Figure 1 - PRISMA Flowchart of included studies

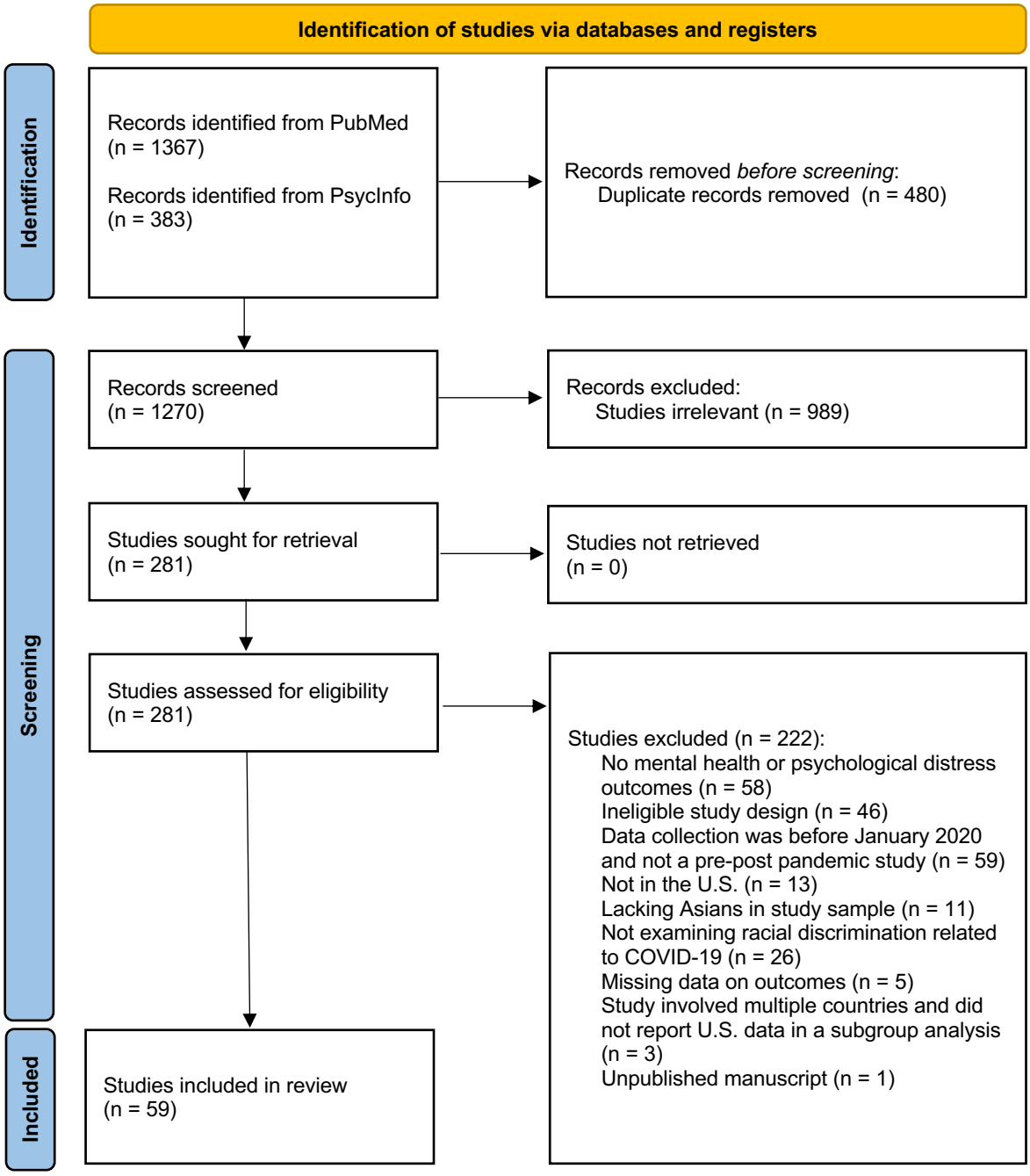

Table 1–Characteristics of included studies

Study	Title	Study design	Number of AAPI participants	Samples comprised of only Asians and/or PI or includes multiple races (non-Asian and/or non-PI)	Breakdown provided for Asians and/or PI ethnicity or by race	Participant characteristics	Age of AAPI participants: Mean (SD), Range, Median, or Percentage Breakdown	Gender of AAPI participants	Exposure scales assessing discrimination experiences	Discrimination prevalence among AAPI participants	Mental health and psychological distress outcomes	Mental health and psychological distress outcomes	Mental health and psychological distress prevalence among AAPI participants	Funding source
Abe et al., 2022	COVID-19 racism, intersectional racism, and psychological distress among Asian adults	Longitudinal	Wave 1: 342 Wave 2: 145 Wave 3: 80	Asian and/or PI only	32.2% Chinese 30.2% Korean 10.7% Taiwanese 8.3% Japanese 4.2% Other 2.2% Did not answer	Adults (18+)	6 (SD): 23.6 (8.8) Range: 19-63	66.3% Female 31.2% Male 2.5% Genderqueer/non-binary	The Safety and Hatred Racism Scale for Asian Americans (SAHR-A2; adapted; Yip et al., 2019)	Experienced racism in public after the COVID-19 outbreak: 19% Experienced vicarious racism online: 20% Experienced vicarious racism through friends or family: 6%	Psychological distress	K6	Experienced negative emotions (an increased anxiety/hyper/agitated/hopelessness): 36% Experienced negative emotions (an increase due to racism/increased anger/sadness/shame): 11%	Not reported
Chae et al., 2021	Vicarious racism and vigilance during COVID-19 and mental health and mental health implications among Asian and Black Americans	Cross-sectional	604	Multiple races	41.7% Asian American	Adults (18+)	6 (SD): 38.6 (17.1) Range: 18-85	34.9% Male 65.1% Female	Vicarious Racism (adapted; Mertz et al., 2019)	Experienced any vicarious racism: 91.9% Experiences of vicarious racism during the COVID-19 pandemic were more than once: 72.8% Personal experiences of racial discrimination were the same during the COVID-19 pandemic: 62.2% Experiences of vicarious racism since the discrimination were less than usual during the COVID-19 pandemic: 11.9%	Depression Anxiety	PROMIS 4-item short form	72.8% of the participants were experiencing vicarious racism also reported thinking about these experiences more than usual during the COVID-19 pandemic and "at least somewhat" distressed, and 68.7% reported being concerned about these experiences "somewhat" or more.	None
Chouh et al., 2021	Chinese American adolescents' experiences of COVID-19 racial discrimination: Risk and protective factors for internalizing difficulties	Cross-sectional	211 adolescent parent-dyads	100% Chinese American	Parent-child dyads	Adolescents: adolescent parent-dyads Parents: Not reported	Adolescents: 6 (SD): 15.1 (1.3) Range: 10-18 Parents: 6 (SD): 46.2 (5.2) Range: 34-65	Adolescents: 40% Female Parents: 81% Female	Online Victimization Scale for Adolescents (adapted; Tynes et al., 2010) Perceived Discrimination Microaggressions Scale (adapted; Nadal, 2011)	Not reported	Internalizing difficulties (including emotional symptoms like "unhappy, depressed or tearful")	SDQ	Not reported	Not reported	Not reported
Chuah, Wang et al., 2020	COVID-19 racism and mental health in Chinese American families	Cross-sectional	163 Chinese American parents and 230 of their children	100% Chinese American	Primary sample: Parents Subsample: Parent-child dyads	Parent sample: Adults (18+) Parent sample: 6 (SD): 43.4 (6.5) Range: 29-65 Children: 6 (SD): 11.4 (6) Range: 4-20 Dyad sample: Parents: 6 (SD): 43.9 (6.2) Range: 29-65 Children: 6 (SD): 13.8 (2.3) Range: 10-18	Parent sample: Parents: 21.1% Male, 77.9% Female Children: 53% Male, 47% Female Dyad sample: Parents: 20.4% Male, 79.6% Female Children: 52.1% Male, 47.9% Female	Parent sample: Parents: 21% Male, 77.9% Female Children: 53% Male, 47% Female Dyad sample: Parents: 20.4% Male, 79.6% Female Children: 52.1% Male, 47.9% Female	Experienced online COVID-19 direct racial discrimination at least once: Parents: 31.7% Children: 67.7% Experienced in person COVID-19 direct racial discrimination at least once: Parents: 0% Children: 38.2% Experienced intimate or in-person COVID-19 vicarious racial discrimination at least once: Parents: 6.7% Children: 0% Experienced online COVID-19 vicarious racial discrimination almost every day: Parents: 22.4% Children: 26% Experienced in person COVID-19 vicarious racial discrimination almost every day: Parents: 12.1% Children: 26.4%	Parent psychological well-being Parent anxiety symptoms Parent depressive symptoms Child internalizing difficulties (including emotional symptoms) Youth psychological well-being Youth anxiety symptoms	BrPS-18-item Psychological Well-Being Scale (Ryff & Keyes, 1995) GAD-7 SDQ-E SDQ	Moderate levels of anxiety symptoms: Parents: not reported Children: 8.1% High levels of anxiety symptoms: Parents: not reported Children: 3% Slightly elevated risk for clinically significant problems in Strengths and Difficulties Questionnaire: Parents: 12.4% Children: 17.4% Substantial risk for clinically significant problems on Strengths and Difficulties Questionnaire: Parents: 6.7% Children: 6.5%	National Science Foundation Rapid Response Research award
Choi et al., 2020	Predicting psychological distress during COVID-19 among Korean in-person and online Christian worship: Discrimination and coping mechanisms of Korean immigrants in the U.S.	Cross-sectional	790	Asian and/or PI only	100% Korean	Adults (18+)	6 (SD): 42.7 (12.1) Range: 20-81	40.1% Male 59.7% Female	Everyday Discrimination Scale (Williams et al., 1997) Racial Discrimination Scale (unclear) Discrimination (self-developed)	Not reported	Psychological distress	K10	Low level of psychological distress: 49.4% High level of psychological distress: 49.2%	National Science Foundation-funded Social Science Extreme Events in Disaster Research network and the CONVERGE facility at the Natural Hazards Center at the University of Colorado Boulder
Dhanani et al., 2022	The burden of latte: How network discontinuities experienced during the COVID-19 pandemic impacts immigrants in the U.S.	Cross-sectional	111	Multiple races	Asian and/or PI ethnicity is not reported	Full time or part time employees	6 (SD): 33.6 (8.7) Range: not reported	50.2% Female	Everyday Discrimination Scale (Williams et al., 1997)	Not reported	Depressive Symptoms Emotional Exhaustion	PHQ-9 Exhaustion subscale of the MBI	Not reported	Not reported
Deng et al., 2022	Relationships between racial discrimination, social isolation, and well-being among international Asian graduate students during the COVID-19 pandemic	Cross-sectional	177	Asian and/or PI only	39.1% Chinese (including mainland China, Hong Kong, Taiwan) 20.3% South Korean 13.6% India 7% Vietnam 3.7% Singapore 1.1% Malaysia 0.6% Thailand 0.6% Vietnam 1.1% Others	International Asian graduate trainee (including master student, doctoral student, and postdoctoral trainee) enrolled in universities in Philadelphia, Pennsylvania	6 (SD): 29.4 (5.1) Range: 22-48	49.2% Male 50.8% Female	Everyday Discrimination Scale (Williams et al., 1997)	Perceived racial discrimination during the COVID-19: 50.3% No perceived racial discrimination during COVID-19: 49.7% Most common forms of perceived discrimination: racial insult (68.2%), deliberately avoiding (37.7%), getting spat/sneezed or coughed on (11.2%) and physical intimidation (10.7%)	Depressive symptoms Anxiety symptoms Distress about social distancing	PHQ-9 GAD-7 Social distancing distress item developed by the ACS Research Program (COVID-19 Participant Experience (CORE) Survey (adapted)	Higher levels of depression (scores above 10): 20% Higher levels of generalized anxiety (scores above 10): 12%	University of Pennsylvania Office of the Provost Campaign for Community Grant
Dorfboy et al., 2022	Physicians' experiences with mistreatment and discrimination by patients, families, and visitors and association with burnout	Cross-sectional	681	Multiple races	13.1% AAPI	Physicians	AAPI age statistics is not reported	AAPI gender breakdown is not reported	Association of American Medical College's Graduation Questionnaire (adapted)	Been subjected to offensive racially or ethnically remarks: Male: 51.7% Female: 39.9% "Had a patient or his/her family refuse to allow them to provide care because of the physician's personal attributes." Male: 32.4% Female: 36.5% "Been physically harassed (eg, hit, slapped, kicked)." Male: 2.7% Female: 16.8%	Burnout	Emotional exhaustion and depersonalization subscales of the MBI	Not reported	Not reported	Mayo Clinic Department of Medicine Program on Physician Well-Being, the Mayo Clinic WellMD Center, and the American Medical Association Journal of Ethics Innovation award under grant 2001210
Ermico-Demirtas et al., 2022c	The impact of COVID-19 associated discrimination on psychological stress symptoms in Asian American adolescents	Cross-sectional	114	Asian and/or PI only	51.1% Chinese Americans 24.6% Japanese 8.8% Korean 7% Taiwanese 2.3% Thai 2.6% Filipino Americans	Public high school students taking classes at the time of the survey	6 (SD): 16.4 (1.8) Range: not reported	51.8% Male 47.4% Female 0.9% Transgender	Online Victimization Scale (adapted; Tynes et al., 2010) Vigo, 2020) Perceived Discrimination by Parents Index Scale (possible adaptation from Way, 1997) COVID-19 Discrimination Checklist (adapted; Chouh, et al., 2020) Self-developed discrimination question to screen lifetime racial discrimination	Experienced COVID-19 associated discrimination in online or offline settings: 75.9% Witnessed COVID-19 associated discrimination: 81.6% Witnessed anti-Asian sentiments associated with the pandemic: 83.3%	Depressive Symptoms Anxiety DSM-5 Lifetime Traumatic Events	PHQ for Adolescents (PHQ-A, Johnson et al., 2002) GAD-7 Child PTSD Symptom Scale for DSM5 Trauma Screen Checklist (CPSS-5, Foa et al., 2018)	Not reported	Not reported	University of Wisconsin-Stout Graduate Research Grant and Sponsored Programs
Ermico-Demirtas et al., 2022b	The trauma of COVID-19-fueled racial discrimination: Risk factors in Asian American adolescents	Cross-sectional	116	Asian and/or PI only	51.7% Chinese Americans 24.1% Japanese 9.5% Korean 5.2% Taiwanese American 1.4% Thai American 2.6% Filipino American 9.9% Cambian American	Public high school students taking classes at the time of the survey	6 (SD): 16.5 (1.8) Range: not reported	31.7% Male 67.4% Female 0.9% Transgender	Online Victimization Scale (adapted; Tynes et al., 2010) Perceived Discrimination by Parents Index Scale (possible adaptation from Way, 1997) COVID-19 Discrimination Checklist (adapted; Chouh, et al., 2020) Self-developed discrimination question to screen lifetime racial discrimination	Experienced COVID-19 related discrimination in online or offline settings: Witnessed COVID-19 related discrimination: 81.9% Witnessed anti-Asian sentiments associated with the pandemic: 83.6% Experienced in-person COVID-19 related discrimination: 36.2% Exposed to one or more COVID-19 related discriminatory experiences: 61.9% Exposed to both DSM traumatic events and COVID-related discrimination: 20% Lifetime discrimination: 50.9%	DSM-5 Lifetime Traumatic Events PTSD symptoms	CPSS-5 DSM-5 PTSD Reaction Index for DSM-5 Brief Screening Form (UCLA-B2T, Kelton Arroyo et al., 2020)	Not reported	Not reported	University of Wisconsin-Stout Graduate Research Grant and Sponsored Programs Self-funded
Fisher et al., 2021	COVID-related victimization, racial bias and employment and housing discrimination increase mental health risk among U.S. Asian, Black and Latino adults	Cross-sectional	114	Multiple races	28.4% Asian	Adults (18+)	6 (SD): 32.2 (10.5) Range: 19-72 Percentage breakdown: 18-25:12.5% >25:87.5%	27.2% Male 70.5% Female 1.8% Gender minority	Coronavirus Victimization Distress Scale (VVDS; Fisher & Yip, 2020)	One or more types of coronavirus victimization experience: 27.2%	Depression Anxiety Discrimination-related distress	PHQ-9 GAD-7	Moderate depression: 28.1% Moderate anxiety: 29%	Intersectional Research Program of the National Institutes of Health's Office of Disease Prevention, Drug Abuse, and the Fordham University Center for Ethics Education
Fisher et al., 2023	The effects of COVID-19 victimization and perceived racial bias on mental health among Asian, Black, Latino, and White young adults	Cross-sectional	94	Multiple races	Asians and/or PI ethnicity breakdown provided 34% East Asian 66% South East Asian	Young adults (18-25)	Asian: 6 (SD): 20.4 (2.2) Range: 18-25	Asian: 32.4% Cisgender male 58.3% Cisgender female 9.3% Gender minority	Racial/Ethnic Discrimination Index (Wang & Siegel-Hawley, 2020) Coronavirus Victimization Distress Scale (VVDS; Fisher & Yip, 2020)	Not reported	Depressive symptoms Anxiety symptoms	PHQ-9 GAD-7	Moderate depression: Asian: 16.6% Anxiety: Asian: 21.1% Moderate anxiety: Asian: 31.1%	Not reported
Hall & Zhou, 2021	An outbreak of xenophobia: Perceived discrimination and anxiety in Chinese American college students before and during the COVID-19 pandemic	Cross-sectional	198	Asian and/or PI only	100% Chinese American	Chinese American college students (18-25) enrolled in a public university	6 (SD): 20 (1.3) Range: 18-25	44.4% Male 55.6% Female	Everyday Discrimination Scale (Williams et al., 1997)	Not reported	Anxiety	BAI	Not reported	Not reported
Huber et al., 2021	Perceived COVID-19-related anti-Asian discrimination and traumatic stress disorder symptoms among Asian and Asian American young adults	Cross-sectional	211	Asian and/or PI only	43% East Asian 9% South Asian 2% Southeast Asian 48% Asian in general (includes those who did not report specific ethnicity)	Young adults (18-30)	6 (SD): 24.5 (SD not reported) Range: 18-36.0	19.9% Male 77.3% Female 2.8% Transgender/non-binary	Self-developed	Any experiences of racial discrimination or harassment: 67.8% Race-related physical assault against one self or family member due to COVID-19: 2.4% "Someone has made a racial remark against one-self or family member due to COVID-19: 12.4% "Someone has made a comment about Chinese/Asian people being the cause of COVID-19: 37.9% "Someone has made a comment about Chinese/Asian eating habits": 41.3% "Someone has made a comment that they avoid eating Chinese/Asian food because they are worried about contracting COVID-19": 32.7% "Someone has actively avoided physical contact with me or my family because they thought we might transmit COVID-19": 32.7% "Someone has made a comment about Chinese/Asian people being dirty": 21.2%	Depression Anxiety PTSD	PHQ-8 GAD-7 PCL-C	Current depression symptoms: 31.8% Current anxiety symptoms: 30.5% Current PTSD symptoms: 21.3%	National Science Foundation
Huang & Tsai, 2021	Asian American parents' experiences of stress, discrimination, and mental health during COVID-19	Cross-sectional	166	Asian and/or PI only	26.5% Chinese 21.9% Taiwanese 15.9% Filipino 8.4% Vietnamese 6.0% Hmong 1.2% Cambodian 2.7% Indonesian 6.0% Hmong 1.8% Japanese 1.8% Unknown	Parents	6 (SD): 38.7 (6.9) Range: not reported	26.5% Male 73.5% Female	Recent Discrimination Subscale (General Ethnic Discrimination Scale; Landrine et al., 2006) COVID-19 Items (self-developed)	Experienced race-related discrimination since the COVID-19 pandemic: 22%	Psychological distress (depression, anxiety, and stress)	DASS-21	Some to strong levels of mental health difficulties due to COVID-19: 51.3%	Not reported
Kezar et al., 2022	Leading predictors of COVID-19-related poor mental health in adult Asian Indians: An application of stress process theory and negative stereotype display additive explanations	Cross-sectional	289	Asian and/or PI only	100% Asian Indian	Adults (18+)	6 (SD): Not reported Range: not reported Percentage breakdown: >50: 73.3%	65.1% Female	Self-developed	Reported some form of discrimination: 66%	Poor mental health symptoms (feeling down, depressed, or lonely, and/or nervous, tense, or worried)	Self-developed	Reported poor mental health: 46%	National Institutes of Health (NIH) NIH GRANT ID: AT020022UL1RR025008 NIH NIH GRANT ID: UL1TR000445 NIH NIH GRANT ID: UL1RR024156 Chase CSAL Alliance; National Institute on Minority Health and Health Disparities (NIMHD) NIH GRANT ID: 1R01MD010443; 5U54MD008602
Kezar et al., 2023	Factors associated with COVID-19-related mental health among Asian Indians in the United States	Cross-sectional	289	Asian and/or PI only	100% Asian Indian	Adults (18+)	6 (SD): 35.8 (12.8) Range: not reported	34.9% Male 65.1% Female	California Health Interview Survey Discrimination Scale (Kezar et al.) Brief Perceived Ethnic Discrimination Questionnaire-Community Version (Brief PEDQ-CV; Brondolo et al., 2005)	Treated with less respect: 59.7% Treated with less intelligence: 51.6% Threatened or harassed in the past 12 months: 28.4%	Poor mental health symptoms (feeling down, depressed, or lonely, and/or nervous, tense, or worried)	Self-developed	Feeling down, depressed, or lonely: 35.6% Feeling nervous, tense, or worried: 41.9%	National Institutes of Health (NIH) NIH GRANT ID: AT020022UL1RR025008 NIH NIH GRANT ID: UL1TR000445 NIH NIH GRANT ID: UL1RR024156 Chase CSAL Alliance; National Institute on Minority Health and Health Disparities through the Texas Center for Health Disparities (NIMHD) 5U54MD008602
Inman et al., 2021	Discrimination and psychosocial engagement during the COVID-19 pandemic	Cross-sectional	502	Multiple races	39.8% Asian	University students	AAPI age statistics is not reported	AAPI gender breakdown is not reported	Everyday Discrimination Scale (adapted; Williams et al., 1997)	Not reported	Depression Anxiety	PHQ-9 GAD-7	Not reported	Not reported
J. Huynh et al., 2021	The mental health of Asian American adolescents and young adults: Cross-sectional survey in the United States during COVID-19	Cross-sectional	176	Asian and/or PI only	47.7% East Asian 30.8% Southeast Asian 13.6% South Asian 1.7% Not reported	Adolescents (ages 11-17) & Young adults (ages 18-29 years old)	Range = 13-29	48.9% Cisgender male 48.2% Cisgender female 1.5% Transgender and non-binary 1.4% Genderqueer/ nonbinary 0.7% Not reported	Experiences of anti-Asian violence (self-developed)	Increased frequency and/or severity of in-person or online personal experiences of anti-Asian harassment since the COVID-19 pandemic: 24%	Depression	PHQ-9	Moderate, moderately severe, or severe depressive symptoms in the past 2 weeks: 40% (19, 32 and 9%, respectively) Depressive symptoms increased since the pandemic started: 66%	Robert Wood Johnson Foundation Health Policy Research Scholars Program
Jun & Wu, 2021	Words that hurt: Leaders' anti-Asian conversations and employee outcomes	Cross-sectional	220	Asian and/or PI only	42% East Asian 1.9% Southeast Asian 2.3% South Asian 4.1% South Asian 4.5% Not reported	Adults (18+)	6 (SD): 30.11 (9.55)	53% Male 47% Female	Leaders' use of stigmatizing COVID-19 labels (self-developed)	One or more incidences of supervisor using stigmatizing COVID-19 labels: 20%	Emotional exhaustion	Emotional exhaustion subscale of the MBI	Not reported	Not reported
Lacy et al., 2022	The impacts of racial media use and online racial discrimination on Asian American mental health: Cross-sectional survey in the United States during COVID-19	Cross-sectional	306	Multiple races	3% Asian	Adults (18+)	AAPI age statistics is not reported	AAPI gender breakdown is not reported	Online Victimization Scale (adapted; Tynes et al., 2010)	Not reported	Depression Anxiety Secondary Traumatic Stress	PHQ-9 GAD-7 STS-17	Not reported	Department of Communication, University of California, Davis
Lee, Miron et al., 2021	Coronavirus disease (COVID-19) related discrimination and mental health in five U.S. Southern cities	Cross-sectional	125	Multiple races	7.4% Non-Hispanic Asian	Adults (18+)	AAPI age statistics is not reported	AAPI gender breakdown is not reported	Everyday Discrimination Scale (adapted; Snowden et al., 2011) Major Experiences of Discrimination Scale (adapted; Williams et al., 1997)	Experiences of everyday discrimination: 23.2% Experiences of major discrimination: 11.9%	Psychological distress Perceived emotional health due to the pandemic	PHQ-4 Worries about emotional health due to the pandemic (self-developed)	Not reported separately for AAPI participants	Internal grant from University of Texas at Arlington Internal research funding provided by New York University
Lee & Waters, 2021	Asian and Asian Americans' experiences of racial discrimination during the COVID-19 pandemic: Impacts on adjustment through emotional and role of social support	Cross-sectional	410	Asian and/or PI only	Asian and/or PI ethnicity is not reported	Adults (18+)	6 (SD): 26.1 (7.8) Range: 19-60	47% Female 53% genderqueer	Perceived Ethnic Discrimination Questionnaire (PEDQ; Contrada et al., 2001) Racial and Ethnic Microaggressions Scales (Nadal, 2011)	Increased discrimination compared to pre-COVID-19 pandemic: 29%	Depression Anxiety	CES-D-20 BAI	Compared to pre-COVID-19 pandemic, increased depressive symptoms: 47% Increased depressive symptoms: 53%	Not reported
Lee, Liu, Farrer et al., 2022	Association of everyday discrimination with mental health symptoms and suicidal ideation during the COVID-19 pandemic in the All of Us Research Program	Longitudinal	1813	Multiple races	2.8% Non-Hispanic Asian 0.1% Hispanic Asian	Adults (18+)	AAPI age statistics is not reported	AAPI gender breakdown is not reported	Everyday Discrimination Scale (Williams et al., 1997)	Not reported separately for AAPI participants	Depressive symptoms Suicidal ideation	PHQ-9	Not reported separately for AAPI participants	National Institutes of Health, Office of the Director: Regional Medical Centers
Lee, Yang, Zhang et al., 2022	COVID-19 pertinacious distress and discrimination in Chinese residents in North America: The role of continuous worry	Cross-sectional	943	Asian and/or PI only	100% Chinese	Adults (18+)	6 (SD): 31.9 (8.9) Range: 18-72	33.9% Male 64.5% Female	Perceived anti-Chinese discrimination (specific details not provided by authors)	Experienced anti-Chinese discrimination: 23.3% Perceived anti-Chinese discrimination: 38.2%	COVID-19 pertinacious distress Index Scale (CPDI)	COVID-19 Pertinacious Distress Index Scale (CPDI)	Not reported	New Frontiers Research Fund Exploratory Grant, Institutes of Health Research (CIHR) the IDIC Immigrant, Diversity, and Health Lab, Canada Research Chair in Immigrant, Diversity, and Health, and the Trottier Fellowship
Li et al., 2022	Mental health among Chinese American adolescents during the COVID-19 pandemic	Cross-sectional	507	Asian and/or PI only	100% Chinese	Adults (18+)	6 (SD): 16 (10)	29.6% Male 70.4% Female	Everyday Discrimination Scale (adapted; Williams et al., 1997)	Experienced racial discrimination against Chinese: 33%	Depression Anxiety	PHQ-9 GAD-7	Depression (i.e., score of ≥11 on PHQ-9): 36% Anxiety (i.e., score of ≥ 11 on GAD-7): 29%	University of Texas at Austin School of Nursing Start-Up Fund
Liaison & Oh, 2022	Coping strategies to mitigate effects of COVID-19 racial discrimination in Filipino Americans	Cross-sectional	246	Asian and/or PI only	100% Filipino Americans	Adults (18-75 years old)	6 (SD): 34 (10.8) Range: 18-75	31.7% Male 68.3% Female 0% Transgender or Genderqueer	Everyday Discrimination Scale (Williams et al., 1997)	Experienced and witnessed instances of COVID-19 related racism: 44.9% Only witnessed instances of COVID-19 related racism: 35.1% Only experienced instances of COVID-19 related racism: 20%	Depression Anxiety	CESD-R BAI	Not reported	Not reported
Liu et al., 2020	Perceived discrimination and mental health among COVID-19 pandemic evidence from the understanding America study	Panel	March 2020 survey: 117 April 2020 survey: 118	Multiple races	3% Asian	Adults (18+)	AAPI age statistics is not reported	AAPI gender breakdown is not reported	Everyday Discrimination Scale Short Version (Sternthal et al., 2011)	Perceived COVID-19-associated Discrimination March 2020: 11.9% April 2020: 22%	Mental distress	PHQ-4	Not reported	Understanding America Study, which is maintained by the RAND Corporation, and the National Institute on Aging. The UAS coronavirus survey funding USC and (in part) the Bill & Melinda Gates Foundation, National Institute on Drug Abuse. National Institute of Mental Health
Lo & Wang, 2022	Asian Americans' racial discrimination experiences during COVID-19: Social support and locus of control as moderators	Cross-sectional	218	Asian and/or PI only	Asian and/or PI ethnicity is not reported	College students	6 (SD): 20.4 (2.1)	67.4% Female	The Online Victimization Scale for Adolescents (adapted; Tynes et al., 2010) COVID-19 Related Racial Discrimination Scale (adapted; Chouh et al., 2020)	Reported at least occasionally experiencing direct online racial discrimination: 38.5% Reported experiencing vicarious racial discrimination: 88.1%	Depression Anxiety Discrimination-related distress	PHQ-9 GAD-7 COVID-19 Related Racial Discrimination scale* by vicarious racial discrimination: 42.9% COVID-19 Related Racial Discrimination scale* by direct racial discrimination: 42.9% Clinically significant depressive symptoms: 37.2%	Not reported	Not reported
M. A. Liu et al., 2021	Psychological outcomes and culturally relevant moderators and mediators of perceived discrimination among Asian American adults	Cross-sectional	289	Asian and/or PI only	34.2% East Asian 2.8% Southeast Asian, or Japanese 27% Southeast Asian 2.8% Indonesian, Cambodian, or Hmong 10% South Asian (Indian or Pakistani) 0.7% Biracial	Adults (18+)	6 (SD): 33.1 (10.5)	57.1% Male 42.9% Female	Rape-Anchored Post-Traumatic Stress Scale Report Questionnaire (adapted; Takeuchi, 2020)	Experienced discrimination: 51.6%	Depression Social Anxiety	CES-D-20 SIAS-6	Not reported	Melissa A. Cyders funded from the Indiana University's Office of the Vice President for Research, and NIH grant R01 MD102278-01 awarded to Cyders
Macaraeus et al., 2022	COVID-19-related direct and vicarious racial discrimination: Associations with psychological distress among U.S. college students	Cross-sectional	8970	Multiple races	14% Asian	College students	AAPI age statistics is not reported	AAPI gender breakdown is not reported	Developed by the American College Health Association (ACHA) for the Spring 2021 National College Health Assessment	Direct discrimination: 32.9% Vicarious discrimination: 68.4%	Psychological distress	K6	Psychological distress (i.e., score of ≥13 on K6): 27.8%	Mary A. Toney Teacher Fellowship (ref: C.B.L.); the Family Health and Resilience Lab (ref: C.B.L.); NIH R01 MD 011389-01 (ref: S.J.) NIH 1U2N-PI-award (ref: S.B.)
Nez, 2023	Asian Indian ancestry, stress, and religious coping: A study of Asian and South American Indian adults in the U.S.	Cross-sectional	330	Asian and/or PI only	21.0% Asian Indians 2% Asian, US born 19.2% Filipino 36.9% Other	Adults (18+)	6 (SD): 39.02 (13.05) Range: 18-72 Percentage breakdown: >34: 44% 35-44: 49.2% >45: 10.8%	47% Male 53% Female	Sabla and Hansen Racism Scale (Nez et al., 2010)	Not reported	Depression Anxiety Stress	DASS-21	Not reported	Jack Skeed Research Grants of the Society for the Scientific Study of Religion, grant number JS0120217
Oh & Lindsey, 2022	COVID-19 racial discrimination on mental health and life satisfaction among Asian Americans: Examining a moderated mediation model	Cross-sectional	725	Asian and/or PI only	24.1% Chinese 17.9% Korean 17.2% Korean 7.9% Vietnamese 7.4% Filipino 1.9% Thai 18.3% Other Asian ethnicities or multiethnicities	Adults (18+)	6 (SD): 32.42 (9.44) Range: 18-69	49.9% Male 50.1% Female 0.7% Other	Everyday Discrimination Scale (adapted; Williams et al., 1997)	Not reported	Depression Anxiety	CESD-R BAI	Not reported	Not reported
Oh et al., 2022	COVID-19 racial discrimination and mental health of Korean American and of ethnic minority: and coping strategy	Cross-sectional	270	Asian and/or PI only	100% Korean	Adults (18+)	6 (SD): 34.25 (9.77) Range: 18-69	38.1% Male 61.9% Female	Everyday Discrimination Scale (adapted; Williams et al., 1997)	Experienced COVID-19 related racial discrimination at least once: 31.2% Experienced COVID-19 related racial discrimination more than once: 5.2% Experienced COVID-19 related racial discrimination more than twice: 3.7% Experienced COVID-19 related racial discrimination more than 3 times: 10.4% Witnessed COVID-19 related racial discrimination twice: 29.6% Witnessed COVID-19 related racial discrimination more than twice: 15.2%	Depression Anxiety Stress	CESD-R BAI	Not reported	Not reported
Okazaki et al., 2022	Disaggregating the data: Diversity of COVID-19 stressors, discrimination, and mental health among Asian American communities	Cross-sectional	620	Asian and/or PI only	34.8% East Asian 24.7% Southeast Asian 20.7% South Asian 11.1% Indian 3.9% Chinese 9.7% Japanese 7.6% Korean 1.7% Pakistani	Adults (18+)	6 (SD): 40.6 (13.7) Range: 18-80	61.3% Female	COVID-19 Related Racial Discrimination Scale (adapted; Chouh et al., 2020)	Not reported	Psychological distress Worry	K10 Pain State Worry Questionnaire	Not reported	NYU School's Office for Research Seed Fund
Pan, Shen et al., 2021	Coronavirus stigmatization and psychological distress among Asians in the United States	Cross-sectional	450	Multiple races	1.2% Asians, foreign born 2% Asian, US born 1.3% Asian of mixed race 2% Indigenous*	Any adults (18+)	18-24: 10.9% 25-34: 26.7% 35-44: 19.1% 45-54: 19.2% 55-64: 12.7% >=75: 1.0%	50.7% Male 49.3% Female	Experiences of coronavirus stigma (self-developed)	Experienced any coronavirus stigma Asia, foreign born: 12.1% Asian, US born: 14.9% Asian of mixed race: 17.4% Indigenous: 5.3%	Psychological distress	PHQ-4	Psychological distress Asian, foreign born: 6.7% Asian, US born: 13.9% Asian of mixed race: 21.9% Indigenous: 14.0%	Not reported
Pan, Yang et al., 2021	Experience of and worry about discrimination, social media use, and depression among Asians in the United States during the COVID-19 pandemic: Cross-sectional survey	Cross-sectional	209	Asian and/or PI only	35.4% Chinese 44.6% Unspecified Asian	Any adults (18+)	6 (SD): 33.7 (11.3) Range: 18-72 Percentage breakdown: >=50: 48% <30: 38%	54.1% Male 45.9% Female	Everyday Discrimination Scale (adapted; Snowden et al., 2011)	Not reported	Depression Worries about experiencing discrimination	PHQ-9	Positive 16-item adaptation of CES-D-20 Everyday Discrimination Scale (adapted; Snowden et al., 2011)	Journalism and Mercom Communications, University of Texas
Parks et al., 2021	Racial discrimination as a cumulative risk factor affecting depression and psychological distress of Korean Americans (both US and foreign-born) amid COVID-19: Structural equation modeling	Cross-sectional	339	Asian and/or PI only	100% Korean	Any adults (18+)	6 (SD): 41.2 (8.3) Range: 24-72 years	33.2% Male 61.9% Female	Racial discrimination (unclear)	Not reported	Psychological distress	K10	Not reported	National Science Foundation-funded Social Science Extreme Events in Disaster Research network. The CONVERGE facility at the Natural Hazards Center at the University of Colorado Boulder
Patsou et al., 2022	Measuring Asian hate: Discordant reporting of cross-bias incidents and online treatment and associations with measures of wellbeing	Cross-sectional	500	Asian and/or PI only	43.2% East Asian 29% Southeast Asian 13.6% South Asian 14.2% Asian Mixed Two or more Asian	Any adults (18+)	18-25: 14% 26-35: 22% 36-44: 42.2% >=45: 19.8%	46.6% Male 53.4% Female	Developed by the California Health Interview Survey and UCLA Asian American Studies Center for the Spring 2020 California Health Interview Survey	Experienced a hate incident: 6.4% Experienced unfair treatment due to race: 4.4%	Psychological distress	K6	Serious psychological distress Yes: 5.6% No: 94.4%	UCLA Asian American Studies Center, California Wellness Foundation, California Health Care Foundation, Endowment and the California Department of Public Health, Centers for Disease Control and Prevention Alliance (CDC) Against COVID-19 Disparities Initiative, Kaiser Permanente (KP) Agency for Healthcare Research and Quality as part of the Los Angeles Area Health Services Research Training Program (T32 Predoctoral Fellowship)
Quach et al., 2021	A rapid assessment of the impact of COVID-19 on Asian Americans: Cross-sectional survey study	Cross-sectional	1279	Asian and/or PI only	88.2% Chinese 1.6% Japanese 1.6% Cambodian 1.3% Other Asian 6.6% Two or more races (Dual or of CEM)	Individuals aged 12+	Out of n=1141 12-17: 1.1% 18-25: 25.1% 26-44: 19.4% 45-64: 28.2% >65: 22%	Out of n=1272 40.3% Male 59.7% Female	Experiences of anti-Asian violence (self-developed)	Experienced race-related discrimination or violence (verbal, emotional, or physical) during the COVID-19 pandemic Yes: 1.6% No: 98.4%	Feeling of stress, depression, hopeless, restless or fidgety	Mental health challenges (self-developed)	Feeling stressed: 67.7% Feeling depressed: 27.6% Feeling restless or fidgety: 11.8% Mental health challenges: 6.4% Other: 1.7%	National Institutes of Health National Institute on Minority Health and Health Disparities, Centers for Disease Control and Prevention
S. R. Lin et al., 2022	Experiences of COVID-19-related racism and impact on depressive trajectories among racially/ethnically minoritized adolescents	Longitudinal	12	Multiple races	12% Asian American	Adolescents under age 18	AAPI age statistics is not reported	AAPI gender breakdown is not reported	Developed by the Pew Research Center for the June 2020 American Trends Panel (adapted)	Worried about experiencing racism related to COVID: 38.2% Being called names, including racial slurs, or made jokes: 41.7% People ac

Table 2 - Scales used to measure discrimination

Scale	Scale authors	Number of studies using the scale	Number of items	Scale units	Factors/subscales measured	Sample item(s)
Everyday Discrimination Scale	Williams et al., 1997	13	9	1-6, 1 = Never to 6 = Almost everyday	N/A	"You are treated with less courtesy than other people are"
Everyday Discrimination Scale (Short Version)	Sternthal et al., 2011	6	5	1-6, 1 = Never to 6 = Almost everyday	N/A	"You are treated with less courtesy or respect than other people"
The Online Victimization Scale	Tynes et al., 2010	7	21	1-6, 1 = Never to 6 = Everyday	Individual Online Racial Discrimination, Vicarious Online Racial Discrimination, General Online Victimization, Sexual Online Victimization	"People have said mean or rude things about me because of my race or ethnic group online"
Racial and Ethnic Microaggression Scale (REMS-Checklist)	Nadal, 2011	3	45	0-1, 0 = I did not experience this event in the past six months to 1 = I experienced this event at least once in the past six months	Assumptions of Inferiority, Second-Class Citizen and Assumption of Criminality, Microinvalidations, Exoticization/Assumptions of Similarity, Environmental Microaggressions, and Workplace and School Microaggressions	"An employer or co-worker was unfriendly or unwelcoming toward me because of my race" "Someone assumed that I spoke a language other than English"
Subtle and blatant racism scale for Asian American college student (SABR-A2)	Yoo, Steger, & Lee, 2010	3	8	1-5, 1 = almost never to 5 = almost always	Exposure to Racism, Subtle Racism, Blatant Racism	"In America, I am viewed with suspicion because I'm Asian"
Asian American Racism-Related Stress Inventory (AARRSI)	Miller et al., 2012	1	13	0-5, 1 = this has never happened to me or someone I know to 5 = this event happened and I was extremely upset	Vicarious and Collective Racism, Daily Racial Microaggressions	"You hear that Asian Americans are not significantly represented in management positions"
Acculturative Stress Scale from National Latino and Asian American Study (NLAAS)	Cohen, 1988	2	9	Yes, No, or N/A	N/A	"Do people treat you badly because they think you do not speak English well or speak with an accent?"
Racial/Ethnic Discrimination Index	Wang & Yip, 2020; Feng et al., 2021	2	6	0-3, 0 = did not happen/was not a problem today to 2=very much a problem today	N/A	"I was treated unfairly because of my race/ethnicity"
Perceived Ethnic Discrimination Questionnaire (PEDQ)	Contrada et al., 2001	1	22	1-7, 1 = never to 7 = very often	Verbal Rejection, Avoidance, Exclusion, Denial of Equal Treatment, Devaluing Action, Threat of Aggression, Aggression	"Offensive ethnic comments aimed directly at you" "Others avoided you because of your ethnicity" "You were denied access to a public facility because of your ethnicity"
Perceived Ethnic Discrimination Questionnaire-Community Version (PEDQ-CV)	Brondolo et al., 2005	2	34	1-5, 1 = never to 5 = very often	Discrimination in the Media, Discrimination Against Family	"Been kept out of a public place or group" "Others hinted that you must not be clean" "Been treated unfairly by co-workers"
General Ethnic Discrimination Scale	Landrine et al., 2006	2	18	1-6, 1 = never to 6 = all the time	Recent Discrimination, Lifetime Discrimination; Appraised Discrimination	"How often have you been treated unfairly by strangers because of your race/ethnic group?" "How often have you been treated unfairly by employers, bosses, and supervisors because of your race/ethnic group?"
Indirect Racism	Martz et al., 2019	1	4	0-3, 0 = not at all to 3 = very much	N/A	"hearing people being the victims of racism in the news"
COVID-19 Discrimination Checklist	Cheah et al., 2020	2	3	Yes/No	N/A	"Since the COVID-19 outbreak, have you ever experienced COVID-19– related racism or discrimination in online or offline settings?" "Since the COVID-19 outbreak, have you ever witnessed COVID-19–related racism or discrimination?" "Since the COVID-19 outbreak, have you ever witnessed anti-Asian sentiments associated with the pandemic?"
COVID-19-Related Racial Discrimination Scale	Cheah et al., 2020, adapted measures from Tynes et al., 2010; Nadal, 2011; Miller et al., 2012; & Kunst et al., 2013	3	24	Scale points and labels vary by subscale	Online Direct Racial Discrimination; Online Vicarious Racial Discrimination; In-person Direct Racial Discrimination; In-person Vicarious Racial Discrimination; Health Sinophobia; Media Sinophobia	"People have said mean or rude things about me because of my race or ethnic group online." "People have cracked jokes about people of my race or ethnic group online." "Some people were unfriendly or unwelcoming toward me because of my Chinese background." "Someone said something negative about Chinese people (for example, their diet) related to the COVID-19 outbreak." "A lot of Americans are afraid that Chinese people are going to make Americans sick." "The U.S. media presents Chinese people as dangerous."
Perceived Discrimination by Peers/Adults Scale	Way, 1997	2	Discrimination by Peers: Discrimination by Adults	1-5, 0 = never to 5 = all the time	N/A	"How often are you called names or insulted by other teenagers because of your race or ethnicity?"
Coronavirus Victimization Distress Scale (CVDS)*	Fisher & Yip, 2020	2	5	1-5, 1 = it never happened to 5 = it happened and it upset me quite a bit	N/A	1. I have been teased or bullied because someone thought I was infected with the Coronavirus 2. I have been physically threatened, hit or beaten up because someone thought I was infected with the Coronavirus

*While the scale assesses distress, the studies that used the scale in our scoping review relied on the scale as an assessment of exposure
Organization-developed scales (e.g., the American College Health Association National College Health Assessment), scales that were self-developed, and scales that were adapted to a great degree are not included

Table 3 - Scales used to measure mental health outcomes

Scale	Scale authors	Number of studies using the scale	Number of items	Scale units	Factors/subscales measured	Sample items/questions
Generalized Anxiety Disorder Screener (GAD-7)	Spitzer et al., 2006	16	7	Scale 0-3; 0 = not at all, 1 = several days, 2 = more than half of the days, 3 = nearly every day	Worry and anxiety symptoms	How often have you been bothered by the following problems: Feeling nervous, anxious or on edge; Not being able to stop or control worrying; Worrying too much about different things
Patient Health Questionnaire-9 (PHQ-9)	Kroenke et al., 2001	12	9	Scale 0-3; 0 = not at all, 1 = several days, 2 = more than half the days, 3 = nearly every day	Depression severity	How often have you been bothered by any of the following problems? Little interest or pleasure in doing things; Feeling down, depressed, or hopeless; Trouble falling or staying asleep, or sleeping too much; Feeling tired or having little energy
Center for Epidemiologic Studies Depression Scale (CES-D 20)	Radloff, 1977	7	20	Scale 0-3; 0 = none or almost none of the time to 3 = all or almost all of the time	Depressive symptoms	1. I was bothered by things that usually don't bother me. 2. I did not feel like eating; my appetite was poor
Beck Anxiety Inventory (BAI)	Beck & Steer, 1993	5	21	Scale 0-3; 0 = not at all, 1 = mildly but it didn't bother me much, 2 = moderately-it wasn't pleasant at times, 3 = severely - it bothered me a lot	Intensity of physical and cognitive anxiety symptoms	1. Numbness/tingling, 2. Feeling hot, 3. Wobbliness in legs
Patient Health Questionnaire-4 (PHQ-4)	Kroenke, Spitzer et al., 2009	4	4	Scale 0-3; 0 = not at all, 1 = several days, 2 = more than half the days, 3 = nearly every day	Depression and anxiety symptoms	How often have you been bothered by the following problems within the past 2 weeks: Little interest or pleasure in doing things; Feeling down, depressed, or hopeless
Kessler Psychological Distress Scale (K6)	Kessler et al., 2010	4	6	Scale 1-5; 1 = none of the time to 5 = all of the time	Psychological distress such as depression and anxiety	How often did you feel so depressed that nothing could cheer you up?
Depression and Anxiety Stress Scales (DASS-21)	Lovibond & Lovibond, 1995	3	21	Scale 0-3; 0 = did not apply to me at all, 1 = applied to me to some degree, or some of the time, 2 = applied to me to a considerable degree, or a good part of time, 3 = applied to me very much, or most of the time	Depression, anxiety, tension/stress	1. I found it hard to wind down. 2. I was aware of dryness of my mouth.
Center for Epidemiologic Studies Depression Scale - Revised (CESD-R)	Van Dam & Earleywine, 2011	3	20	Scale 1-5; 1 = not at all or less than 1 day, 2 = 1-2 days, 3 = 3-4 days, 4 = 5-7 days, 5 = nearly every day for 2 weeks	Depression symptoms in two factors: functional impairment and negative mood	1. My appetite was poor. 2. I could not shake off the blues. 3. I had trouble keeping my mind on what I was doing.
Kessler Psychological Distress Scale (K10)	Kessler et al., 2002	3	10	1-5; 1 = none of the time to 5 = all the time	Depression and anxiety symptoms	1. During the last 30 days, about how often did you feel tired out for no good reason? 2. During the last 30 days, about how often did you feel nervous?
Maslach Burnout Inventory	Maslach & Jackson, 1986	3	Emotional exhaustion: 9 Depersonalization: 5	1-7; 1 = Never to 7 = Always (Every day)	Three components of the burnout syndrome: emotional exhaustion, depersonalization, and reduced personal accomplishment.	Emotional exhaustion: 1. I feel emotionally drained from my work. 2. I feel used up at the end of the workday. Depersonalization: 1. I get the feeling that I treat some clients/colleagues impersonally, as if they were objects. 2. I have become more callous to people since I have started doing this job.
Child PTSD Symptom Scale for DSM 5 Trauma Screen Checklist (CPSS-5) - Trauma Screen Checklist	Foa et al., 2018	2	15	Yes/No	Occurrences of traumatic events	1. A severe natural disaster such as flood, tornado, hurricane, earthquake, or fire 2. Serious accident or injury caused by a car or bike crash, being bitten by a dog, or caused by playing sports
Strengths and Difficulties Questionnaire (SDQ)	Goodman, 1997	2	25	0-3; 0 = not true to 2 = certainly true	5 subscales: emotional symptoms, conduct problems, hyperactivity-inattention, peer problems, and prosocial behaviour	Hyperactivity: " Restless, overactive, cannot stay still for long"; "Constantly fidgeting or squirming"; "Easily distracted, concentration wanders" Emotional symptoms: "Often complains of headaches, stomach-ache or sickness"; "Many worries, often seems worried"
Worry About Discrimination (Adapted from Sterntahl et al., 2011 5-item Everyday Discrimination Scale)*	Yang et al., 2020 Pan, Yang et al., 2021	2	5	Unclear	The extent that participants worry about the discriminatory events	Since the COVID-19 outbreak, how often have you worried about the following thing 1. You will be treated with less courtesy or respect than other people. 2. You will receive poorer service than other people at restaurants or stores. 3. People will act as if they think you are not smart. 4. People will act as if they are afraid of you. 5. You will be threatened or harassed.
Beck Depression Inventory-II (BDI-II)	Beck et al., 1987	1	21	0-3, scale labels vary by question	Sadness, pessimism, past failures, loss of pleasure, etc.	1. Sadness (I do not feel sad; I feel sad much of the time; I am sad all the time; I am so sad or unhappy that I can't stand it.
Children's Depression Inventory (CDI2:SR[S])	Kovacs, 2011	1	12	0-2, scale labels vary by question	Depressive symptoms in youth aged 7 to 17 years	Unclear
COVID-19 Peritraumatic Distress Index (CPDI)	Qiu et al., 2020	1	24	0-4; 0 = never to 4 = very often	Frequency of anxiety, depression, phobia, cognitive change, avoidance and compulsive behavior, physical symptoms, and loss of social functioning	I feel helpless and angry about people around me, government, and media.
Geriatric Depression Scale (GDS-15)	de Craen et al., 2003	1	15	Yes/No	Depression symptoms	1. Are you basically satisfied with your life? 2. Have you dropped many of your activities and interests? 3. Do you feel that your life is empty?
Patient Health Questionnaire-8 (PHQ-8)	Kroenke, Strine et al., 2009	1	8	0-3; 0 = not at all to 3 = nearly every day	Current depression	How often have you been bothered by the following problems within the past 2 weeks: Little interest or pleasure in doing things; Feeling down, depressed, or hopeless
Patient Health Questionnaire for Adolescents (PHQ-A)	Johnson et al., 2002	1	9	0-3; 0 = not at all to 3 = nearly every day	Depression severity	How often have you been bothered by the following problems within the past 2 weeks: Little interest or pleasure in doing things; Feeling down, depressed, irritable, or hopeless
PTSD Checklist—Civilian Version (PCL-C)	Weathers et al., 1993	1	17	1-5; 1 = not at all to 5 = extremely	Posttraumatic stress symptoms	Repeated,disturbing memories, thoughts, or images of a stressful experience from the past?
Penn State Worry Questionnaire (Brief version)	Topper et al., 2014	1	5	1-5; 1 = not at all typical of me to 5 = very typical of me	Levels of worry	1. Many situations make me worry. 2. I know I should not worry about things, but I just cannot help it. 3. I noticed that I have been worrying about things.
Perceived stress scale-4 (PSS-4)	Cohen, 1983	1	4	0-4; 0 = never to 4 = very often	The degree to which situations in one's life over the past month are appraised as stressful	In the last month, how often have you felt that you were unable to control the important things in your life?
Perceived stress scale-10 (PSS-10)	Cohen, 1983; Cohen, 1988	1	10	0-4; 0 = never to 4 = very often	The degree to which situations in one's life over the past month are appraised as stressful	In the last month, how often have you been upset because of something that happened unexpectedly? In the last month, how often have you felt that you were unable to control the important things in your life?
Primary Care-Posttraumatic Stress Disorder-5	Prins et al., 2015	1	5	Yes/No	Posttraumatic stress symptoms	1. Have you felt guilty or unable to stop blaming yourself or others for the event or any problems the event may have caused?
Ruminative Response Scale (RRS) - Brooding Subscale & Reflection Subscale	Nolen-Hoeksema et al., 1991	1	5 (Brooding subscale); 5 (Reflection Subscale)	1-4; 1 = never to 4 = always	Rumination reflection and rumination brooding	Brooding: Analyze recent events to try to understand why you are depressed Reflection: Think "What am I doing to deserve this?"
Ryff's 18-item Psychological Well-Being Scale	Ryff & Keyes, 1995	1	18	1-7; 1 = strongly agree to 7 = strongly disagree	Six aspects of wellbeing and happiness: autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance	"The demands of everyday life often get me down."; "Maintaining close relationships has been difficult and frustrating for me."
Secondary Traumatic Scale	Bride et al., 2016	1	17	1-5; 1 = not at all to 5 = nearly every day	Traumatic symptoms such as avoidance, intrusion, and arousal	1. It seems as if I can relive the trauma(s) experienced through the pandemic. 2. I wanted to avoid thinking about the pandemic.
Social Interaction Anxiety Scale (SIAS-6)	Mattick & Clarke, 1998	1	6	0-4; 0 = not at all characteristic or true of me to 4 = extremely characteristic or true of me	Severity of social anxiety	I have difficulty making eye contact with others.
State Trait Anxiety Inventory (STAI) - Short Forn	Marteau & Bekker, 1992	1	6	1-4; 1 = not at all to 4 = very much so	Presence and absence of anxiety symptoms	1. I feel calm. 2. I am tense. 3. I feel upset.
The UCLA PTSD Reaction Index for DSM-5 Brief Screening Form (UCLA-RI-5-BF)	Rolon-Arroyo et al., 2020	1	11	0-4; 0 = never to 4 = most	Frequency with which PTSD symptoms were experienced	1. Recurrent, involuntary, and intrusive distressing memories of trauma 2. Avoidance of thoughts, feelings, or conversations related to trauma 3. Persistent and exaggerated negative beliefs 4. Irritable behavior and angry outbursts
WHO Well-Being Index-5 (WHO-5)	World Health Organization, 1998	1	5	0-5, 0 = at no time to 5 = all the time	Presence or absence of wellbeing in a person's life	Over the last 2 weeks, I have felt cheerful and in good spirits.

Organization-developed scales (e.g., the American College Health Association National College Health Assessment), scales that were self-developed, and scales that were adapted to a great degree are not included

*Yang et al., 2020 and Pan, Yang, et al., 2021 adapted the 5-item Everyday Discrimination Scale (Sterntahl et al., 2011) to measure worry about discrimination, which is one of the psychological distress outcomes this scoping review focused on.