

# Protective Factors in COVID-19 Pandemic-Related Mental Health Outcomes: A Louisiana-Based Study

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*Psychosocial resources buffer the mental health impact of pandemics.*

## BACKGROUND

- Study objectives:
  - Describe specific COVID-19-related impacts associated with general well-being
  - Identify protective factors associated with better mental health outcomes
  - Assess racial disparities in pandemic impact and protective factors
- The COVID-19 pandemic has had a wide-ranging impact on mental health. Diverse populations experienced the pandemic differently, highlighting pre-existing inequalities and creating new challenges in recovery.
- Understanding the effects across diverse populations and identifying protective factors is crucial for guiding future pandemic preparedness.

## Methods

- Study design and population:** Cross-sectional survey of 1,050 Louisiana adult residents recruited using Qualtrics XM research panels balanced by age, gender, and race between July 23 - September 6, 2020.
- Exposure:** Overall pandemic impact, measured using (92 items) Epidemic-Pandemic Impacts Inventory.<sup>1</sup> Higher scores reflect higher levels of negative pandemic-related impact.
- Outcome:** General well-being, measured using the (18 items) NHANES General Well-Being Schedule (GWB).<sup>2</sup> Higher scores reflect positive well-being.
- Effect modifiers:**
  - Social support, measured through the Medical Outcomes Study Social Support Survey (19 items).<sup>3</sup> Higher scores indicate more support
  - Resilience, measured using the Connor-Davidson Resilience Scale 10 (10 items).<sup>4</sup> Higher scores suggest greater resilience
  - Social cohesion, measured by how strongly they agreed with statements about their neighborhood (5 items).<sup>5</sup>
  - Each measure dichotomized at the median into low and high categories
  - Race, Black & White.
- Covariates:** Sex, age, marital status, income, and presence of children in the household.
- Statistical analysis:** Descriptive analyses of demographic characteristics. Linear regression to examine the association between pandemic impact and general well-being, with test for effect modification by social support, resilience, and social cohesion.

## About the Population

	Total		White (n=673)		Black (n=313)	
	N	%	N	%	N	%
<b>Sex*</b>						
Male	394	40.08	290	43.28	104	33.23
Female	589	59.92	380	56.72	209	66.77
<b>Age*</b>						
18-24 yrs	192	19.47	81	12.04	111	35.46
25-44 yrs	360	36.51	240	35.66	120	38.34
45-64 yrs	269	27.28	209	31.05	60	19.17
65+ yrs	165	16.73	143	21.25	22	7.03
<b>Marital Status*</b>						
Married/partnered	470	48.11	386	57.53	84	27.45
Single	507	51.89	285	42.47	222	72.55
<b>Income, Annual HH, 2019*</b>						
Less than \$50K/yr	558	56.59	335	49.78	223	71.25
\$50K/yr or more	428	43.41	338	50.22	90	28.75
<b>Any children 0-17 years in HH*</b>						
No	613	62.17	449	66.72	164	52.40
Yes	373	37.83	224	33.28	149	47.60
<b>Social support score*</b>						
Low	495	50.20	303	45.02	192	61.34
High	491	49.80	370	54.98	121	38.66
<b>Resilience score</b>						
Low	543	55.07	356	52.90	187	59.74
High	443	44.93	317	47.10	126	40.26
<b>Social cohesion score*</b>						
Low	487	55.98	307	50.58	180	68.44
High	383	44.02	300	49.52	83	31.56
	<b>Mean</b>	<b>SD</b>	<b>Mean</b>	<b>SD</b>	<b>Mean</b>	<b>SD</b>
<b>Overall pandemic Impact*</b>	10.03	7.40	9.61	6.89	10.94	8.33
<b>General Well-Being</b>	65.14	21.31	65.46	22.31	64.45	18.99

\* p-value for race differences &lt;.05

## Results

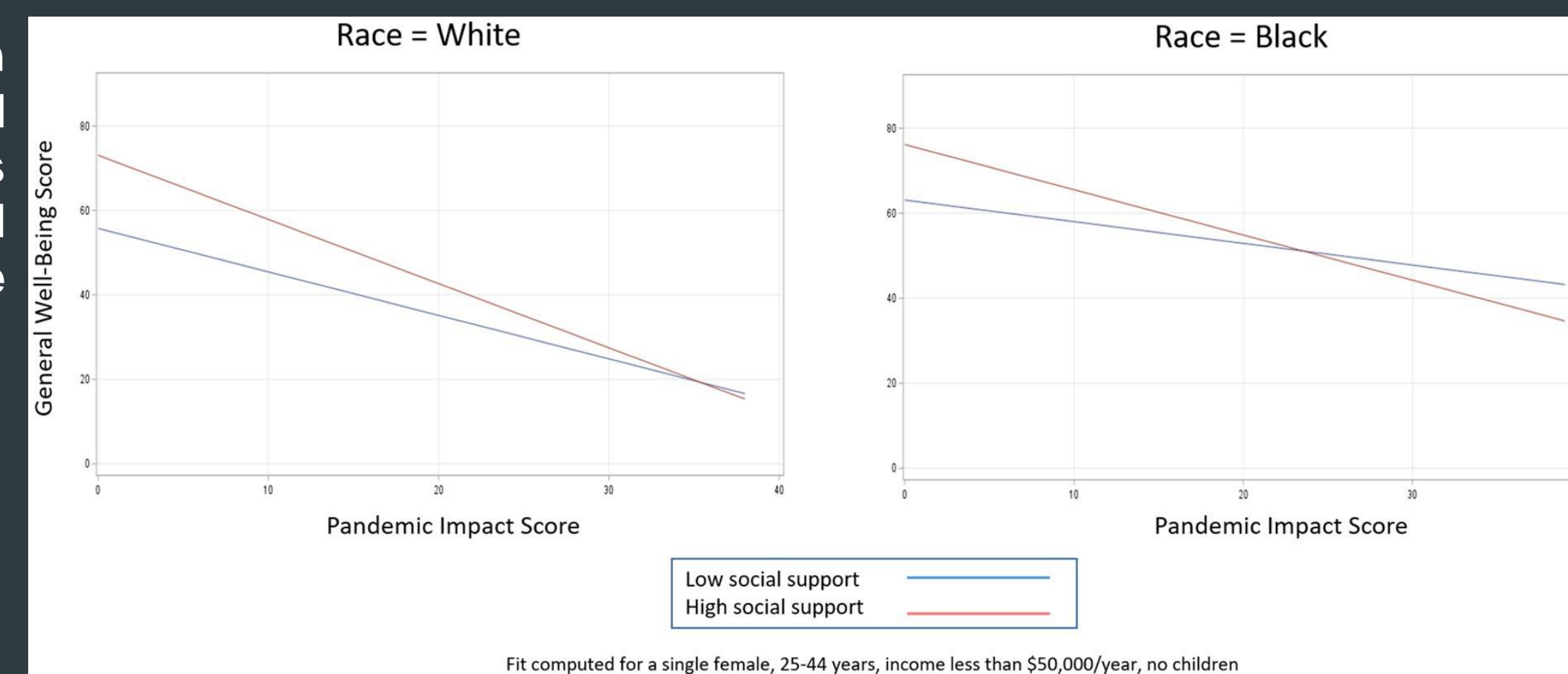
	Estimate	P-value
<b>Model A – Social Support (N=974)</b>		
Overall pandemic impact score	-0.77	<.0001
High social support (vs low)	17.55	<.0001
White race (vs Black)	-5.71	<.0001
Pandemic impact * social support	-0.63	<.0001
<b>Model B – Resilience (N=974)</b>		
Overall pandemic impact score	-0.72	<.0001
High resilience (vs low)	22.81	<.0001
White race (vs Black)	-4.52	0.0001
Pandemic impact * resilience	-0.57	<.0001
<b>Model C – Social Cohesion (N=862)</b>		
Overall pandemic impact score	-0.79	<.0001
High social cohesion (vs low)	14.66	<.0001
White race (vs Black)	-6.51	<.0001
Pandemic impact * social cohesion	-0.73	<.0001

Adjusted Effects of Buffering Characteristics on General Well-Being

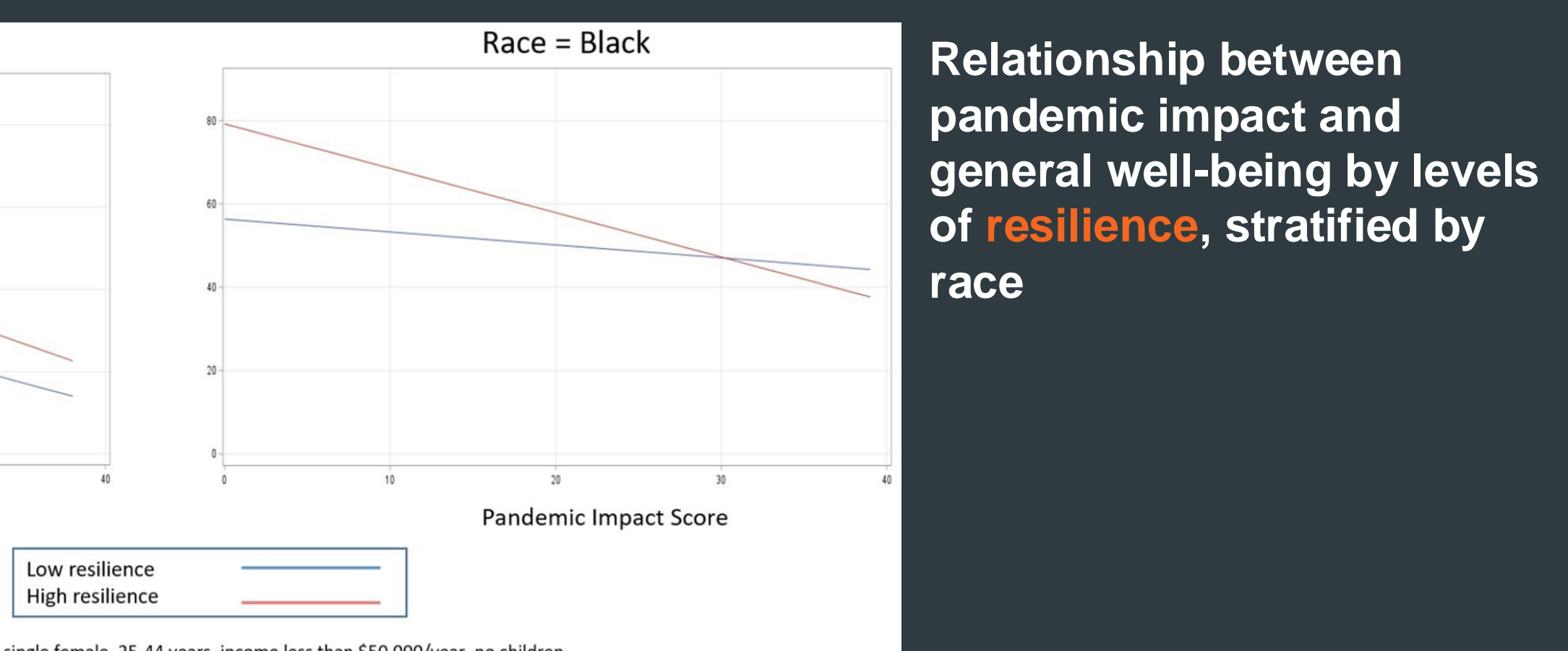
Respondents with higher levels of social support, resilience, and social cohesion had higher levels of general well-being, holding race constant

All models adjusted for potential confounders of sex, age, marital status, income, and presence of children in the home

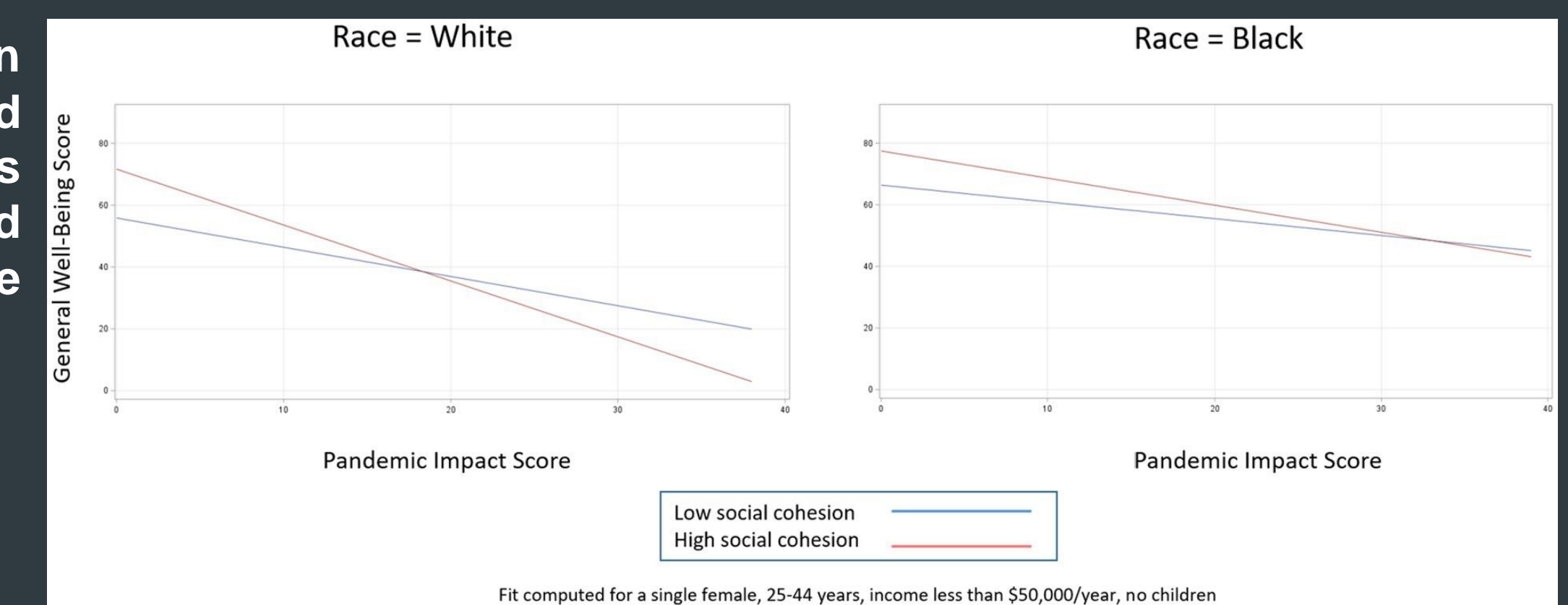
Relationship between pandemic impact and general well-being by levels of **social support**, stratified by race



Relationship between pandemic impact and general well-being by levels of **resilience**, stratified by race



Relationship between pandemic impact and general well-being by levels of **social cohesion**, stratified by race



## Conclusion

- This study emphasizes the importance of psychosocial resources in buffering the mental health impact of pandemics.
- It also suggests greater vulnerability for marginalized communities lacking access to crucial support systems.
- Findings underscore the need for targeted interventions that bolster access to social support, promote resilience, and strengthen social cohesion, particularly within minority groups.
- Policymakers should consider proactive measures to assist in recovery and mitigate the disproportionate impact of future crises on vulnerable populations.

## Acknowledgements and References

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