

A scoping review of the association between work-related psychosocial stress and depression over more than 20 years

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Most of the 125 studies included in this scoping review globally reported a *significant positive association between work-related stress and depression or depressiveness* independently of the measuring instruments and study design applied. Research gaps are a lack of interventional and longitudinal studies as well as moderation and mediation analysis of this association. Several regions and occupations are underinvestigated.

BACKGROUND

- Poor psychosocial working conditions can be a source of stress, which can pose a risk to employees' mental health. While there is sufficient evidence for a significant relationship between the most common measures of work-related stress (effort-reward imbalance, job strain) and depression or depressive symptoms, little is known about the evidence on this relationship using other stress measures.
- The goal of this scoping review was to provide an overview of the results of primary studies on the relationship between work-related psychosocial stress and depression/depressiveness as well as to elucidate inconsistencies or gaps in knowledge in the existing literature.

METHODS

- Systematic literature search of original studies finished before December 2019 in Pubmed, Web of Science & PsycInfo
- Including full reports of observational & interventional studies, published between January 1999 and May 2022, but no reviews
- Using predefined key word strings & a special data extraction form
- Performed according to the PRISMA guidelines for scoping reviews

RESULT

Of 125 included studies most came from Asia, Europe and North America (Tab. 1). 67.2 % were cross-sectional, 28.8 % longitudinal and 2.4 % interventional studies beside others (1.6%). The studies most often focused on healthcare workers, manufacturing workers, teachers and public servants (Table 1). Nurses (16 studies) and physicians (14 studies) were the most investigated occupations. Figure 2a, b show most often used measuring instruments for outcome and exposure.

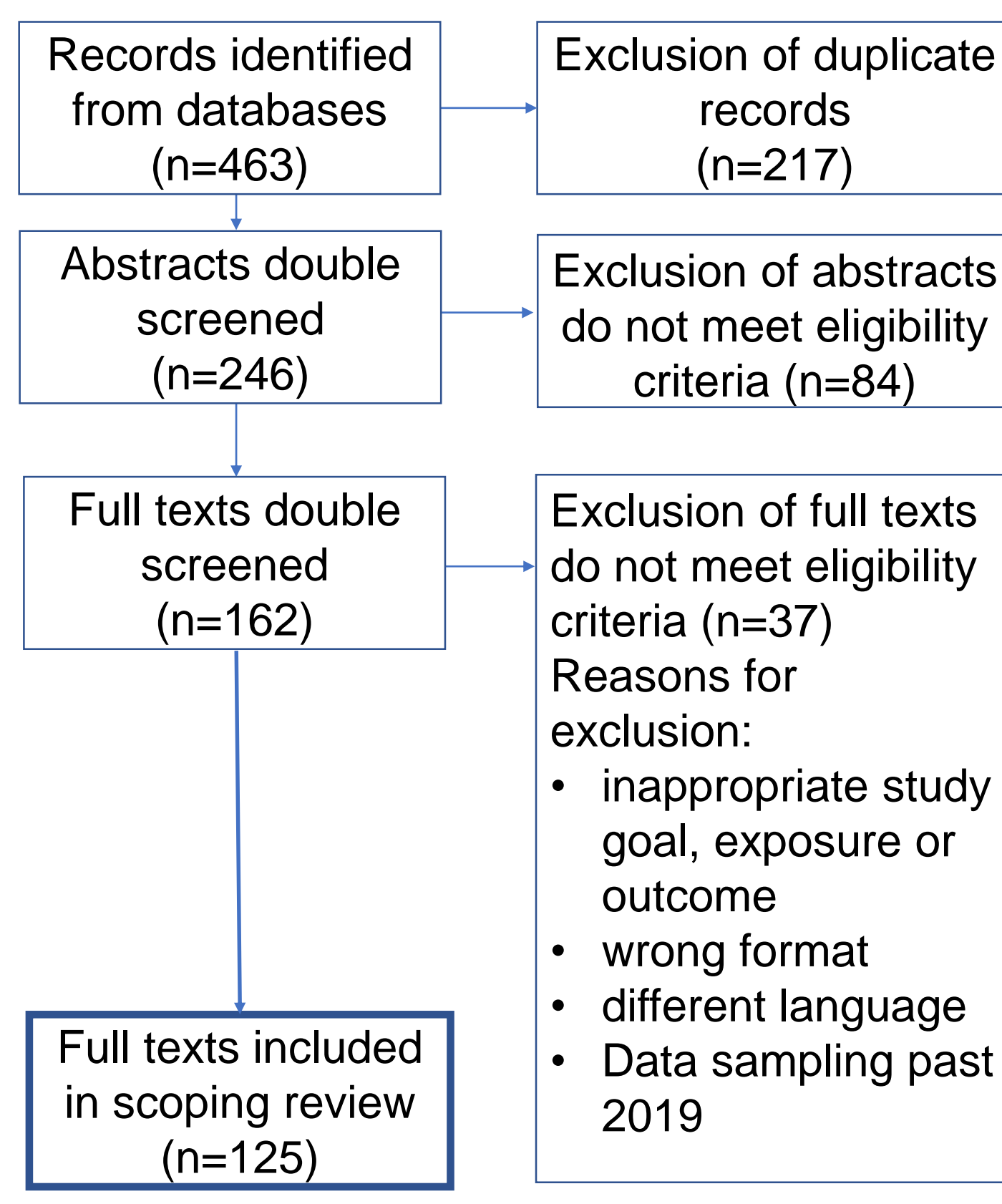


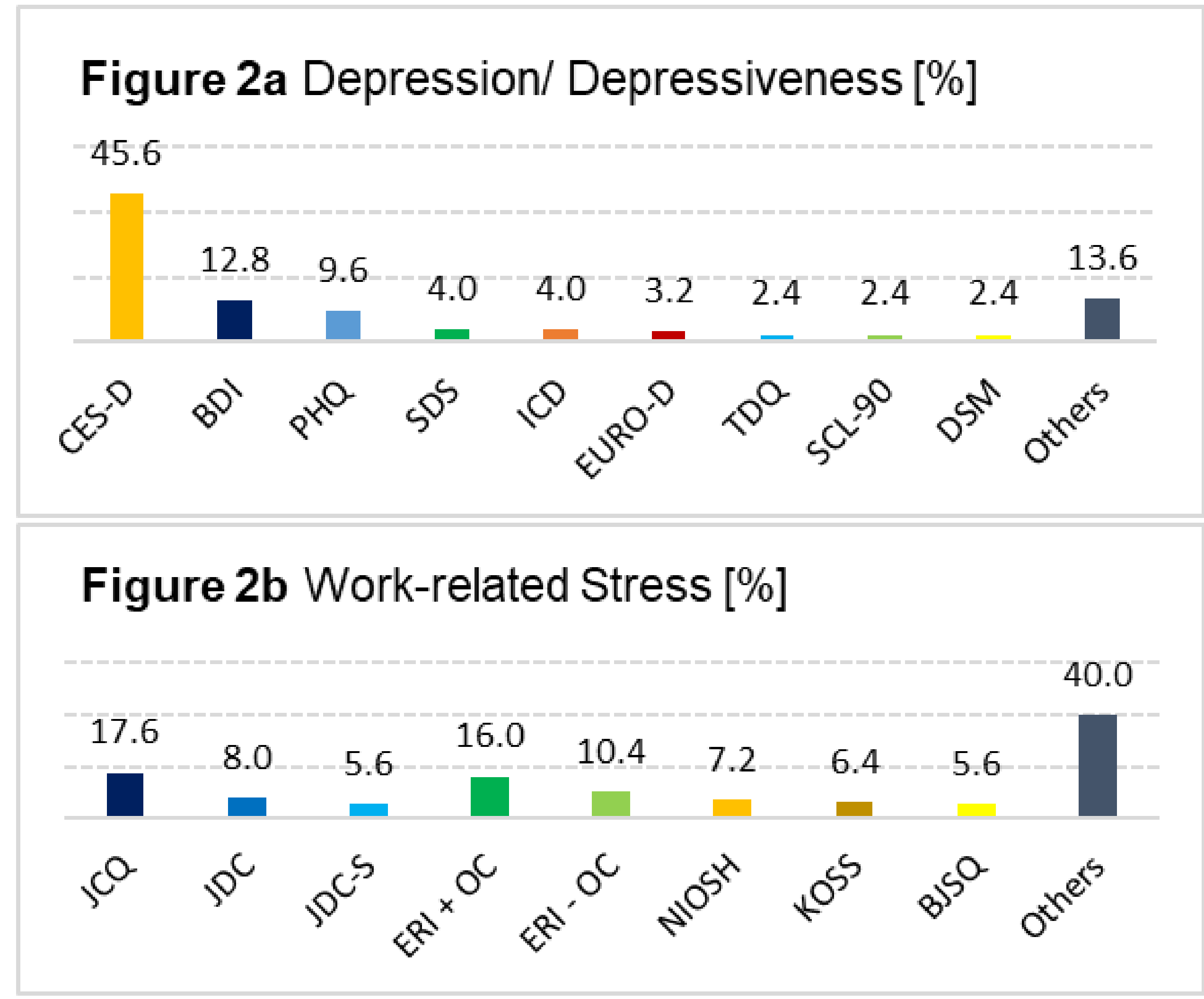
Figure 1 Identified studies in Pubmed, PsycInfo and Web of Science

Table 1. Included studies per continent and country (N=125)

Continent	n [%]	Country (n)
Asia	57 [45.5 %]	CHN (15), JPN (24), KOR (9), TWN (5), ISR (1), MYS (1), PHL (1), TUR (1)
Europe	37 [29.6 %]	DEU (14), SWE (7), FIN (5), DNK (2), FRA (2), GBR (2), BEL (1), UKR (1), Different (3)
North America	20 [16.0 %]	USA (15), CAN (5)
Oceania	4 [3.2 %]	AUS (3), NZL (1)
Africa	3 [2.4 %]	EGY (2), GHA (1)
South America	1 [0.8 %]	BRA (1)
Different	3 [2.4%]	Different

Abbr.: AUS, Australia; BEL, Belgium; BRA, Brasilia; CAN, Canada; CHN, China; DEU, Germany; DNK, Denmark; EGY, Egypt; FIN, Finland; GBR, United Kingdom; GHA, Ghana; ISR, Israel; JPN, Japan; KOR, South-Korea; MYS, Malaysia; NZL, New Zealand; PHL, Philippine; SWE, Sweden; TUR, Turkey; TWN, Taiwan

RESULTS CONTINUED



Abbr.: BDI: Beck Depression Inventory; BJSQ: Brief Job Stress Questionnaire; CES-D: Center for Epidemiological Survey-Depression Scale; DSM: Diagnostic and Statistical Manual of Mental Disorders; ERI: Effort Reward Imbalance-Questionnaire; EURO-D: EURO-D depression scale; ICD International Classification of Diseases; JDC (-S): Job Demand Control (-Support); JQC: Job Content Questionnaire; KOSS: Korean Occupational Stress Scale; NIOSH GJSQ: The National Institute for Occupational Safety and Health Generic Job Stress Questionnaire; OC: Overcommitment; PHQ: Patient Health Questionnaire; SCL-90: Symptom Checklist 90; SDS: Zung's Self-Rating Depression Scale; TDQ: Taiwanese Depression Questionnaire

Independently of the study design, the region and population under investigation and the measuring instruments, most of the included studies found a significant positive association between work-related stress and depression or depressiveness.

CONCLUSIONS

- Existing systematic reviews and metaanalyses focused on the most investigated instruments job strain and ERI. Beyond that, we observed a remarkable consistency in the association between work-related stress and depression/depressiveness independently of the measuring instruments and the study design applied.
- Nevertheless, several research gaps exists, which should be closed before coming to general conclusions about the association between work-related stress and depression/depressiveness.
- There are only few longitudinal studies on other stress measures than ERI and job strain. Interventional studies and those including mediation or moderation analysis are too rare. More studies are needed from Africa, South America and Oceania as well as on most occupations with exception of the healthcare sector.

ADDITIONAL KEY INFORMATION

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