PREVALENCE OF DEPRESSION IN THE CONTEXT OF EXTERNAL SOCIAL FACTORS

Courage Ndalama, Ife Ososanya,
Kushi Jakati, Lourdes Dubose

TOPIC AND MOTIVATION

As a group comprising a psychology student, a prehealth student, an evolutionary anthropology student, and a computer science student, we were curious to examine social determinants of adolescent mental health using statistical coding methods.

We looked for datasets, surveys, and studies that discussed mental health in the context of youth and other factors.

Question: Among adolescents aged 12–17 in the 2024 NSDUH, how does the prevalence of a past-year major depressive episode differ by race, sex, and family-income category?

National Survey on Drug Use and Health (NSDUH)

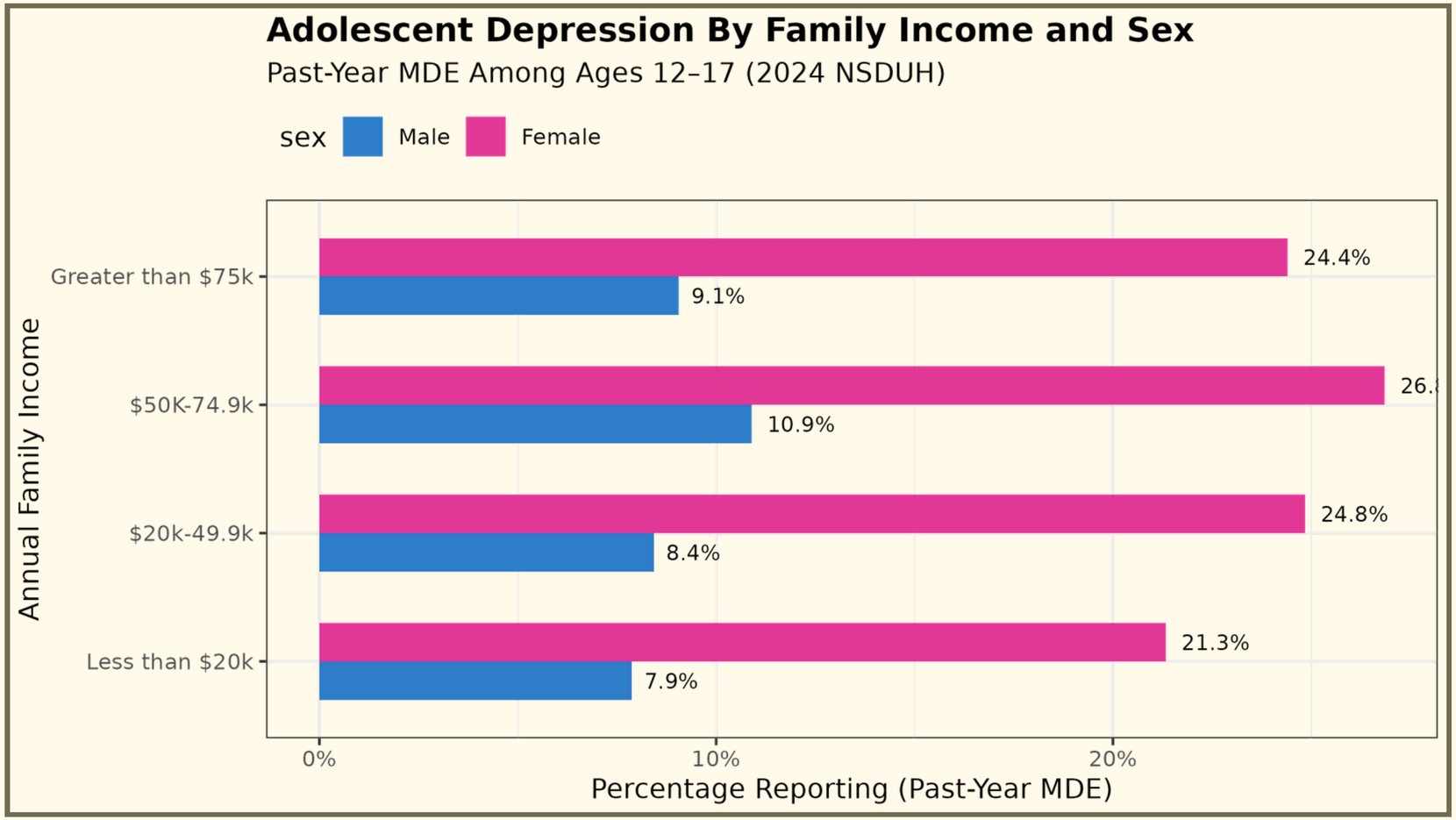
2024 survey (in-person/online questionnaire) on "substance use, mental illness, and treatment in individuals 12+ y/o

Hypothesis: Past-year major depressive episodes are more common among minority adolescents, female adolescents, and adolescents in lower-income families. These are predictions to test, not findings.

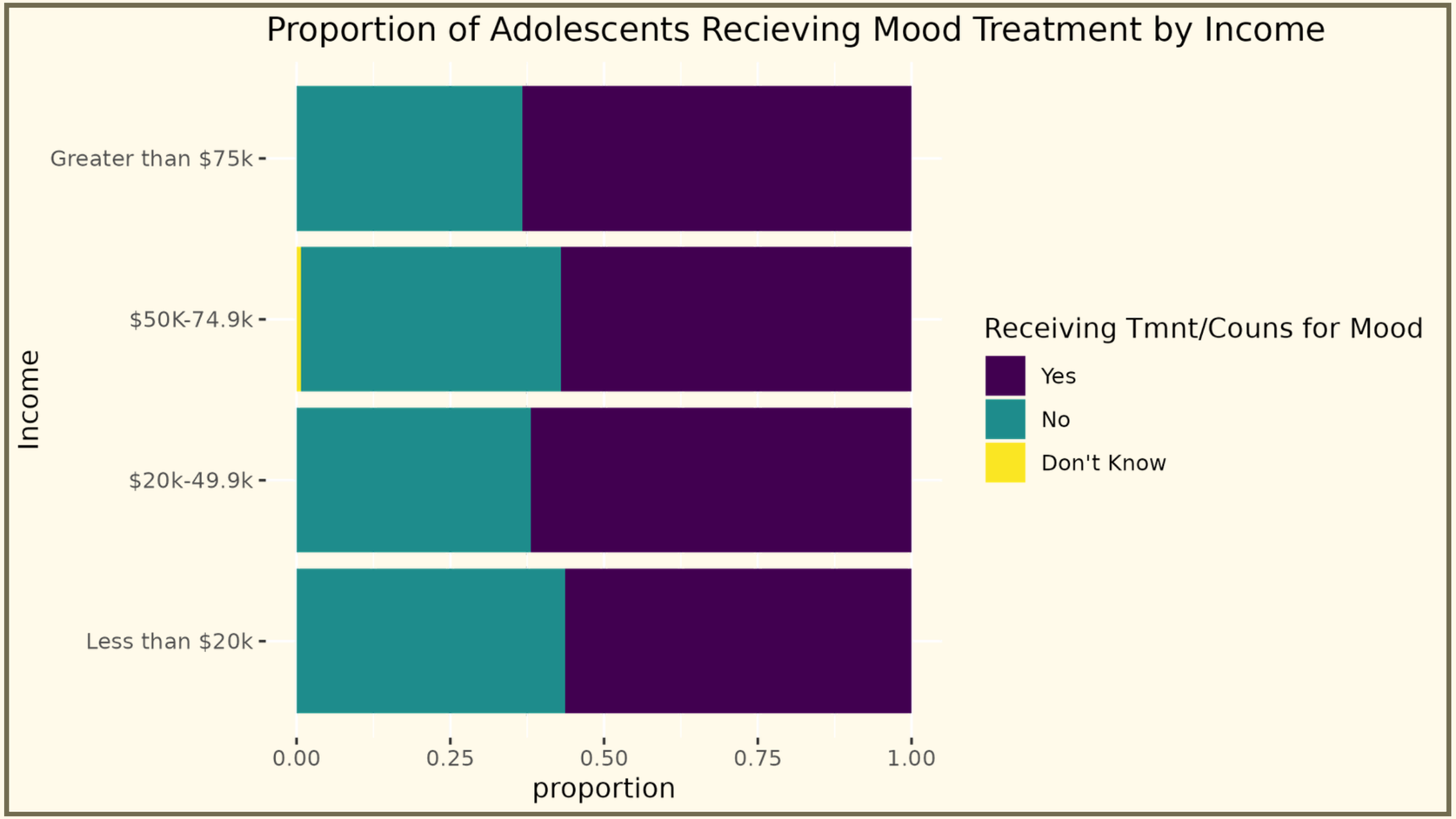
Some variables of focus:

- YMDEYR - Whether an adolescent aged 12–17 experienced a major depressive episode in the past year, nominal categorical (Yes/No)
- IRSEX - Sex comparison groups, nominal categorical
- IRFAMIN3 - Family-income comparison groups, ordinal categorical

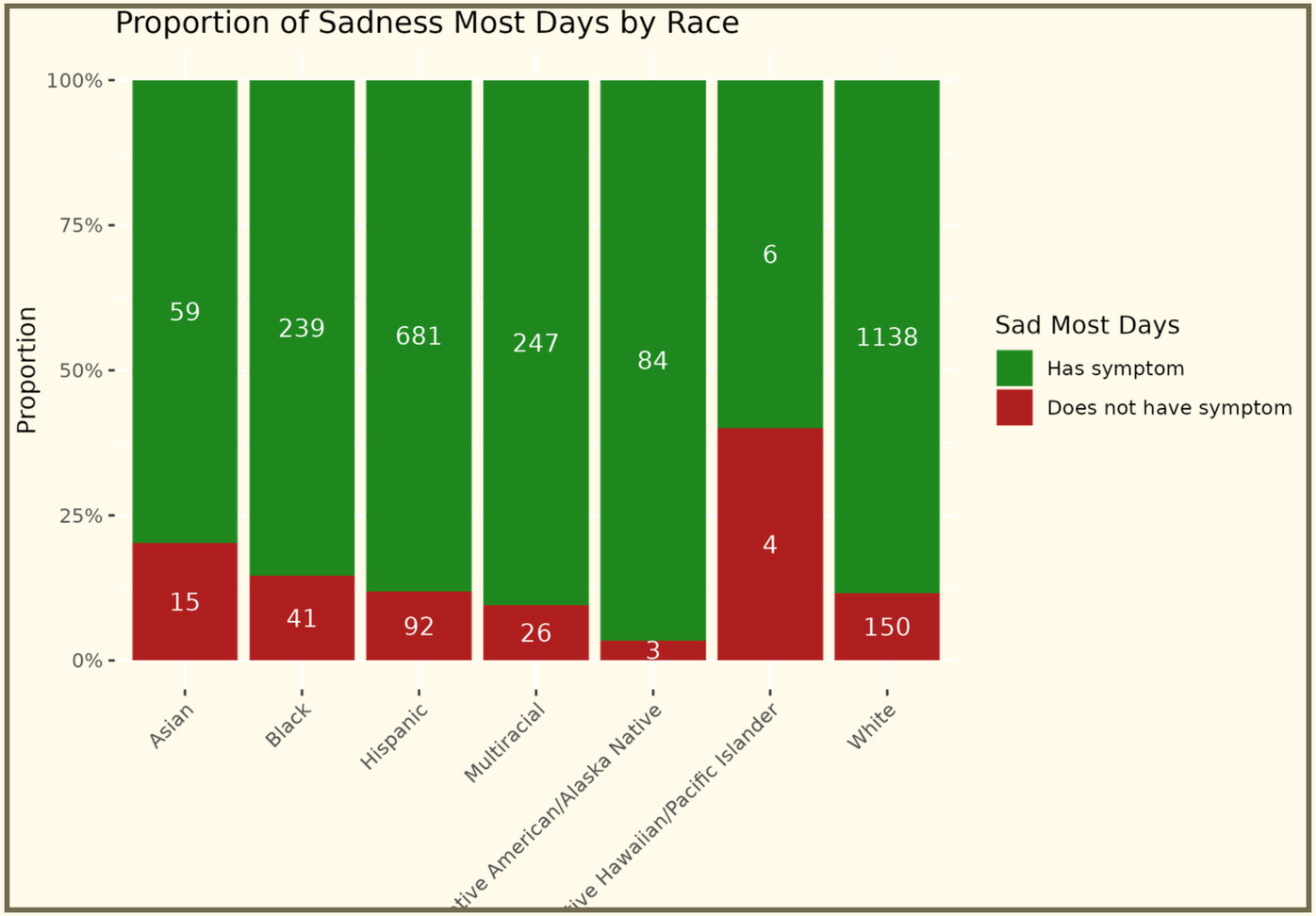
Results


Adolescent Depression By Family Income and Sex
Past-Year MDE Among Ages 12–17 (2024 NSDUH)
sex
Male
Female
Annual Family Income
Greater than $75k
$50K-74.9k
$20k-49.9k
Less than $20k
24.4%
9.1%
10.9%
24.8%
8.4%
21.3%
7.9%
0%
10%
20%
Percentage Reporting (Past-Year MDE)

Results


Proportion of Adolescents Recieving Mood Treatment by Income
Greater than $75k
$50K-74.9k
$20k-49.9k
Less than $20k
Income
0.00
0.25
0.50
0.75
1.00
proportion
Receiving Tmnt/Couns for Mood
Yes
No
Don't Know

Results


Proportion of Sadness Most Days by Race
Proportion
100%
75%
50%
25%
0%
59
239
681
247
84
6
1138
15
41
92
26
3
4
150
Asian
Black
Hispanic
Multiracial
tive American/Alaska Native
ive Hawaiian/Pacific Islander
White
Sad Most Days
Has symptom
Does not have symptom

Dicussion & Conclusion

Considerations & Limitations:

- Inclusion of minors (de-identified in data)
- Self-report and cross-sectional data (not necessarily standardized results, respondents answered according to their own beliefs)
- No follow-up on respondents (can't observe change over time)
- Questions changed from year-to-year

Conclusions:

- Girls had a higher percentage of reported depression in the last year compared to boys
- There weren’t apparent differences in mood treatment or reported depression by income
- There were some differences by race in sadness most days

Future Directions:

- Continue looking at the relationships between adolescent mental health, race, and gender
- Examining other metrics of socioeconomic status, like insurance