

Publication

Adolescents with greater mental toughness show higher sleep efficiency, more deep sleep and fewer awakenings after sleep onset

JournalArticle (Originalarbeit in einer wissenschaftlichen Zeitschrift)

ID 2239736

Author(s) Brand, Serge; Gerber, Markus; Kalak, Nadeem; Kirov, Roumen; Lemola, Sakari; Clough, Peter J; Pühse, Uwe; Holsboer-Trachsler, Edith

Author(s) at UniBasel Brand, Serge ; Pühse, Uwe ; Holsboer-Trachsler, Edith ; Lemola, Sakari ; Gerber, Markus ;

Year 2014

Title Adolescents with greater mental toughness show higher sleep efficiency, more deep sleep and fewer awakenings after sleep onset

Journal Journal of adolescent health

Volume 54

Number 1

Pages / Article-Number 109-13

Keywords Mental toughness, Sleep electroencephalogram, Sleep efficiency, Deep sleep

Purpose: Mental toughness (MT) is understood as the display of confidence, commitment, challenge, and control. Mental toughness is associated with resilience against stress. However, research has not yet focused on the relation between MT and objective sleep. The aim of the present study was therefore to explore the extent to which greater MT is associated with objectively assessed sleep among adolescents.Methods: A total of 92 adolescents (35% females; mean age, 18.92 years) completed the Mental Toughness Questionnaire. Participants were split into groups of high and low mental toughness. Objective sleep was recorded via sleep electroencephalograms and subjective sleep was assessed via a questionnaire.Results: Compared with participants with low MT, participants with high MT had higher sleep efficiency, a lower number of awakenings after sleep onset, less light sleep, and more deep sleep. They also reported lower daytime sleepiness.Conclusions: Adolescents reporting higher MT also had objectively better sleep, as recorded via sleep electroencephalograms. A bidirectional association between MT and sleep seems likely; therefore, among adolescence, improving sleep should increase MT, and improving MT should increase sleep. (C) 2014 Society for Adolescent Health and Medicine. All rights reserved.

Publisher Elsevier ISSN/ISBN 1054-139X edoc-URL http://edoc.unibas.ch/dok/A6194611 Full Text on edoc No; Digital Object Identifier DOI 10.1016/j.jadohealth.2013.07.017 PubMed ID http://www.ncbi.nlm.nih.gov/pubmed/23998848 ISI-Number WOS:000329062400017 Document type (ISI) Article