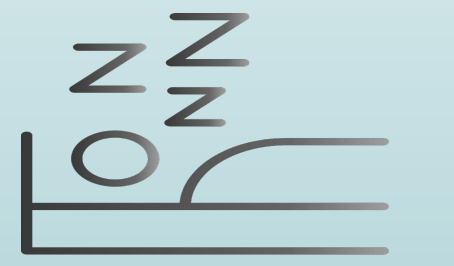


Who Sleeps Best?: Examining Main Effects of Living Arrangement, First-generation Status, and Race/Ethnicity on Sleep and Anxiety during the COVID-19 Pandemic

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Introduction

- The COVID-19 pandemic has been a global stressor with significant negative effects for sleep health within the general population (Jahrami et al., 2021).
- Individuals from racial/ethnic minority groups were found to be disproportionately affected in terms of their sleep and stress, during the pandemic (Yip et al., 2021).
- Furthermore, those who live in cramped living conditions had fewer economic resources, experienced more racial discrimination, had limited access to equitable healthcare, and lost access to mental health resources, experienced more negative consequences of the pandemic (Rozenfeld et al., 2020).
- However, few studies have examined the main effects of socio-demographic factors on sleep and mental health specifically among emerging adults at college.
- To address this gap, the present study examined whether there are significant differences in **sleep** and **anxiety** across groups of emerging adults based on their **living arrangements**, **first-generation status**, and **racial/ethnic identity**.

Participants & Measures

N = 619 Emerging Adults (65% female) in the U.S.

Age: 18-29 years old ($M = 21.8$ years old, $SD = 2.2$)

- **Sleep Duration:** “During the [week/weekend], how many actual hours of sleep do you think you typically get per night?”
- **Insomnia:** Insomnia Severity Index (Morin et al., 2011) (e.g., “Difficulty FALLING asleep”)
- **Anxiety symptoms:** General Well-Being Scale - Anxiety Subscale (Fazio, 1997) (e.g., “Have you been under or felt you were under any strain, stress, or pressure?” Lower scores reflect distress and higher scores reflect positive well-being.) **Higher scores indicate better well-being*
- **Living arrangement:** “Has your living arrangement changed because of the COVID-19 pandemic?” (Yes/No)
- **First-generation status:** Yes (Neither parents have any college education); No (At least 1 parent has some college experience)
- **Race/ethnicity:** Participants self-reported their race and ethnicity.

Results

Table 1: Differences in Sleep Duration, Insomnia, and Anxiety Symptoms across Living Arrangement, First-generation status, and Race/Ethnicity

COVID-Related Change in Living Arrangement	Sleep Duration $M(SD)$	Sleep Quality $M(SD)$	Anxiety $M(SD)$
Yes	7.8 (1.2) ^a	16.7 (5.7) ^a	14.6 (5.7) ^a
No	7.4 (1.3) ^b	17.4 (6.2) ^a	15.8 (6.3) ^b
First-Generation Status			
Yes	7.2 (1.2) ^a	18.5 (6.4) ^a	13.9 (5.3) ^a
No	7.7 (1.2) ^b	16.7 (5.8) ^b	15.1 (6.0) ^a
Race/Ethnicity			
Racial/Ethnic Minority	7.5 (1.3) ^a	17.5 (6.2) ^a	15.4 (6.0) ^a
Non-Hispanic White	7.7 (1.2) ^a	16.5 (5.6) ^b	14.7 (5.8) ^a

- **Plan of Analysis:** Independent Samples T-Tests

Living Arrangements:

- There was a significant main effect of living arrangement on **sleep duration** ($p < .001$) and **anxiety symptoms** ($p = .029$).

First Generation Status:

- There was a significant main effect of first generation status on sleep duration ($p < .001$) and insomnia symptoms ($p = .012$).

Race/Ethnicity:

- There was a significant main effect of race/ethnicity on insomnia symptoms ($p = .045$).

Discussion

- Those who experienced changes in their living arrangement as a result of COVID reported *longer* sleep hours, but *worse* anxiety symptoms, perhaps due to more opportunities to sleep in the face of online learning, but greater anxiety due to uncomfortable family living arrangements (van den Berg et al., 2021).
- First generation students experienced both shorter sleep hours and worse sleep quality relative to non-first-generation students, while racial/ethnic minority students reported worse sleep quality, compared to White students. Both groups are more likely to shoulder more responsibilities when returning home which potentially leads to higher stress and thus, compromised sleep.
- Emerging adults from minority groups who attended college during the pandemic may face unique stressors relating to their home life, which may, in turn, disrupt sleep and mental health.
- Future studies should employ a strengths-based approach to examine factors that may protect these groups from the negative implications of the pandemic.
- At the institutional-level, programs that are dedicated to assist vulnerable populations, like first-generation students and racial/ethnic minorities should be implemented.

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