

Prognostic factors for improved emotional functioning from pain management programmes: A systematic review

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Introduction & Aims

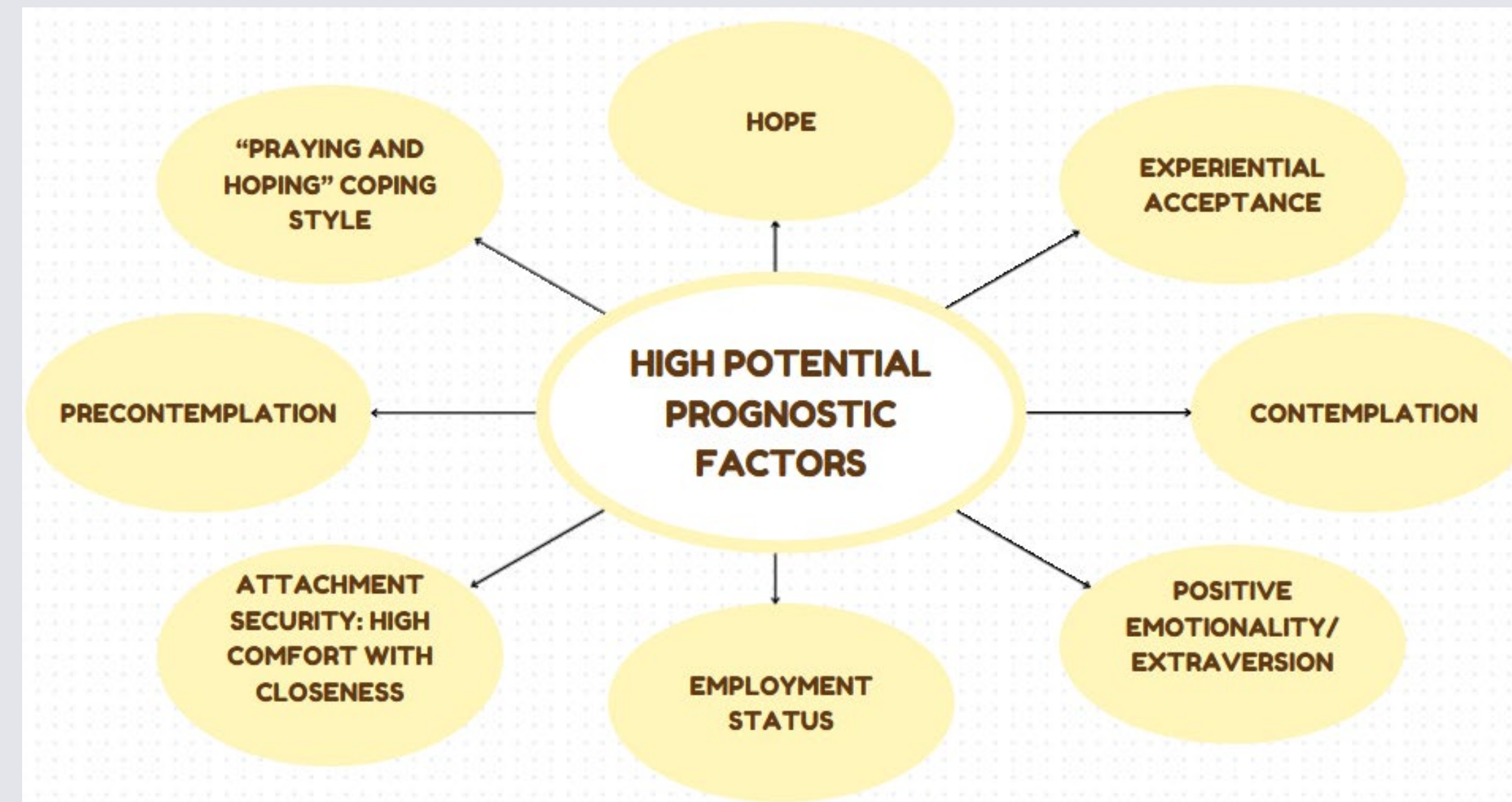
- Pain management programs (PMPs) are preferred interventions for people with chronic pain whose condition impacts their quality of life.
- The aim of this systematic review was to evaluate prognostic factors for improved emotional functioning outcomes following a PMP for people with chronic pain.
- The review was prospectively registered on PROSPERO and was funded by the Pain Relief Foundation, Liverpool, UK.

Methods

- Comprehensive searches were conducted in PsycInfo, MEDLINE, Cochrane CENTRAL, CINAHL & Embase from inception to 31 August 2023.
- A total of thirty-six studies, including 31,251 participants, met the eligibility criteria.
- Eligibility required that each PMP focused on people with chronic pain and included both a physiotherapist and psychologist in the program team.
- The Quality in Prognosis Studies (QUIPS) tool was utilized to assess the risk of bias in the selected studies.

Results

- Twenty potential baseline prognostic factors were eligible for Synthesis Without Meta-analysis (SWIM) and other prognostic factors that were investigated across multiple studies were synthesized narratively.
- Seven other factors were identified as high potential prognostic factors (HPPFs), each only investigated in a single study but significant in their only analyses. These HPPFs lack evidence to be considered consistent prognostic factors but warrant further study.
- A further HPPF was identified, that being *employment status*. Part-time employment was favored over full-time employment, with studies comparing part-time to full-time employment much less common than studies comparing employed to unemployed. Part-time employment thus warrants further study as a prognostic factor.



- The Grading of Recommendations Assessment, Development and Evaluation (GRADE) approach was used to assess the certainty of evidence (CoE) for each potential prognostic factor, which ranged from very low to moderate. Other reviews for different PMP outcomes found similar results in their GRADE assessments^{1,2}.
- Most studies were categorized as phase 1, meaning that they lacked a specific hypothesis, often exploring a range of potential prognostic factors without relying on existing models or previous findings. Eleven of the studies were found to have a high risk of bias. Some potentially valuable prognostic factors lacked sufficient research, while others yielded mixed results.

Conclusions

- The limited number of studies for some factors, mixed results for others, and overall low CoE impeded the identification of clear prognostic factors.

Future Use

- Future research should prioritize hypotheses centered on HPPFs identified in this review that warrant further study.

Perspective

- PMPs can be optimized based on the prognostic factors of an individual patient.
- This review identifies high potential prognostic factors for emotional functioning.
- Once consistent prognostic factors are identified, clinicians will be able to identify those who would benefit from PMPs and those who may require further support to benefit.

References

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