# Pregnant during the Pandemic: Pregnancy Distress and COVID-19 Stress in Relation to Current and Anticipated Subjective Sleep Quality

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## Introduction

- Stress, prenatal anxiety/worry, and sleep disturbances during pregnancy have been linked to the onset of post-partum depression.
- Compared to objective measures of sleep, subjective sleep assessments have been shown to be more strongly correlated with emotional distress in pregnant samples (Bei et al., 2010; Volkovich et al., 2016).
- The COVID-19 pandemic resulted in significant changes in both sleep and emotional distress. Pregnant women represent a unique population to study because of the health risks associated with pregnancy.
- The current study addressed two research questions:
- 1. Do measures of distress during pregnancy predict perceptions of current or anticipated sleep quality?
- 2. Do measures of COVID-19-related stress (i.e., trauma symptoms and contamination) predict perceptions of current and anticipated sleep quality?

# Method

#### <u>Participants</u>

- N = 571 pregnant women (18 years old or older) in the U.S.
- Sample characteristics:
  - 69.9% white
  - 81.6% non-hispanic
  - 53% earn under \$50,000 per year (TOTAL income)
  - 38.4% no children
  - 43.1% in their third trimester

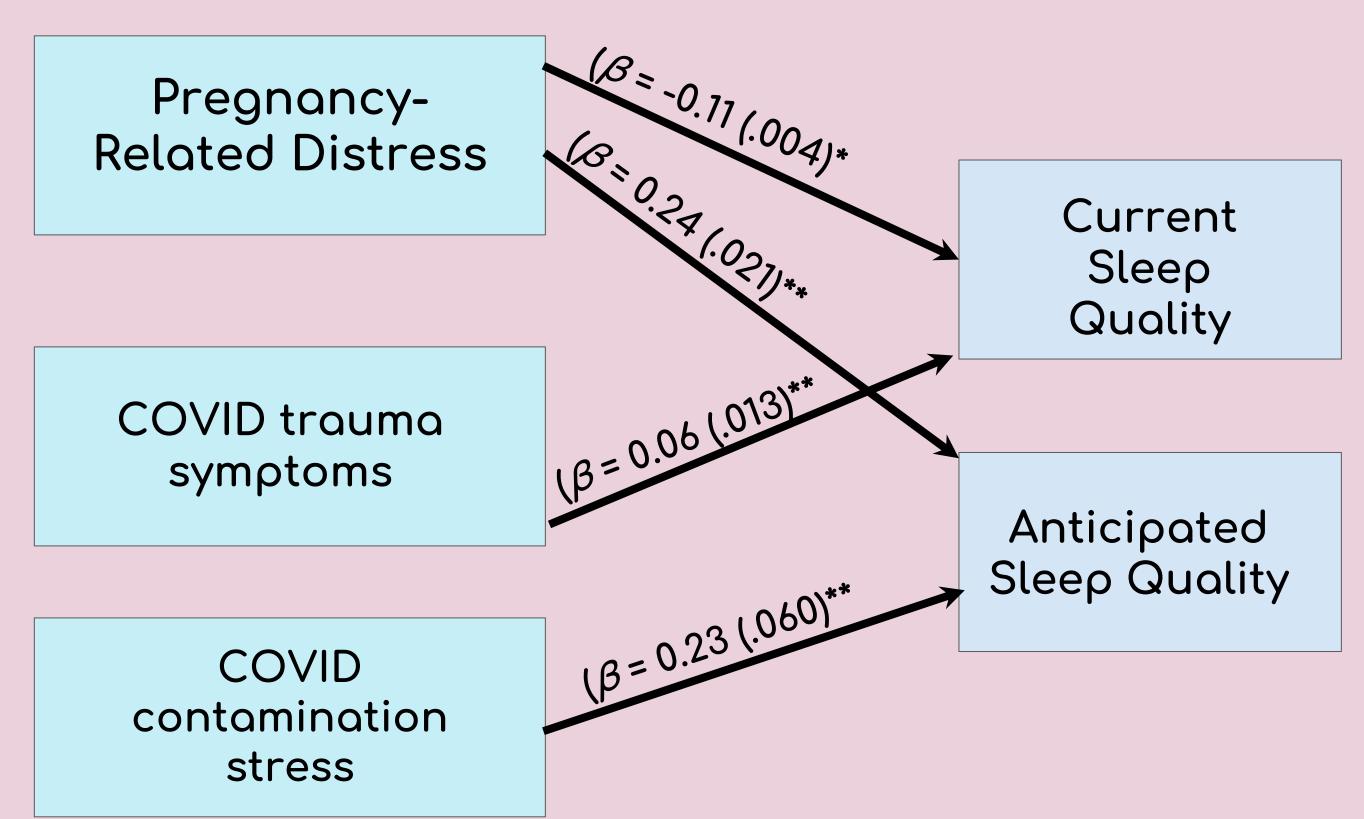
#### Measures

- Covariates: age, household income, # of children, trimester
- Pregnancy Distress: 12 items from Pregnancy Distress Questionnaire (Levine et al. 2017); E.g., "Physical symptoms of pregnancy, such as nausea, vomiting, swollen feet, or backache, irritate me")

## Method Cont'

- COVID-19 stress: 10 items from the 36 item COVID Stress Scale (Taylor et al. 2020); E.g., "Disturbing mental images about the virus popped into my mind against my will" (Trauma subscale); " I am worried that if I touched something in a public space, I would catch the virus (Contamination subscale)
- Current Sleep Quality: Single-item from the PSQI (Buysse et al., 1989); "During the past month how would you rate your sleep quality overall?"
- Future Sleep Quality: 7 items adapted from Insomnia Severity Index (Morin et al., 2011) for predictions about anticipated sleep quality after giving birth (e.g., "Difficulty staying asleep")

## Results



## Discussion

- Pregnancy-related distress predicted worse current sleep quality.
  - Increasing severity of physical, emotional, and interpersonal changes of pregnancy may negatively affect mood, and, in turn, affect sleep.
- Greater pregnancy-related distress predicted worse anticipated sleep quality
  - Anticipated anxieties about infant sleep habits may put strain on parental sleep quality.
  - Physical, emotional, and interpersonal changes during pregnancy may persist in unique ways after giving birth, which may have negative implications for sleep.
- Contamination stress from COVID-19 predicts worse anticipated sleep quality
  - Potentially capturing "high worry" and uncertainty around COVID.
- Trauma symptoms from COVID-19 predict better current sleep quality
  - Unexpected finding, given the link between negative emotionality and poor sleep.
  - Higher perceived COVID-19 trauma symptoms may facilitate higher social support.
- Future directions: More racially-diverse samples; subjective and objective measures of sleep; explore the role of social support and other protective factors as moderators; longitudinal data to assess actual sleep postbirth.

### References

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