

# Pain & Loneliness: A Scoping Review

Gallant, N. L., De Roo, B., & Kohlert, A.

## Results:

### Background

#### Pain

- Pain is defined as an unpleasant sensory or emotional experience associated with, or resembling that associated with, actual or potential tissue damage (1)
- Pain is influenced by biological, psychological, and social factors (1)

#### Loneliness

- Loneliness is defined as an unpleasant emotional experience associated with perceived social isolation (2).
- Loneliness can have adverse effects on one's physical and mental health (3).

### Purpose

This scoping review was aimed at evaluating the extent and nature of the relationship between pain and loneliness.

### Methods

#### Search Strategy

- Databases included Science Direct, CINAHL, Web of Science, PsycINFO
- Search terms included pain and loneliness

#### Study Selection

- Two independent reviewers screened titles and abstracts and reviewed full texts

#### Data Extraction

- Data extracted from each study included study characteristics (i.e., study design, participants) and main findings on the relationship between pain and loneliness

Scan the QR code below to view our PRISMA flow diagram and references!



Figure 1. Number of eligible studies published each year

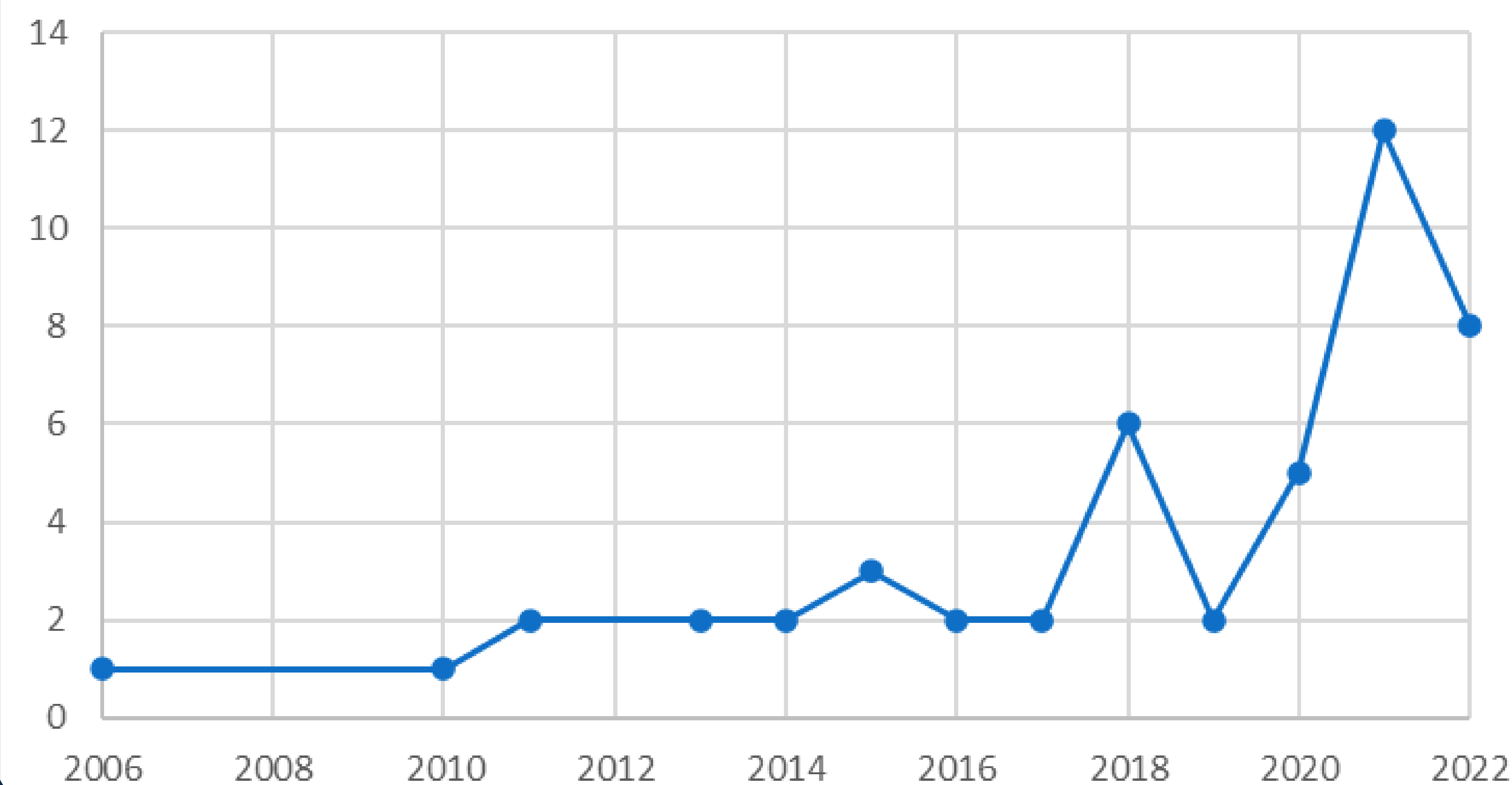


Figure 2. Number of studies per age group

■ Children & Adolescents ■ Young Adults ■ Middle-Aged Adults ■ Older Adults

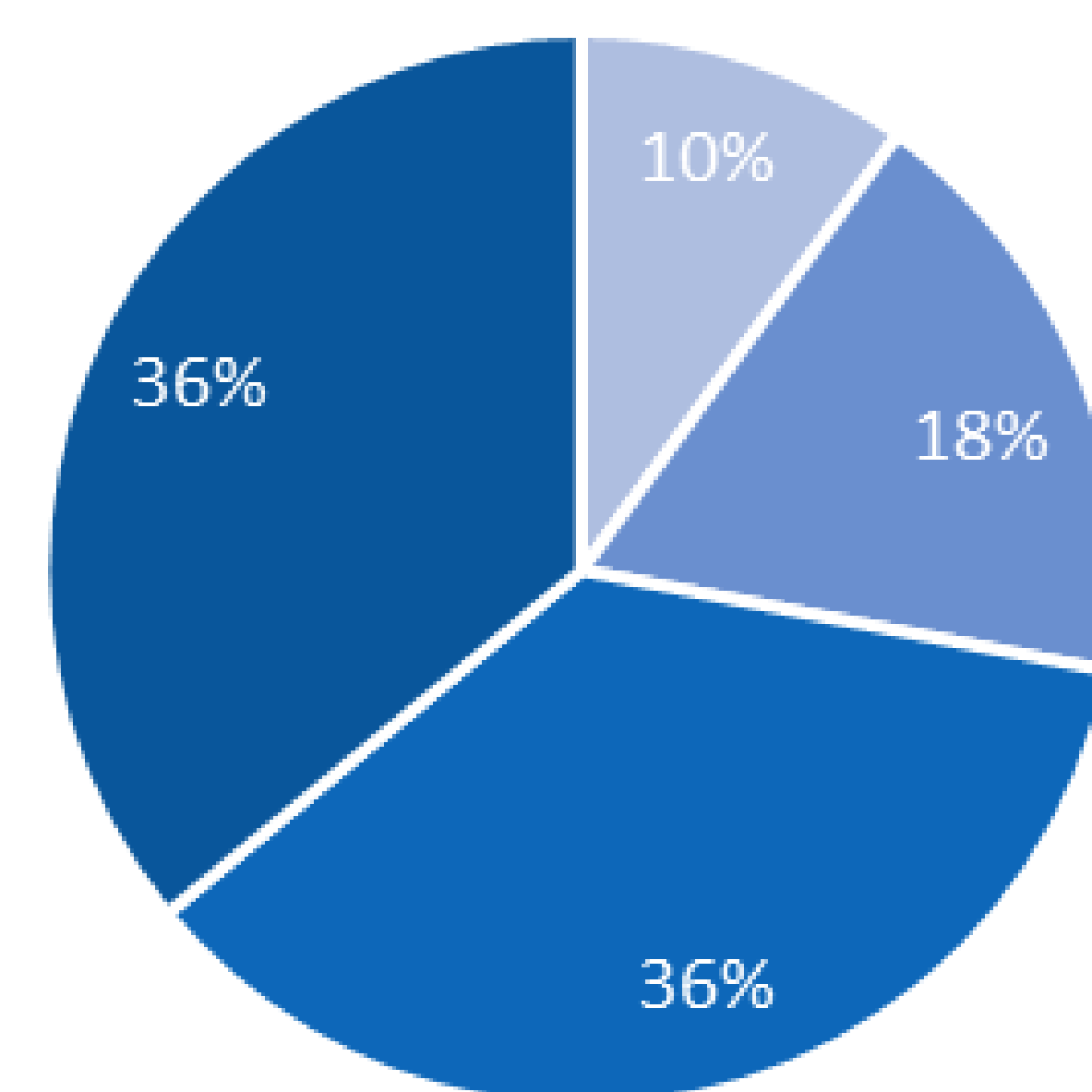


Figure 1. Main findings on the association between pain and loneliness



Current loneliness likely predicts future pain and current pain possibly predicts future loneliness



Increased loneliness among chronic pain groups compared to groups without chronic pain



Among chronic pain groups, pain and pain-related constructs (e.g., catastrophizing) are often associated with loneliness

#### Eligible Studies

- After deduplication, screening of titles and abstracts, and reviewing of full texts, a total of 48 studies were deemed to be eligible.

#### Study Characteristics

- The number of studies published each year has increased (Figure 1).
- Most studies were conducted in the United States (N=27) followed by the United Kingdom (N=6), Norway (N=4), China (N=3), Hong Kong (N=3), Canada (N=1), Japan (N=1), Turkey (N=1), and Israel (N=1).
- Study designs used primarily involved cross-sectional observational studies (95.83%) with the rest of the studies using a non-random experimental design (4.17%).
- Most studies included general chronic pain populations (N=13), a few studies focused on specific chronic pain populations (cancer [N=5], fibromyalgia [N=2]), and other studies examined acute pain (N=8).
- Most studies focused on middle-aged or older adults (Figure 2).
- The most common pain measures were a numeric rating scale (N=13) or other unspecified self-report scales (N=6) followed by the Brief Pain Inventory (N=5) and Pain Catastrophizing Scale (N=5).
- The most common loneliness measure was the UCLA Loneliness Scale (N=28).

#### Main Findings (Figure 1)

- When comparing chronic pain groups to non-chronic pain groups, all studies indicated that the chronic pain group reported higher levels of loneliness (N=11).
- Longitudinally, loneliness at baseline was associated with chronic pain at a later time (N=9).
- Baseline pain was also found to predict later levels of loneliness (N=3).
- When examining chronic pain populations, pain and pain-related constructs (e.g., pain catastrophizing) was often (N=11), but not always (N=3), associated with loneliness.

### Discussion:

- Systematic review and meta-analysis of observational studies could provide insights into the direction and strength of the relationship between pain and loneliness.
- Future research could determine whether the relationship between pain and loneliness is stable or changing across the lifespan.

- Interventions addressing both pain and loneliness should be further explored.



University of Regina

