

Unhealthy Sleep Practices, Conduct Problems, and Daytime Functioning During Adolescence

Wen-Hsu Lin · Chin-Chun Yi

Received: 19 March 2014 / Accepted: 11 August 2014 / Published online: 23 August 2014
© Springer Science+Business Media New York 2014

Abstract Although sleep has been linked to activities in various domains of life, one under-studied link is the relationship between unhealthy sleep practices and conduct problems among adolescents. The present study investigates the influence of adolescents' unhealthy sleep practices—short sleep (e.g., less than 6 h a day), inconsistent sleep schedule (e.g., social jetlag), and sleep problems—on conduct problems (e.g., substance use, fighting, and skipping class). In addition, this study examines unhealthy sleep practices in relationship to adolescent emotional well-being, defiant attitudes, and academic performance, as well as these three domains as possible mediators of the longitudinal association between sleep practices and conduct problems. Three waves of the Taiwan Youth Project ($n = 2,472$) were used in this study. At the first time-point examined in this study, youth (51 % male) were aged 13–17 ($M = 13.3$). The results indicated that all three measures of unhealthy sleep practices were related to conduct problems, such that short sleep, greater social jetlag, and more serious sleep problems were concurrently associated with greater conduct problems. In addition, short sleep and sleep problems predicted conduct problems one year later. Furthermore, these three unhealthy sleep practices were differently related to poor academic performance, low levels of emotional well-being, and defiant attitudes, and some significant indirect effects on later conduct problems through these three attributes were found. Cultural differences and suggestions for prevention are discussed.

Keywords Unhealthy sleep practices · Conduct problems · Defiant attitude · Emotional well-being · Academic performance

Introduction

Studies have shown that most adolescents do not obtain sufficient sleep on school days and weekends (Roberts et al. 2001; Wolfson and Carskadon 1998). One reason for this lack of sleep is the delayed bedtime and delayed wake-up time (i.e., circadian phase delay) that is common during adolescence, for both biological (e.g., puberty) and psychosocial (e.g., seeking autonomy) reasons (Carskadon et al. 1993; Crowley and Carskadon 2010). Besides sleep problems, adolescence is characterized by an increase in conduct problems/delinquency (Gottfredson and Hirschi 1990; Moffitt 1993), as well as various physical, cognitive, and emotional changes (Wolfson and Carskadon 1998). Hence, adolescence is characterized by sleep problems, an increase in conduct problems/delinquency, and various personal changes. Vail-Smith et al. (2009) showed that sleep problems (e.g., insufficient sleep) results in an array of negative consequences. Relatively few studies have examined the association between sleep and conduct problems, however, and none has examined possible mediators of the association.

This study employed a Taiwanese panel sample to examine the relationship between adolescent unhealthy sleep practices, namely short sleep and social jetlag (later weekend bedtimes compared to weekdays), and youth conduct problems, including substance use, skipping class, and fighting. Furthermore, the model tested in this study includes three important measures of adolescent functioning: psychological well-being, defiant attitude, and

W.-H. Lin (✉) · C.-C. Yi
Institute of Sociology #1017, Academia Sinica, 128 Sec. 2
Academia Rd., Nankang, Taipei 11529, Taiwan
e-mail: mars0512@gate.sinica.edu.tw; mars760512@gmail.com

C.-C. Yi
e-mail: chinyi@gate.sinica.edu.tw