

Psychological Interventions for Chronic Pain and Trauma Management: A Scoping Review



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Background

Chronic Pain

- Chronic pain is defined as pain lasting longer than 3 months
- Multidimensional phenomenon that impacts the physical, psychological, and social quality of life
- Strongly associated with a wide range of depression and anxiety disorders (i.e., post-traumatic stress disorder (PTSD)).

Trauma

- Traumatic events and PTSD earlier in life is a risk factor for chronic pain in adulthood
- Numerous retrospective studies link trauma or PTSD to chronic pain
- Psychological intervententions treat trauma and chronic pain symptoms independently
- Less is known about effectivenss of current interventions to treat comorbid trauma and chronic pain

Objective

• To examine effective evidence-based psychological interventions for individuals living with chronic pain and post-traumatic stress disorder or trauma-related symptoms

Methods

Search Strategy

- Databases included PSYCInfo and Web of Science
- Relevant search terms included "adults, chronic pain, post-traumatic stress disorder, and trauma"
- Original randomized clinical trials (RCT) and nonrandomized trials included

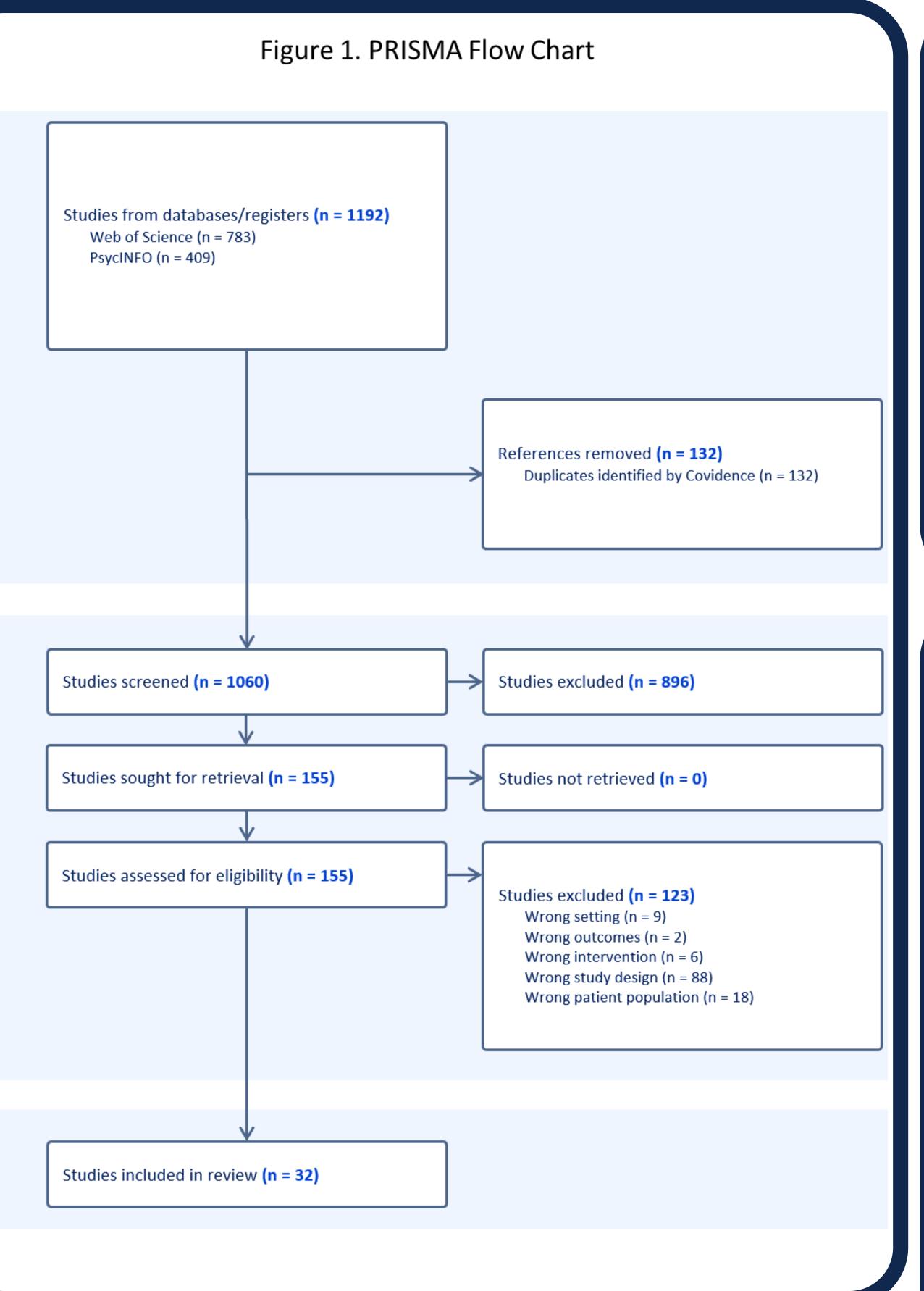
Study Selection

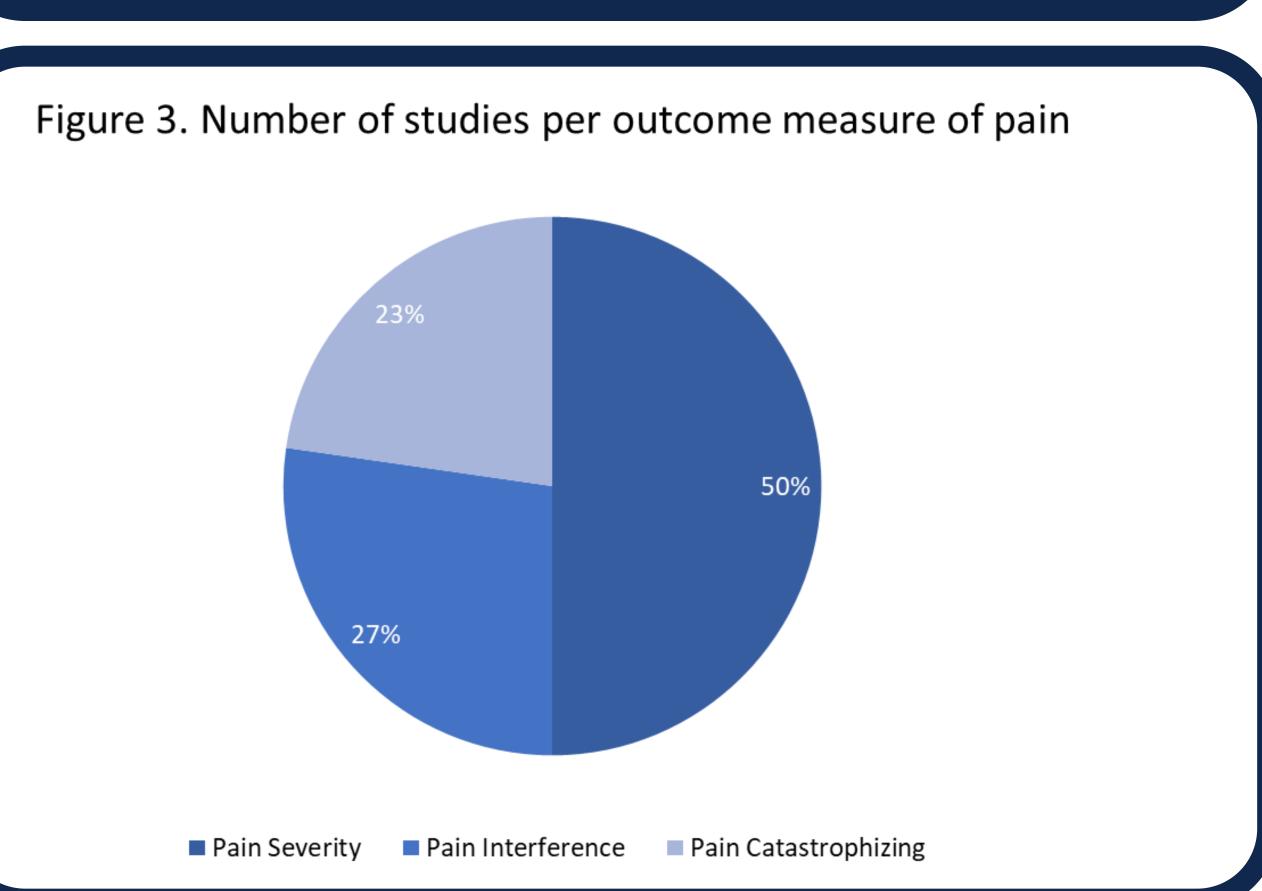
 Two independent reviewers screened titles, abstract, and reviewed full-texts

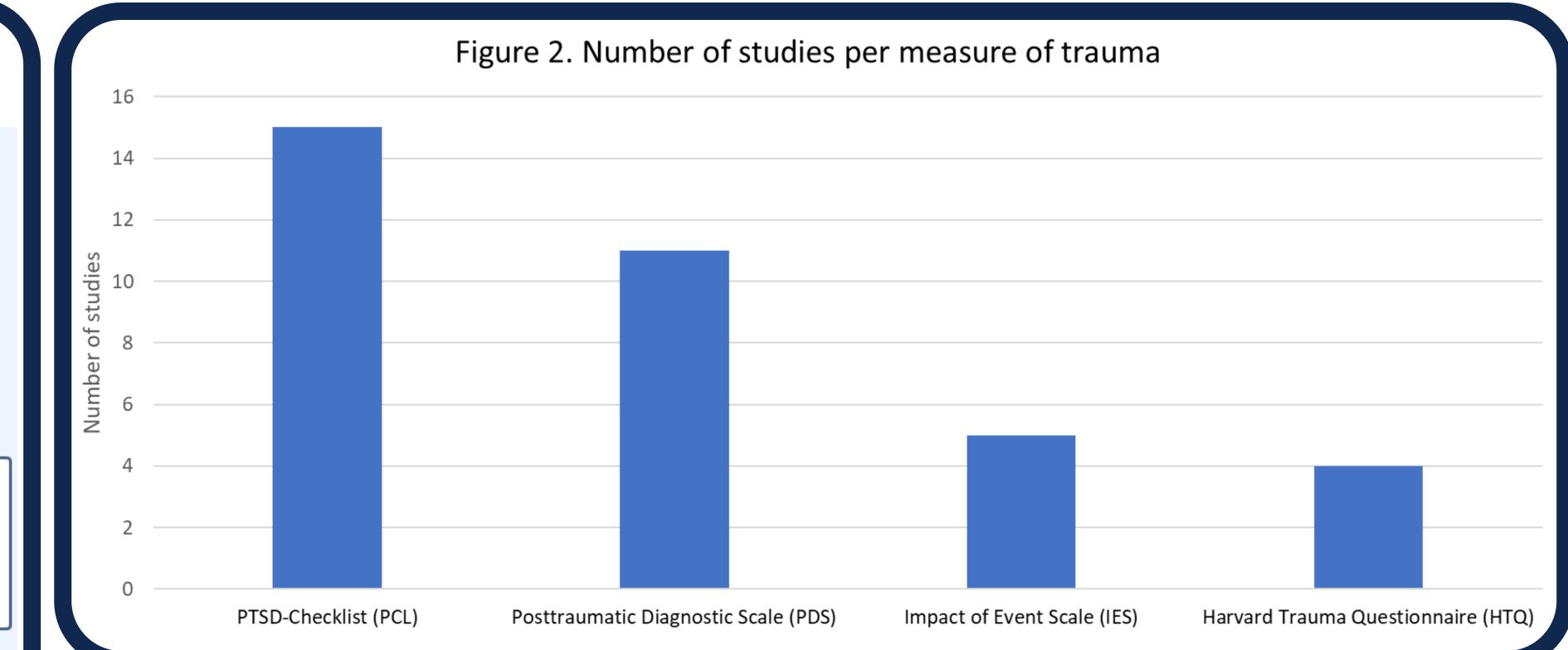
Data Extraction

 Data extracted from each study included study characteristics (i.e., author(s), year of publication, objectives, population, measures) and main findings on the interventions for chronic pain and trauma

Main Findings









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references

Results

Study Characteristics

- A total of 32 articles published between 2010 to 2023 included
- Study designs used primarily involved randomized controlled trials (n = 19) and randomized uncontrolled trials (n = 13)
- The most common outcome of pain measured was pain severity (n = 22)
- The most common trauma questionnaire used was the PTSD-Checklist (PCL; n = 15) depending on the population (e.g., civilians or veterans)

Main Findings

- Cognitive-Behavioral Therapy (CBT)
 - Significant improvement in pain severity, pain interference and PTSD symptom severity
- Mind-Body Program
 - Significant improvement in pain intensity, severity, interference, catastrophizing, and PTSD symptoms (e.g., anxiety, depression) posttreatment
 - Decrease in PTSD symptoms is strongly associated with a decrease in pain symptoms
- Eye-movement Desensitization Reprocessing (EMDR)
 - Significant decrease in pain intensity reported post-treatment
 - Symptoms of PTSD positively correlated with symptoms of pain intensity, interference, and catastrophizing
- Acceptance and Commitment Therapy (ACT)
 - No differences in pain severity or pain interference reported
 - Decrease in combined symptoms of anxiety, depression, and selfreported post-traumatic stress symptoms

Conclusions

- Current research focuses on reducing symptoms of pain and trauma through the use of exposure, mindfulness, behavior change, cognitive restructuring, and psychoeducation
- Future research should focus on:
 - recruiting larger and diverse samples of individuals living with chronic pain and PTSD;
 - assess the clinical utility, acceptability, and feasability of interventions in a randomized controlled trial;
 - o assess the effectiveness of a multidimensional approach; and
- examine the long-term effects of evidence-based interventions