europe	62	33.2%
Middle East	7	3.7%
North America	73	39.0%
Oceania	10	5.3%
South America	12	6.4%

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eTable 3. Newcastle-Ottawa Risk-of-Bias Scores of the 182 Studies Included in this Systematic Review

Source	Representativeness	Sample Size	Non-respondents	Ascertainment	Descriptive Statistics
Massou, 2013[9]	0	0	0	0	0
Margaryan, 2010[10]	1	0	0	1	1
Xiao, 2014[11]	0	0	0	1	0
Wu, 2013[12]	1	1	0	1	1
Wang, 2014[13]	1	1	0	1	1
Siu, 2012[14]	1	0	0	1	0
Li, 2018[15]	0	1	0	1	0
Das, 2016[16]	0	0	0	1	0
Langade, 2016[17]	1	1	0	1	0
Nishimura, 2014[18]	1	1	0	1	0
Saijo, 2014[19]	0	1	0	1	0
Asai, 2007[20]	1	1	0	1	1
Zafar, 2016[21]	1	0	0	1	0
Sadat-Ali, 2005[22]	0	0	0	0	0
See, 2016[23]	0	0	0	1	0
Chou, 2014[24]	0	0	0	1	1
Chen, 2013[25]	1	1	0	1	0
Schooley, 2016[26]	0	0	1	1	0
Wurm, 2016[27]	1	1	1	1	1
Eelen, 2014[28]	1	0	0	1	0
Vandenbroeck, 2017[29]	1	1	0	1	1
Selmanovic, 2011[30]	0	0	0	0	0
Stanetic, 2013[31]	0	0	0	1	0
Ozvacic Adzic Z, 2013[32]	0	0	0	1	1
Pedersen, 2013[33]	0	1	0	1	0
Pedersen, 2016[34]	1	1	0	1	0
Pedersen, 2018[35]	0	1	0	1	0
Brondt, 2008[36]	0	1	0	1	1

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Source	Representativeness	Sample Size	Non-respondents	Ascertainment	Descriptive Statistics
Lesage, 2013[37]	0	1	0	1	0
Dreano-Hartz, 2015[38]	0	1	0	1	1
Lamothe, 2014[39]	0	0	0	1	1
Embriaco, 2007[40]	1	1	0	1	0
Bohle, 2001[41]	0	0	0	1	0
Richter, 2014[42]	1	0	0	1	0
Pantenburg, 2016[43]	1	1	0	1	1
Panagopoulou, 2006[44]	0	0	0	1	1
O'Kelly, 2016[45]	0	1	0	1	0
Bressi, 2009[46]	0	0	0	1	1
Bressi, 2008[47]	0	0	0	1	1
Raggio, 2007[48]	0	0	0	1	0
Grassi, 2000[49]	1	1	0	1	0
Mattei, 2017[50]	0	0	0	1	0
Volpe, 2014[51]	0	0	1	0	1
Travado, 2005[52]	1	0	0	1	1
Pranckeviciene, 2016[53]	0	0	0	1	0
Mikalauskas, 2018[54]	1	0	0	1	0
Mikalauskas, 2012[55]	1	0	1	1	1
Ruitenburg, 2012[56]	0	0	0	1	1
van der Ploeg, 2003[57]	0	0	0	1	1
Meynaar, 2015[58]	1	0	0	1	1
van der Wal, 2016[59]	0	1	0	1	0
Twellaar, 2008[60]	0	1	0	1	1
Glebocka, 2017[61]	1	0	0	0	0
Maroco, 2016[62]	1	1	0	1	1
Marcelino, 2012[63]	0	0	0	1	1
Teixeira, 2013[64]	0	0	0	1	0
Hagau, 2012[65]	0	0	0	1	0
Stojanovic-Tasic, 2018[66]	0	0	0	1	1

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Source	Representativeness	Sample Size	Non-respondents	Ascertainment	Descriptive Statistics
Vicentic, 2013[67]	0	0	0	1	0
Milenovic, 2016[68]	0	0	0	1	1
Putnik, 2011[69]	0	1	0	1	0
Yuguero Torres, 2015[70]	0	0	0	0	0
Yuguero, 2017[71]	1	0	0	1	0
Chivato-Perez, 2011[72]	0	1	0	1	1
Frutos-Llanes, 2014[73]	0	0	0	1	1
Martínez de la Casa Muñoz, 2003[74]	1	0	0	1	1
Vila Falgueras, 2014[75]	0	0	0	1	0
Atalaya, 2008[76]	0	0	0	1	1
Riquelme, 2018[77]	1	1	0	1	0
Yuguero, 2017[78]	0	0	0	0	0
Escriba-Aguir, 2007[79]	0	1	0	1	0
Arigoni, 2009[80]	1	1	0	1	0
Goehring, 2005[81]	1	1	0	1	0
Merlani, 2011[82]	0	1	0	1	0
Hammig, 2012[83]	0	0	0	1	0
Upton, 2012[84]	1	1	0	1	0
Orton, 2012[85]	0	1	0	1	0
Taylor, 2005[86]	1	1	0	1	0
Colville, 2017[87]	1	0	0	1	0
Sharma, 2008[88]	0	1	0	1	1
Soltanifar, 2018[89]	0	0	0	1	0
Ahmadpanah, 2015[90]	0	0	0	1	1
Kushnir, 2014[91]	0	0	1	1	1
Al-Shoraian, 2011[92]	1	0	0	1	0
Hamdan, 2017[93]	0	0	0	1	0
Abdulla, 2011[94]	0	0	0	1	0
Al-Dubai, 2010[95]	1	1	0	1	1

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Source	Representativeness	Sample Size	Non-respondents	Ascertainment	Descriptive Statistics
Amanullah, 2017[96]	0	0	0	0	0
Wright, 2014[97]	0	0	0	1	1
Helewa, 2013[98]	0	0	0	1	0
Lee, 2008[99]	0	0	0	1	0
Lloyd, 1994[100]	0	0	0	1	0
Elit, 2004[101]	0	0	0	1	0
Viviers, 2008[102]	0	0	0	0	1
Dyrbye, 2009[103]	0	0	0	1	1
Puffer, 2017[104]	0	1	1	1	0
Johns, 2005[105]	0	0	0	1	0
Gabbe, 2002[106]	0	0	0	1	1
Cruz OA, 2007[107]	0	0	0	1	1
De Oliveira, 2011[108]	0	0	0	1	0
Garcia, 2015[109]	0	0	0	1	1
Rao, 2017[110]	0	1	1	1	0
Shenoi, 2018[111]	0	0	1	0	0
Aggarwal, 2015[112]	0	0	0	1	0
Lu, 2015[113]	0	0	0	1	0
Rath, 2015[114]	0	1	0	0	0
Kroll, 2016[115]	1	0	0	1	1
Streu, 2014[116]	0	1	0	1	0
Jesse, 2015[117]	0	0	0	1	1
Bertges Yost, 2005[118]	0	0	0	1	1
Shanafelt, 2014[119]	0	1	0	1	0
Golub, 2008[120]	0	1	0	1	0
Fletcher, 2012[121]	0	0	0	1	0
Simons, 2016[122]	0	0	0	1	0
Shanafelt, 2012[123]	1	1	0	1	0
Shanafelt, 2015[124]	1	1	0	1	0
Shanafelt, 2009[125]	1	1	0	1	0

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Source	Representativeness	Sample Size	Non-respondents	Ascertainment	Descriptive Statistics
Busis, 2017[126]	0	1	0	1	1
Klimo, 2013[127]	0	0	0	1	0
McPhillips, 2007[128]	0	0	0	1	0
Contag, 2010[129]	0	0	0	1	0
Guest, 2011[130]	0	0	0	1	0
Evans, 2015[131]	1	0	0	1	0
Campbell, 2001[132]	1	1	0	1	0
Saleh, 2007[133]	0	0	0	1	0
Kamal, 2016[134]	0	1	0	1	0
Shanafelt, 2009[135]	1	1	0	1	0
Qureshi, 2014[136]	0	1	0	1	1
De Stefano, 2018[137]	0	0	0	1	0
Saleh, 2009[138]	0	0	0	1	0
Guntupalli, 1996[139]	1	0	0	1	1
West, 2013[140]	0	0	1	1	1
West, 2014[141]	0	1	0	1	0
Balch, 2011[142]	1	1	0	1	1
Gorelick, 2016[143]	0	1	0	1	0
Salmoirago-Blotcher, 2016[144]	0	0	0	1	1
Tak, 2017[145]	1	1	1	1	0
Weintraub, 2016[146]	0	1	0	1	0
Kase, 2017[147]	0	0	0	1	0
Yoon, 2010[148]	0	1	0	1	1
Chew, 2017[149]	0	1	0	1	0
Deckard, 1992[150]	0	1	0	1	0
Deckard, 1994[151]	1	0	0	1	0
Fields, 1995[152]	1	1	0	1	0
Hinami, 2012[153]	1	1	0	1	0
Jager, 2017[154]	1	1	1	1	1

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Source	Representativeness	Sample Size	Non-respondents	Ascertainment	Descriptive Statistics
Rohland, 2004[155]	1	0	0	1	1
Yoon, 2016[156]	1	1	0	1	0
Yoon, 2017[157]	1	1	0	1	0
Helfrich, 2013[158]	0	1	0	1	0
Starmer, 2016[159]	0	1	0	0	0
Doan-Wiggins, 1995[160]	0	1	0	0	0
Johnson, 1993[161]	0	1	0	0	0
Glasheen, 2011[162]	1	0	0	0	0
Whippen, 1991[163]	0	1	0	0	0
Coleman, 2015[164]	1	1	0	0	1
Silver, 2017[165]	1	0	0	0	0
Allegra, 2005[166]	1	1	0	0	0
Pozdnyakova, 2018[167]	0	0	0	0	0
Dolan, 2014[168]	0	1	0	1	0
Stafford, 2010[169]	0	0	0	1	0
Ifediora, 2016[170]	1	0	0	1	0
Dunwoodie, 2007[171]	1	0	0	1	0
Kluger, 2003[172]	0	1	0	1	0
Winefield, 1991[173]	0	1	0	1	0
Pit, 2014[174]	0	0	0	1	0
Leung, 2015[175]	0	0	0	1	0
Surgenor, 2009[176]	0	0	0	1	1
Bruce, 2005[177]	1	0	0	1	0
Kumar, 2007[178]	0	0	0	1	0
Gil-Monte, 2008[179]	0	0	0	1	0
Barbosa, 2017[180]	0	0	0	1	1
Barbosa, 2012[181]	0	0	1	1	1
Garcia, 2014[182]	0	0	0	1	1
Barros, 2008[183]	0	0	0	1	1
Tironi, 2010[184]	1	0	0	1	1

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Source	Representativeness	Sample Size	Non-respondents	Ascertainment	Descriptive Statistics
Zanatta, 2015[185]	0	0	0	0	0
Govêia, 2018[186]	0	0	0	1	1
Aguirre Roldan, 2015[187]	0	0	0	1	1
Maticorena-Quevedo J, 2014[188]	1	1	0	1	0
Burghi, 2016[189]	0	0	0	0	0
Arayago, 2016[190]	0	0	0	1	0

Legend: Details regarding Newcastle-Ottawa risk-of-bias scoring are provided in eAppendix 2.

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eTable 4. Summary of the Newcastle-Ottawa Risk-of-Bias Scores of the Studies

	No. of Studies	%
Representativeness		
0 Points	123	67.6%
1 Point	59	32.4%
Sample Size		
0 Points	109	59.9%
1 Point	73	40.1%
Non-respondents		
0 Points	170	93.4%
1 Point	12	6.6%
Ascertainment		
0 Points	22	12.1%
1 Point	160	87.9%
Descriptive Statistics		
0 Points	121	66.5%
1 Point	61	33.5%
Total Newcastle-Ottawa Score		
0 Points	9	4.9%
1 Point	50	27.5%
2 Points	68	37.4%
3 Points	43	23.6%
4 Points	10	5.5%
5 Points	2	1.1%

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eTable 5. Summary of the Depression Screening Instruments Used by the Studies

Depression Screening Method	No. of Studies	%
Did Not Screen for Depression	149	81.9%
GHQ-12≥4	14	7.7%
PRIME-MD≥1	9	4.9%
Positive Single-item Screen	2	1.1%
BDI-II≥14	1	0.5%
BDI≥19	1	0.5%
BSI≥0.41	1	0.5%
GHQ-12≥2	1	0.5%
HADS≥9	1	0.5%
MDI≥20	1	0.5%
PHQ-9≥5	1	0.5%
PRIME-MD≥3	1	0.5%

Abbreviations: BDI, Beck Depression Inventory; BSI, Brief Symptom Inventory; HADS, Hospital Anxiety and Depression Scale; GHQ-12, 12-item General Health Questionnaire; MDI, Major Depression Inventory; PHQ-9, 9-item Patient Health Questionnaire; PRIME-MD, Primary Care Evaluation of Mental Disorders.

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eTable 6. Meta-analysis of the Prevalence of Overall Burnout

Study	Prevalence (%)	LCI	UCI	%W(random)
Wu, 2013[12]	12.1%	10.3%	14.0%	0.9%
Wang, 2014[13]	5.9%	3.9%	8.5%	0.9%
Li, 2018[15]	69.7%	67.4%	71.9%	0.9%
Nishimura, 2014[18]	21.6%	20.0%	23.2%	0.9%
Saijo, 2014[19]	22.1%	18.5%	26.1%	0.9%
Wurm, 2016[27]	50.7%	49.4%	52.0%	0.9%
Vandenbroeck, 2017[29]	5.1%	3.9%	6.6%	0.9%
Pedersen, 2013[33]	2.6%	1.3%	4.8%	0.8%
Pedersen, 2016[34]	4.8%	3.6%	6.2%	0.9%
Pedersen, 2018[35]	25.0%	21.6%	28.7%	0.9%
Brondt, 2008[36]	2.6%	1.3%	4.8%	0.8%
Lesage, 2013[37]	11.8%	10.2%	13.6%	0.9%
Pantenburg, 2016[43]	10.9%	9.5%	12.5%	0.9%
O'Kelly, 2016[45]	28.9%	25.2%	32.8%	0.9%
van der Wal, 2016[29]	19.8%	16.5%	23.6%	0.9%
Twellaar, 2008[60]	19.5%	15.5%	24.0%	0.9%
Maroco, 2016[62]	43.6%	39.0%	48.2%	0.9%
Riquelme, 2018[77]	7.3%	4.6%	10.9%	0.9%
Arigoni, 2009[80]	6.0%	3.8%	8.9%	0.9%
Goehring, 2005[81]	3.5%	2.7%	4.5%	0.9%
Upton, 2012[84]	19.8%	15.5%	24.7%	0.9%
Al-Dubai, 2010[95]	11.7%	9.2%	14.7%	0.9%
Puffer, 2017[104]	24.5%	22.7%	26.4%	0.9%
Rao, 2017[110]	9.8%	8.5%	11.3%	0.9%
Shanafelt, 2014[119]	44.7%	41.7%	47.7%	0.9%
Golub, 2008[120]	4.0%	2.2%	6.6%	0.8%
Shanafelt, 2012[123]	45.4%	44.3%	46.6%	0.9%
Shanafelt, 2015[124]	54.4%	53.2%	55.6%	0.9%
Shanafelt, 2009[125]	34.0%	29.7%	38.5%	0.9%
Busis, 2017[126]	60.1%	57.7%	62.5%	0.9%
Kamal, 2015[134]	61.9%	58.2%	65.6%	0.9%
Shanafelt, 2009[135]	39.6%	38.5%	40.7%	0.9%
Qureshi, 2015[136]	29.7%	27.4%	32.0%	0.9%
Maticorena-Quevedo J, 2014[188]	3.7%	2.9%	4.6%	0.9%
Massou, 2013[9]	52.9%	38.5%	67.1%	0.8%
Margaryan, 2010[10]	18.3%	11.9%	26.4%	0.8%
Xiao, 2014[11]	25.4%	19.6%	31.9%	0.9%
Siu, 2012[14]	31.4%	25.4%	37.9%	0.9%
Das, 2016[16]	0.0%	0.0%	60.2%	0.2%
See, 2016[23]	31.1%	18.2%	46.7%	0.8%
Lamothe, 2014[39]	3.4%	1.6%	6.2%	0.8%
Embriaco, 2007[40]	13.9%	11.2%	16.9%	0.9%
Mattei, 2017[50]	28.6%	18.9%	40.0%	0.8%
Volpe, 2014[51]	52.0%	37.4%	66.3%	0.8%
Mikalauskas, 2018[54]	10.9%	7.1%	15.8%	0.9%
Mikalauskas, 2012[55]	62.7%	49.2%	75.0%	0.8%

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Study	Prevalence (%)	LCI	UCI	%W(random)
Ruitenburg, 2012[56]	6.1%	3.3%	10.2%	0.8%
van der Ploeg, 2003[57]	21.4%	13.2%	31.7%	0.8%
Meynaar, 2015[58]	4.4%	2.3%	7.6%	0.8%
Marcelino, 2012[63]	2.0%	0.4%	5.7%	0.6%
Teixeira, 2013[64]	24.7%	15.3%	36.1%	0.8%
Milenovic, 2016[68]	6.3%	3.4%	10.6%	0.8%
Yuguero Torres, 2015[70]	6.5%	2.7%	12.9%	0.7%
Yuguero, 2017[71]	6.6%	3.1%	12.2%	0.8%
Frutos-Llanes, 2014[73]	16.3%	10.6%	23.5%	0.8%
Martínez de la Casa Muñoz, 2003[74]	76.4%	68.6%	83.1%	0.9%
Vila Falgueras, 2014[75]	49.5%	43.6%	55.4%	0.9%
Yuguero, 2017[78]	34.9%	21.0%	50.9%	0.8%
Merlani, 2011[82]	31.2%	26.9%	35.6%	0.9%
Hammig, 2012[83]	32.1%	19.9%	46.3%	0.8%
Colville, 2017[87]	48.7%	36.9%	60.6%	0.8%
Kushnir, 2014[91]	55.9%	47.1%	64.4%	0.9%
Al-Shoraian, 2011[92]	20.5%	15.1%	26.8%	0.9%
Hamdan, 2017[93]	9.9%	5.5%	16.0%	0.8%
Abdulla, 2011[94]	12.6%	8.1%	18.3%	0.9%
Helewa, 2013[98]	61.1%	35.8%	82.7%	0.7%
Dyrbye, 2009[103]	61.8%	50.0%	72.8%	0.8%
Johns, 2005[105]	2.8%	0.6%	8.0%	0.6%
Gabbe, 2002[106]	4.2%	1.4%	9.5%	0.7%
Cruz OA, 2007[107]	8.9%	4.2%	16.2%	0.8%
De Oliveira, 2011[108]	20.8%	13.2%	30.3%	0.8%
Shenoi, 2018[111]	21.4%	16.5%	27.0%	0.9%
Aggarwal, 2015[112]	6.4%	1.3%	17.5%	0.6%
Lu, 2015[113]	50.0%	36.1%	63.9%	0.8%
Rath, 2015[114]	32.0%	27.3%	37.0%	0.9%
Fletcher, 2012[121]	3.5%	1.0%	8.7%	0.7%
Simons, 2016[122]	16.7%	2.1%	48.4%	0.5%
Klimo, 2013[127]	27.2%	17.9%	38.2%	0.8%
McPhillips, 2007[128]	19.7%	13.4%	27.4%	0.9%
Contag, 2010[129]	1.7%	0.0%	8.9%	0.4%
Guest, 2011[130]	42.3%	30.6%	54.6%	0.8%
Evans, 2015[131]	57.5%	48.4%	66.2%	0.9%
De Stefano, 2018[137]	4.4%	0.1%	22.0%	0.4%
West, 2013[140]	28.7%	23.5%	34.4%	0.9%
West, 2014[141]	29.3%	25.0%	33.8%	0.9%
Balch, 2011[142]	26.7%	25.7%	27.8%	0.9%
Salmoirago-Blotcher, 2016[144]	26.8%	19.6%	35.0%	0.9%
Tak, 2017[145]	45.5%	42.8%	48.3%	0.9%
Weintraub, 2016[146]	20.8%	17.1%	24.9%	0.9%
Kase, 2017[147]	14.7%	8.5%	23.1%	0.8%
Chew, 2017[149]	80.5%	76.3%	84.2%	0.9%
Fields, 1995[152]	14.1%	10.8%	18.0%	0.9%
Hinami, 2012[153]	30.0%	26.8%	33.4%	0.9%
Jager, 2017[154]	28.5%	26.7%	30.5%	0.9%

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Study	Prevalence (%)	LCI	UCI	%W(random)
Rohland, 2004[155]	22.7%	18.1%	27.9%	0.9%
Yoon, 2016[156]	22.9%	20.5%	25.5%	0.9%
Yoon, 2017[157]	20.6%	18.4%	23.0%	0.9%
Starmer, 2016[159]	30.0%	26.9%	33.3%	0.9%
Doan-Wiggins, 1995[160]	25.2%	22.1%	28.5%	0.9%
Johnson, 1993[161]	33.7%	28.9%	38.7%	0.9%
Glasheen, 2011[162]	23.4%	18.4%	29.0%	0.9%
Whippen, 1991[163]	56.2%	52.1%	60.3%	0.9%
Coleman, 2015[164]	25.0%	22.4%	27.8%	0.9%
Silver, 2017[165]	45.5%	34.8%	56.4%	0.9%
Allegra, 2005[166]	61.7%	59.3%	64.0%	0.9%
Pozdnyakova, 2018[167]	16.7%	0.4%	64.1%	0.3%
Helfrich, 2013[158]	45.5%	43.1%	47.8%	0.9%
Dunwoodie, 2007[171]	25.0%	12.7%	41.2%	0.8%
Leung, 2015[175]	2.7%	1.0%	5.8%	0.7%
Surgenor, 2009[176]	19.5%	14.9%	24.7%	0.9%
Bruce, 2005[177]	10.0%	3.3%	21.8%	0.7%
Gil-Monte, 2008[179]	10.6%	5.8%	17.4%	0.8%
Barbosa, 2017[180]	9.3%	2.6%	22.1%	0.6%
Barbosa, 2012[181]	17.9%	9.6%	29.2%	0.8%
Garcia, 2014[182]	50.0%	37.8%	62.2%	0.8%
Barros, 2008[183]	7.4%	4.7%	11.0%	0.9%
Tironi, 2010[184]	7.4%	4.7%	11.0%	0.9%
Zanatta, 2015[185]	5.6%	0.7%	18.7%	0.5%
Govêia, 2018[186]	2.4%	0.1%	12.9%	0.4%
Aguirre Roldan, 2015[187]	3.8%	1.0%	9.4%	0.7%
Burghi, 2016[189]	51.2%	39.9%	62.4%	0.9%
Arayago, 2016[190]	55.9%	37.9%	72.8%	0.8%
Number of studies combined:	k = 122			
Random effects model	21.3%	18.9%	24.0%	
Quantifying heterogeneity:	τ^2 = 0.658	H = 9.37	I^2 = 98.9%	
Test of heterogeneity:				
Q	d.f.	p-value		
10613	121	<0.0001		

Abbreviations: d.f., degrees of freedom; H, square root of the χ^2 statistic divided by its degrees of freedom; I^2, a transformation of H describing the proportion of total variation in study estimates secondary to heterogeneity; k, number of studies; LCI, lower 95% confidence interval; τ^2, between-study variance; UCI, upper 95% confidence interval; Q, Cochran's heterogeneity statistic; %W, percentage weight in the random effects meta-analysis. Note that these abbreviations are also used in subsequent tables.

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eTable 7. Meta-analysis of the Prevalence of Overall Burnout Stratified by Assessment Method

Definition of Overall Burnout	k	Prevalence (%)	LCI	UCI	Q	τ^2	I^2
(MBI-EE + MBI-DP + MBI-PA)≥47	1	34.9%	22.3%	50.1%	0	--	--
(UBOS-EE High and UBOS-DP High) and/or UBOS-PA Low	1	21.4%	13.9%	31.5%	0	--	--
aMBI-EE≥27 and aMBI-DP≥10 and aMBI-PA≤31	1	20.8%	13.9%	30.1%	0	--	--
aMBI-EE≥27 and aMBI-DP≥10 and aMBI-PA≤33	2	3.6%	1.8%	7.1%	0	0.0	0.0 %
aMBI-EE≥27 and aMBI-DP≥13 and aMBI-PA≤31	1	8.9%	4.7%	16.3%	0	--	--
aMBI-EE≥27 and/or aMBI-DP≥10	1	48.7%	37.5%	59.9%	0	--	--
AMBQ>19	1	12.6%	8.5%	18.2%	0	--	--
Average CBI Subscale≥50	1	32.1%	21.0%	45.7%	0	--	--
CESQT-EE>Top Tertile and CESQT-DP>Top Tertile and CESQT-PA>Top Tertile	1	3.8%	1.4%	9.6%	0	--	--
CFST>"High-End" Cutoff	1	20.8%	17.2%	24.9%	0	--	--
CFST>"Natural High-End Cut Point"	1	14.7%	9.1%	23.0%	0	--	--
Chinese MBI-HSS≥4.5	1	5.9%	4.1%	8.5%	0	--	--
HBI≥145	1	50.7%	49.4%	52.0%	0	--	--
MBI-EE High and (MBI-DP High and/or MBI-PA Low)	1	21.4%	16.8%	26.9%	0	--	--
MBI-EE High and MBI-DP High and MBI-PA Low	2	9.1%	5.7%	14.2%	1	0.0	0.0 %
MBI-EE High and/or MBI-DP High	3	47.2%	28.3%	67.0%	26	0.5	92. 2%
MBI-EE≥19 and/or MBI-DP≥6 and/or MBI-PA≤39	1	55.9%	39.2%	71.4%	0	--	--
MBI-EE≥24 and/or MBI-DP≥9	1	28.6%	19.6%	39.6%	0	--	--
MBI-EE≥25 and MBI-DP≥10 and MBI-PA≤32	1	24.7%	16.1%	35.8%	0	--	--
MBI-EE≥26 and MBI-DP≥9 and MBI-PA≤33	1	2.4%	0.3%	15.4%	0	--	--
MBI-EE≥27 and (MBI-DP≥10 and/or MBI-PA≤33)	1	19.5%	15.2%	24.7%	0	--	--
MBI-EE≥27 and (MBI-DP≥13 and/or MBI-PA≤31)	1	28.9%	25.3%	32.7%	0	--	--
MBI-EE≥27 and MBI-DP≥10 and MBI-PA≤31	1	10.9%	7.4%	15.8%	0	--	--
MBI-EE≥27 and MBI-DP≥10 and MBI-PA≤32	1	2.7%	1.2%	5.9%	0	--	--
MBI-EE≥27 and MBI-DP≥10 and MBI-PA≤33	21	8.6%	6.0%	12.2%	481	0.7	95. 8%
MBI-EE≥27 and MBI-DP≥13 and MBI-PA≤31	5	8.8%	6.7%	11.3%	9	0.1	53. 9%
MBI-EE≥27 and/or MBI-DP≥10	11	40.0%	34.4%	45.8%	433	0.1	97. 7%
MBI-EE≥27 and/or MBI-DP≥10 and/or MBI-PA≤33	2	63.8%	35.3%	85.0%	27	0.7	96. 3%

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Definition of Overall Burnout	k	Prevalence (%)	LCI	UCI	Q	τ^2	I^2
MBI-EE≥27 and/or MBI-DP≥10 and/or MBI-PA≤33	1	61.1%	37.9%	80.2%	0	--	--
MBI-EE≥27 and/or MBI-DP≥13	2	66.0%	58.1%	73.2%	13	0.1	92.5%
MBI-EE≥27 and/or MBI-DP≥13 and/or MBI-PA≤30	1	50.0%	38.5%	61.5%	0	--	--
MBI-EE≥27 and/or MBI-PA≥13	1	57.5%	48.7%	65.8%	0	--	--
MBI-EE≥28 and MBI-DP≥14 and MBI-PA≤29	1	4.4%	0.6%	25.2%	0	--	--
MBI-EE≥28 and/or MBI-DP≥11	2	34.5%	25.5%	44.8%	54	0.1	98.1%
MBI-EE≥28 and/or MBI-DP≥11 and/or MBI-PA≤32	1	62.7%	49.8%	74.0%	0	--	--
MBI-EE≥30 and MBI≥12 and MBI-PA≤33	1	10.0%	0.6%	67.4%	0	--	--
MBI-EE>Top Quartile and MBI-DP>Top Quartile and MBI-PA<Lowest Quartile	2	7.1%	4.8%	10.4%	0	0.0	0.0%
MBI-EX≥14 and MBI-CY≥10 and MBI-PE≤17	1	12.1%	10.3%	14.0%	0	--	--
MBI-EX≥14 and/or MBI-CY≥10 and/or MBI-PE≤17	1	25.4%	19.9%	31.8%	0	--	--
MBI-EX≥3.2 and MBI-CY≥2.6 and MBI-PE≤3.8	1	9.8%	8.5%	11.3%	0	--	--
MBI-EX>4.0 and (MBI-CY>2.6 and/or MBI-PE<4.17)	1	21.6%	20.0%	23.2%	0	--	--
MBI-EX>4.2 and (MBI-CY>2.4 and/or MBI-PE<2.5)	1	22.1%	18.7%	26.0%	0	--	--
MBI-EX>Top Tertile and MBI-CY>Top Tertile	1	19.8%	15.8%	24.6%	0	--	--
MBI (Specific Criteria Not Stated)	3	15.2%	2.5%	55.9%	53	2.9	96.2%
MBI Global Mean Score≥30	1	3.4%	1.8%	6.2%	0	--	--
MBI≥−8 to ≤34	3	29.5%	14.2%	51.5%	75	0.7	97.3%
Mini-Z≥3	1	24.5%	22.7%	26.4%	0	--	--
Modified MBI Average Subscale Score≥3	1	43.6%	39.1%	48.1%	0	--	--
Personal Burnout≥50 and/or Work-Related Burnout≥50 and/or Patient-Related Burnout≥50	1	31.1%	19.4%	45.9%	0	--	--
Pines and Aronson Burnout Measure Score>4	1	14.1%	11.0%	18.0%	0	--	--
Positive Single-item Screen	9	35.7%	24.6%	48.6%	602	0.6	98.7%
Rohland et al. Score≥3	6	27.9%	20.7%	36.4%	277	0.2	98.2%
Single-item MBI-EE≥27 and/or Single-item MBI-DP≥10 and/or 5-item MBI-PA≤33	1	80.5%	76.3%	84.1%	0	--	--
Single-item MBI-EE≥4 and/or Single-item MBI-DP≥4	5	31.2%	22.9%	41.0%	180	0.2	97.8%
UBOS-EE≥2.38 and (UBOS-DP≥ 1.6 [women]/1.8 [men] and/or UBOS-PA≤3.7)	1	4.4%	2.5%	7.6%	0	--	--

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Definition of Overall Burnout	k	Prevalence (%)	LCI	UCI	Q	τ^2	I^2
UBOS-EE≥2.5 and UBOS-DP≥1.6 (women)/UBOS-DP≥1.8 (men) and UBOS-PA≤3.7	1	5.1%	4.0%	6.6%	0	--	--
UBOS-EE≥27 and UBOS-DP≥10	1	6.1%	3.6%	10.2%	0	--	--
UBOS-EE>Top Quartile and (UBOS-DP>Top Quartile and/or UBOS-PA<Lowest Quartile)	2	19.7%	17.2%	22.5%	0	0	0.0 %
Test for subgroup differences:							
	Q	d.f.	p-value				
Between groups	3406	57	<0.0001				

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eTable 8. Assessment Tools and Cutoff Scores for Defining Burnout or Burnout Subcomponent Prevalence Used by the Studies

	No. of Studies	%
Definition of Overall Burnout		
Did Not Report Overall Burnout Prevalence	60	32.1%
MBI-EE≥27 and MBI-DP≥10 and MBI-PA≤33	21	11.2%
MBI-EE≥27 and/or MBI-DP≥10	11	5.9%
Positive Single-item Screen	9	4.8%
MBI-EE≥27 and MBI-DP≥13 and MBI-PA≤31	5	2.7%
Rohland et al. Score≥3	6	3.2%
Single-item MBI-EE≥4 and/or Single-item MBI-DP≥4	5	2.7%
MBI (Specific Criteria Not Stated)	3	1.6%
MBI≥−8 to ≤34	3	1.6%
MBI-EE High and/or MBI-DP High	3	1.6%
aMBI-EE≥27 and aMBI-DP≥10 and aMBI-PA≤33	2	1.1%
MBI-EE High and MBI-DP High and MBI-PA Low	2	1.1%
MBI-EE>Top Quartile and MBI-DP>Top Quartile and MBI-PA<Lowest Quartile	2	1.1%
MBI-EE≥27 and/or MBI-DP≥10 and/or MBI-PA≤33	2	1.1%
MBI-EE≥27 and/or MBI-DP≥13	2	1.1%
MBI-EE≥28 and/or MBI-DP≥11	2	1.1%
UBOS-EE>Top Quartile and (UBOS-DP>Top Quartile and/or UBOS-PA<Lowest Quartile)	2	1.1%
(MBI-EE + MBI-DP + MBI-PA)≥47	1	0.5%
(UBOS-EE High and UBOS-DP High) and/or UBOS-PA Low	1	0.5%
aMBI-EE≥27 and aMBI-DP≥10 and aMBI-PA≤31	1	0.5%
aMBI-EE≥27 and aMBI-DP≥13 and aMBI-PA≤31	1	0.5%
aMBI-EE≥27 and/or aMBI-DP≥10	1	0.5%
AMBQ>19	1	0.5%
Average CBI Subscale≥50	1	0.5%
CESQT-EE>Top Tertile and CESQT-DP>Top Tertile and CESQT-PA>Top Tertile	1	0.5%
CFST>"High-End" Cutoff	1	0.5%

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	No. of Studies	%
CFST>"Natural High-End Cut Point"	1	0.5%
Chinese MBI-HSS≥4.5	1	0.5%
HBI≥145	1	0.5%
MBI Global Mean Score≥30	1	0.5%
MBI-EE High and (MBI-DP High and/or MBI-PA Low)	1	0.5%
MBI-EE≥19 and/or MBI-DP≥6 and/or MBI-PA≤39	1	0.5%
MBI-EE≥24 and/or MBI-DP≥9	1	0.5%
MBI-EE≥25 and MBI-DP≥10 and MBI-PA≤32	1	0.5%
MBI-EE≥26 and MBI-DP≥9 and MBI-PA≤33	1	0.5%
MBI-EE≥27 and (MBI-DP≥10 and/or MBI-PA≤33)	1	0.5%
MBI-EE≥27 and (MBI-DP≥13 and/or MBI-PA≤31)	1	0.5%
MBI-EE≥27 and MBI-DP≥10 and MBI-PA≤31	1	0.5%
MBI-EE≥27 and MBI-DP≥10 and MBI-PA≤32	1	0.5%
MBI-EE≥27 and/or MBI-DP≥10 and/or MBI-PA≤33	1	0.5%
MBI-EE≥27 and/or MBI-DP≥13 and/or MBI-PA≤30	1	0.5%
MBI-EE≥27 and/or MBI-PA≥13	1	0.5%
MBI-EE≥28 and MBI-DP≥14 and MBI-PA≤29	1	0.5%
MBI-EE≥28 and/or MBI-DP≥11 and/or MBI-PA≤32	1	0.5%
MBI-EE≥30 and MBI≥12 and MBI-PA≤33	1	0.5%
MBI-EX>4.0 and (MBI-CY>2.6 and/or MBI-PE<4.17)	1	0.5%
MBI-EX>4.2 and (MBI-CY>2.4 and/or MBI-PE<2.5)	1	0.5%
MBI-EX>Top Tertile and MBI-CY>Top Tertile	1	0.5%
MBI-EX≥14 and MBI-CY≥10 and MBI-PE≤17	1	0.5%
MBI-EX≥14 and/or MBI-CY≥10 and/or MBI-PE≤17	1	0.5%
MBI-EX≥3.2 and MBI-CY≥2.6 and MBI-PE≤3.8	1	0.5%
Mini-Z≥3	1	0.5%
Modified MBI Average Subscale Score≥3	1	0.5%
Personal Burnout≥50 and/or Work-Related Burnout≥50 and/or Patient-Related Burnout≥50	1	0.5%
Pines and Aronson Burnout Measure Score>4	1	0.5%
Single-item MBI-EE≥27 and/or Single-item MBI-DP≥10 and/or 5-item MBI-PA≤33	1	0.5%

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	No. of Studies	%
UBOS-EE≥2.38 and (UBOS-DP≥ 1.6 [women]/1.8 [men] and/or UBOS-PA≤3.7)	1	0.5%
UBOS-EE≥2.5 and UBOS-DP≥1.6 (women)/UBOS-DP≥1.8 (men) and UBOS-PA≤3.7	1	0.5%
UBOS-EE≥27 and UBOS-DP≥10	1	0.5%
Definition of Emotional Exhaustion		
Did Not Report Emotional Exhaustion Prevalence	51	28.0%
aMBI-EE≥13	1	0.5%
aMBI-EE≥27	3	1.6%
CESQT-EE>Top Tertile	1	0.5%
MBI-EE High	22	12.1%
MBI-EE High Frequency Percentage	1	0.5%
MBI-EE≥15	1	0.5%
MBI-EE≥22	1	0.5%
MBI-EE≥24	2	1.1%
MBI-EE≥25	1	0.5%
MBI-EE≥26	2	1.1%
MBI-EE≥27	57	31.3%
MBI-EE≥28	8	4.4%
MBI-EE≥30	4	2.2%
MBI-EE≥31	1	0.5%
MBI-EE≥40	1	0.5%
MBI-EE>Top Quartile	3	1.6%
MBI-EE>Top Tertile	1	0.5%
MBI-EX High	1	0.5%
MBI-EX≥17	1	0.5%
MBI-EX≥3.2	2	1.1%
MBI-EX>2.5	1	0.5%
MBI-EX>Top Tertile	2	1.1%
Mean MBI-EE≥4	1	0.5%
Mean MBI-EE>3	1	0.5%
Modified MBI-EE≥18	2	1.1%

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	No. of Studies	%
Single-item Measure of MBI-EE≥27	1	0.5%
Single-item Measure of MBI-EE≥4	5	2.7%
UBOS-EE High	2	1.1%
UBOS-EE≥2.38	1	0.5%
UBOS-EE≥2.5	1	0.5%
Definition of Depersonalization		
Did Not Report Depersonalization Prevalence	58	31.9%
aMBI-DP≥10	2	1.1%
aMBI-DP≥13	2	1.1%
CESQT-DP>Top Tertile	1	0.5%
MBI-CY High	1	0.5%
MBI-CY≥12	1	0.5%
MBI-CY>1.6	1	0.5%
MBI-CY>2.2	1	0.5%
MBI-CY>Top Tertile	2	1.1%
MBI-DP High	21	11.5%
MBI-DP High Frequency Percentage	1	0.5%
MBI-DP≥10	41	22.5%
MBI-DP≥11	5	2.7%
MBI-DP≥12	4	2.2%
MBI-DP≥13	17	9.3%
MBI-DP≥14	2	1.1%
MBI-DP≥15	1	0.5%
MBI-DP≥6	1	0.5%
MBI-DP≥9	3	1.6%
MBI-DP>Top Quartile	3	1.6%
MBI-DP>Top Tertile	1	0.5%
Mean MBI-DP≥4	1	0.5%
Mean MBI-DP>3	1	0.5%
Modified MBI-DP≥26	2	1.1%

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	No. of Studies	%
Single-item Measure of MBI-DP≥10	1	0.5%
Single-item Measure of MBI-DP≥4	4	2.2%
UBOS-DP High	2	1.1%
UBOS-DP≥1.6 (women)/UBOS-DP≥1.8 (men)	2	1.1%
Definition of a Diminished Sense of Personal Accomplishment		
Did Not Report a Diminished Sense of Personal Accomplishment Prevalence	67	36.8%
5-item Measure of MBI-PA≤33	1	0.5%
aMBI-PA≤31	1	0.5%
aMBI-PA≤33	2	1.1%
aMBI-PA≤6	1	0.5%
CESQT-PA<Lowest Tertile	1	0.5%
MBI-PA High Frequency Percentage	1	0.5%
MBI-PA Low	20	11.0%
MBI-PA≤29	4	2.2%
MBI-PA≤30	3	1.6%
MBI-PA≤31	14	7.7%
MBI-PA≤32	8	4.4%
MBI-PA≤33	40	22.0%
MBI-PA≤36	1	0.5%
MBI-PA≤38	1	0.5%
MBI-PA≤39	1	0.5%
MBI-PA<Lowest Quartile	2	1.1%
MBI-PA<Lowest Tertile	1	0.5%
MBI-PE Low	1	0.5%
MBI-PE≤3.7	1	0.5%
MBI-PE≤4.0	1	0.5%
MBI-PE≤9	1	0.5%
MBI-PE<Lowest Tertile	1	0.5%
Mean MBI-PA≤4	1	0.5%
Mean MBI-PA<3	1	0.5%

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	No. of Studies	%
Modified MBI-PA≤22	2	1.1%
UBOS-PA Low	2	1.1%
UBOS-PA≤3.7	2	1.1%

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eTable 9. Meta-analysis of the Prevalence of Emotional Exhaustion

Study	Prevalence (%)	LCI	UCI	%W(random)
Asai, 2007[20]	22.0%	18.9%	25.2%	0.9%
Chen, 2013[25]	49.2%	44.8%	53.5%	0.9%
Vandenbroeck, 2017[29]	38.7%	35.9%	41.5%	0.9%
Pedersen, 2013[33]	9.6%	6.8%	13.0%	0.8%
Pedersen, 2016[34]	18.1%	16.0%	20.4%	0.9%
Pedersen, 2018[35]	17.6%	14.6%	20.9%	0.8%
Lesage, 2013[37]	34.3%	31.9%	36.8%	0.9%
Dreano-Hartz, 2015[38]	8.7%	5.8%	12.5%	0.8%
Pantenburg, 2016[43]	30.2%	28.0%	32.4%	0.9%
O'Kelly, 2015[45]	28.5%	24.9%	32.4%	0.9%
Grassi, 2000[49]	27.4%	22.7%	32.6%	0.8%
Chivato-Perez, 2011[72]	33.4%	28.8%	38.3%	0.8%
Riquelme, 2018[77]	22.6%	18.0%	27.7%	0.8%
Escriba-Aguir, 2007[79]	36.5%	31.5%	41.8%	0.8%
Arigoni, 2009[80]	33.3%	28.5%	38.4%	0.8%
Goehring, 2005[81]	19.0%	17.2%	20.9%	0.9%
Upton, 2012[84]	32.9%	27.7%	38.4%	0.8%
Taylor, 2005[86]	41.0%	38.3%	43.8%	0.9%
Al-Dubai, 2010[95]	63.2%	59.1%	67.2%	0.9%
Shanafelt, 2014[119]	38.3%	35.4%	41.3%	0.9%
Golub, 2008[120]	23.1%	18.8%	27.8%	0.8%
Shanafelt, 2012[123]	37.9%	36.8%	39.1%	0.9%
Shanafelt, 2015[124]	46.9%	45.7%	48.1%	0.9%
Shanafelt, 2009[125]	30.2%	26.0%	34.6%	0.8%
Busis, 2017[126]	53.4%	50.9%	55.9%	0.9%
Campbell, 2001[132]	31.7%	27.9%	35.7%	0.9%
Kamal, 2015[134]	60.1%	56.3%	63.7%	0.9%
Shanafelt, 2009[135]	31.7%	30.7%	32.8%	0.9%
Qureshi, 2014[136]	24.9%	22.8%	27.1%	0.9%
Yoon, 2010[148]	34.4%	31.6%	37.3%	0.9%
Kluger, 2003[172]	19.9%	16.2%	24.0%	0.8%
Winefield, 1991[173]	29.8%	26.9%	32.9%	0.9%
Maticorena-Quevedo J, 2014[188]	14.2%	12.8%	15.7%	0.9%
Margaryan, 2010[10]	34.4%	26.2%	43.3%	0.8%
Siu, 2012[14]	50.9%	44.2%	57.6%	0.8%
Das, 2016[16]	0.0%	0.0%	60.2%	0.1%
Langade, 2016[17]	45.0%	40.5%	49.6%	0.9%
Zafar, 2016[21]	42.4%	34.8%	50.4%	0.8%
Sadat-Ali, 2005[22]	50.7%	38.4%	63.0%	0.7%
Schooley, 2016[26]	71.1%	54.1%	84.6%	0.6%
Eelen, 2014[28]	38.6%	27.2%	51.0%	0.7%
Selmanovic, 2011[30]	37.4%	29.6%	45.8%	0.8%
Stanetic, 2013[31]	46.0%	39.6%	52.6%	0.8%
Ozvacic Adzic Z, 2013[32]	42.4%	33.6%	51.6%	0.8%
Bohle, 2001[41]	37.3%	24.1%	51.9%	0.7%
Richter, 2014[42]	33.1%	27.5%	39.0%	0.8%

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Study	Prevalence (%)	LCI	UCI	%W(random)
Panagopoulou, 2006[44]	16.5%	9.9%	25.1%	0.7%
Bressi, 2009[46]	49.4%	38.1%	60.7%	0.7%
Bressi, 2008[47]	32.2%	24.0%	41.3%	0.8%
Raggio, 2007[48]	36.0%	18.0%	57.5%	0.5%
Travado, 2005[52]	25.6%	18.1%	34.4%	0.8%
Pranckeviciene, 2016[53]	25.8%	11.9%	44.6%	0.5%
Mikalauskas, 2018[54]	34.1%	27.9%	40.8%	0.8%
Mikalauskas, 2012[55]	18.6%	9.7%	30.9%	0.6%
van der Ploeg, 2003[57]	25.0%	16.2%	35.6%	0.7%
Meynaar, 2015[58]	10.7%	7.3%	15.0%	0.8%
Glebocka, 2017[61]	33.3%	20.4%	48.4%	0.6%
Marcelino, 2012[63]	25.3%	18.6%	33.1%	0.8%
Hagau, 2012[65]	38.2%	26.7%	50.8%	0.7%
Stojanovic-Tasic, 2018[66]	32.4%	26.1%	39.2%	0.8%
Vicentic, 2013[67]	58.3%	49.0%	67.3%	0.8%
Milenovic, 2016[68]	52.7%	45.6%	59.7%	0.8%
Putnik, 2011[69]	48.3%	43.1%	53.5%	0.8%
Yuguero Torres, 2015[70]	29.6%	21.2%	39.2%	0.8%
Yuguero, 2017[71]	28.7%	21.3%	37.1%	0.8%
Frutos-Llanes, 2014[73]	34.8%	26.9%	43.2%	0.8%
Martínez de la Casa Muñoz, 2003[74]	41.0%	32.9%	49.5%	0.8%
Vila Falgueras, 2014[75]	42.7%	36.9%	48.6%	0.8%
Atalaya, 2008[76]	52.4%	29.8%	74.3%	0.5%
Orton, 2012[85]	46.3%	42.1%	50.5%	0.9%
Sharma, 2008[88]	31.7%	27.6%	36.0%	0.8%
Soltanifar, 2018[89]	42.9%	31.6%	54.7%	0.7%
Ahmadpanah, 2015[90]	15.0%	8.7%	23.5%	0.7%
Kushnir, 2014[91]	44.1%	35.6%	52.9%	0.8%
Al-Shoraian, 2011[92]	40.0%	33.2%	47.2%	0.8%
Hamdan, 2017[93]	72.3%	64.2%	79.5%	0.8%
Amanullah, 2017[96]	38.2%	25.4%	52.3%	0.7%
Helewa, 2013[98]	33.3%	13.3%	59.0%	0.5%
Lee, 2008[99]	48.0%	38.9%	57.2%	0.8%
Lloyd, 1994[100]	13.1%	9.3%	17.7%	0.8%
Elit, 2004[101]	34.3%	19.1%	52.2%	0.6%
Viviers, 2008[102]	44.7%	35.8%	53.9%	0.8%
Dyrbye, 2009[103]	46.2%	34.8%	57.8%	0.7%
Johns, 2005[105]	26.2%	18.2%	35.6%	0.7%
Gabbe, 2002[106]	53.8%	44.4%	63.0%	0.8%
Cruz OA, 2007[107]	31.7%	22.8%	41.7%	0.7%
Garcia, 2015[109]	86.2%	78.3%	92.1%	0.7%
Shenoi, 2018[111]	34.4%	28.6%	40.6%	0.8%
Aggarwal, 2015[112]	27.7%	15.6%	42.6%	0.6%
Lu, 2015[113]	22.2%	12.0%	35.6%	0.6%
Rath, 2015[114]	30.1%	25.4%	35.0%	0.8%
Kroll, 2016[115]	60.4%	53.4%	67.1%	0.8%
Streu, 2014[52]	28.9%	24.9%	33.0%	0.8%
Jesse, 2015[117]	40.1%	33.5%	46.9%	0.8%

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Study	Prevalence (%)	LCI	UCI	%W(random)
Bertges Yost, 2005[118]	37.3%	30.8%	44.3%	0.8%
Fletcher, 2012[121]	19.1%	12.4%	27.5%	0.7%
Simons, 2016[122]	33.3%	9.9%	65.1%	0.4%
Klimo, 2013[127]	14.1%	7.3%	23.8%	0.6%
McPhillips, 2007[128]	16.8%	11.0%	24.1%	0.7%
Contag, 2010[129]	26.7%	16.1%	39.7%	0.7%
Guest, 2011[130]	41.4%	29.8%	53.8%	0.7%
Evans, 2015[131]	52.8%	43.7%	61.7%	0.8%
Saleh, 2007[133]	41.5%	34.4%	48.8%	0.8%
De Stefano, 2018[137]	17.4%	5.0%	38.8%	0.4%
Saleh, 2009[138]	38.5%	29.1%	48.5%	0.8%
Guntupalli, 1996[139]	28.5%	23.0%	34.5%	0.8%
West, 2013[140]	27.0%	21.9%	32.5%	0.8%
West, 2014[141]	27.4%	23.2%	31.9%	0.8%
Balch, 2011[142]	22.9%	21.9%	23.9%	0.9%
Gorelick, 2016[143]	17.1%	14.7%	19.7%	0.9%
Chew, 2017[149]	61.7%	56.9%	66.5%	0.8%
Deckard, 1992[150]	43.5%	41.0%	46.1%	0.9%
Deckard, 1994[151]	56.2%	49.6%	62.6%	0.8%
Dolan, 2014[158]	44.7%	42.4%	47.1%	0.9%
Stafford, 2010[169]	35.7%	18.6%	55.9%	0.6%
Ifediora, 2016[170]	19.6%	13.9%	26.5%	0.8%
Dunwoodie, 2007[171]	22.5%	10.8%	38.5%	0.6%
Pit, 2014[174]	26.1%	17.5%	36.3%	0.7%
Leung, 2015[175]	28.2%	22.3%	34.6%	0.8%
Surgenor, 2009[176]	29.6%	24.2%	35.5%	0.8%
Bruce, 2005[177]	34.0%	21.2%	48.8%	0.7%
Kumar, 2007[178]	33.1%	27.1%	39.4%	0.8%
Gil-Monte, 2008[179]	47.2%	38.1%	56.4%	0.8%
Barbosa, 2017[180]	25.6%	13.5%	41.2%	0.6%
Barbosa, 2012[181]	41.8%	29.9%	54.5%	0.7%
Garcia, 2014[182]	44.3%	32.4%	56.7%	0.7%
Barros, 2008[183]	47.5%	41.7%	53.3%	0.8%
Tironi, 2010[184]	47.6%	41.8%	53.5%	0.8%
Zanatta, 2015[185]	25.0%	12.1%	42.2%	0.6%
Govêia, 2018[186]	24.4%	12.4%	40.3%	0.6%
Aguirre Roldan, 2015[187]	45.3%	35.6%	55.3%	0.8%
Number of studies combined:	k = 131			
Random effects model	34.4%	32.3%	36.6%	
Quantifying heterogeneity:	τ^2 = 0.265	H = 5.56	I^2 = 96.8%	
Test of heterogeneity:				
Q	d.f.	p-value		
4022	130	<0.0001		

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eTable 10. Meta-analysis of the Prevalence of Emotional Exhaustion Stratified by Assessment Method

Def. of Emotional Exhaustion	k	Prevalence (%)	LCI	UCI	Q	τ^2	I^2
aMBI-EE≥13	1	45.0%	40.6%	49.5%	0	--	--
aMBI-EE≥27	3	36.7%	21.8%	54.8%	20	0.4	90.0%
CESQT-EE>Top Tertile	1	45.3%	36.1%	54.8%	0	--	--
MBI-EE High	22	37.7%	33.0%	42.7%	188	0.2	88.8%
MBI-EE High Frequency Percentage	1	19.6%	14.3%	26.3%	0	--	--
MBI-EE≥15	1	37.4%	30.0%	45.5%	0	--	--
MBI-EE≥22	1	49.4%	38.7%	60.1%	0	--	--
MBI-EE≥24	2	32.9%	25.8%	40.9%	0	0.0	0.0%
MBI-EE≥25	1	33.4%	29.0%	38.2%	0	--	--
MBI-EE≥26	2	31.4%	24.9%	38.7%	1	0.0	18.4%
MBI-EE≥27	57	34.8%	31.5%	38.2%	2168	0.3	97.4%
MBI-EE≥28	8	30.6%	25.1%	36.8%	84	0.1	91.7%
MBI-EE≥30	4	21.9%	9.4%	43.3%	65	0.8	95.4%
MBI-EE≥31	1	46.0%	39.8%	52.4%	0	--	--
MBI-EE≥40	1	13.1%	9.5%	17.7%	0	--	--
MBI-EE>Top Quartile	3	21.5%	17.9%	25.6%	2	0.0	0.0%
MBI-EE>Top Tertile	1	27.4%	22.9%	32.5%	0	--	--
MBI-EX High	1	38.2%	26.4%	51.6%	0	--	--
MBI-EX≥17	1	86.2%	78.4%	91.5%	0	--	--
MBI-EX≥3.2	2	41.5%	28.1%	56.4%	33	0.2	96.9%
MBI-EX>2.5	1	48.3%	43.2%	53.3%	0	--	--
MBI-EX>Top Tertile	2	32.3%	27.6%	37.4%	1	0.0	0.0%
Mean MBI-EE≥4	1	15.0%	9.3%	23.4%	0	--	--
Mean MBI-EE>3	1	29.8%	27.0%	32.8%	0	--	--
Modified MBI-EE≥18	2	49.5%	37.3%	61.7%	13	0.1	92.2%
Single-item Measure of MBI-EE≥27	1	61.7%	57.0%	66.3%	0	--	--
Single-item Measure of MBI-EE≥4	5	27.0%	18.0%	38.5%	372	0.4	98.9%
UBOS-EE High	2	31.4%	19.8%	46.0%	3	0.1	69.1%
UBOS-EE≥2.38	1	10.7%	7.5%	14.9%	0	--	--
UBOS-EE≥2.5	1	38.7%	35.9%	41.5%	0	--	--
Test for subgroup differences:							
	Q	d.f.	p-value				
Between groups	482	29	<0.0001				

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eTable 11. Meta-analysis of the Prevalence of Depersonalization

Study	Prevalence (%)	LCI	UCI	%W(random)
Asai, 2007[20]	11.1%	8.8%	13.6%	0.9%
Chen, 2013[25]	52.0%	47.6%	56.3%	0.9%
Vandenbroeck, 2017[29]	27.1%	24.6%	29.8%	0.9%
Pedersen, 2013[33]	17.7%	13.9%	21.9%	0.9%
Pedersen, 2016[34]	14.7%	12.7%	17.0%	0.9%
Pedersen, 2018[35]	13.9%	11.2%	16.9%	0.9%
Lesage, 2013[37]	20.1%	18.0%	22.2%	0.9%
Dreano-Hartz, 2015[38]	3.9%	2.0%	6.7%	0.7%
Pantenburg, 2016[43]	47.7%	45.4%	50.1%	0.9%
O'Kelly, 2015[45]	27.0%	23.4%	30.8%	0.9%
Grassi, 2000[49]	25.6%	21.0%	30.7%	0.9%
Chivato-Perez, 2011[72]	28.5%	24.1%	33.1%	0.9%
Riquelme, 2018[77]	22.3%	17.7%	27.4%	0.9%
Arigoni, 2009[80]	27.6%	23.1%	32.4%	0.9%
Goehring, 2005[81]	21.9%	20.0%	23.9%	0.9%
Upton, 2012[84]	31.6%	26.5%	37.1%	0.9%
Al-Dubai, 2010[95]	19.4%	16.2%	22.9%	0.9%
Shanafelt, 2014[119]	24.9%	22.3%	27.6%	0.9%
Golub, 2008[120]	18.0%	14.1%	22.4%	0.9%
Shanafelt, 2012[123]	29.4%	28.4%	30.5%	0.9%
Shanafelt, 2015[124]	34.7%	33.5%	35.8%	0.9%
Shanafelt, 2009[125]	13.3%	10.3%	16.8%	0.9%
Busis, 2017[126]	41.4%	39.0%	43.9%	0.9%
Campbell, 2001[132]	13.3%	10.6%	16.4%	0.9%
Kamal, 2015[131]	24.0%	20.9%	27.4%	0.9%
Shanafelt, 2009[135]	26.0%	25.1%	27.0%	0.9%
Qureshi, 2014[136]	20.1%	18.1%	22.1%	0.9%
Kluger, 2003[172]	19.9%	16.2%	24.0%	0.9%
Winefield, 1991[173]	8.5%	6.8%	10.5%	0.9%
Maticorena-Quevedo J, 2014[188]	16.8%	15.3%	18.4%	0.9%
Margaryan, 2010[10]	51.2%	42.2%	60.1%	0.9%
Siu, 2012[14]	53.1%	46.4%	59.8%	0.9%
Das, 2016[16]	0.0%	0.0%	60.2%	0.1%
Langade, 2016[17]	66.0%	61.6%	70.2%	0.9%
Zafar, 2016[21]	72.9%	65.6%	79.5%	0.9%
Sadat-Ali, 2005[22]	59.4%	46.9%	71.1%	0.8%
Schooley, 2016[26]	79.0%	62.7%	90.5%	0.6%
Eelen, 2014[28]	27.1%	17.2%	39.1%	0.8%
Selmanovic, 2011[30]	45.6%	37.4%	54.0%	0.9%
Stanetic, 2013[31]	21.3%	16.3%	27.1%	0.9%
Ozvacic Adzic Z, 2013[32]	16.0%	10.1%	23.6%	0.8%
Bohle, 2001[41]	27.5%	15.9%	41.7%	0.7%
Panagopoulou, 2006[44]	8.7%	4.1%	15.9%	0.7%
Bressi, 2009[46]	39.5%	28.8%	51.0%	0.8%
Bressi, 2008[47]	29.8%	21.8%	38.7%	0.8%
Raggio, 2007[48]	56.0%	34.9%	75.6%	0.6%

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Study	Prevalence (%)	LCI	UCI	%W(random)
Travado, 2005[52]	22.3%	15.3%	30.8%	0.8%
Pranckeviciene, 2016[53]	16.1%	5.5%	33.7%	0.6%
Mikalauskas, 2018[54]	25.9%	20.3%	32.2%	0.9%
Mikalauskas, 2012[55]	25.4%	15.0%	38.4%	0.7%
van der Ploeg, 2003[57]	40.5%	29.9%	51.8%	0.8%
Meynaar, 2015[58]	7.7%	4.8%	11.6%	0.8%
Glebocka, 2017[61]	35.4%	22.2%	50.5%	0.7%
Marcelino, 2012[63]	16.0%	10.5%	22.9%	0.8%
Hagau, 2012[65]	42.7%	30.7%	55.2%	0.8%
Stojanovic-Tasic, 2018[66]	14.9%	10.4%	20.5%	0.8%
Vicentic, 2013[67]	0.0%	0.0%	3.0%	0.1%
Milenovic, 2016[68]	12.2%	8.1%	17.5%	0.8%
Putnik, 2011[69]	12.9%	9.6%	16.7%	0.9%
Yuguero Torres, 2015[70]	19.4%	12.5%	28.2%	0.8%
Yuguero, 2017[71]	18.4%	12.3%	25.9%	0.8%
Frutos-Llanes, 2014[73]	43.3%	35.0%	51.9%	0.9%
Martínez de la Casa Muñoz, 2003[74]	52.8%	44.3%	61.2%	0.9%
Vila Falgueras, 2014[75]	27.3%	22.3%	32.8%	0.9%
Atalaya, 2008[76]	33.3%	14.6%	57.0%	0.6%
Orton, 2012[85]	42.0%	37.9%	46.2%	0.9%
Sharma, 2008[88]	21.2%	17.6%	25.1%	0.9%
Soltanifar, 2018[89]	11.7%	5.5%	21.0%	0.7%
Ahmadpanah, 2015[90]	15.0%	8.7%	23.5%	0.8%
Kushnir, 2014[91]	36.0%	28.0%	44.7%	0.9%
Al-Shoraian, 2011[92]	45.5%	38.5%	52.7%	0.9%
Hamdan, 2017[93]	32.1%	24.5%	40.6%	0.9%
Amanullah, 2017[96]	49.1%	35.4%	62.9%	0.8%
Helewa, 2013[98]	38.9%	17.3%	64.3%	0.6%
Lee, 2008[99]	46.3%	37.3%	55.6%	0.9%
Lloyd, 1994[100]	60.8%	54.7%	66.7%	0.9%
Elit, 2004[101]	14.3%	4.8%	30.3%	0.6%
Viviers, 2008[102]	40.7%	31.9%	49.9%	0.9%
Dyrbye, 2009[103]	41.3%	30.1%	53.3%	0.8%
Johns, 2005[105]	13.1%	7.3%	21.0%	0.8%
Gabbe, 2002[106]	36.1%	27.5%	45.5%	0.8%
Cruz OA, 2007[107]	13.9%	7.8%	22.2%	0.8%
Garcia, 2015[109]	89.9%	82.7%	94.9%	0.7%
Shenoi, 2018[111]	19.8%	15.1%	25.3%	0.9%
Aggarwal, 2015[112]	14.9%	6.2%	28.3%	0.6%
Lu, 2015[113]	38.9%	25.9%	53.1%	0.8%
Rath, 2015[114]	10.0%	7.2%	13.6%	0.9%
Kroll, 2016[115]	35.8%	29.2%	42.7%	0.9%
Streu, 2014[116]	16.2%	13.1%	19.7%	0.9%
Jesse, 2015[117]	17.1%	12.3%	22.7%	0.9%
Bertges Yost, 2005[118]	26.3%	20.5%	32.8%	0.9%
Fletcher, 2012[121]	20.9%	13.9%	29.4%	0.8%
Simons, 2016[122]	25.0%	5.5%	57.2%	0.4%
Klimo, 2013[127]	27.2%	17.9%	38.2%	0.8%

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Study	Prevalence (%)	LCI	UCI	%W(random)
McPhillips, 2007[128]	13.1%	8.0%	20.0%	0.8%
Contag, 2010[129]	21.7%	12.1%	34.2%	0.7%
Guest, 2011[130]	11.3%	5.0%	21.0%	0.7%
Evans, 2015[131]	21.3%	14.5%	29.4%	0.8%
Saleh, 2007[133]	26.9%	20.8%	33.8%	0.9%
De Stefano, 2018[137]	26.1%	10.2%	48.4%	0.6%
Guntupalli, 1996[139]	20.6%	15.8%	26.1%	0.9%
West, 2013[140]	10.3%	7.0%	14.4%	0.8%
West, 2014[141]	11.1%	8.3%	14.5%	0.9%
Balch, 2011[142]	14.9%	14.1%	15.8%	0.9%
Gorelick, 2016[143]	12.5%	10.4%	14.9%	0.9%
Chew, 2017[149]	53.3%	48.3%	58.2%	0.9%
Deckard, 1992[150]	40.3%	37.8%	42.8%	0.9%
Deckard, 1994[151]	60.0%	51.2%	68.3%	0.9%
Stafford, 2010[169]	10.7%	2.3%	28.2%	0.5%
Ifediora, 2016[170]	6.0%	2.9%	10.7%	0.7%
Dunwoodie, 2007[171]	7.5%	1.6%	20.4%	0.5%
Leung, 2015[175]	19.1%	14.1%	24.9%	0.9%
Surgenor, 2009[176]	24.3%	19.3%	30.0%	0.9%
Bruce, 2005[177]	28.0%	16.2%	42.5%	0.7%
Kumar, 2007[178]	13.0%	9.0%	17.9%	0.8%
Gil-Monte, 2008[179]	22.8%	15.7%	31.2%	0.8%
Barbosa, 2017[180]	44.2%	29.1%	60.1%	0.7%
Barbosa, 2012[181]	37.3%	25.8%	50.0%	0.8%
Garcia, 2014[182]	24.3%	14.8%	36.0%	0.8%
Barros, 2008[183]	24.6%	19.8%	29.9%	0.9%
Tironi, 2010[184]	24.7%	19.9%	30.0%	0.9%
Zanatta, 2015[185]	25.0%	12.1%	42.2%	0.7%
Govêia, 2018[186]	29.3%	16.1%	45.5%	0.7%
Aguirre Roldan, 2015[187]	18.9%	11.9%	27.6%	0.8%
Number of studies combined:	k = 124			
Random effects model	25.8%	23.7%	28.0%	
Quantifying heterogeneity:	τ^2 = 0.36	H = 5.86	I^2 = 97.1%	
Test of heterogeneity:				
Q	d.f.	p-value		
4224	123	<0.0001		

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eTable 12. Meta-analysis of the Prevalence of Depersonalization Stratified by Assessment Method

Definition of Depersonalization	k	Prevalence (%)	LCI	UCI	Q	τ^2	I^2
aMBI-DP≥10	2	22.9%	7.5%	52.1%	15	0.8	93.2%
aMBI-DP≥13	2	36.2%	4.7%	86.7%	67	3.1	98.5%
CESQT-DP>Top Tertile	1	18.9%	12.5%	27.5%	0	--	--
MBI-CY High	1	49.1%	36.2%	62.1%	0	--	--
MBI-CY≥12	1	89.9%	82.7%	94.3%	0	--	--
MBI-CY>1.6	1	12.9%	9.8%	16.7%	0	--	--
MBI-CY>2.2	1	52.0%	47.7%	56.2%	0	--	--
MBI-CY>Top Tertile	2	25.3%	13.0%	43.6%	3	0.3	67.1%
MBI-DP High	21	25.2%	20.2%	31.0%	262	0.4	92.4%
MBI-DP High Frequency Percentage	1	6.0%	3.2%	10.7%	0	--	--
MBI-DP≥10	41	26.0%	22.9%	29.4%	1352	0.3	97.0%
MBI-DP≥11	5	27.7%	21.5%	34.8%	68	0.1	94.1%
MBI-DP≥12	4	20.5%	3.6%	64.2%	187	3.5	98.4%
MBI-DP≥13	17	22.1%	18.3%	26.5%	174	0.2	90.8%
MBI-DP≥14	2	36.4%	22.2%	53.5%	2	0.1	48.6%
MBI-DP≥15	1	60.8%	54.9%	66.5%	0	--	--
MBI-DP≥6	1	39.5%	29.5%	50.5%	0	--	--
MBI-DP≥9	3	36.3%	23.4%	51.5%	6	0.2	68.6%
MBI-DP>Top Quartile	3	17.6%	9.7%	29.9%	9	0.3	77.9%
MBI-DP>Top Tertile	1	25.6%	21.2%	30.6%	0	--	--
Mean MBI-DP≥4	1	15.0%	9.3%	23.4%	0	--	--
Mean MBI-DP>3	1	8.5%	6.9%	10.5%	0	--	--
Modified MBI-DP≥26	2	49.7%	31.2%	68.4%	19	0.3	94.7%
Single-item Measure of MBI-DP≥10	1	53.3%	48.5%	58.1%	0	--	--
Single-item Measure of MBI-DP≥4	4	12.6%	10.5%	15.0%	12	0.0	74.1%
UBOS-DP High	2	33.9%	22.2%	48.0%	3	0.1	66.4%
DP≥1.6 (women)/DP≥1.8 (men)	2	15.2%	4.0%	43.6%	40	1.1	97.5%
Test for subgroup differences:							
	Q	d.f.	p-value				
Between groups	832	26	<0.0001				

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eTable 13. Meta-analysis of the Prevalence of a Diminished Sense of Personal Accomplishment

Study	Prevalence (%)	LCI	UCI	%W(random)
Asai, 2007[20]	62.0%	58.3%	65.6%	0.9%
Chen, 2013[25]	73.3%	69.3%	77.0%	0.9%
Vandenbroeck, 2017[29]	15.1%	13.1%	17.2%	0.9%
Pedersen, 2013[33]	37.7%	32.7%	43.0%	0.9%
Pedersen, 2016[34]	29.0%	26.4%	31.7%	0.9%
Pedersen, 2018[35]	34.8%	30.9%	38.8%	0.9%
Lesage, 2013[37]	63.9%	61.4%	66.4%	0.9%
Dreano-Hartz, 2015[38]	23.0%	18.4%	28.1%	0.9%
Pantenburg, 2016[43]	35.9%	33.7%	38.2%	1.0%
O'Kelly, 2016[45]	31.3%	27.5%	35.3%	0.9%
Grassi, 2000[49]	13.1%	9.7%	17.3%	0.9%
Chivato-Perez, 2011[72]	9.7%	7.0%	13.0%	0.9%
Riquelme, 2018[77]	24.9%	20.1%	30.2%	0.9%
Arigoni, 2009[80]	19.6%	15.6%	24.0%	0.9%
Goehring, 2005[81]	16.3%	14.6%	18.1%	0.9%
Al-Dubai, 2010[95]	33.0%	29.2%	37.1%	0.9%
Shanafelt, 2014[119]	13.2%	11.2%	15.4%	0.9%
Golub, 2008[120]	11.1%	8.0%	14.9%	0.9%
Shanafelt, 2012[123]	12.4%	11.7%	13.2%	1.0%
Shanafelt, 2015[124]	16.3%	15.5%	17.2%	1.0%
Shanafelt, 2009[125]	13.2%	10.2%	16.6%	0.9%
Busis, 2017[126]	21.2%	19.2%	23.3%	0.9%
Campbell, 2001[132]	4.4%	2.8%	6.5%	0.9%
Shanafelt, 2009[135]	12.8%	12.0%	13.5%	1.0%
Qureshi, 2014[136]	8.3%	7.0%	9.8%	0.9%
Kluger, 2003[172]	37.0%	32.4%	41.8%	0.9%
Winefield, 1991[173]	7.4%	5.8%	9.3%	0.9%
Maticorena-Quevedo J, 2014[188]	18.1%	16.5%	19.8%	0.9%
Margaryan, 2010[10]	50.0%	41.1%	58.9%	0.9%
Siu, 2012[14]	55.3%	48.6%	61.9%	0.9%
Das, 2016[16]	50.0%	6.8%	93.2%	0.4%
Langade, 2016[17]	87.1%	83.8%	90.0%	0.9%
Sadat-Ali, 2005[22]	17.4%	9.3%	28.4%	0.8%
Schooley, 2016[26]	29.0%	15.4%	45.9%	0.8%
Eelen, 2014[28]	7.1%	2.4%	15.9%	0.7%
Selmanovic, 2011[30]	50.3%	42.0%	58.7%	0.9%
Stanetic, 2013[31]	43.1%	36.7%	49.6%	0.9%
Ozvacic Adzic Z, 2013[32]	60.0%	50.9%	68.7%	0.9%
Bohle, 2001[41]	9.8%	3.3%	21.4%	0.7%
Bressi, 2009[46]	22.2%	13.7%	32.8%	0.9%
Bressi, 2008[47]	12.4%	7.1%	19.6%	0.9%
Raggio, 2007[48]	20.0%	6.8%	40.7%	0.7%
Travado, 2005[52]	21.5%	14.5%	29.9%	0.9%
Pranckeviciene, 2016[53]	25.8%	11.9%	44.6%	0.8%
Mikalauskas, 2018[54]	38.6%	32.2%	45.4%	0.9%

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Study	Prevalence (%)	LCI	UCI	%W(random)
Mikalauskas, 2012[55]	42.4%	29.6%	55.9%	0.9%
van der Ploeg, 2003[57]	20.2%	12.3%	30.4%	0.9%
Meynaar, 2015[58]	13.2%	9.4%	17.9%	0.9%
Marcelino, 2012[63]	16.7%	11.1%	23.6%	0.9%
Hagau, 2012[65]	47.1%	34.8%	59.6%	0.9%
Stojanovic-Tasic, 2018[66]	16.7%	11.9%	22.4%	0.9%
Vicentic, 2013[67]	0.0%	0.0%	3.0%	0.3%
Milenovic, 2016[68]	28.8%	22.7%	35.5%	0.9%
Putnik, 2011[69]	5.1%	3.1%	7.8%	0.9%
Yuguero Torres, 2015[70]	11.1%	5.9%	18.6%	0.9%
Yuguero, 2017[71]	11.0%	6.3%	17.5%	0.9%
Frutos-Llanes, 2014[73]	41.8%	33.6%	50.4%	0.9%
Martínez de la Casa Muñoz, 2003[74]	42.4%	34.2%	50.9%	0.9%
Vila Falgueras, 2014[75]	7.9%	5.0%	11.6%	0.9%
Atalaya, 2008[76]	14.3%	3.1%	36.3%	0.6%
Orton, 2012[85]	33.7%	29.8%	37.8%	0.9%
Sharma, 2008[88]	28.8%	24.8%	33.1%	0.9%
Soltanifar, 2018[89]	55.8%	44.1%	67.2%	0.9%
Ahmadpanah, 2015[90]	10.0%	4.9%	17.6%	0.8%
Kushnir, 2014[91]	31.6%	23.9%	40.1%	0.9%
Al-Shoraian, 2011[92]	46.5%	39.4%	53.7%	0.9%
Hamdan, 2017[93]	32.1%	24.5%	40.6%	0.9%
Amanullah, 2017[96]	23.6%	13.2%	37.0%	0.8%
Helewa, 2013[98]	27.8%	9.7%	53.5%	0.7%
Lee, 2008[99]	17.1%	10.9%	24.9%	0.9%
Lloyd, 1994[100]	44.0%	38.0%	50.2%	0.9%
Elit, 2004[101]	31.4%	16.9%	49.3%	0.8%
Viviers, 2008[102]	25.0%	17.7%	33.6%	0.9%
Dyrbye, 2009[103]	4.1%	0.8%	11.4%	0.7%
Johns, 2005[105]	46.7%	37.0%	56.6%	0.9%
Gabbe, 2002[106]	20.2%	13.4%	28.5%	0.9%
Cruz OA, 2007[107]	63.4%	53.2%	72.7%	0.9%
Garcia, 2015[109]	5.5%	2.1%	11.6%	0.8%
Shenoi, 2018[111]	21.4%	16.5%	27.0%	0.9%
Aggarwal, 2015[112]	31.9%	19.1%	47.1%	0.8%
Lu, 2015[113]	11.1%	4.2%	22.6%	0.8%
Rath, 2015[114]	11.1%	8.1%	14.8%	0.9%
Kroll, 2016[115]	19.3%	14.2%	25.4%	0.9%
Streu, 2014[116]	4.9%	3.2%	7.2%	0.9%
Jesse, 2015[117]	46.5%	39.8%	53.4%	0.9%
Bertges Yost, 2005[118]	14.4%	9.9%	19.9%	0.9%
Fletcher, 2012[121]	10.4%	5.5%	17.5%	0.9%
Simons, 2016[122]	33.3%	9.9%	65.1%	0.6%
Klimo, 2013[127]	27.2%	17.9%	38.2%	0.9%
McPhillips, 2007[128]	32.1%	24.4%	40.6%	0.9%
Contag, 2010[129]	10.0%	3.8%	20.5%	0.8%
Guest, 2011[130]	11.3%	5.0%	21.0%	0.8%
Evans, 2015[131]	11.8%	6.8%	18.7%	0.9%

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Study	Prevalence (%)	LCI	UCI	%W(random)
Saleh, 2007[133]	2.6%	0.9%	5.9%	0.8%
De Stefano, 2018[137]	56.5%	34.5%	76.8%	0.8%
Guntupalli, 1996[139]	58.9%	52.6%	65.0%	0.9%
Chew, 2017[149]	39.6%	34.8%	44.5%	0.9%
Deckard, 1992[150]	8.2%	6.9%	9.7%	0.9%
Deckard, 1994[151]	7.2%	4.3%	11.3%	0.9%
Stafford, 2010[169]	3.7%	0.1%	19.0%	0.4%
Ifediora, 2016[170]	4.2%	1.7%	8.4%	0.8%
Dunwoodie, 2007[171]	2.5%	0.1%	13.2%	0.4%
Leung, 2015[175]	24.1%	18.6%	30.3%	0.9%
Surgenor, 2009[176]	32.2%	26.6%	38.2%	0.9%
Bruce, 2005[177]	38.0%	24.7%	52.8%	0.9%
Kumar, 2007[178]	23.9%	18.6%	29.8%	0.9%
Gil-Monte, 2008[179]	34.2%	25.8%	43.2%	0.9%
Barbosa, 2017[180]	51.2%	35.5%	66.7%	0.9%
Barbosa, 2012[181]	58.2%	45.5%	70.2%	0.9%
Garcia, 2014[182]	17.1%	9.2%	28.0%	0.8%
Barros, 2008[183]	28.3%	23.2%	33.8%	0.9%
Tironi, 2010[184]	28.4%	23.3%	33.9%	0.9%
Zanatta, 2015[185]	27.8%	14.2%	45.2%	0.8%
Govêia, 2018[186]	34.2%	20.1%	50.6%	0.8%
Aguirre Roldan, 2015[187]	26.4%	18.3%	35.9%	0.9%
Number of studies combined:	k = 115			
Random effects model	23.5%	20.6%	26.7%	
Quantifying heterogeneity:	τ^2 = 0.793	H = 7.48	I^2 = 98.2%	
Test of heterogeneity:				
Q	d.f.	p-value		
6378	114	<0.0001		

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eTable 14. Meta-analysis of the Prevalence of a Diminished Sense of Personal Accomplishment Stratified by Assessment Method

Definition of Low PA	k	Prevalence (%)	LCI	UCI	Q	τ^2	I^2
5-item Measure of MBI-PA≤33	1	39.6%	34.9%	44.4%	0	--	--
aMBI-PA≤31	1	63.4%	53.6%	72.2%	0	--	--
aMBI-PA≤33	2	32.1%	12.3%	61.6%	17	0.7	94.2%
aMBI-PA≤6	1	87.1%	83.8%	89.8%	0	--	--
CESQT-PA<Lowest Tertile	1	26.4%	18.9%	35.6%	0	--	--
MBI-PA High Frequency Percentage	1	4.2%	2.0%	8.5%	0	--	--
MBI-PA Low	20	17.8%	13.4%	23.2%	274	0.5	93.1%
MBI-PA≤29	4	31.9%	13.0%	59.5%	44	1.2	93.2%
MBI-PA≤30	3	27.6%	13.5%	48.2%	17	0.5	87.9%
MBI-PA≤31	14	21.4%	14.0%	31.3%	702	0.9	98.1%
MBI-PA≤32	8	19.5%	13.4%	27.4%	253	0.4	97.2%
MBI-PA≤33	40	29.0%	24.2%	34.3%	2167	0.6	98.2%
MBI-PA≤36	1	44.0%	38.2%	50.0%	0	--	--
MBI-PA≤38	1	23.0%	18.6%	28.0%	0	--	--
MBI-PA≤39	1	37.0%	32.5%	41.7%	0	--	--
MBI-PA<Lowest Quartile	2	25.2%	20.9%	30.2%	0	0.0	0.0%
MBI-PA<Lowest Tertile	1	13.1%	9.9%	17.2%	0	--	--
MBI-PE Low	1	23.6%	14.3%	36.6%	0	--	--
MBI-PE≤3.7	1	5.1%	3.3%	7.9%	0	--	--
MBI-PE≤4.0	1	73.3%	69.3%	76.9%	0	--	--
MBI-PE≤9	1	5.5%	2.5%	11.7%	0	--	--
MBI-PE<Lowest Tertile	1	25.8%	13.5%	43.7%	0	--	--
Mean MBI-PA≤4	1	10.0%	5.5%	17.6%	0	--	--
Mean MBI-PA<3	1	7.4%	5.9%	9.3%	0	--	--
Modified MBI-PA≤22	2	8.1%	6.9%	9.5%	0	0.0	0.0%
UBOS-PA Low	2	12.9%	4.4%	32.2%	5	0.6	79.7%
UBOS-PA≤3.7	2	14.7%	13.0%	16.7%	1	0.0	0.0%
Test for subgroup differences:							
	Q	d.f.	p-value				
Between groups	1719	26	<0.0001				

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eTable 15. Meta-analysis of the Prevalence of Overall Burnout Stratified by Country and Continent or Region

A. By Country:

	k	Prevalence (%)	LCI	UCI	Q	τ^2	I^2
Argentina	1	10.6%	6.2%	17.4%	0	--	--
Armenia	1	18.3%	12.4%	26.3%	0	--	--
Australia	1	25.0%	14.0%	40.5%	0	--	--
Australia, New Zealand	1	2.7%	1.2%	5.9%	0	--	--
Austria	1	50.7%	49.4%	52.0%	0	--	--
Belgium	1	5.1%	4.0%	6.6%	0	--	--
Brazil	7	11.2%	4.7%	24.3%	85	1.4	93.0%
Canada	1	61.1%	37.9%	80.2%	0	--	--
Canada, United States	1	61.8%	50.5%	72.0%	0	--	--
China	5	24.0%	6.7%	58.3%	1003	2.9	99.6%
Colombia	1	3.8%	1.4%	9.6%	0	--	--
Denmark	4	5.7%	1.5%	19.1%	191	1.9	98.4%
France	3	9.4%	5.9%	14.5%	20	0.2	89.8%
Germany	1	10.9%	9.6%	12.5%	0	--	--
India	1	10.0%	0.6%	67.4%	0	--	--
Ireland, United Kingdom	1	28.9%	25.3%	32.7%	0	--	--
Israel	1	55.9%	47.5%	64.0%	0	--	--
Italy	2	39.5%	19.7%	63.4%	7	0.4	85.5%
Japan	2	21.7%	20.2%	23.1%	0	0.0	0.0%
Kuwait	1	20.5%	15.5%	26.7%	0	--	--
Lithuania	2	31.1%	3.4%	85.5%	58	3.4	98.3%
Morocco	1	52.9%	39.4%	66.1%	0	--	--
Netherlands	5	12.5%	7.5%	20.2%	47	0.4	91.5%
New Zealand	2	15.7%	8.3%	27.7%	2	0.2	59.3%
Palestine	1	9.9%	5.9%	16.0%	0	--	--
Peru	1	3.7%	3.0%	4.6%	0	--	--
Portugal	3	16.5%	4.5%	45.1%	45	1.5	95.6%
Qatar	1	12.6%	8.5%	18.2%	0	--	--
Serbia	1	6.3%	3.7%	10.6%	0	--	--
Singapore	1	31.1%	19.4%	45.9%	0	--	--
Spain	7	22.1%	8.5%	46.2%	267	2.2	97.8%
Switzerland	4	12.9%	3.3%	39.5%	267	2.2	98.9%
United Kingdom	2	32.3%	11.4%	64.1%	24	0.9	95.9%
United States	51	28.3%	24.8%	32.1%	4283	0.4	98.8%
Uruguay	1	51.2%	40.5%	61.8%	0	--	--
Venezuela	1	55.9%	39.2%	71.4%	0	--	--
Yemen	1	11.7%	9.3%	14.7%	0	--	--
Test for subgroup differences:							
	Q	d.f.	p-value				
Between groups	2618	36	<0.0001				

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B. By Continent or Region:

	k	Prevalence (%)	LCI	UCI	Q	τ^2	I^2
Africa	1	52.9%	39.4%	66.1%	0	--	--
Asia	10	22.7%	11.5%	39.9%	1362	1.6	99.3%
Europe	37	15.8%	11.1%	21.8%	3424	1.5	98.9%
Middle East	5	19.0%	8.6%	36.8%	126	1.0	96.8%
North America	53	29.3%	25.7%	33.1%	4302	0.4	98.8%
Oceania	4	11.6%	4.7%	25.7%	27	0.9	89.1%
South America	12	12.9%	5.9%	25.9%	343	2.1	96.8%
Test for subgroup differences:							
	Q	d.f.	p-value				
Between groups	38	6	<0.0001				

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eTable 16. Meta-analysis of the Prevalence of Emotional Exhaustion Stratified by Country and Continent or Region

A. By Country:

	k	Prevalence (%)	LCI	UCI	Q	τ^2	I^2
Argentina	1	47.2%	38.5%	56.0%	0	--	--
Armenia	1	34.4%	26.7%	43.0%	0	--	--
Australia	6	24.6%	19.7%	30.4%	20	0.1	75.1%
Australia, New Zealand	1	28.2%	22.6%	34.5%	0	--	--
Belgium	2	38.7%	36.0%	41.4%	0	0.0	0.0%
Bosnia and Herzegovina	2	42.1%	33.9%	50.7%	3	0.0	63.6%
Brazil	7	39.1%	32.4%	46.2%	20	0.1	69.6%
Canada	6	33.8%	20.5%	50.3%	63	0.6	92.1%
Canada, United States	1	46.2%	35.5%	57.2%	0	--	--
China	1	50.9%	44.4%	57.4%	0	--	--
Colombia	1	45.3%	36.1%	54.8%	0	--	--
Croatia	1	42.4%	34.1%	51.2%	0	--	--
Denmark	3	15.0%	11.1%	20.1%	15	0.1	86.8%
France	2	18.4%	4.1%	54.4%	66	1.4	98.5%
Germany	3	30.7%	28.8%	32.7%	2	0.0	0.0%
Greece	1	16.5%	10.5%	25.0%	0	--	--
India	2	34.4%	9.3%	72.8%	2	0.9	44.1%
Iran	2	26.9%	8.2%	60.2%	16	1.0	93.7%
Ireland, United Kingdom	1	28.5%	25.0%	32.4%	0	--	--
Israel	1	44.1%	36.0%	52.6%	0	--	--
Italy	4	35.4%	25.9%	46.2%	14	0.2	78.6%
Italy, Portugal, Spain	1	25.6%	18.6%	34.1%	0	--	--
Japan	1	22.0%	19.0%	25.2%	0	--	--
Kuwait	1	40.0%	33.4%	46.9%	0	--	--
Lithuania	3	27.0%	17.8%	38.7%	5	0.1	63.1%
Netherlands	2	16.5%	6.7%	35.0%	10	0.5	90.3%
New Zealand	3	31.5%	27.8%	35.5%	1	0.0	0.0%
Pakistan	1	42.4%	35.1%	50.1%	0	--	--
Palestine	1	72.3%	64.4%	79.1%	0	--	--
Peru	1	14.2%	12.8%	15.7%	0	--	--
Poland	1	33.3%	21.5%	47.7%	0	--	--
Portugal	1	25.3%	19.0%	32.9%	0	--	--
Romania	1	38.2%	27.5%	50.2%	0	--	--
Saudi Arabia	1	50.7%	39.1%	62.3%	0	--	--
Serbia	4	47.6%	37.7%	57.7%	26	0.2	88.6%
Spain	9	34.3%	29.6%	39.4%	36	0.1	78.0%
Switzerland	2	25.4%	13.9%	41.7%	36	0.3	97.2%
Taiwan	1	49.2%	44.9%	53.4%	0	--	--
Turkey	1	71.1%	54.9%	83.2%	0	--	--
United Kingdom	4	38.0%	32.0%	44.4%	30	0.1	90.0%
United States	42	35.9%	32.4%	39.5%	2052	0.2	98.0%
Yemen	1	63.2%	59.2%	67.1%	0	--	--
Test for subgroup differences:							
	Q	d.f.	p-value				
Between groups	929	41	<0.0001				

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B. By Continent or Region:

	k	Prevalence (%)	LCI	UCI	Q	τ^2	I^2
Asia	9	43.6%	33.9%	53.7%	143	0.3	94.4%
Europe	47	31.4%	28.3%	34.6%	827	0.2	94.4%
Middle East	6	45.8%	31.6%	60.7%	107	0.5	95.3%
North America	49	35.9%	32.6%	39.2%	2121	0.2	97.7%
Oceania	10	27.2%	23.8%	30.9%	26	0.0	66.0%
South America	10	35.3%	22.8%	50.3%	353	0.9	97.4%
Test for subgroup differences:							
	Q	d.f.	p-value				
Between groups	21	5	<0.0001				

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eTable 17. Meta-analysis of the Prevalence of Depersonalization Stratified by Country and Continent or Region

A. By Country:

	k	Prevalence (%)	LCI	UCI	Q	τ^2	I^2
Argentina	1	22.8%	16.2%	31.0%	0	--	--
Armenia	1	51.2%	42.6%	59.7%	0	--	--
Australia	5	10.1%	5.6%	17.6%	41	0.4	90.3%
Australia, New Zealand	1	19.1%	14.4%	24.8%	0	--	--
Belgium	2	27.1%	24.7%	29.7%	0	0.0	0.0%
Bosnia and Herzegovina	2	32.3%	13.6%	59.0%	24	0.6	95.9%
Brazil	7	28.5%	23.8%	33.6%	12	0.0	49.3%
Canada	6	43.1%	32.3%	54.7%	32	0.3	84.3%
Canada, United States	1	41.3%	30.8%	52.7%	0	--	--
China	1	53.1%	46.6%	59.5%	0	--	--
Colombia	1	18.9%	12.5%	27.5%	0	--	--
Croatia	1	16.0%	10.6%	23.5%	0	--	--
Denmark	3	15.1%	13.4%	17.1%	3	0.0	25.9%
France	2	9.3%	1.7%	38.2%	37	1.6	97.3%
Germany	2	38.3%	20.9%	59.4%	8	0.3	87.0%
Greece	1	8.7%	4.6%	16.0%	0	--	--
India	2	40.6%	4.4%	91.0%	4	3.0	72.7%
Iran	2	13.7%	9.3%	19.6%	0	0.0	0.0%
Ireland, United Kingdom	1	27.0%	23.5%	30.7%	0	--	--
Israel	1	36.0%	28.4%	44.4%	0	--	--
Italy	4	34.8%	25.4%	45.5%	14	0.2	78.1%
Italy, Portugal, Spain	1	22.3%	15.8%	30.6%	0	--	--
Japan	1	11.1%	8.9%	13.6%	0	--	--
Kuwait	1	45.5%	38.7%	52.4%	0	--	--
Lithuania	3	25.0%	20.5%	30.1%	1	0.0	0.0%
Netherlands	2	19.3%	3.0%	65.0%	43	2.1	97.7%
New Zealand	3	20.6%	12.7%	31.6%	12	0.2	83.6%
Pakistan	1	72.9%	65.8%	79.1%	0	--	--
Palestine	1	32.1%	24.9%	40.3%	0	--	--
Peru	1	16.8%	15.3%	18.4%	0	--	--
Poland	1	35.4%	23.3%	49.8%	0	--	--
Portugal	1	16.0%	11.0%	22.8%	0	--	--
Romania	1	42.7%	31.5%	54.6%	0	--	--
Saudi Arabia	1	59.4%	47.5%	70.3%	0	--	--
Serbia	4	12.6%	9.1%	17.2%	7	0.1	58.2%
Spain	8	29.7%	22.5%	38.0%	69	0.2	89.8%
Switzerland	2	24.3%	19.2%	30.2%	6	0.0	82.1%
Taiwan	1	52.0%	47.7%	56.2%	0	--	--
Turkey	1	79.0%	63.2%	89.1%	0	--	--
United Kingdom	3	31.0%	19.8%	45.0%	50	0.3	96.0%
United States	39	23.7%	20.7%	26.9%	1796	0.3	97.9%
Yemen	1	19.4%	16.3%	22.8%	0	--	--
Test for subgroup differences:							
	Q	d.f.	p-value				
Between groups	937	41	<0.0001				

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B. By Continent or Region:

	k	Prevalence (%)	LCI	UCI	Q	τ^2	I^2
Asia	9	51.9%	34.7%	68.7%	396	1.1	98.0%
Europe	44	24.0%	20.7%	27.7%	990	0.4	95.7%
Middle East	6	25.5%	16.6%	36.9%	72	0.4	93.0%
North America	46	25.9%	22.9%	29.2%	1980	0.3	97.7%
Oceania	9	14.5%	10.1%	20.3%	77	0.3	89.6%
South America	10	25.4%	20.5%	30.9%	52	0.1	82.8%
Test for subgroup differences:							
	Q	d.f.	p-value				
Between groups	22	5	<0.0001				

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eTable 18. Meta-analysis of the Prevalence of a Diminished Sense of Personal Accomplishment Stratified by Country and Continent or Region

A. By Country:

	k	Prevalence (%)	LCI	UCI	Q	τ^2	I^2
Argentina	1	34.2%	26.3%	42.9%	0	--	--
Armenia	1	50.0%	41.5%	58.5%	0	--	--
Australia	5	7.7%	2.1%	24.2%	183	2.0	97.8%
Australia, New Zealand	1	24.1%	18.9%	30.2%	0	--	--
Belgium	2	11.7%	5.7%	22.4%	3	0.2	68.1%
Bosnia and Herzegovina	2	46.3%	39.3%	53.4%	2	0.0	47.9%
Brazil	7	33.9%	25.4%	43.7%	37	0.2	83.7%
Canada	6	27.7%	18.5%	39.2%	34	0.3	85.2%
Canada, United States	1	4.1%	1.3%	11.8%	0	--	--
China	1	55.3%	48.8%	61.7%	0	--	--
Colombia	1	26.4%	18.9%	35.6%	0	--	--
Croatia	1	60.0%	51.2%	68.2%	0	--	--
Denmark	3	33.5%	28.4%	39.0%	12	0.0	83.5%
France	2	42.2%	11.3%	80.7%	149	1.6	99.3%
Germany	2	20.9%	5.1%	56.7%	12	1.2	91.7%
India	2	77.1%	35.6%	95.3%	4	1.3	72.2%
Iran	2	27.5%	3.4%	80.4%	36	2.9	97.2%
Ireland, United Kingdom	1	31.3%	27.6%	35.2%	0	--	--
Israel	1	31.6%	24.4%	39.9%	0	--	--
Italy	4	15.6%	11.5%	20.7%	5	0.1	43.3%
Italy, Portugal, Spain	1	21.5%	15.1%	29.7%	0	--	--
Japan	1	62.0%	58.3%	65.5%	0	--	--
Kuwait	1	46.5%	39.7%	53.4%	0	--	--
Lithuania	3	38.0%	31.6%	44.8%	2	0.0	17.2%
Netherlands	2	15.9%	10.4%	23.6%	2	0.1	59.2%
New Zealand	3	30.1%	23.1%	38.1%	6	0.1	68.2%
Palestine	1	32.1%	24.9%	40.3%	0	--	--
Peru	1	18.1%	16.5%	19.7%	0	--	--
Portugal	1	16.7%	11.5%	23.5%	0	--	--
Romania	1	47.1%	35.6%	58.9%	0	--	--
Saudi Arabia	1	17.4%	10.2%	28.2%	0	--	--
Serbia	4	10.2%	3.7%	25.1%	59	1.0	94.9%
Spain	8	17.8%	10.2%	29.3%	144	0.8	95.1%
Switzerland	2	17.4%	14.6%	20.7%	2	0.0	56.7%
Taiwan	1	73.3%	69.3%	76.9%	0	--	--
Turkey	1	29.0%	16.8%	45.1%	0	--	--
United Kingdom	2	31.3%	26.7%	36.3%	3	0.0	65.3%
United States	34	17.3%	14.4%	20.6%	1208	0.4	97.3%
Yemen	1	33.0%	29.3%	37.0%	0	--	--
Test for subgroup differences:							
	Q	d.f.	p-value				
Between groups	1158	38	<0.0001				

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B. By Continent or Region:

	k	Prevalence (%)	LCI	UCI	Q	τ^2	I^2
Asia	8	55.3%	41.2%	68.6%	196	0.6	96.4%
Europe	41	23.5%	19.3%	28.2%	1546	0.6	97.4%
Middle East	6	33.8%	25.1%	43.9%	50	0.2	89.9%
North America	41	18.2%	15.3%	21.5%	1373	0.4	97.1%
Oceania	9	16.7%	9.7%	27.4%	209	0.8	96.2%
South America	10	31.0%	23.7%	39.3%	109	0.3	91.7%
Test for subgroup differences:							
	Q	d.f.	p-value				
Between groups	44	5	<0.0001				

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eTable 19. Meta-analysis of the Prevalence of Overall Burnout Stratified by Specialty

	k	Prevalence (%)	LCI	UCI	Q	τ^2	I^2
Anesthesia	8	18.7%	6.6%	42.8%	640	2.7	98.9%
Emergency Medicine	8	25.0%	18.3%	33.2%	39	0.2	81.8%
ENT	5	5.3%	1.1%	22.2%	118	3.1	96.6%
Family Medicine	1	20.5%	15.5%	26.7%	0	--	--
Forensics	1	21.4%	13.9%	31.5%	0	--	--
General Practice	9	7.8%	4.2%	13.9%	157	0.9	94.9%
Headache Medicine	1	57.5%	48.7%	65.8%	0	--	--
Hospitalist Medicine	2	27.0%	21.0%	34.0%	4	0.0	76.5%
Intensive Care	8	27.6%	17.1%	41.4%	157	0.7	95.5%
Internal Medicine	5	35.8%	28.0%	44.4%	31	0.1	87.0%
Multiple Specialties	34	19.1%	14.8%	24.2%	5454	0.8	99.4%
Neonatology	1	20.8%	17.2%	24.9%	0	--	--
Neurology	1	60.1%	57.7%	62.5%	0	--	--
Neurosurgery	1	27.2%	18.6%	37.8%	0	--	--
Obstetrics and Gynecology	2	13.0%	1.5%	60.4%	25	2.7	96.1%
Occupational Medicine	1	11.8%	10.2%	13.6%	0	--	--
Oncology	3	54.3%	43.3%	64.9%	77	0.1	97.4%
Ophthalmology	1	8.9%	4.7%	16.3%	0	--	--
Orthopedic Surgery	1	16.7%	4.2%	47.7%	0	--	--
Palliative Care	3	31.6%	8.5%	69.8%	74	1.9	97.3%
Pediatric Critical Care	2	17.5%	11.4%	25.7%	6	0.1	82.4%
Pediatrics	5	21.8%	12.6%	35.0%	45	0.5	91.1%
Primary Care	8	20.6%	10.9%	35.5%	703	1.0	99.0%
Psychiatry	1	52.0%	38.4%	65.4%	0	--	--
Radiation Oncology	2	3.8%	1.7%	8.4%	2	0.1	33.2%
Radiology	1	80.5%	76.3%	84.1%	0	--	--
Surgery	6	32.8%	25.9%	40.6%	319	0.1	98.4%
Urology	1	28.9%	25.3%	32.7%	0	--	--
Test for subgroup differences:							
	Q	d.f.	p-value				
Between groups	1238	27	<0.0001				

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eTable 20. Meta-analysis of the Prevalence of Emotional Exhaustion Stratified by Specialty

	k	Prevalence (%)	LCI	UCI	Q	τ^2	I^2
Allergy and Immunology	1	33.4%	29.0%	38.2%	0	--	--
Anesthesia	6	32.0%	21.3%	45.1%	69	0.4	92.7%
Concierge Medicine	1	19.6%	14.3%	26.3%	0	--	--
Emergency Medicine	10	34.0%	21.6%	49.1%	246	0.9	96.3%
ENT	4	23.3%	20.2%	26.8%	2	0.0	0.0%
Family Medicine	2	40.9%	35.7%	46.4%	0	0.0	0.0%
Forensics	1	25.0%	16.9%	35.3%	0	--	--
General Practice	9	24.8%	17.5%	33.9%	183	0.4	95.6%
Gynecologic Oncology	2	34.9%	24.2%	47.4%	0	0.0	0.0%
Headache Medicine	1	52.8%	44.1%	61.3%	0	--	--
Hematology/Oncology	1	32.2%	24.5%	41.1%	0	--	--
Infectious Disease	1	43.5%	41.0%	46.1%	0	--	--
Intensive Care	4	38.3%	27.6%	50.4%	21	0.2	85.5%
Internal Medicine	6	28.6%	24.1%	33.4%	20	0.1	74.7%
Multiple Specialties	27	35.8%	31.2%	40.7%	1375	0.3	98.1%
Neurology	1	53.4%	51.0%	55.9%	0	--	--
Neurosurgery	2	18.7%	9.9%	32.3%	2	0.1	51.3%
Obstetrics and Gynecology	4	40.0%	31.0%	49.8%	24	0.1	87.7%
Occupational Medicine	1	34.3%	31.9%	36.8%	0	--	--
Oncology	3	34.3%	26.6%	43.0%	7	0.1	72.9%
Ophthalmology	2	38.3%	26.4%	51.7%	4	0.1	74.6%
Orthopedic Surgery	4	42.1%	37.1%	47.3%	3	0.0	1.8%
Pain Medicine	1	60.4%	53.6%	66.8%	0	--	--
Palliative Care	3	25.9%	4.4%	72.6%	174	3.1	98.8%
Pediatric Critical Care	1	34.4%	28.8%	40.5%	0	--	--
Pediatrics	4	32.2%	18.2%	50.4%	30	0.5	90.1%
Primary Care	10	37.9%	29.2%	47.3%	324	0.4	97.2%
Psychiatry	3	58.7%	26.7%	84.7%	68	1.4	97.0%
Radiation Oncology	2	28.1%	23.0%	33.8%	0	0.0	0.0%
Radiology	1	61.7%	57.0%	66.3%	0	--	--
Surgery	11	31.4%	27.8%	35.4%	194	0.1	94.8%
Urology	2	30.7%	23.9%	38.4%	2	0.0	41.5%
Test for subgroup differences:							
	Q	d.f.	p-value				
Between groups	466	31	<0.0001				

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eTable 21. Meta-analysis of the Prevalence of Depersonalization Stratified by Specialty

	k	Prevalence (%)	LCI	UCI	Q	τ^2	I^2
Allergy and Immunology	1	28.5%	24.3%	33.1%	0	--	--
Anesthesia	6	26.8%	18.6%	37.0%	41	0.3	87.7%
Concierge Medicine	1	6.0%	3.2%	10.7%	0	--	--
Emergency Medicine	9	37.1%	18.7%	60.1%	373	1.9	97.9%
ENT	4	18.2%	15.3%	21.4%	3	0.0	0.0%
Family Medicine	2	28.8%	8.7%	63.2%	27	1.1	96.4%
Forensics	1	40.5%	30.6%	51.3%	0	--	--
General Practice	8	18.9%	11.1%	30.2%	242	0.8	97.1%
Gynecologic Oncology	2	12.8%	6.5%	23.6%	0	0.0	0.0%
Headache Medicine	1	21.3%	15.0%	29.2%	0	--	--
Hematology/Oncology	1	29.8%	22.3%	38.5%	0	--	--
Infectious Disease	1	40.3%	37.8%	42.8%	0	--	--
Intensive Care	4	31.1%	21.4%	42.7%	19	0.2	84.0%
Internal Medicine	6	16.3%	10.2%	25.1%	73	0.4	93.1%
Multiple Specialties	25	31.2%	26.4%	36.5%	1347	0.3	98.2%
Neurology	1	41.4%	39.0%	43.9%	0	--	--
Neurosurgery	2	23.4%	14.4%	35.7%	1	0.1	31.4%
Obstetrics and Gynecology	3	23.6%	8.3%	51.4%	42	1.1	95.3%
Occupational Medicine	1	20.1%	18.1%	22.2%	0	--	--
Oncology	3	24.8%	22.5%	27.2%	1	0.0	0.0%
Ophthalmology	2	25.2%	7.6%	58.3%	18	1.0	94.4%
Orthopedic Surgery	3	37.4%	16.8%	63.8%	23	0.8	91.1%
Pain Medicine	1	35.8%	29.5%	42.5%	0	--	--
Palliative Care	3	9.4%	2.1%	33.3%	49	1.8	95.9%
Pediatric Critical Care	1	19.8%	15.4%	25.2%	0	--	--
Pediatrics	4	20.4%	15.0%	27.2%	6	0.1	49.0%
Primary Care	9	25.1%	19.1%	32.2%	114	0.3	93.0%
Psychiatry	3	48.5%	10.1%	88.8%	123	3.5	98.4%
Radiation Oncology	2	18.4%	14.2%	23.5%	0	0.0	0.0%
Radiology	1	53.3%	48.5%	58.1%	0	--	--
Surgery	11	20.2%	16.3%	24.7%	335	0.2	97.0%
Urology	2	27.0%	23.7%	30.6%	0	0.0	0.0%
Test for subgroup differences:							
	Q	d.f.	p-value				
Between groups	520	31	<0.0001				

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eTable 22. Meta-analysis of the Prevalence of a Diminished Sense of Personal Accomplishment Stratified by Specialty

	k	Prevalence (%)	LCI	UCI	Q	τ^2	I^2
Allergy and Immunology	1	9.7%	7.1%	12.9%	0	--	--
Anesthesia	6	38.0%	32.7%	43.7%	13	0.0	60.9%
Concierge Medicine	1	4.2%	2.0%	8.5%	0	--	--
Emergency Medicine	7	37.8%	27.3%	49.4%	33	0.3	81.6%
ENT	4	16.5%	5.9%	38.4%	68	1.3	95.6%
Family Medicine	2	53.0%	39.8%	65.8%	6	0.1	82.1%
Forensics	1	20.2%	13.0%	30.2%	0	--	--
General Practice	8	20.2%	12.3%	31.3%	245	0.7	97.1%
Gynecologic Oncology	2	13.8%	1.4%	63.8%	5	2.5	80.9%
Headache Medicine	1	11.8%	7.3%	18.7%	0	--	--
Hematology/Oncology	1	12.4%	7.6%	19.6%	0	--	--
Infectious Disease	1	8.2%	6.9%	9.7%	0	--	--
Intensive Care	4	41.3%	23.3%	62.1%	61	0.7	95.1%
Internal Medicine	3	11.9%	8.6%	16.3%	5	0.1	55.9%
Multiple Specialties	24	31.3%	23.8%	39.8%	2717	0.8	99.2%
Neurology	1	21.2%	19.3%	23.3%	0	--	--
Neurosurgery	2	26.8%	19.4%	35.7%	0	0.0	0.0%
Obstetrics and Gynecology	3	14.7%	9.1%	23.0%	6	0.1	67.9%
Occupational Medicine	1	63.9%	61.4%	66.3%	0	--	--
Oncology	3	14.1%	8.8%	21.8%	9	0.2	77.0%
Ophthalmology	2	43.2%	13.1%	79.2%	32	1.3	96.8%
Orthopedic Surgery	3	12.1%	2.8%	40.0%	19	1.7	89.7%
Pain Medicine	1	19.3%	14.5%	25.3%	0	--	--
Palliative Care	2	9.7%	1.0%	53.5%	6	2.5	82.7%
Pediatric Critical Care	1	21.4%	16.8%	26.9%	0	--	--
Pediatrics	4	28.6%	21.8%	36.5%	7	0.1	54.9%
Primary Care	9	18.9%	12.2%	28.2%	207	0.6	96.1%
Psychiatry	3	15.9%	7.9%	29.6%	14	0.4	86.0%
Radiation Oncology	2	26.0%	20.1%	32.9%	1	0.0	19.3%
Radiology	1	39.6%	34.9%	44.4%	0	--	--
Surgery	9	14.0%	8.8%	21.6%	356	0.6	97.8%
Urology	2	19.3%	5.6%	49.2%	9	0.9	88.8%
Test for subgroup differences:							
	Q	d.f.	p-value				
Between groups	1297	31	<0.0001				

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eTable 23. Associations Between Overall Burnout or Burnout Subcomponent Prevalence with Survey Year, Age, and Sex

	Range	Slope	SE	Z	LCI	UCI	*P* (mod)	Q (mod)	df(mod)	*P* (het)	Q (het)	df (het)
Overall Burnout												
Baseline Survey Year	1989-2017	0.2%	0.4%	0.5	-0.5%	0.9%	*0.60*	0.3	1	*<0.0001*	23808	97
Average Age	29.8-56.9	0.2%	0.4%	0.7	-0.5%	0.9%	*0.49*	0.5	1	*<0.0001*	14012	63
Percentage of Males	10-97%	9.1%	10.4%	0.9	-11.4%	29.5%	*0.39*	0.8	1	*<0.0001*	20044	91
Emotional Exhaustion												
Baseline Survey Year	1987-2017	0.2%	0.3%	0.8	-0.3%	0.7%	*0.41*	0.7	1	*<0.0001*	4838	93
Average Age	29.8-56.9	0.0%	0.3%	0.1	-0.5%	0.5%	*0.93*	0.01	1	*<0.0001*	3134	77
Percentage of Males	0-100%	-14.4%	5.7%	-2.5	-25.5%	-3.3%	*0.01*	6.4	1	*<0.0001*	4709	107
Depersonalization												
Baseline Survey Year	1987-2017	-0.04%	0.3%	-0.1	-0.6%	0.5%	*0.89*	0.02	1	*<0.0001*	4753	87
Average Age	29.8-56.9	-0.1%	0.3%	-0.3	-0.7%	0.5%	*0.76*	0.1	1	*<0.0001*	5211	76
Percentage of Males	0-100%	-1.8%	6.9%	-0.3	-15.4%	11.8%	*0.79*	0.1	1	*<0.0001*	6480	102
Diminished Personal Accomplishment												
Baseline Survey Year	1987-2017	0.4%	0.3%	1.1	-0.3%	1.1%	*0.27*	1.2	1	*<0.0001*	7442	80
Average Age	29.8-56.9	-0.4%	0.3%	-1.3	-1.1%	0.2%	*0.20*	1.7	1	*<0.0001*	5340	72
Percentage of Males	0-100%	-7.5%	7.8%	-1.0	-22.8%	7.7%	*0.33*	0.9	1	*<0.0001*	8567	95

Abbreviations: df, degrees of freedom; het, heterogeneity; LCI, lower 95% confidence interval; mod, moderators; SE, standard error; UCI, upper 95% confidence interval. Other abbreviations as per legend for eTable 6.

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eTable 24. Meta-analysis of the Prevalence of Screening Positive for Depression

	Prevalence (%)	LCI	UCI	%W(random)
Saijo, 2014[19]	40.6%	36.2%	45.1%	3.4%
Asai, 2007[20]	19.9%	17.0%	23.1%	3.4%
Wurm, 2016[27]	10.3%	9.5%	11.1%	3.5%
Grassi, 2000[49]	22.3%	17.9%	27.2%	3.3%
van der Wal, 2016[59]	40.1%	35.8%	44.5%	3.4%
Arigoni, 2009[80]	31.5%	26.8%	36.5%	3.4%
Taylor, 2005[86]	32.0%	29.5%	34.6%	3.5%
Shanafelt, 2012[123]	37.8%	36.7%	38.9%	3.5%
Shanafelt, 2015[124]	39.8%	38.6%	41.0%	3.5%
Shanafelt, 2009[135]	30.0%	29.0%	31.0%	3.5%
Xiao, 2014[11]	37.1%	30.5%	44.1%	3.3%
Zafar, 2016[21]	39.3%	31.9%	47.1%	3.2%
Bressi, 2009[46]	23.5%	14.8%	34.2%	2.8%
Bressi, 2008[47]	36.4%	27.8%	45.6%	3.1%
Volpe, 2014[51]	6.0%	1.3%	16.6%	1.5%
Mikalauskas, 2018[54]	24.6%	19.0%	30.8%	3.2%
Mikalauskas, 2012[55]	47.5%	34.3%	60.9%	2.8%
Ruitenburg, 2012[56]	26.9%	21.1%	33.3%	3.3%
Sharma, 2008[88]	32.9%	28.7%	37.2%	3.4%
Abdulla, 2011[94]	67.9%	60.2%	74.8%	3.2%
Elit, 2004[101]	25.7%	12.5%	43.3%	2.3%
Shenoi, 2018[111]	30.8%	25.2%	36.9%	3.3%
Lu, 2015[113]	18.5%	9.3%	31.4%	2.4%
Rath, 2015[114]	33.4%	28.8%	38.3%	3.4%
Guest, 2011[130]	26.8%	16.9%	38.6%	2.8%
De Stefano, 2018[137]	26.1%	10.2%	48.4%	1.9%
West, 2013[140]	27.3%	22.2%	32.9%	3.3%
West, 2014[141]	29.7%	19.7%	41.5%	2.8%
Balch, 2011[142]	39.1%	37.9%	40.2%	3.5%
Starmer, 2016[159]	6.7%	5.1%	8.6%	3.3%
Stafford, 2010[169]	17.2%	5.9%	35.8%	1.8%
Dunwoodie, 2007[171]	27.5%	14.6%	43.9%	2.4%
Bruce, 2005[177]	12.0%	4.5%	24.3%	2.1%
Number of studies combined:	k = 33			
	Prevalence (%)	LCI	UCI	
Random effects model	28.6%	24.9%	32.6%	
Quantifying heterogeneity:				
τ^2 = 0.26	H = 7.80		I^2 = 98.4%	
Test of heterogeneity:				
Q	d.f.	p-value		
1947.32	32	0		

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eTable 25. Meta-analysis of the Prevalence of Screening Positive for Depression Stratified by Assessment Method

	k	Prevalence (%)	LCI	UCI	Q	τ^2	I^2
BDI-II≥14	1	6.0%	2.0%	17.0%	0	--	--
BDI≥19	1	26.1%	12.2%	47.2%	0	--	--
BSI≥0.41	1	26.9%	21.4%	33.2%	0	--	--
GHQ-12≥2	1	40.1%	35.9%	44.4%	0	--	--
GHQ-12≥4	14	27.9%	24.4%	31.8%	66	0.1	80.4%
HADS≥9	1	37.1%	30.7%	43.9%	0	--	--
MDI≥20	1	10.3%	9.5%	11.1%	0	--	--
PHQ-9≥5	1	40.6%	36.3%	45.0%	0	--	--
Positive Single-item Screen	2	28.0%	1.4%	91.4%	246	5.7	99.6%
PRIME-MD≥1	9	34.5%	31.0%	38.1%	222	0.0	96.4%
PRIME-MD≥3	1	24.6%	19.3%	30.7%	0	--	--
Test for subgroup differences:							
	Q	d.f.	p-value				
Between groups	725.48	10	<0.0001				

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eTable 26. Correlation Coefficients Between Overall Burnout or Burnout Subcomponent Prevalence and Screening Positive for Depression

	Correlation Coefficient with Screening Positive for Depression	LCI	UCI	*P*	t	df
Overall Burnout	−0.11	−0.49	0.31	*0.62*	−0.50	22
Emotional Exhaustion	0.05	−0.35	0.44	*0.81*	0.24	23
Depersonalization	0.23	−0.19	0.58	*0.29*	1.09	22
Personal Accomplishment	−0.10	−0.52	0.36	*0.69*	−0.40	18

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eTable 27. Within-instrument Heterogeneity Analyses of Studies Reporting on Burnout or Burnout Subcomponent Prevalence

A. Overall Burnout defined by (MBI-EE≥27 and MBI-DP≥10 and MBI-PA≤33)												
Stratified Meta-analysis Results												
United States vs. Not	**k**	**Prev.**	**LCI**	**UCI**	**Q**	**tau²**	**I²**	**P(diff)**	**Q(diff)**	**df**		
Not United States	17	9.5%	6.4%	13.9%	461	0.73	96.5%	0.05	3.9	1		
United States	4	4.5%	2.3%	8.5%	5	0.19	39.0%					
Country												
Armenia	1	18.3%	12.4%	26.3%	0	--	--	<0.0001	336.9	13		
Brazil	2	14.4%	7.7%	25.4%	2	0.10	33.8%					
China	1	31.4%	25.7%	37.8%	0	--	--					
Denmark	3	3.5%	2.2%	5.4%	5	0.11	63.3%					
France	1	11.8%	10.2%	13.6%	0	--	--					
Germany	1	10.9%	9.6%	12.5%	0	--	--					
Italy	1	52.0%	38.4%	65.4%	0	--	--					
Kuwait	1	20.5%	15.5%	26.7%	0	--	--					
New Zealand	1	10.0%	4.2%	21.9%	0	--	--					
Peru	1	3.7%	3.0%	4.6%	0	--	--					
Portugal	1	2.0%	0.7%	6.0%	0	--	--					
Spain	1	16.3%	11.1%	23.4%	0	--	--					
Switzerland	2	4.5%	2.7%	7.4%	5	0.12	78.6%					
United States	4	4.5%	2.3%	8.5%	5	0.19	39.0%					
Continent												
Asia	2	24.7%	14.1%	39.8%	7	0.22	85.0%	<0.0001	32.9	5		
Europe	10	7.4%	4.6%	11.5%	230	0.56	96.1%					
Middle East	1	20.5%	15.5%	26.7%	0	--	--					
North America	4	4.5%	2.3%	8.5%	5	0.19	39.0%					
Oceania	1	10.0%	4.2%	21.9%	0	--	--					
South America	3	8.5%	2.6%	24.6%	29	1.13	93.1%					
Specialty												
Anesthesia	1	9.3%	3.5%	22.3%	0	--	--	<0.0001	122.0	10		
ENT	3	3.7%	2.4%	5.7%	1	0	0%					
Family Medicine, General Practice	1	20.5%	15.5%	26.7%	0	--	--					
General Practice	3	3.9%	1.8%	8.2%	7	0.35	72.6%					
General Practice, Oncology, Pediatrics	1	6.0%	4.0%	8.9%	0	--	--					

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Intensive Care	1	17.9%	10.5%	29.0%	0	--	--					
Multiple Specialties	5	10.6%	4.9%	21.3%	230	0.87	98.3%					
Occupational Medicine	1	11.8%	10.2%	13.6%	0	--	--					
Orthopedic Surgery	1	16.7%	4.2%	47.7%	0	--	--					
Primary Care	3	5.3%	1.5%	17.2%	43	1.23	95.4%					
Psychiatry	1	52.0%	38.4%	65.4%	0	--	--					
Meta-regression Results												
Baseline Year (Range)	**k**	**Slope**	**SE**	**Z**	**P(mod)**	**LCI**	**UCI**	**Q(mod)**	**df(mod)**	**P(het)**	**Q(het)**	**df(het)**
2002-2014	17	0.5%	0.5%	1.0	0.34	-0.5%	1.5%	0.9	1	<0.0001	298	15
Average Age (Range)												
31.9-54.5	14	-1.1%	0.4%	-2.8	0.01	-1.8%	-0.3%	7.8	1	<0.0001	225	12
Proportion of Male Participants (Range)												
10-88%	19	-19.3%	11.5%	-1.7	0.09	-41.9%	3.3%	2.8	1	<0.0001	236	17
B. Emotional Exhaustion defined by MBI-EE ≥27												
Stratified Meta-analysis Results												
United States vs. Not	**k**	**Prev.**	**LCI**	**UCI**	**Q**	**tau²**	**I²**	**P(diff)**	**Q(diff)**	**df**		
Not United States	41	34.7%	30.4%	39.2%	1226	0.38	96.7%	0.75	0.1	1		
United States	16	35.7%	31.2%	40.5%	477	0.14	96.9%					
Country												
Argentina	1	47.2%	38.5%	56.0%	0	--	--	<0.0001	819.1	26		
Armenia	1	34.4%	26.7%	43.0%	0	--	--					
Australia	1	22.5%	12.1%	37.9%	0	--	--					
Australia, New Zealand	1	28.2%	22.6%	34.5%	0	--	--					
Brazil	5	44.1%	38.6%	49.7%	8	0	49.1%					
Canada	2	44.8%	33.2%	56.9%	1	0.05	24.5%					
China	1	50.9%	44.4%	57.4%	0	--	--					
Croatia	1	42.4%	34.1%	51.2%	0	--	--					
Denmark	3	15.0%	11.1%	20.1%	15	0.08	86.8%					
France	1	34.3%	31.9%	36.8%	0	--	--					
Germany	1	30.2%	28.1%	32.3%	0	--	--					
Iran	1	42.9%	32.3%	54.1%	0	--	--					
Ireland, United Kingdom	1	28.5%	25.0%	32.4%	0	--	--					
Israel	1	44.1%	36.0%	52.6%	0	--	--					

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Italy, Portugal, Spain	1	25.6%	18.6%	34.1%	0	--	--					
Japan	1	22.0%	19.0%	25.2%	0	--	--					
Kuwait	1	40.0%	33.4%	46.9%	0	--	--					
Lithuania	1	34.1%	28.1%	40.6%	0	--	--					
New Zealand	3	31.5%	27.8%	35.5%	1	0	0%					
Peru	1	14.2%	12.8%	15.7%	0	--	--					
Portugal	1	25.3%	19.0%	32.9%	0	--	--					
Serbia	2	54.8%	49.3%	60.1%	1	0	0%					
Spain	5	39.3%	35.6%	43.2%	5	0.01	25.5%					
Switzerland	2	25.4%	13.9%	41.7%	36	0.28	97.2%					
United Kingdom	1	41.0%	38.3%	43.7%	0	--	--					
United States	16	35.7%	31.2%	40.5%	477	0.14	96.9%					
Yemen	1	63.2%	59.2%	67.1%	0	--	--					
Continent												
Asia	3	34.8%	18.4%	55.7%	66	0.56	97.0%	0.06	10.4	5		
Europe	20	32.1%	27.3%	37.2%	511	0.25	96.3%					
Middle East	4	47.9%	34.7%	61.4%	44	0.29	93.1%					
North America	18	36.3%	32.0%	40.9%	479	0.14	96.4%					
Oceania	5	30.2%	27.2%	33.5%	3	0	0.0%					
South America	7	37.0%	21.4%	55.9%	333	1.03	98.2%					
Specialty												
Anesthesia	2	39.3%	17.0%	67.1%	10	0.62	89.7%	<0.0001	555.3	30		
Anesthesia, Intensive Care	1	34.1%	28.1%	40.6%	0	--	--					
Emergency Medicine	2	37.8%	33.0%	42.9%	1	0	6.5%					
ENT	3	22.7%	19.3%	26.5%	1	0	0%					
Family Medicine	1	42.4%	34.1%	51.2%	0	--	--					
Family Medicine, General Practice	1	40.0%	33.4%	46.9%	0	--	--					
Gastroenterology, Oncology, Radiology, Surgical Oncology	1	41.0%	38.3%	43.7%	0	--	--					
General and Subspecialty Internal Medicine	1	30.2%	26.2%	34.6%	0	--	--					
General Practice	3	17.9%	9.8%	30.4%	23	0	91%					
General Practice, Oncology, Pediatrics	1	33.3%	28.7%	38.3%	0	--	--					
General Practice, Psychiatry	1	58.3%	49.3%	66.8%	0	--	--					
Headache Medicine	1	52.8%	44.1%	61.3%	0	--	--					
Intensive Care	2	46.4%	41.4%	51.6%	1	0	0%					
Multiple Palliative Care-Related Specialties	1	22.5%	12.1%	37.9%	0	--	--					

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Multiple Specialties	11	36.3%	28.7%	44.6%	1092	0.33	99.1%					
Multiple Surgical Specialties	1	31.7%	28.1%	35.6%	0	--	--					
Neurology	1	53.4%	51.0%	55.9%	0	--	--					
Neurosurgery	1	14.1%	8.0%	23.7%	0	--	--					
Obstetrics and Gynecology	1	52.4%	31.8%	72.2%	0	--	--					
Occupational Medicine	1	34.3%	31.9%	36.8%	0	--	--					
Oncology	2	32.3%	21.2%	45.9%	7	0.15	86.3%					
Oncology, Palliative Care	1	22.0%	19.0%	25.2%	0	--	--					
Orthopedic Surgery	2	41.0%	34.5%	47.9%	0	0	0%					
Palliative Care	1	60.1%	56.4%	63.7%	0	--	--					
Pediatrics	3	34.4%	17.3%	57.0%	29	0.62	93.0%					
Primary Care	6	34.6%	23.2%	48.1%	140	0.47	96.4%					
Psychiatry	1	33.1%	27.4%	39.3%	0	--	--					
Radiation Oncology	1	28.2%	22.6%	34.5%	0	--	--					
Surgery	1	33.3%	15.8%	57.1%	0	--	--					
Surgical Oncology	1	41.4%	30.5%	53.2%	0	--	--					
Urology	1	28.5%	25.0%	32.4%	0	--	--					
Meta-regression Results												
Baseline Year (Range)	**k**	**Slope**	**SE**	**Z**	**P(mod)**	**LCI**	**UCI**	**Q(mod)**	**df(mod)**	**P(het)**	**Q(het)**	**df(het)**
2000-2017	42	0.5%	0.5%	1.1	0.28	-0.4%	1.4%	1.2	1	<0.0001	2839	40
Average Age (Range)												
32.8-56.0	37	-0.5%	0.3%	-1.9	0.06	-1.0%	0.03%	3.4	1	<0.0001	1284	35
Proportion of Male Participants (Range)												
0-97%	51	-19.4%	7.3%	-2.7	0.01	-33.6%	-5.1%	7.1	1	<0.0001	2779	49
C. Emotional Exhaustion defined by MBI-EE "High"												
Stratified Meta-analysis Results												
United States vs. Not	**k**	**Prev.**	**LCI**	**UCI**	**Q**	**tau²**	**I²**	**P(diff)**	**Q(diff)**	**df**		
Not United States	14	39.2%	32.8%	46.0%	107	0.23	87.9%	0.45	0.6	1		
United States	8	35.3%	28.2%	43.2%	73	0.20	90.5%					
Country												
Australia	2	28.5%	21.1%	37.2%	1	0	0%	<0.0001	82.7	10		
Canada	2	42.0%	33.2%	51.3%	1	0.02	16.9%					
Canada, United States	1	46.2%	35.5%	57.2%	0	--	--					

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Germany	1	37.3%	25.2%	51.2%	0	--	--					
Palestine	1	72.3%	64.4%	79.1%	0	--	--					
Poland	1	33.3%	21.5%	47.7%	0	--	--					
Saudi Arabia	1	50.7%	39.1%	62.3%	0	--	--					
Serbia	1	32.4%	26.4%	39.0%	0	--	--					
Spain	2	29.1%	23.7%	35.1%	0	0	0%					
United Kingdom	2	38.8%	25.7%	53.7%	23	0.18	95.7%					
United States	8	35.3%	28.2%	43.2%	73	0.20	90.5%					
Continent												
Asia	1	50.7%	39.1%	62.3%	0	--	--	<0.0001	64.7	4		
Europe	7	34.3%	28.2%	40.8%	35	0.11	82.9%					
Middle East	1	72.3%	64.4%	79.1%	0	--	--					
North America	11	37.1%	30.9%	43.7%	81	0.18	87.6%					
Oceania	2	28.5%	21.1%	37.2%	1	0	0%					
Specialty												
Colorectal Surgery, Vascular Surgery	1	31.7%	27.7%	36.0%	0	--	--	<0.0001	88.9	16		
Emergency Medicine	2	46.8%	9.1%	88.5%	34	2.38	97.1%					
General Practice	4	32.8%	22.6%	44.9%	28	0.24	89.4%					
Gynecologic Oncology	2	34.9%	24.2%	47.4%	0	0	0%					
Internal Medicine	1	46.2%	35.5%	57.2%	0	--	--					
Multiple Specialties	1	33.3%	21.5%	47.7%	0	--	--					
Obstetrics and Gynecology	1	30.1%	25.6%	35.0%	0	--	--					
Ophthalmology	1	44.7%	36.2%	53.6%	0	--	--					
Orthopedic Surgery	1	50.7%	39.1%	62.3%	0	--	--					
Pain Medicine	1	60.4%	53.6%	66.8%	0	--	--					
Pediatric Critical Care	1	34.4%	28.8%	40.5%	0	--	--					
Plastic Surgery	1	28.9%	25.1%	33.0%	0	--	--					
Primary Care	1	32.4%	26.4%	39.0%	0	--	--					
Radiation Oncology	1	27.7%	16.8%	42.0%	0	--	--					
Surgery	1	40.1%	33.8%	46.8%	0	--	--					
Transplant Surgery	1	37.3%	31.0%	44.1%	0	--	--					
Urology	1	37.3%	25.2%	51.2%	0	--	--					
Meta-regression Results												
Baseline Year (Range)	**k**	**Slope**	**SE**	**Z**	**P(mod)**	**LCI**	**UCI**	**Q(mod)**	**df(mod)**	**P(het)**	**Q(het)**	**df(het)**

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2002-2016	16	-0.4%	0.9%	-0.4	0.66	-2.0%	1.3%	0.2	1	<0.0001	183	14
Average Age (Range)												
43.0-50.3	11	-0.7%	1.7%	-0.4	0.69	-4.0%	2.7%	0.2	1	<0.0001	78	9
Proportion of Male Participants (Range)												
17-94%	15	16.9%	11.2%	1.5	0.13	-5.1%	38.9%	2.3	1	<0.0001	101	13
D. Depersonalization defined by MBI-DP ≥10												
Stratified Meta-analysis Results												
United States vs. Not	**k**	**Prev.**	**LCI**	**UCI**	**Q**	**tau²**	**I²**	**P(diff)**	**Q(diff)**	**df**		
Not United States	31	26.4%	21.8%	31.7%	1004	0.47	97.0%	0.58	0.3	1		
United States	10	24.6%	20.7%	29.0%	257	0.10	96.5%					
Country												
Armenia	1	51.2%	42.6%	59.7%	0	--	--	<0.0001	876.8	21		
Australia	1	7.5%	2.4%	20.8%	0	--	--					
Australia, New Zealand	1	19.1%	14.4%	24.8%	0	--	--					
Bosnia and Herzegovina	1	45.6%	37.7%	53.7%	0	--	--					
Brazil	2	40.0%	31.3%	49.5%	1	0	0%					
Canada	2	45.4%	37.4%	53.7%	0	0	0%					
Croatia	1	16.0%	10.6%	23.5%	0	--	--					
Denmark	3	15.1%	13.4%	17.1%	3	0.004	25.9%					
France	1	20.1%	18.1%	22.2%	0	--	--					
Germany	1	47.7%	45.4%	50.0%	0	--	--					
Iran	1	11.7%	6.2%	21.0%	0	--	--					
Israel	1	36.0%	28.4%	44.4%	0	--	--					
Italy, Portugal, Spain	1	22.3%	15.8%	30.6%	0	--	--					
Japan	1	11.1%	8.9%	13.6%	0	--	--					
Kuwait	1	45.5%	38.7%	52.4%	0	--	--					
New Zealand	2	24.9%	20.5%	30.0%	0	0	0%					
Peru	1	16.8%	15.3%	18.4%	0	--	--					
Portugal	1	16.0%	11.0%	22.8%	0	--	--					
Serbia	1	0.4%	0.03%	6.3%	0	--	--					
Spain	5	36.7%	27.0%	47.5%	38	0.22	89.5%					
Switzerland	2	24.3%	19.2%	30.2%	6	0.04	82.1%					
United States	10	24.6%	20.7%	29.0%	257	0.10	96.5%					
Continent												

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Asia	2	26.4%	4.3%	74.4%	100	2.25	99.0%	0.78	2.5	5		
Europe	17	25.4%	19.4%	32.4%	673	0.48	97.6%					
Middle East	3	29.8%	16.1%	48.5%	24	0.44	91.5%					
North America	12	26.6%	22.7%	31.0%	269	0.10	95.9%					
Oceania	4	21.2%	15.7%	28.0%	7	0.07	58.8%					
South America	3	30.7%	14.5%	53.7%	35	0.67	94.3%					
Specialty												
Allergy and Immunology	1	28.5%	24.3%	33.1%	0	--	--	<0.0001	447.8	23		
Anesthesia	1	44.2%	30.3%	59.1%	0	--	--					
Emergency Medicine	1	11.7%	6.2%	21.0%	0	--	--					
ENT	2	18.7%	15.4%	22.5%	0	0	0%					
Family Medicine	1	16.0%	10.6%	23.5%	0	--	--					
Family Medicine, General Practice	1	45.5%	38.7%	52.4%	0	--	--					
General and Subspecialty Internal Medicine	1	13.3%	10.5%	16.8%	0	--	--					
General Practice	3	17.8%	12.9%	24.0%	8	0.08	74.5%					
General Practice, Oncology, Pediatrics	1	27.6%	23.3%	32.3%	0	--	--					
General Practice, Psychiatry	1	0.4%	0.03%	6.3%	0	--	--					
Intensive Care	1	37.3%	26.6%	49.4%	0	--	--					
Multiple Palliative Care-Related Specialties	1	7.5%	2.4%	20.8%	0	--	--					
Multiple Specialties	9	33.3%	26.5%	40.7%	667	0.23	98.8%					
Neurology	1	41.4%	39.0%	43.9%	0	--	--					
Neurosurgery	1	27.2%	18.6%	37.8%	0	--	--					
Obstetrics and Gynecology	1	33.3%	16.8%	55.3%	0	--	--					
Occupational Medicine	1	20.1%	18.1%	22.2%	0	--	--					
Oncology	2	24.6%	22.2%	27.1%	0	0	0%					
Oncology, Palliative Care	1	11.1%	8.9%	13.6%	0	--	--					
Orthopedic Surgery	1	25.0%	8.3%	55.2%	0	--	--					
Pediatrics	1	13.1%	8.4%	19.9%	0	--	--					
Primary Care	6	30.6%	22.3%	40.4%	76	0.26	93.4%					
Radiation Oncology	1	19.1%	14.4%	24.8%	0	--	--					
Surgery	1	38.9%	19.8%	62.1%	0	--	--					
Meta-regression Results												
Baseline Year (Range)	**k**	**Slope**	**SE**	**Z**	**P(mod)**	**LCI**	**UCI**	**Q(mod)**	**df(mod)**	**P(het)**	**Q(het)**	**df(het)**
2000-2016	31	0.7%	0.5%	1.3	0.20	-0.4%	1.8%	2	1	<0.0001	1322	29

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Average Age (Range)												
32.8-56.0	28	0.03%	0.5%	0.1	0.95	-0.9%	1.0%	0.004	1	<0.0001	2506	26
Proportion of Male Participants (Range)												
0-97%	37	-3.1%	9.6%	-0.3	0.74	-21.9%	15.6%	0.1	1	<0.0001	2711	35
E. Depersonalization defined by MBI-DP ≥13												
Stratified Meta-analysis Results												
United States vs. Not	**k**	**Prev.**	**LCI**	**UCI**	**Q**	**tau²**	**I²**	**P(diff)**	**Q(diff)**	**df**		
Not United States	11	23.5%	18.2%	29.6%	131	0.26	92.4%	0.34	0.9	1		
United States	6	19.6%	14.7%	25.7%	31	0.14	84.1%					
Country												
Argentina	1	22.8%	16.2%	31.0%	0	--	--	<0.0001	134.2	9		
Bosnia and Herzegovina	1	21.3%	16.6%	27.0%	0	--	--					
Brazil	3	24.6%	21.5%	28.0%	0	0	0%					
China	1	53.1%	46.6%	59.5%	0	--	--					
Ireland, United Kingdom	1	27.0%	23.5%	30.7%	0	--	--					
Lithuania	1	25.9%	20.6%	32.1%	0	--	--					
New Zealand	1	13.0%	9.3%	17.9%	0	--	--					
Serbia	1	12.2%	8.4%	17.4%	0	--	--					
United States	6	19.6%	14.7%	25.7%	31	0.14	84.1%					
Yemen	1	19.4%	16.3%	22.8%	0	--	--					
Continent												
Asia	1	53.1%	46.6%	59.5%	0	--	--	<0.0001	115.5	5		
Europe	4	21.4%	15.9%	28.2%	19	0.11	84.1%					
Middle East	1	19.4%	16.3%	22.8%	0	--	--					
North America	6	19.6%	14.7%	25.7%	31	0.14	84.1%					
Oceania	1	13.0%	9.3%	17.9%	0	--	--					
South America	4	24.3%	21.4%	27.4%	0	0	0%					
Specialty												
Anesthesia	1	12.2%	8.4%	17.4%	0	--	--	<0.0001	67.8	13		
Anesthesia, Intensive Care	1	25.9%	20.6%	32.1%	0	--	--					
ENT	1	21.7%	13.0%	33.8%	0	--	--					
Headache Medicine	1	21.3%	15.0%	29.2%	0	--	--					
Intensive Care	1	24.6%	20.0%	29.8%	0	--	--					
Multiple Specialties	3	30.8%	15.0%	52.9%	86	0.65	97.7%					

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Multiple Surgical Specialties	1	13.3%	10.8%	16.4%	0	--	--					
Orthopedic Surgery	1	26.9%	21.2%	33.6%	0	--	--					
Palliative Care	1	24.0%	21.0%	27.4%	0	--	--					
Pediatrics	2	23.3%	17.9%	29.8%	0	0	0%					
Primary Care	1	21.3%	16.6%	27.0%	0	--	--					
Psychiatry	1	13.0%	9.3%	17.9%	0	--	--					
Surgical Oncology	1	11.3%	5.7%	21.0%	0	--	--					
Urology	1	27.0%	23.5%	30.7%	0	--	--					
Meta-regression Results												
Baseline Year (Range)	**k**	**Slope**	**SE**	**Z**	**P(mod)**	**LCI**	**UCI**	**Q(mod)**	**df(mod)**	**P(het)**	**Q(het)**	**df(het)**
2006-2017	12	-0.1%	0.9%	-0.1	0.90	-1.8%	1.6%	0.02	1	<0.0001	26	10
Average Age (Range)												
33.3-53.7	10	-0.5%	0.5%	-1.0	0.34	-1.5%	0.5%	0.9	1	<0.0001	119	8
Proportion of Male Participants (Range)												
17-94%	14	3.0%	11.0%	0.3	0.78	-18.6%	24.7%	0.1	1	<0.0001	170	12
F. Depersonalization defined by MBI-DP "High"												
Stratified Meta-analysis Results												
United States vs. Not	**k**	**Prev.**	**LCI**	**UCI**	**Q**	**tau²**	**I²**	**P(diff)**	**Q(diff)**	**df**		
Not United States	13	28.3%	21.6%	36.1%	134	0.37	91.1%	0.15	2.1	1		
United States	8	21.0%	15.1%	28.4%	75	0.29	90.6%					
Country												
Australia	1	10.7%	3.5%	28.4%	0	--	--	<0.0001	71.6	10		
Canada	2	26.6%	8.4%	59.0%	7	0.87	86.6%					
Canada, United States	1	41.3%	30.8%	52.7%	0	--	--					
Germany	1	27.5%	17.0%	41.2%	0	--	--					
Palestine	1	32.1%	24.9%	40.3%	0	--	--					
Poland	1	35.4%	23.3%	49.8%	0	--	--					
Saudi Arabia	1	59.4%	47.5%	70.3%	0	--	--					
Serbia	1	14.9%	10.7%	20.4%	0	--	--					
Spain	2	18.9%	14.4%	24.3%	0	0	0%					
United Kingdom	2	30.7%	14.4%	53.9%	50	0.48	98.0%					
United States	8	21.0%	15.1%	28.4%	75	0.29	90.6%					
Continent												

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Asia	1	59.4%	47.5%	70.3%	0	--	--	<0.0001	33.2	4		
Europe	7	24.5%	16.5%	34.8%	91	0.40	93.4%					
Middle East	1	32.1%	24.9%	40.3%	0	--	--					
North America	11	23.6%	17.4%	31.2%	115	0.36	91.3%					
Oceania	1	10.7%	3.5%	28.4%	0	--	--					
Specialty												
Colorectal Surgery, Vascular Surgery	1	21.2%	17.8%	25.1%	0	--	--	<0.0001	176.8	16		
Emergency Medicine	2	34.1%	27.7%	41.0%	1	0	0%					
General Practice	3	25.8%	12.5%	45.7%	38	0.57	94.7%					
Gynecologic Oncology	2	12.8%	6.5%	23.6%	0	0	0%					
Internal Medicine	1	41.3%	30.8%	52.7%	0	--	--					
Multiple Specialties	1	35.4%	23.3%	49.8%	0	--	--					
Obstetrics and Gynecology	1	10.0%	7.4%	13.5%	0	--	--					
Ophthalmology	1	40.7%	32.3%	49.5%	0	--	--					
Orthopedic Surgery	1	59.4%	47.5%	70.3%	0	--	--					
Pain Medicine	1	35.8%	29.5%	42.5%	0	--	--					
Pediatric Critical Care	1	19.8%	15.4%	25.2%	0	--	--					
Plastic Surgery	1	16.2%	13.3%	19.7%	0	--	--					
Primary Care	1	14.9%	10.7%	0.2041	0	--	--					
Radiation Oncology	1	14.9%	7.3%	28.1%	0	--	--					
Surgery	1	17.1%	12.6%	22.7%	0	--	--					
Transplant Surgery	1	26.3%	20.8%	32.7%	0	--	--					
Urology	1	27.5%	17.0%	41.2%	0	--	--					
Meta-regression Results												
Baseline Year (Range)	**k**	**Slope**	**SE**	**Z**	**P(mod)**	**LCI**	**UCI**	**Q(mod)**	**df(mod)**	**P(het)**	**Q(het)**	**df(het)**
2002-2016	15	-1.0%	0.8%	-1.3	0.18	-2.5%	0.5%	1.78	1	<0.0001	134	13
Average Age (Range)												
43.0-50.3	11	-3.0%	2.2%	-1.4	0.17	-7.4%	1.3%	1.89	1	<0.0001	147	9
Proportion of Male Participants (Range)												
17-94%	14	10.9%	14.5%	0.8	0.45	-17.4%	39.3%	0.6	1	<0.0001	209	12
G. Diminished Personal Accomplishment defined by MBI-PA "Low"												
Stratified Meta-analysis Results												
United States vs. Not	**k**	**Prev.**	**LCI**	**UCI**	**Q**	**tau^2**	**I^2**	**P(diff)**	**Q(diff)**	**df**		

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Not United States	12	18.9%	14.2%	24.7%	84	0.26	86.9%	0.79	0.1	1		
United States	8	17.4%	9.8%	28.9%	171	0.85	95.9%					
Country												
Australia	1	3.7%	0.5%	22.1%	0	--	--	<0.0001	66.4	9		
Canada	2	26.5%	20.2%	33.9%	1	0	0%					
Canada, United States	1	4.1%	1.3%	11.8%	0	--	--					
Germany	1	9.8%	4.1%	21.5%	0	--	--					
Palestine	1	32.1%	24.9%	40.3%	0	--	--					
Saudi Arabia	1	17.4%	10.2%	28.2%	0	--	--					
Serbia	1	16.7%	12.2%	22.3%	0	--	--					
Spain	2	11.1%	7.7%	15.7%	0	0	0%					
United Kingdom	2	31.3%	26.7%	36.3%	3	0.02	65.3%					
United States	8	17.4%	9.8%	28.9%	171	0.85	95.9%					
Continent												
Asia	1	17.4%	10.2%	28.2%	0	--	--	0.01	14.9	4		
Europe	6	18.1%	12.1%	26.3%	60	0.29	91.6%					
Middle East	1	32.1%	24.9%	40.3%	0	--	--					
North America	11	17.4%	10.9%	26.6%	185	0.76	94.6%					
Oceania	1	3.7%	0.5%	22.1%	0	--	--					
Specialty												
Colorectal Surgery, Vascular Surgery	1	28.8%	25.0%	33.0%	0	--	--	<0.0001	204.0	15		
Emergency Medicine	2	20.5%	6.6%	48.6%	8	0.78	87.6%					
General Practice	3	17.0%	6.3%	38.2%	40	0.90	95.0%					
Gynecologic Oncology	2	13.8%	1.4%	63.8%	5	2.48	80.9%					
Internal Medicine	1	4.1%	1.3%	11.8%	0	--	--					
Obstetrics and Gynecology	1	11.1%	8.3%	14.7%	0	--	--					
Ophthalmology	1	25.0%	18.2%	33.4%	0	--	--					
Orthopedic Surgery	1	17.4%	10.2%	28.2%	0	--	--					
Pain Medicine	1	19.3%	14.5%	25.3%	0	--	--					
Pediatric Critical Care	1	21.4%	16.8%	26.9%	0	--	--					
Plastic Surgery	1	4.9%	3.4%	7.2%	0	--	--					
Primary Care	1	16.7%	12.2%	22.3%	0	--	--					
Radiation Oncology	1	31.9%	20.3%	46.4%	0	--	--					
Surgery	1	46.5%	40.0%	53.2%	0	--	--					
Transplant Surgery	1	14.4%	10.2%	19.8%	0	--	--					

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Urology	1	9.8%	4.1%	21.5%	0	--	--					
Meta-regression Results												
Baseline Year (Range)	**k**	**Slope**	**SE**	**Z**	**P(mod)**	**LCI**	**UCI**	**Q(mod)**	**df(mod)**	**P(het)**	**Q(het)**	**df(het)**
2002-2016	15	0.01%	0.8%	0.02	0.98	-1.5%	1.5%	0.0004	1	<0.0001	204	13
Average Age (Range)												
45.6-50.3	10	2.2%	2.7%	0.8	0.42	-3.2%	7.5%	0.64	1	<0.0001	152	8
Proportion of Male Participants (Range)												
17-94%	14	18.6%	15.6%	1.2	0.23	-12.0%	49.1%	1.42	1	<0.0001	292	12
H. Diminished Personal Accomplishment defined by MBI-PA≤33												
Stratified Meta-analysis Results												
United States vs. Not	**k**	**Prev.**	**LCI**	**UCI**	**Q**	**tau²**	**I²**	**P(diff)**	**Q(diff)**	**df**		
Not United States	30	32.4%	26.7%	38.6%	982	0.50	97.0%	0.01	7.2	1		
United States	10	20.8%	15.7%	27.0%	395	0.27	97.7%					
Country												
Armenia	1	50.0%	41.5%	58.5%	0	--	--	<0.0001	721.8	20		
Australia	1	2.5%	0.4%	15.7%	0	--	--					
Brazil	3	48.4%	34.8%	62.3%	6	0.16	65.5%					
Canada	2	19.1%	12.5%	28.2%	1	0.03	14.4%					
China	1	55.3%	48.8%	61.7%	0	--	--					
Croatia	1	60.0%	51.2%	68.2%	0	--	--					
Denmark	3	33.5%	28.4%	39.0%	12	0.04	83.5%					
Germany	1	35.9%	33.7%	38.2%	0	--	--					
India	1	50.0%	12.4%	87.7%	0	--	--					
Iran	1	55.8%	44.7%	66.5%	0	--	--					
Israel	1	31.6%	24.4%	39.9%	0	--	--					
Italy, Portugal, Spain	1	21.5%	15.1%	29.7%	0	--	--					
Japan	1	62.0%	58.3%	65.5%	0	--	--					
Kuwait	1	46.5%	39.7%	53.4%	0	--	--					
New Zealand	2	33.2%	28.2%	38.5%	1	0	0%					
Peru	1	18.1%	16.5%	19.7%	0	--	--					
Portugal	1	16.7%	11.5%	23.5%	0	--	--					
Serbia	1	0.4%	0.03%	6.3%	0	--	--					
Spain	4	23.4%	9.1%	48.3%	77	1.19	96.1%					

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Switzerland	2	17.4%	14.6%	20.7%	2	0.01	56.7%					
United States	10	20.8%	15.7%	27.0%	395	0.27	97.7%					
Continent												
Asia	4	56.6%	49.9%	63.0%	8	0.04	63.7%	<0.0001	69.8	5		
Europe	14	26.6%	20.8%	33.4%	363	0.32	96.4%					
Middle East	3	44.1%	31.8%	57.3%	13	0.18	84.7%					
North America	12	20.8%	16.0%	26.5%	397	0.26	97.2%					
Oceania	3	26.9%	14.2%	45.0%	9	0.33	78.0%					
South America	4	38.7%	17.7%	64.8%	80	1.14	96.2%					
Specialty												
Anesthesia	2	42.7%	27.2%	59.7%	2	0.15	59.3%	<0.0001	720.2	20		
Emergency Medicine	2	55.6%	44.6%	66.0%	0	0	0%					
ENT	2	11.0%	8.4%	14.1%	0	0	0%					
Family Medicine	1	60.0%	51.2%	68.2%	0	--	--					
Family Medicine, General Practice	1	46.5%	39.7%	53.4%	0	--	--					
General and Subspecialty Internal Medicine	1	13.2%	10.4%	16.6%	0	--	--					
General Practice	3	36.0%	33.1%	39.1%	1	0	0%					
General Practice, Oncology, Pediatrics	1	19.6%	15.8%	23.9%	0	--	--					
General Practice, Psychiatry	1	0.4%	0.03%	6.3%	0	--	--					
Intensive Care	2	58.8%	53.3%	64.0%	0	0	0%					
Multiple Palliative Care-Related Specialties	1	2.5%	0.4%	15.7%	0	--	--					
Multiple Specialties	9	30.2%	22.1%	39.7%	906	0.40	99.1%					
Neurology	1	21.2%	19.3%	23.3%	0	--	--					
Neurosurgery	1	27.2%	18.6%	37.8%	0	--	--					
Obstetrics and Gynecology	1	14.3%	4.7%	36.1%	0	--	--					
Oncology	1	21.5%	15.1%	29.7%	0	--	--					
Oncology, Palliative Care	1	62.0%	58.3%	65.5%	0	--	--					
Orthopedic Surgery	1	33.3%	13.1%	62.4%	0	--	--					
Pediatrics	1	32.1%	24.8%	0.4038	0	--	--					
Primary Care	6	19.9%	12.7%	29.9%	87	0.42	94.3%					
Surgery	1	27.8%	12.1%	51.9%	0	--	--					
Meta-regression Results												
Baseline Year (Range)	**k**	**Slope**	**SE**	**Z**	**P**	**LCI**	**UCI**	**Q(mod)**	**df(mod)**	**P(het)**	**Q(het)**	**df(het)**
2000-2016	29	0.2%	0.8%	0.3	0.80	-1.3%	1.7%	0.07	1	<0.0001	1776	27

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Average Age (Range)												
32.8-56.0	27	-1.5%	0.6%	-2.5	0.01	-2.6%	-0.3%	6.48	1	<0.0001	2489	25
Proportion of Male Participants (Range)												
0-97%	36	-15.5%	12.1%	-1.3	0.20	-39.3%	8.2%	1.65	1	<0.0001	2666	34

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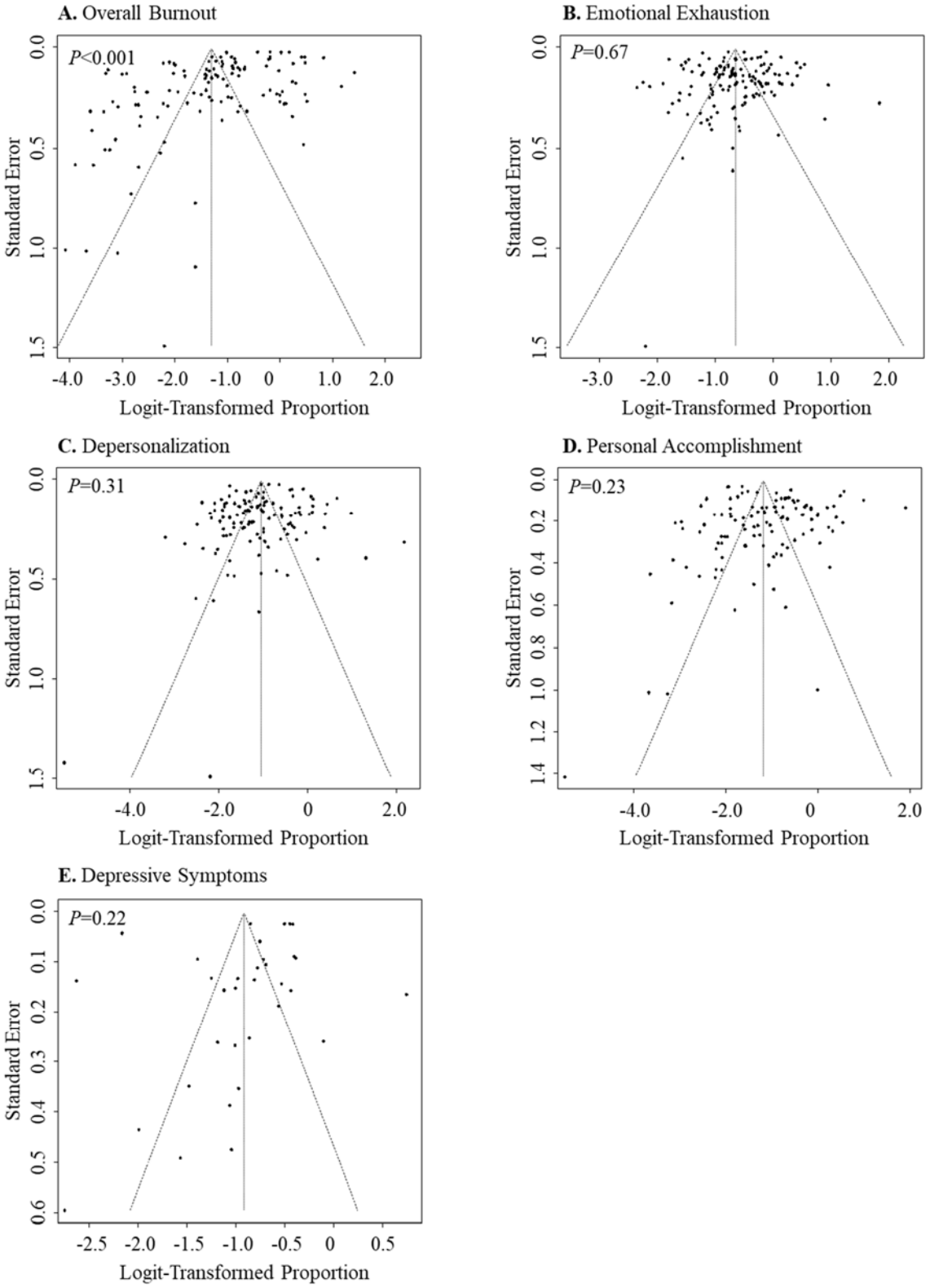
eFigure. Assessment of Small Study Effects by Funnel Plot



Legend: *P* values calculated using the linear regression test of funnel plot asymmetry.[6]

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