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

Aneri Patel,1,2 Jarrod M. Ellingson2
1The Psychiatry Undergraduate Research Program and Learning Experience (PURPLE), Research Education Core, Psychiatry Research Innovations (PRI), 2Department of Psychiatry, University of Colorado Anschutz Medical Campus

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%3
  • Opportunity to drink in isolation to cope with stress4

• 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

Methodology

• Intensive longitudinal mobile health assessments for 47 participants
  • Eligibility: ≥1 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

<table>
<thead>
<tr>
<th>Substance Use Outcomes</th>
<th>Alcohol Use (Quantity x Frequency)</th>
<th>Drug Use</th>
<th>Craving for Alcohol</th>
<th>Craving for Cannabis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mood</td>
<td>Depressive Mood</td>
<td>Anxious Mood</td>
<td>Angry Mood</td>
<td>Feeling that Life has Meaning</td>
</tr>
</tbody>
</table>

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

Results: RQ 2

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

<table>
<thead>
<tr>
<th>Substance Use and Mood Outcomes</th>
<th>NHW</th>
<th>POC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Angry Mood</td>
<td>-0.769***</td>
<td>-0.180</td>
</tr>
<tr>
<td>Anxious Mood</td>
<td>-0.671***</td>
<td>-0.198</td>
</tr>
<tr>
<td>Depressive Mood</td>
<td>-0.739***</td>
<td>-0.474***</td>
</tr>
<tr>
<td>Life has Meaning</td>
<td>0.479***</td>
<td>0.294***</td>
</tr>
<tr>
<td>Craving for Alcohol</td>
<td>-0.174***</td>
<td>0.02</td>
</tr>
<tr>
<td>Drug Use</td>
<td>0.003</td>
<td>-0.107***</td>
</tr>
<tr>
<td>Alcohol Use</td>
<td>-0.687***</td>
<td>-0.029</td>
</tr>
</tbody>
</table>

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

Results: 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

Conclusions

RQ 1:

• 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

RQ 2:

• 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 bias8

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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References


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?