

Psychological Distress in Neonatal Intensive Care Unit Providers: A Scoping Review in Progress

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[Members of the Research Committee of the National Network of NICU Psychologists]

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BACKGROUND

Neonatal Intensive Care Unit (NICU) staff monitor acutely ill infants while providing support to distressed families and each other in a fast-paced environment

These responsibilities contribute to work-related stress and trauma exposure

Study Rationale:

- The prevalence, phenomenology, and treatment of work-related stress in NICUs is unclear
- Reviewing the literature is needed to understand the state of the field, inform intervention development, and suggest policy recommendations

Research Question:

- "What is the state of the literature regarding work-related psychological stress responses in NICU medical providers?"

METHODS

Research Team:

- Members of the National Network of NICU Psychologists -- Research Committee
- Library support from Henry Ford Health Sladen Library

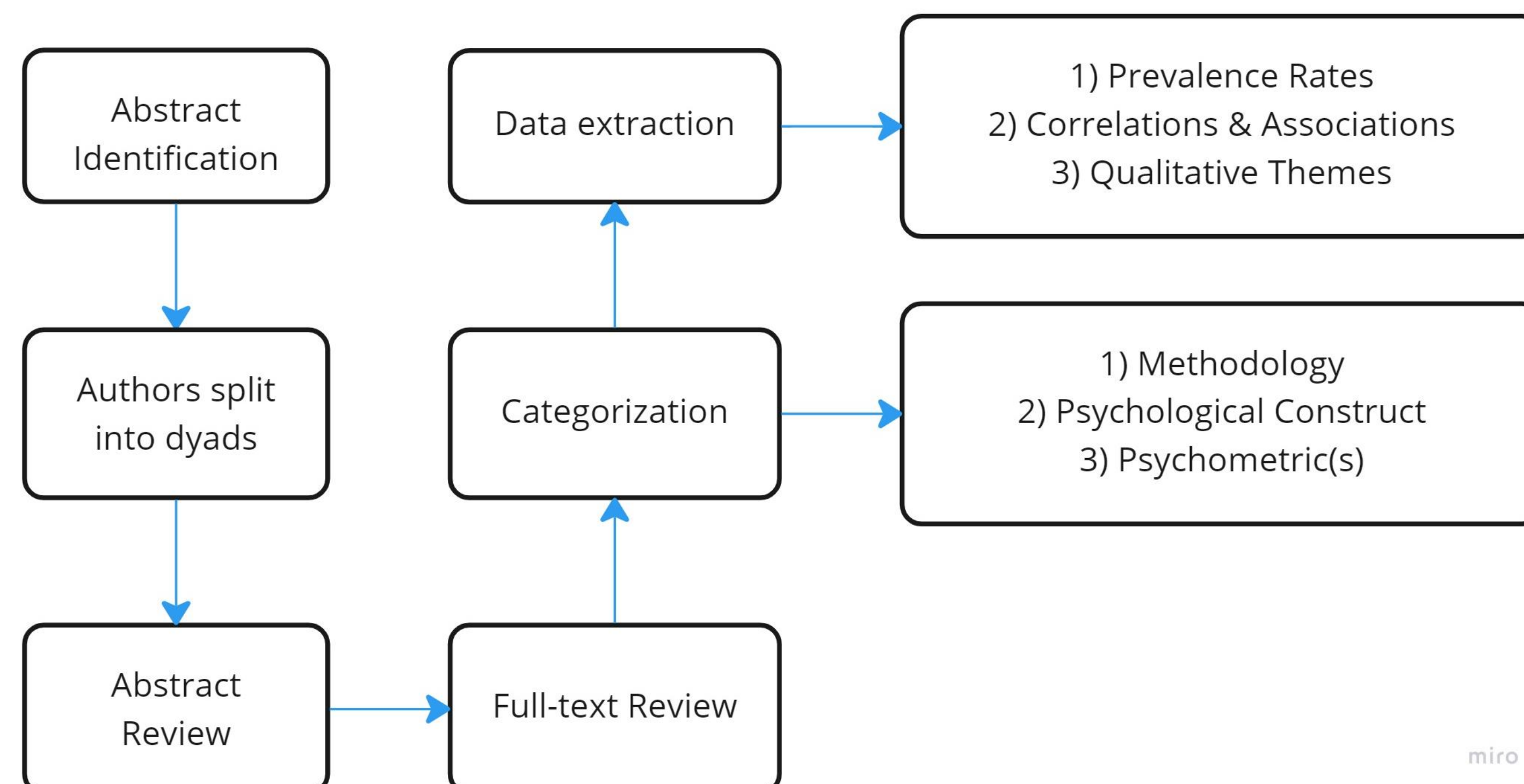
Scoping Review Methodology:

- Preferred Reporting Items for Systematic Reviews and Meta-Analyses – Scoping Review Checklist (PRISMA-ScR; Page et. al., 2021)
- Example search term(s) used: "NICU" AND "nurses" AND "secondary traumatic stress"
- Databases Searched: PsychInfo, Ovid, MEDLINE, Embase, CINAHL

Publication Eligibility Criteria:

- Written in English
- Published after 1960
- Original research (no editorials, reviews, or short reports)
- Assess job-related stress exposures in NICU medical providers

Analytic Approach:



RESULTS

Figure 1. PRISMA flowchart

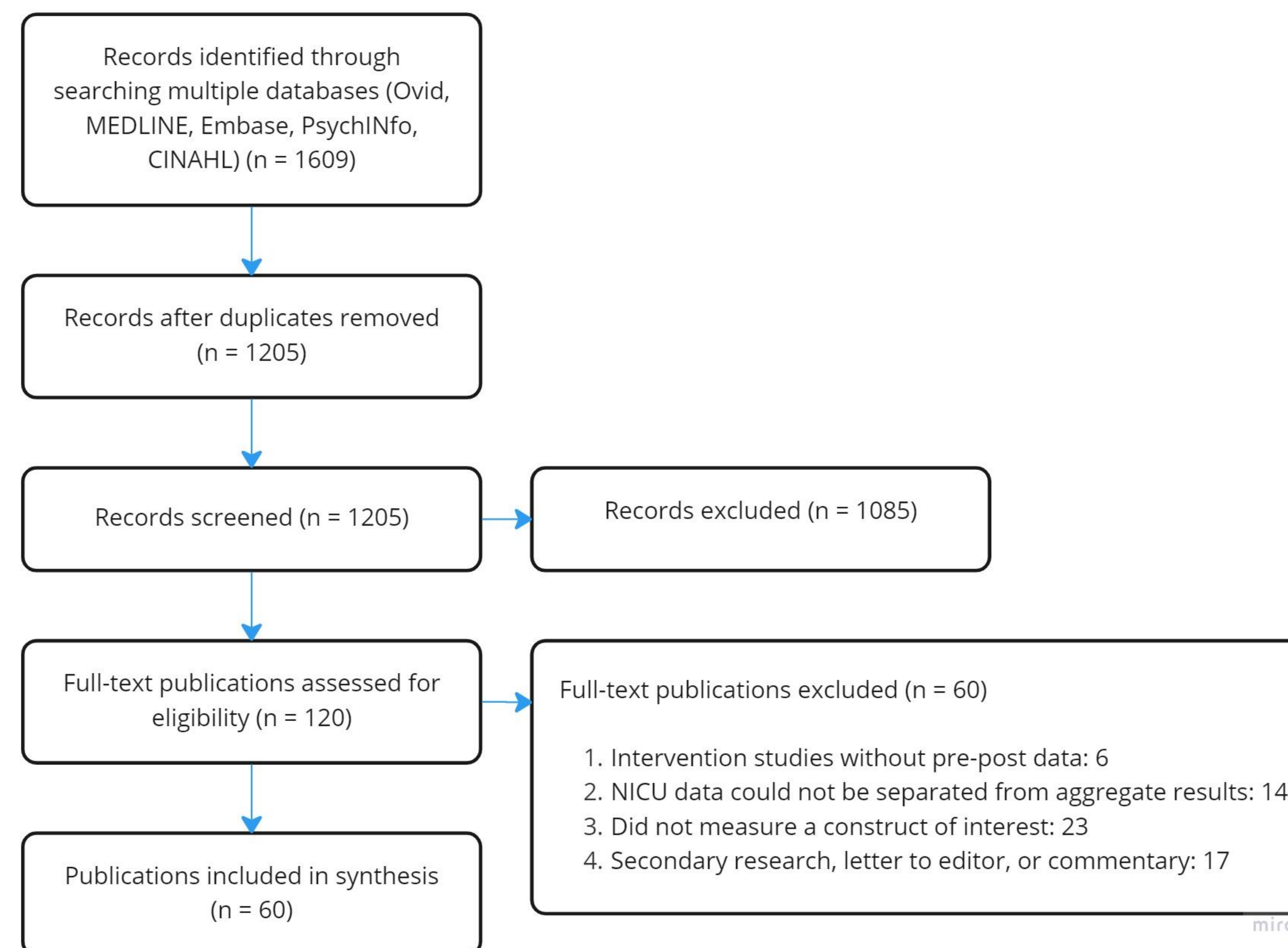
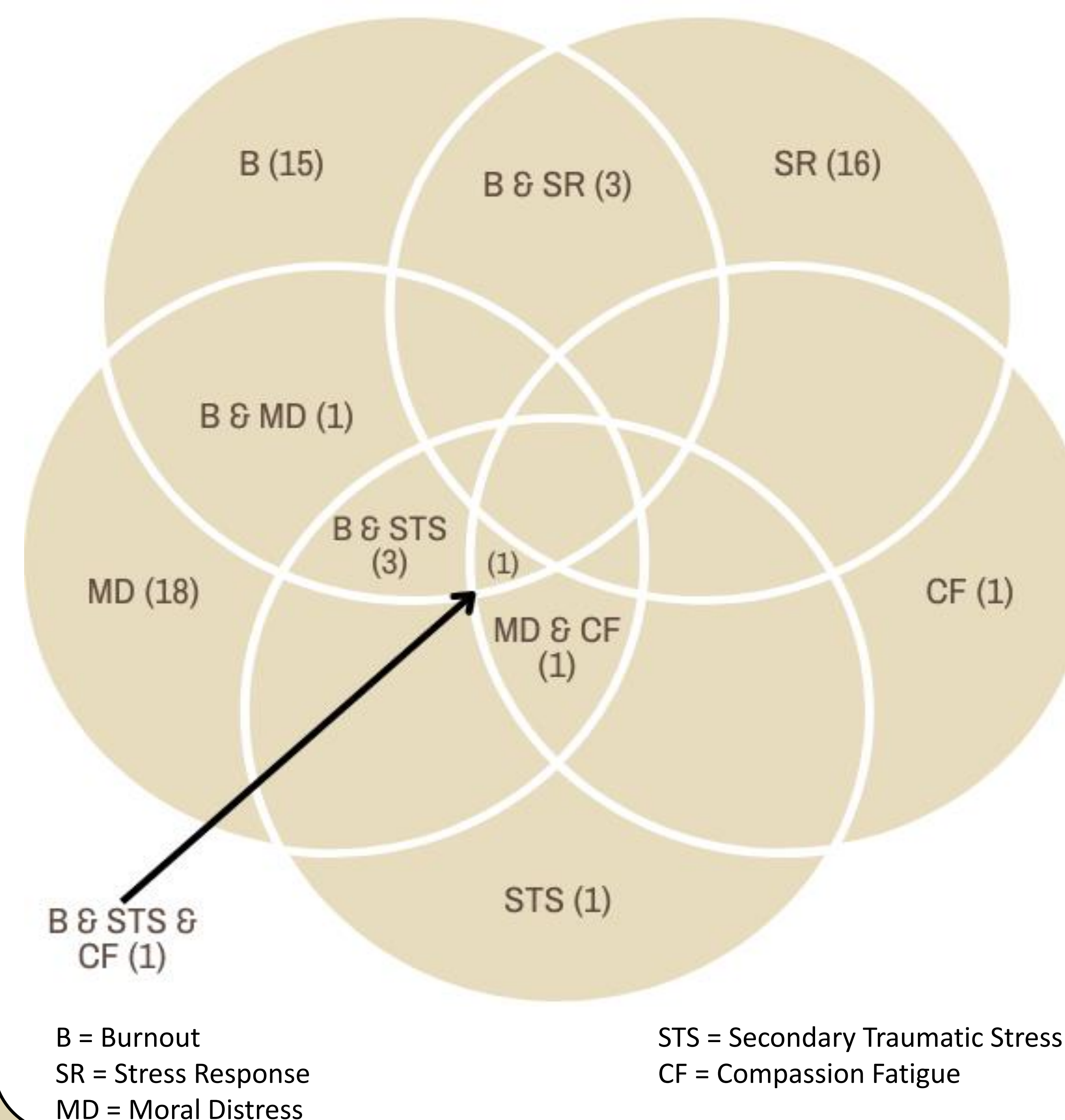


Figure 2. Psychological Constructs Represented in the Literature



SAMPLE FINDINGS

Burnout: Vittner et. al., 2021 (USA)

- Quantitative:** Professional Quality of Life Scale, Perceived Stress Scale
- Burnout prevalence:** M = 24.61; SD 1.72 (moderate range)
- Correlations:** perceived stress and burnout ($r = 0.562, p < 0.009$)
- Associations:** perceived stress and years of experience ($F = 4.77, p < 0.004$)

Secondary Traumatic Stress: Nissanholtz et. al., 2021 (Israel)

- Quantitative:** Secondary Traumatic Stress Scale
- STS prevalence, nurses:** M = 35.18
- STS prevalence, physicians:** M = 35.38
- Correlations:** vigor and STS ($r = -0.33, p < 0.001$)
- Associations:** coping flexibility moderated the association between vigor and STS ($B = 0.19, p < 0.01$)

Moral Distress: Thorne et. al., 2018 (Canada)

- Qualitative:** Interpretive description analysis
- Ethically complex clinical scenarios:** preventable errors and actions that may violate the infant's best interests
- Organizational conditions:** 1) normalizing extensive medical interventions with no imperative for psychosocial care, 2) unhealthy interpersonal dynamics among staff, 3) inconsistent ethical guidelines for practice

Stress Response/Distress: Lavoie-Tremblay et. al., 2016 (Canada)

- Quantitative:** Nurse Stress Scale
- Stress prevalence:** M = 1.65; SD 0.57
- Correlations:** family centered care and stress ($r = -0.24, p = 0.03$)
- Associations:** organizational obstacles and stress ($B = 0.31, p = 0.03$)

DISCUSSION

Literature is Not Clear:

- Lack of consistency: terms are not well defined and used interchangeably
- Cross comparison is challenging: measures are used differently
- How are constructs related: not enough theoretical research

Intervention is Clearly Needed:

- Most articles demonstrate the pervasiveness of psychological distress
- May be getting worse – most articles were published in 2010s
- Yet, NICU staff also experience resilience and growth – may be targeted areas of intervention

Looking to the Future:

- Use validated measures, standardized definitions, consistent methodology
- Replicate studies in larger, diverse samples
- Assess existing psychological interventions to help drive innovation

