

both lockdowns relative to the preceding respective months. These data suggest that subjective sleep quality is particularly sensitive to changes in life habits and psychological factors, independently of sleep habits. Considering that the pandemic situation may continue for several months, there is a need for interventions targeting sleep quality.

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SLEEP VARIABILITY AND AFFECT DYNAMICS AMONG COLLEGE STUDENTS DURING COVID-19 PANDEMIC

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Introduction: Sleep disturbance is a transdiagnostic risk factor that is so prevalent among emerging adults it is considered to be a public health epidemic. For emerging adults, who are already at greater risk for psychopathology, the COVID-19 pandemic has disrupted daily routines, potentially changing sleep patterns and heightening risk factors for the emergence of affective dysregulation, and consequently mood-related disturbances. This study aimed to determine whether variability in sleep patterns across a 3-month period was associated with next-day positive and negative affect, and affective dynamics, proximal affective predictors of depressive symptoms among young adults during the pandemic.

Methods: College student participants (N=20, 65% female, Mage=19.80, SDage=1.0) wore non-invasive wearable devices (the Oura ring <https://ouraring.com/>) continuously for a period of 3-months, measuring sleep onset latency, sleep efficiency, total sleep, and time spent in different stages of sleep (light, deep and rapid eye movement). Participants reported daily PA and NA using the Positive and Negative Affect Schedule on a 0-100 scale to report on their affective state.

Results: Multilevel models specifying a within-subject process of the relation between sleep and affect revealed that participants with higher sleep onset latency ($b = -2.98$, $p < .01$) and sleep duration on the prior day ($b = -.35$, $p = .01$) had lower PA the next day. Participants with longer light sleep duration had lower PA ($b = -.28$, $p = .02$), whereas participants with longer deep sleep duration had higher PA ($b = .36$, $p = .02$) the next day. On days with higher total sleep, participants experienced lower NA compared to their own average ($b = -.01$, $p = .04$). Follow-up exploratory bivariate correlations revealed significant associations between light sleep duration instability and higher instability in both PA and NA, whereas higher deep sleep duration was linked with lower instability in both PA and NA (all $ps < .05$). In the full-length paper these analyses will be probed using linear regressions controlling for relevant covariates (main effects of sleep, sex/age/ethnicity).

Conclusion: Sleep, an important transdiagnostic health outcome, may contribute to next-day PA and NA. Sleep patterns predict affect dynamics, which may be proximal predictors of mood disturbances. Affect dynamics may be one potential pathway through which sleep has implications for health disparities.

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REVEALING THE SEX DATA GAP IN SLEEP AND CHRONOBIOLOGY RESEARCH: A SYSTEMATIC REVIEW

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Introduction: Many aspects of sleep and circadian physiology appear to be sensitive to characteristics of the studied population, most

notably sex. While recent research robustly highlights the importance of considering participant-level demographic information, it is not clear to what extent this information is available in the large body of already published literature. In this systematic review, we evaluated the study sample characteristics in the published sleep and chronobiology research over the past 40 years.

Methods: Articles published between 1979 and 2019 (odd years) in the top eight sleep and chronobiology journals, identified by their five-year Impact Factor, were found through MEDLINE. 6,777 articles were initially included for screening. Inclusion requirements included conducting original research, reporting human data, and recruiting volunteers. The reporting of sample size, age, sex, gender, ethnicity, level of education, socio-economic status, and profession of the study population was scored binarily (0 = not reported), and any reported aggregate summary statistics for these variables were recorded. Funding source, geographical location and clinical focus of the article were examined, as well as whether data were analyzed including any of the demographic variables as covariates.

Results: ~75% of screened articles met inclusion criteria. While >90% of studies reported age or sex, all other variables were reported in <10% of cases. We found that sex balance greatly changed over the years, from a ~3:1 male to female ratio in the 1990s to a near-equal representation in the 2010s. Overall, ~75% of studies recruited both male and female participants. Of studies recruiting a single sex, ~50% all-female studies focused on a sex-dependent feature, compared to <5% in all-male studies.

Conclusion: In this comprehensive review, we found that the majority of studies report at least sex or age, while many other important variables are typically not reported. Reporting quality is highly variable, indicating an opportunity to standardize reporting guidelines for participant-level characteristics to facilitate disaggregated data analyses.

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ASSOCIATION BETWEEN PET OWNERSHIP AND SLEEP IN THE SWEDISH CARDIOPULMONARY BIOIMAGE STUDY (SCAPIS)

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Introduction: Preliminary findings suggest that pets may improve the owner's sleep via companionship, security, physical activity, and relaxation. On the other hand, pets can disrupt the owner's sleep. Due to the heterogeneity of the results and the low number of studies in this field, more studies with a bigger sample size are needed to explore this association.

Methods: Using data from the Swedish CARDiopulmonary bioImage Study (SCAPIS) cohort, we investigated the association of pet ownership with the following self-reported sleep outcomes in 3,788 to 4,574 participants using regression modeling: achieving the recommended daily sleep duration for adults (i.e., at least 7 hours per day); sleep quality as measured by the Pittsburgh Sleep Quality Index (a score of >5 indicating poor sleep quality); and difficulty falling or staying asleep.

Results: Sleep metrics were not associated with pet ownership, dog ownership, and dog walking when controlling for possible confounders. In contrast, cat ownership was associated with a higher odds ratio of failing to achieve the recommended duration of 7 hours of sleep per day (1.18 [1.02, 1.37] vs. non-cat owners). This association persisted

even after adjusting for various factors known to affect sleep (e.g., shift work, lack of social interaction, and chronic stress).

Conclusion: We found that owning a cat was associated with increased odds of sleeping less than the recommended seven hours per day. General pet ownership and dog ownership were not associated with either of the sleep outcomes. Whether this means that cats represent a risk factor for short sleep duration cannot be derived from the present observational study. Future studies should more thoroughly investigate the various aspects of cat ownership, e.g., the cat's breed, age, and co-sleeping with the cat.

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SLEEPING THROUGH A PANDEMIC: SLEEP HEALTH IN ADULTS AROUND THE WORLD DURING THE COVID-19 LOCKDOWN

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Introduction: The novel COVID-19 disease rapidly escalated into a global pandemic affecting people around the world. While communities imposed mitigation measures to stop the spread of the disease, the mass (home) confinement in addition to the uncertainty of the pandemic led to drastic changes in all aspects of life, including sleep. Sleep health is strongly linked with mental and overall health and could play a protective role against the development of mental distress during the pandemic. Here, we investigated sleep health in a global multicultural sample of adults during the COVID-19 pandemic.

Methods: We surveyed 6,882 adults (18-94 years) across 59 countries about their sleep health (RU-SATED scale), sleep behaviors, demographics, pandemic-related factors, and mood between late April and early May 2020. A hierarchical stepwise multiple linear regression was performed to investigate correlates of sleep health.

Results: Compared with pre-pandemic times, more than one third of the sample reported an increase in sleep disturbances, and more than half of the sample shifted their sleep schedule towards later bed- and wake-up times. Better sleep health was associated with being partnered, older age and living in a higher-income country ($p < .001$). Poorer sleep health was associated with a stricter level of quarantine, and other pandemic-related factors including being laid off from job, financial strain, or difficulties with transitioning to working from home ($R^2 = .116$, $p < .001$). Domestic conflict emerged as the strongest correlate of poorer sleep health in the regression model. Greater depression and anxiety symptoms were associated with a poorer sleep health ($p < .001$). In a global comparison, Latin Americans reported the lowest sleep health scores.

Conclusion: Our findings highlight how sleep behavior has changed during the international quarantine- and isolation measurements and show the association between pandemic-related factors and poor sleep health, which, in turn, is closely linked with poorer mental health. These results emphasize the importance of maintaining good sleep health during the pandemic, since poorer sleep health may trigger or exacerbate mental disorders. Maintenance of good sleep health should be incorporated into public health messages aimed at helping people maintain optimal mental and physical health during major stressful life events like the COVID-19 pandemic.

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REFINING THE SUBJECTIVE ASSESSMENT OF SLEEP: AN SEM APPROACH

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Introduction: Given that sleep is multidimensional, the assessment of sleep requires an examination of a number of different domains. Accordingly, there is an abundance of self-report sleep questionnaires that are widely used for both research and clinical use. The surplus of available measures can be problematic, as it often leads to difficulties in selecting the best measure for a given purpose/context. In addition, the use of multiple measures to assess sleep may be an inefficient use of time and resources if they are not measuring unique constructs. The purpose of the current study is to evaluate the factor structure of five sleep measures. A confirmatory factor analysis (CFA) was initially used to evaluate whether each of these scales are measuring different factors of sleep, with follow-up exploratory factor analysis (EFA) as needed.

Methods: An archival analysis was performed using data from an online study, Investigating Sleep Across Normal Development (ISLAND Study). The sample consisted of 3,284 adults aged 18+. The following measures were utilized: RU SATED, PROMIS Sleep-Related Impairment, Sleep Self-Efficacy, Insomnia Severity Index, and the Sleep Regularity Questionnaire.

Results: As expected, the CFA model fit was determined to be poor and an EFA was then conducted to assess the factor structure of these scales. The EFA revealed a four-factor structure comprised of 25 items: Sleep-Related Daytime Impairment, Sleep Regularity, Sleep Disturbance, and Sleep-Related Daytime Enhancement.

Conclusion: The findings from the current study add to the literature supporting the multidimensionality of sleep, as well as the continued need to assess the various facets that comprise this construct. Although the literature supports the utility of these five measures, the present study found that within a community sample, these measures are not entirely unique. Further, the present study extends our knowledge and the literature by revealing a novel factor of sleep – Sleep-Related Daytime Enhancement. It may be worthwhile for researchers and clinicians to consider latent sleep factors that contribute to sleep disturbance and sleep health. Future work is needed to further confirm the observed factor structure and assess the psychometrics of this new scale.

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COVID-19 PANDEMIC NIGHTMARES AT THE US-MEXICO BORDER

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Introduction: The COVID-19 pandemic has impacted individuals in many ways, including anecdotal reports of nightmares. However, little data exists regarding the experience of COVID-related nightmares, especially among the distressed population at the US-Mexico Border. This is especially relevant given the clinical importance of nightmares as risk factors for poor mental health and sleep disturbances.