

# Can't Sleep, Won't Sleep: Negative Affect and High Arousal Predict Bedtime Procrastination

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## Bedtime Procrastination

Why don't people go to bed on time? Procrastination is an **emotion regulation issue**; however, the role of emotion in **bedtime procrastination** is unclear. In **Study 1** we found bedtime procrastination was associated with negative affect and high arousal in a cross-sectional sample of Chinese participants. But does high arousal *cause* bedtime procrastination? In **Study 2**, we manipulated arousal at bedtime via a nightly “home acupuncture massage” and tracked affective valence and arousal with a sleep diary over seven days. Across 2 studies, high arousal was associated with bedtime procrastination. In follow-up studies, we will test whether independently manipulating affective valence increases bedtime procrastination.

### Study 1

#### Participants:

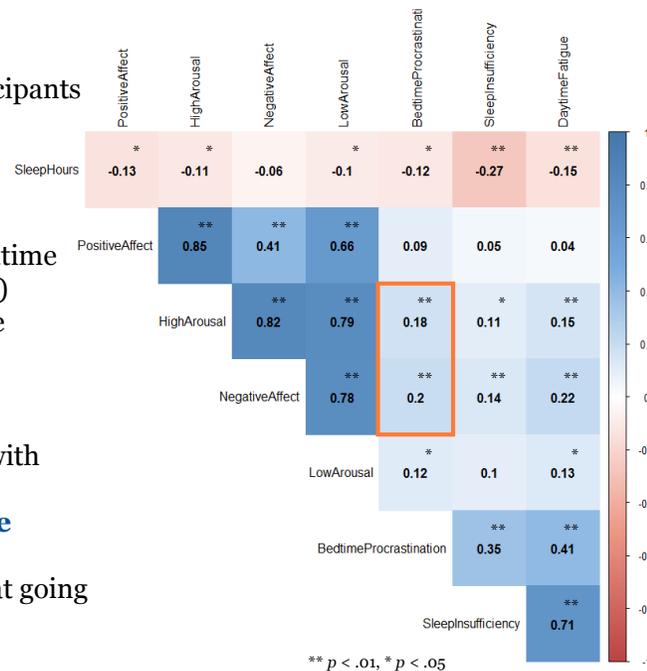
- Community sample of 400 Chinese participants
- 228 women (57%)
- $Mage = 32.23$ ,  $SDage = 9.57$

#### Measures:

- Subjective Bedtime Procrastination - Bedtime Procrastination Scale (Kroese et al., 2016)
- Affect - Positive and Negative Affect Scale (PANAS; Watson et al., 1988)

#### Results:

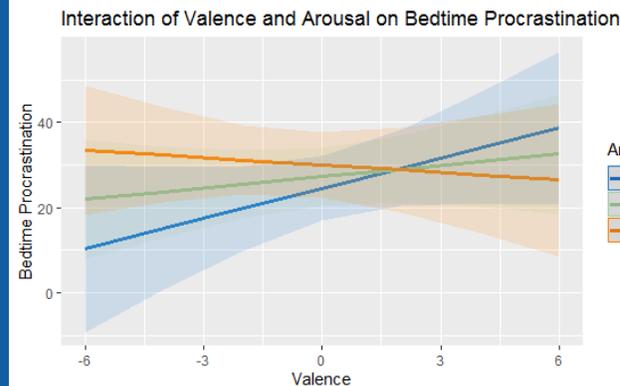
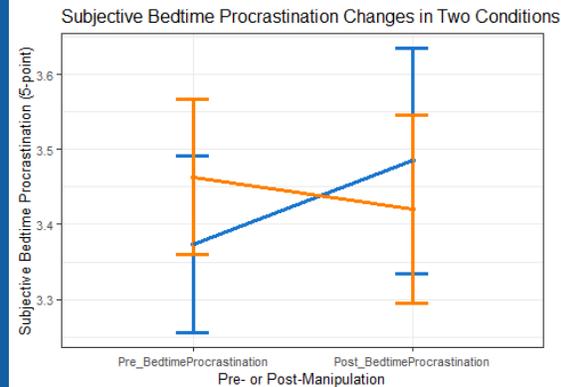
- Bedtime procrastination was correlated with **negative affect** and **high arousal**.
- Bedtime procrastination predicted **worse sleep** quantity and quality.
- **College students** procrastinated most at going to bed,  $F(3,376) = 7.09$ ,  $p < .001$ .



## Study 2

#### Data Collection (in progress):

- 238 American undergrads, 140 women (59%)
  - 115 completed all datapoints
  - Target sample: 300 complete datasets
- $Mage = 18.89$ ,  $SDage = 1.87$



#### Manipulation:

- We told participants that massaging certain acupuncture points either increases (**high arousal** condition) or decreases (**low arousal** condition) arousal and energy levels.
- We instructed participants to **practice the massage** just before going to bed each night for one week.
- Participants reported **affect** (valence + arousal) and planned (vs actual) **bedtime** each night.



#### Interim Results:

- Participants in the high arousal condition reported **more arousal** ( $M = 4.42$ ,  $SD = .14$ ) than in the low arousal condition ( $M = 4.17$ ,  $SD = .13$ ),  $t(253.59) = -1.33$ ,  $p = .186$ .
- Participants in the high arousal condition ( $M = 34.4$  min,  $SD = 3.5$ ) reported **7 more minutes** of bedtime procrastination than the low arousal condition ( $M = 27.5$  min,  $SD = 3.3$ ),  $t(186.56) = -1.44$ ,  $p = .15$ .
- High arousal ( $B = 1.63$ ,  $p = .12$ ) predicted more bedtime procrastination, especially for negative affect ( $B = -.88$ ,  $p = .09$ ).
- *Results above are marginal/tentative pending final data collection.*