

Chronotype and social jetlag were unrelated to dietary energy, carbohydrate, fat, protein, alcohol, and sugar intakes (all  $P \geq 0.1078$ ). Although these findings suggest that chronotype and social jetlag are unrelated to dietary energy and macronutrient intakes in these UK adults, studies with larger sample sizes are needed to confirm or refute these results. Data will soon be available for additional participants from the present cohort and will improve our ability to determine whether associations between chronotype, social jetlag and diet exist in this population.

**Disclosure:** Nothing to disclose.

## P183

### Electronic media use and the blurriness of bedtime: introducing sleep displacement as a two-stage process

L. Exelmans and J. Van den Bulck

*KU Leuven, Leuven, Belgium*

**Objectives:** Prior research argued that bedtime may no longer imply an intention to go to sleep, but rather an intention to use electronic media. This study examines media use before and after bedtime and defines sleep displacement as a two-stage process. It argues that future research should make a distinction between the decision to go to bed and the decision to go to sleep.

**Methods:** Adults ( $N = 338$ ; 67.6% female) participated in a survey on leisure time and sleep. We recorded their bedtime (i.e. deciding to go to bed) and shuteye time (i.e. deciding to go to sleep) and provided examples of both. Pre and post bedtime activities and measures on the voluntary delay of bedtime and shuteye time (i.e. procrastination) were included.

**Results:** Respondents spent a weekly amount of 15 h 34 min on electronic media during the final hours before bedtime, and 2 h 16 minutes after bedtime but before going to sleep. For pre and post bedtime respectively, TV viewing and mobile phone use were the most popular activities. There was an average daily gap of 43 minutes between bedtime and shuteye time. Pre bedtime media use was related to bedtime procrastination, and post bedtime media use to shuteye time procrastination, suggesting both are distinct behaviors.

**Conclusions:** Results indicate a substantial gap between respondents' bedtime and the time at which to go to sleep, that is often filled with electronic media. Findings suggest redefining sleep displacement as a two-stage process and call for future research into the ways media habits impact sleep behavior.

**Disclosure:** Nothing to disclose.

## P184

### A failure to replicate the nightmare protective function of video and internet gaming

C. Sansom<sup>1</sup>, H. McMurtrie<sup>2</sup>, N. Carter<sup>1</sup> and M. Blagrove<sup>3</sup>

<sup>1</sup>Psychology, Swansea University, Swansea, <sup>2</sup>Psychology, Manchester Metropolitan University, Manchester, <sup>3</sup>Psychology, Sleep Laboratory, Swansea University, Swansea, United Kingdom

Gackenbach et al. (2013), and other studies from the same lab, provide evidence for a nightmare protection function of PC and internet gaming. The present study addresses the relationship between stress and nightmare frequency in high and low end gamers. 111 participants (mean age = 22.88 years, males = 67, females = 44) completed an on-line questionnaire to assess extent of gaming, current level of stress (GHQ-12) and retrospective frequency of nightmares (NF). 79 participants provided full data sets for GHQ, NF and hours spent gaming, with a Spearman's correlation between GHQ score and nightmare frequency of 0.34 ( $P < 0.01$ ).

Participants were divided using a median split of 12 h gaming per week between high ( $n = 40$ , 30 male, 10 female) and low ( $n = 39$ , 19 male, 20 female) gamers. High and low gamers did not differ significantly on GHQ score or on nightmare frequency ( $ps = 0.540$  and  $0.600$  respectively). For males, the correlation between GHQ and NF was significant for high gamers ( $\rho = 0.50$ ,  $P = 0.005$ ,  $n = 30$ ) but not low gamers ( $\rho = -0.27$ , ns,  $n = 19$ ). For females, the correlation between GHQ and NF was significant for high gamers ( $\rho = 0.85$ ,  $P = 0.002$ ,  $n = 10$ ) but not low gamers ( $\rho = 0.27$ , ns,  $n = 20$ ). This study has not confirmed the work by Gackenbach on a nightmare protective function of gaming.

**Reference:** Gackenbach, J., Darlington, M., Ferguson, M-L., & Boyes, A. (2013). Video game play as nightmare protection: A replication and extension. *Dreaming*, 23, 97–111.

**Disclosure:**

Nothing to disclose.

## P185

### Electrophysiological predictors of dream recall: state- or trait-like differences?

S. Scarpelli<sup>1</sup>, A. Mangiaruga<sup>1</sup>, A. D'Atri<sup>1</sup>, M. Gorgoni<sup>1</sup>, M. Ferrara<sup>2</sup> and L. De Gennaro<sup>1</sup>

<sup>1</sup>Department of Psychology, University of Rome 'Sapienza', Rome,

<sup>2</sup>Department of Biotechnological and Applied Clinical Sciences,

University of L'Aquila, Coppito, Italy

**Objectives:** Although in the last years several studies investigated on the EEG predictors of dream recall (DR), they have yet to provide unequivocal results. Considering that most investigations were *between-subject* studies, we assessed EEG correlates of DR by a *within-subject* design aiming to disentangle the state/trait-like interpretation.

**Methods:** Twenty-four subjects were recorded from 28 derivations in a nap protocol. Ten subjects were awakened from REM sleep and fourteen subjects from stage 2 NREM sleep. Each participant was recorded in separate sessions until we obtained both recall (REC) and non-recall (NREC) conditions. EEG power spectra of the last 5 min were calculated for all scalp locations.

**Results:** Statistical comparisons between REC and NREC conditions, performed by paired *t*-test separately for REM and NREM sleep and for each derivation and frequency band, revealed that:

a) DR from REM sleep is predicted by an increased alpha power in parietal area ( $P \leq 0.008$ ).

b) DR from stage 2 is predicted by a reduction of delta activity over the left fronto-temporal areas ( $P \leq 0.003$ ).

**Conclusions:** Our findings are consistent with the idea that an EEG milieu characterized by a less synchronized cortical activity is a prerequisite for DR, according to the "Activation Model" (Antrobus, 1991). Indeed, both the enhanced alpha activity in REM and the lower delta activity in NREM are an expression of relative cortical activation. Our study also provided support in favor of a state-like relation between EEG topography and DR, disclosing that a successful DR depends on the specific physiological *background* before the awakening.

**Disclosure:** Nothing to disclose.