Perceived stress, repetitive negative thinking, and cognitive coping strategies as predictors of poor sleep

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Abstract

Introduction: Stress is closely related to impaired sleep and can elicit profound and lasting effects on sleep. The cognitive representations of stressors need to be prolonged in order to extend their physiological concomitants. Elevated levels of repetitive negative thinking appear to be causally involved in the maintenance of emotional problems. An appropriate regulation of thoughts and emotions decreases the likelihood of pathogenic activation of stress response.

Objectives: To study the role of perceived stress, repetitive negative thinking, and cognitive coping strategies on sleep difficulties.

Methods: 549 students (80.1% females) from two Portuguese Universities filled in the Portuguese version of Perceived Stress Scale 10, Perseverative Thinking Questionnaire, Cognitive Emotional Regulation Questionnaire and three questions were used to access sleep difficulties (initiating sleep/DIS, sleep maintenance/DMS, and early morning awakening/EMA) and the Sleep Difficulties Index/SDI (sum of these questions scores).

Results: The significant predictors of SDI were Perceived Distress (β=.279); Repetitive Thought (β=.214), Cognitive Interference and Unproductiveness (β=-.198); and Rumination (β=.127). The predictor of reporting DIS was Perceived Distress (β=.144), the predictors of reporting DMS were Perceived Distress (β=.124), Repetitive Thought (β=.098) and Cognitive Interference and Unproductiveness (β=-.124), and the predictors of reporting EMA were Perceived Distress (β=.070) and Rumination (β=.067). The factors with significant impact on the likelihood of reporting good or poor sleep were Perceived Distress (β=.167), Repetitive Thought (β=.136); Cognitive Interference and Unproductiveness (β=.106) and Positive Refocusing (β=.083). The mediation analyses showed that rumination and repetitive thought partially mediated the association between perceived distress and global sleep difficulties/SDI.

Discussion and Conclusions: Perceived Distress, Repetitive Negative Thinking, Rumination and Positive Refocusing were the major predictors of poor sleep. These results may have clinical implications. They highlight the importance of cognitive-behavioral stress management interventions to promote a better sleep in students.

Supplementary material: Complete presentation available at http://ijcnmh.arc-publishing.org