

The Impact of Social Support on Substance Use and Mood Across Races During COVID-19



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Introduction

- Since COVID-19, increases have been reported in:
 - Substance Use Disorders from 8% to 18%¹
 - Drug Overdoses to 9K March-May 2020²
 - Depression from 7% to 24%¹
 - Opportunity to drink in isolation to cope with stress³
- Notable differences also seen between People of Color (POC) and Non-Hispanic White (NHW) people:
 - 59% higher depression in POC than NHW¹
 - 15% higher increase in overdose cardiac arrests in Latinx and Black individuals⁴
 - 3% greater mental health problems and job loss in Black and Latinx populations (18%)¹
 - 11% POC faced more blame for spreading COVID-19¹
 - Highest disparity in treatment coverage for COVID-19 in POC⁵

Research Questions

1. Did substance use and mood differ between POC and NHW participants during the duration of the study?
2. Is social support related to mood and substance use differently between the two groups?

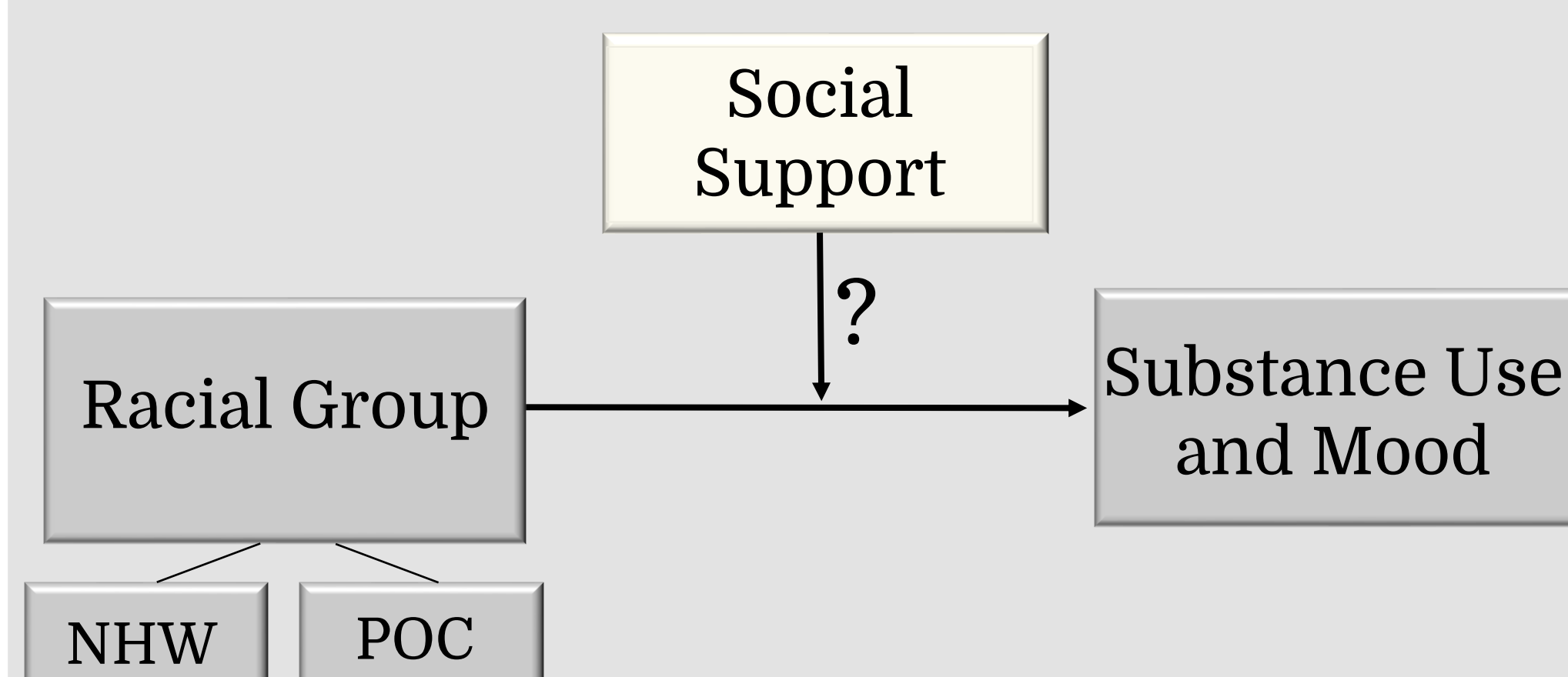


Figure 1. Theoretical diagram depicting relationship of interest

Methodology

- Intensive longitudinal mobile health assessments for 47 participants
 - Eligibility: 21+ with a smartphone
- 13 POC and 34 NHW participants
- Surveys 4x per day for 60 days
- Start day varied between July 2020-2021
 - Day level data analyzed
- Total reimbursement opportunity up to \$580
- Social Support + 8 outcomes analyzed:

Table 1. Dependent variables analyzed for mood and use

Substance Use Outcomes:	Alcohol Use (Quantity x Frequency)	Drug Use	Craving for Alcohol	Craving for Cannabis
Mood Outcomes:	Depressive Mood	Anxious Mood	Angry Mood	Feeling that Life has Meaning

- Correlations and Linear Regression Statistical Analyses performed in JASP and R

Results: RQ 1

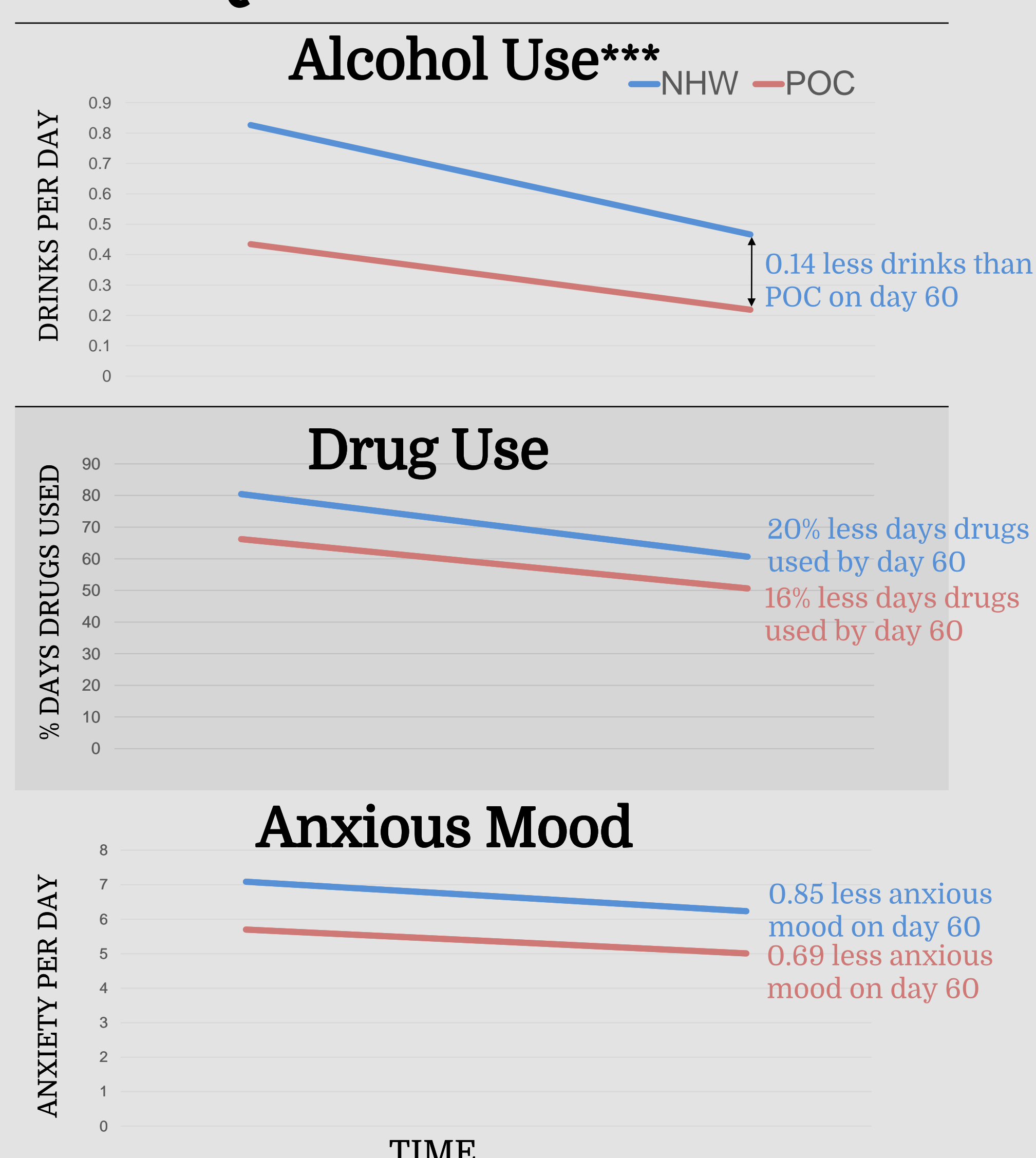


Figure 2. Outcome x Day regressions for outcomes significantly correlated by day in both groups
Note: ***p<0.001 for group differences

Results: RQ 2

Table 2. Analysis of significant interactions of social support by race

Substance Use and Mood Outcomes	NHW	POC
Angry Mood	-0.769***	-0.180
Anxious Mood	-0.671***	-0.198
Depressive Mood	-0.739***	-0.474***
Life has Meaning	0.479***	0.294***
Craving for Alcohol	-0.174***	0.02
Drug Use	0.003	-0.107***
Alcohol Use	-0.687***	-0.029

Note: ***p<0.001, **p<0.01, *p<0.05

Simple effect of social support as a protective factor
Social support is more protective in NHW
Social support is more protective in POC

Conclusions

RQ 1:

- Alcohol Use generally decreased and specifically more for NHW by 0.14 drinks
- Drug Use and Anxious Mood decreased similarly for both groups

RQ 2:

- Social support is more protective in NHW than POC for all outcomes except Drug Use
- Social support acts like a mitigator for both groups → implications for intervention
- Limitations and improvements:
 - Match baseline social support for both groups
 - Increase sample size overall and for POC
 - Linear Mixed Models for repeated measures design
 - Digital phenotyping observation to combat self-reporting bias⁶

Future Directions/Recommendations

- Study the results relative to a “landmark date” to analyze sociopolitical stressors
- Study the potential relationship between news consumption and social support
- Prospective study before and after stressful periods to strengthen causal inference

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Acknowledgements

- Thank you Dr. Ellingson for the mentorship, support, and guidance.
- Thank you Lily Luo and Emmaly Perks for their assistance throughout PURPLE.
- Thank you Kristin Raymond and Melissa Roark for administering the mHealth study and participants for their time.
- Thank you Dr. Douglas Novins, Dr. Neill Epperson, and Dr. Dominic Martinez for sponsoring PURPLE.
- Funding from the National Institutes of Health (NIH) Grant K23AA026635