

Pain-related cognitive biases

Citation for published version (APA):

Xu, T. (2024). *Pain-related cognitive biases: understanding their interrelationship and combined impact on pain outcomes*. [Doctoral Thesis, Maastricht University]. Maastricht University. <https://doi.org/10.26481/dis.20241021tx>

Document status and date:

Published: 01/01/2024

DOI:

[10.26481/dis.20241021tx](https://doi.org/10.26481/dis.20241021tx)

Document Version:

Publisher's PDF, also known as Version of record

Please check the document version of this publication:

- A submitted manuscript is the version of the article upon submission and before peer-review. There can be important differences between the submitted version and the official published version of record. People interested in the research are advised to contact the author for the final version of the publication, or visit the DOI to the publisher's website.
- The final author version and the galley proof are versions of the publication after peer review.
- The final published version features the final layout of the paper including the volume, issue and page numbers.

[Link to publication](#)

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal.

If the publication is distributed under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license above, please follow below link for the End User Agreement:

www.umlib.nl/taverne-license

Take down policy

If you believe that this document breaches copyright please contact us at:

repository@maastrichtuniversity.nl

providing details and we will investigate your claim.

Propositions

Pain-related Cognitive Biases:

Understanding their Interrelationship and Combined Impact on Pain Outcomes

Ting Xu 21st of October 2024 at 10:00 hours.

- Pain-related attention bias, interpretation bias, and memory bias are interrelated, but the magnitude and direction of these relationships depend on variability in sample characteristics, procedural factors, and outcome measures (related to my thesis).
- The interactive effects of attention bias and interpretation bias on pain outcomes illustrate that cognitive biases function simultaneously rather than independently in influencing (chronic) pain (related to my thesis).
- The PainAIM paradigm offers a more ecologically valid approach to measuring pain-related cognitive biases (related to my thesis).
- Future research should enhance threat manipulation methods to more effectively examine how threat influences cognitive biases and their impact on pain outcomes (related to my thesis).
- Recruiting a diverse and representative sample for psychological research is one of the most significant barriers to generalizing research findings (relate to other field of expertise).
- The increasing complexity of psychological datasets requires advanced statistical techniques, but this also heightens the risk of overfitting and misinterpretation if not carefully managed (relate to other field of expertise).
- Integrating virtual reality (VR) technology into experimental studies improves the ecological validity of research across various psychological domains (relate to other field of expertise).
- Understanding how cognitive biases affect pain perception can guide the development of interventions that target cognitive biases, potentially reducing the burden of chronic pain and improving patient outcomes in clinical settings (impact of the society).
- Be the change. Trust the process. Befriend the unexpected (my motto).