

Health Insurance Coverage Status and Mental Health Survey in the Early COVID-19 Pandemic: Analysis of Household Pulse Survey



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BACKGROUND

- ❑ Hospitalized individuals with coronavirus can face a medical bill from \$42,486 to \$74,310 if they are uninsured. Potential medical debt can create a financial burden that puts many people in mental distress.
- ❑ The COVID-19 pandemic has led to poor mental health, including anxiety and depression. Poor mental health can lead to poor physical health.
- ❑ A deeper understanding of the relationship between health insurance coverage status and poor mental health outcomes can provide evidence for public health guidelines and improve the individuals' mental health wellbeing.

OBJECTIVE

To analyze the association between health insurance coverage status and mental health in the early COVID-19 pandemic in the U.S.

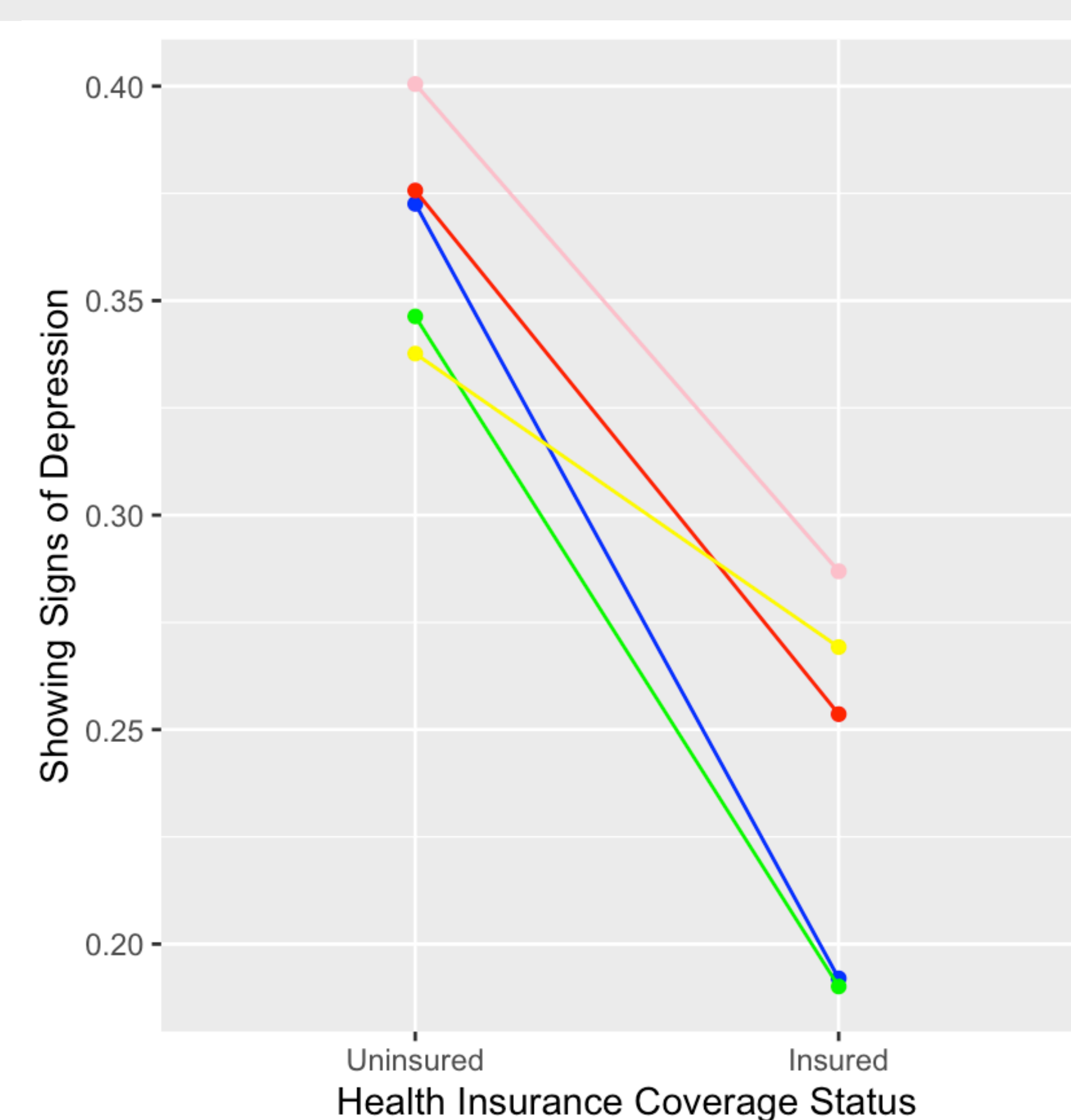
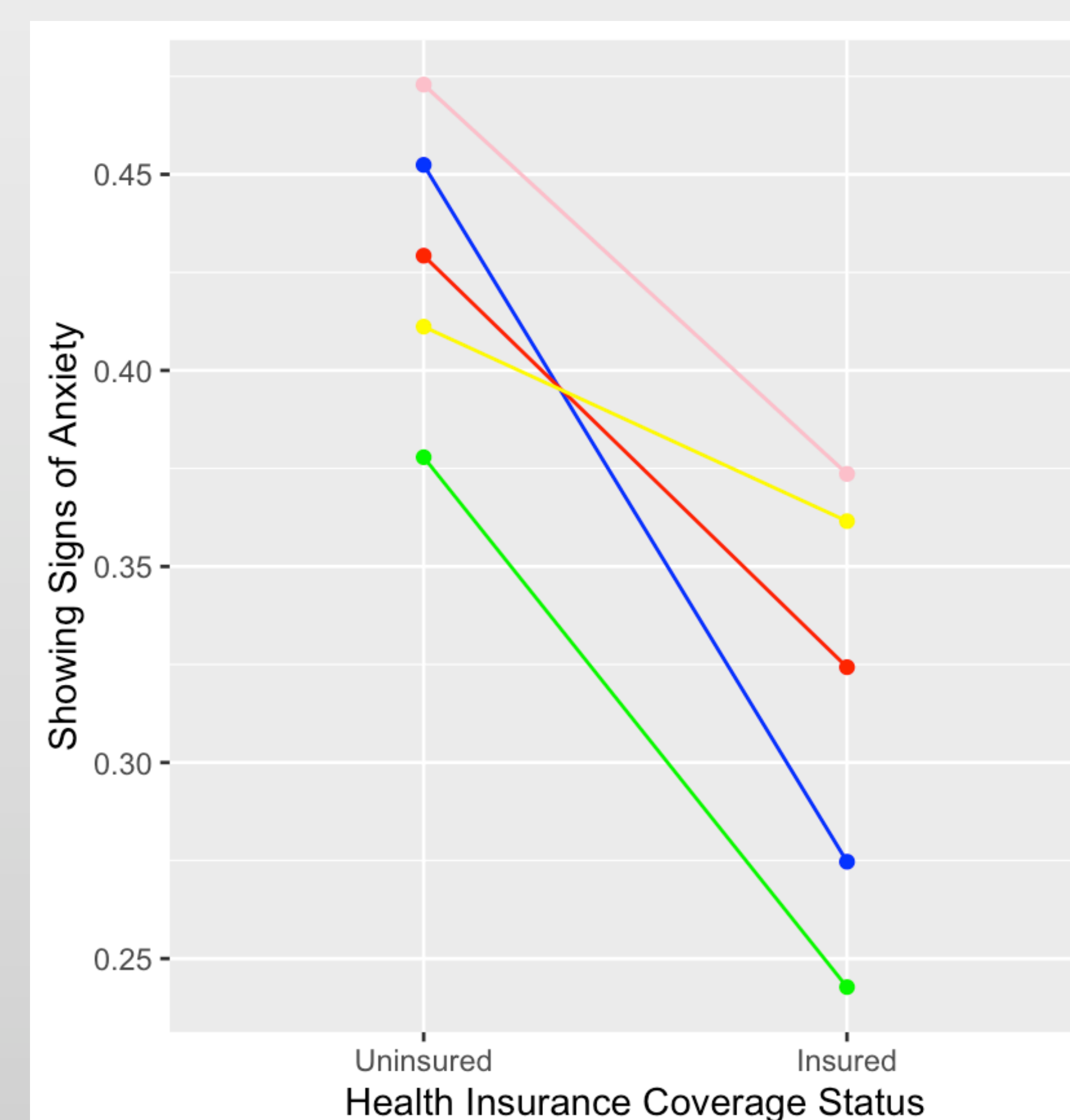
METHODS

- ❑ Phase 1 (April 23 through July 21, 2020) data (N=977,006) of the Household Pulse Survey (HPS)
- ❑ HPS is a brief online survey offered in English and Spanish that was designed to understand the experiences of households and individuals during the COVID-19 pandemic across the states
- ❑ Sampling frame = Census Bureau's Master Address File. Primary data collection method = The online platform Qualtrics
- ❑ Health insurance coverage status: eight yes/no questions regarding insurance policy
 - ❑ Response across all eight questions were collapsed to form dichotomized health insurance coverage status variable
 - ❑ "insured" or "uninsured."
- ❑ Mental health: scores of feeling anxious, feeling worried, feeling down, and lack of interest
 - ❑ Signs of anxiety = feeling anxious + feeling worried ≥ 3
 - ❑ Signs of depression = feeling down + lack of interest ≥ 3

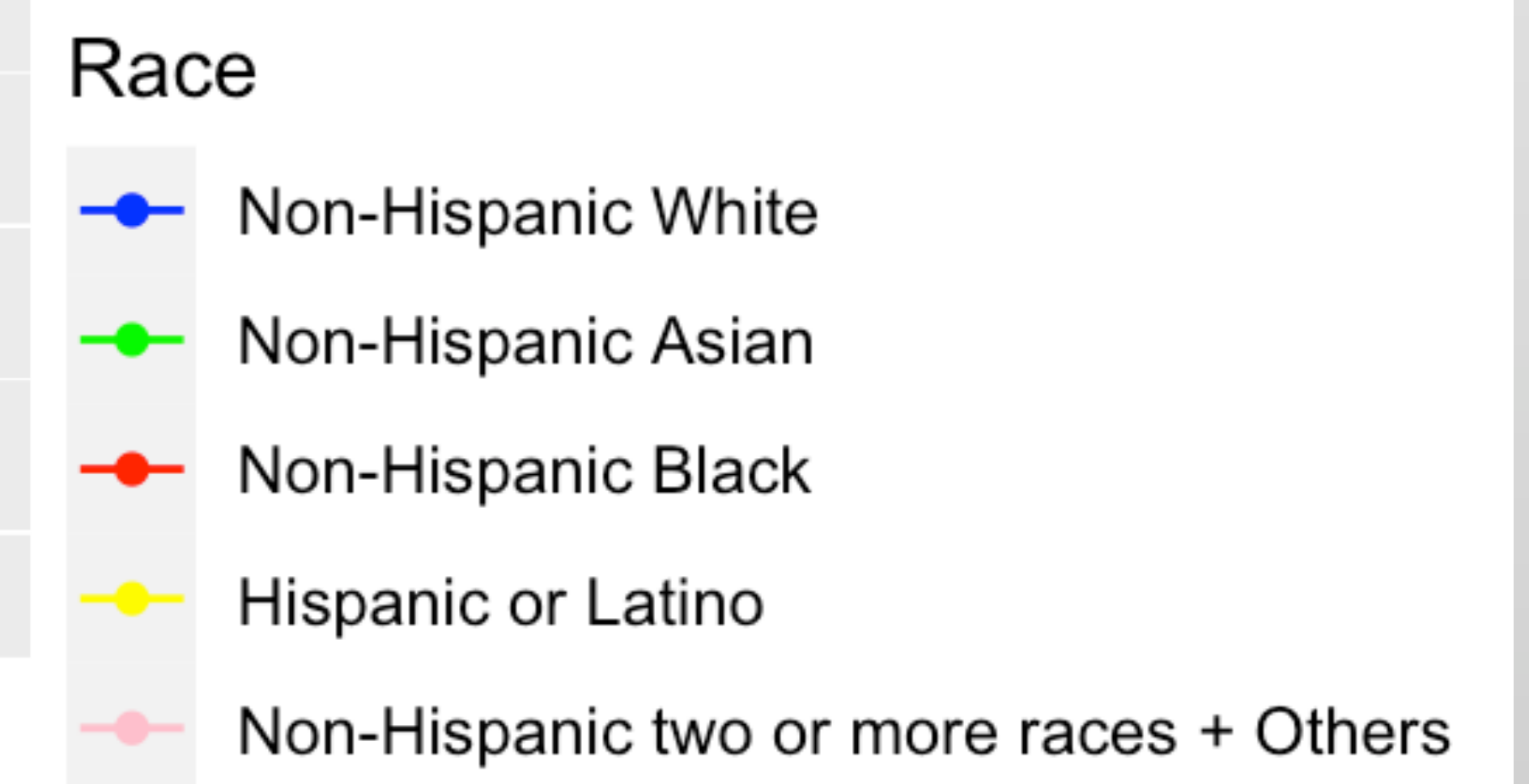
RESULTS

Variable	Anxiety Items Score Proportional Odds	Depression Items Score Proportional Odds
Status - Insured	0.557	0.534
Gender - Female	1.784	1.390
Race/Ethnicity		
Non-Hispanic Asian	1.072	1.180
Non-Hispanic Black	1.140	1.203
Hispanic or Latino	1.400	1.338
Non-Hispanic two or more races + Others	1.442	1.435
Education		
Grade 9-11	1.018	1.028
High school graduate	0.793	0.756
Associate's degree	0.875	0.878
Some college	0.802	0.695
Bachelor's degree	0.734	0.582
Graduate degree	0.664	0.491

- ❑ A female individual, as opposed to a male individual, is 1.784 times more likely to have a higher anxiety score (feeling anxious plus feeling worried) and 1.390 times more likely to have a higher depression score (loss of interest plus feeling down).
- ❑ For insured individuals, the odds of having a higher anxiety score and higher depression score is about half of that of uninsured individuals.



- ❑ Interaction of the health insurance coverage status and race/ethnicity
- ❑ Non-Hispanic white individuals receive the most protective effect of being insured for anxiety and depression while Hispanic Latino individuals obtain the least.



CONCLUSIONS

In the U.S., Those who are insured have a lower relative risk ratio for anxiety and depression than uninsured individuals. The COVID-19 pandemic changed many Americans' lives drastically, and the burden of mental health issues was exacerbated. Our findings offer insight as state and federal governments consider whether to expand health insurance coverage and implement new healthcare policies related to the COVID-19 pandemic to reduce the harmful effects of the pandemic on population mental health wellbeing. The current study indicates a need for healthcare policies to fill important gaps between different race/ethnicity and education groups.