

Conceptual overlap of negative thought processes in insomnia: A focus on worry, catastrophizing, and rumination in a student sample

M. Jansson-Fröjmark, R. Sunnhed, & I. Rosendahl

Karolinska Institutet, Stockholm, Sweden

INTRODUCTION

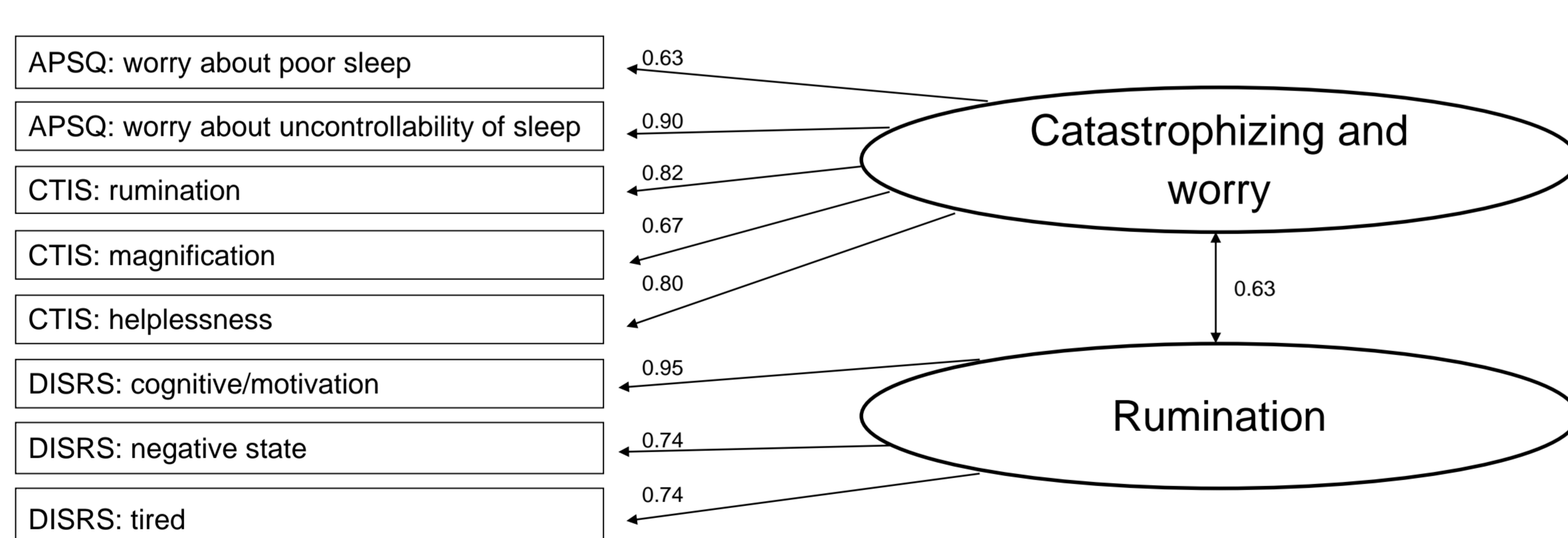
Although negative thought processes have been proposed to be involved in insomnia, very little is known about their inter-relationships. The aim of the current study was, therefore, to examine the degree of conceptual overlap between three negative thought processes (i.e., worry, catastrophizing, and rumination), identify the underlying factors, and explore their validity (in relation to the degree of insomnia severity).

360 students completed three negative thought process measures [the Anxiety and Preoccupation about Sleep Questionnaire (APSQ) with two proposed subscales, the Catastrophizing Thoughts about Insomnia Scale (CTIS) with three subscales, and the Daytime Insomnia Symptom Response Scale (DISRS)] with three subscales and two insomnia symptom scales [the Insomnia Severity Index (ISI) and the Sleep Condition Indicator (SCI)]. On average, the students were approximately 28 years and 73% were females.

RESULTS

The three measures' associations with their respective subscales were moderate to high ($r = .57-.97$). The internal consistencies for the scales and subscales ranged from $\alpha = .75$ to $\alpha = .94$.

Confirmatory factor analysis confirmed the existence of two subscales for the APSQ, three subscales for the CTIS, and three subscales for the DISRS. As displayed in the figure below, confirmatory factor analysis also indicated that two of the negative thought processes - worry and catastrophizing - constitute a common factor, and that rumination comprises a distinct factor.



The correlations between the three negative thought process measures and the two insomnia symptom scales (ISI and SCI) were moderate in strength ($r = .43 - .75$). Further, the correlations appear stronger for the APSQ and the CTIS and their respective subscales ($r = .64 - .75$; $.58 - .72$), relative to the DISRS and its subscales ($r = .43 - .51$).

CONCLUSION

The findings indicate that

- ✓ Worry and catastrophizing can be conceptualized as a common factor, and rumination is a distinct process.

This finding implies that

- ✓ The distinction between three negative thought processes in insomnia can be reconsidered in theoretical conceptualizations of insomnia.
- ✓ Developing a combined worry and catastrophizing measure could be advantageous.

REFERENCES

- Carney, C. E., Edinger, J. D., Meyer, B., Lindman, L., & Istre, T. (2006). Symptom-Focused Rumination and Sleep Disturbance. *Behavioral Sleep Medicine, 4*(4), 228-241. doi:10.1207/s15402010bsm0404
- Carney, C. E., Harris, A. L., Falco, A., & Edinger, J. D. (2013). The relation between insomnia symptoms, mood, and rumination about insomnia symptoms. *Journal of Clinical Sleep Medicine, 9*(6), 567-575.
- Carney, C. E., Harris, A. L., Moss, T. G., & Edinger, J. D. (2010). Distinguishing rumination from worry in clinical insomnia. *Behaviour Research and Therapy, 48*(6), 540-546. doi:10.1016/j.brat.2010.03.004
- Jansson-Fröjmark, M., Harvey, A. G., Lundh, L.-G., Norell-Clarke, A., & Linton, S. J. (2011). Psychometric properties of an insomnia-specific measure of worry: the anxiety and preoccupation about sleep questionnaire. *Cognitive behaviour therapy, 40*(1), 65-76.
- Tan, L. O., Hadjistavropoulos, T., & MacNab, Y. C. (2017). The catastrophic thoughts about insomnia scale (CTIS): development and validation. *Cognitive Therapy and Research, 41*(1), 143-154.
- Tang, N. K., & Harvey, A. G. (2004). Correcting distorted perception of sleep in insomnia: a novel behavioural experiment? *Behaviour Research and Therapy, 42*(1), 27-39.



CONTACT

markus.jansson-frojmark@ki.se

rikard.sunnhed@ki.se