

The Racial Variation in the Effects of Vicarious Exposure to Hate Crime on Mental Health

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Introduction

- ▶ Surge in hate crime against Asians in the U.S. after COVID-19
- ▶ Strong association between hate crime experience (direct) and mental health
- ▶ Association between vicarious exposure to hate crime and mental health?
 - ▶ Claimed (e.g. NYT) but unsubstantiated
- ▶ Did Asians in the U.S. experience greater deterioration in mental health following the 2021 Atlanta Spa Shooting?

Methods: Data

- ▶ Data: Household Pulse Survey (HPS)
 - ▶ U.S. Census and CDC
 - ▶ Tracks effects of COVID-19
 - ▶ Nationally representative and repeated cross-sectional
 - ▶ Mental health (!)
 - ▶ PHQ-2 and GAD-2 (≥ 3 then major depressive/anxiety symptoms likely)

Methods: Econometrics

Difference-in-differences (DD)

- ▶ Atlanta Spa Shooting on March 16, 2021
- ▶ HPS collected from March 3-15, 2021, 2021 and March 17-29, 2021
 - ▶ Good pre- and post-exposure samples!
- ▶ $y_{it} = \delta ASIAN_{it} + \alpha_s + \gamma_t + \beta X_{it} + \varepsilon_{it}$
 - ▶ α_s is the race fixed effects

Methods: Robustness

- ▶ Event Study

- ▶
$$y_{it} = \sum_{j=-q \neq 0}^r \delta ASIAN_i(t+j) + \alpha_s + \gamma_t + \beta X_{it} + \varepsilon_{it}$$

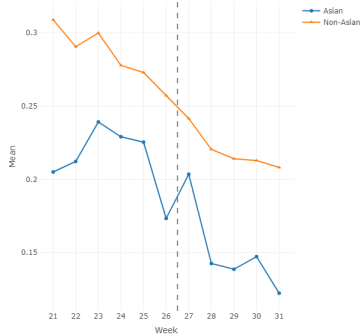
- ▶ Falsification with placebo treatment groups (Black and Hispanic)
- ▶ Missingness

Results

Figure 1.A: Anxiety (All Races)



Figure 1.B: Mean Anxiety (Asian vs. Other Races)



Results: Regression

Appendix A: DD Regression Output

	Anxiety	
	(1)	(2)
<i>Asian × Post</i>	0.0447* (0.0197)	0.0522* (0.0220)
Controls	N	Y
Race Fixed Effects	Y	Y
Week Fixed Effects	Y	Y
N	442,015	249,619
R	0.00533	0.07601

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Notes: Robust standard errors in parentheses. The sample is from Week 21 to 27.

Controls include gender at birth, income, age, marital status, educational attainment, employment status, sector of employment, and expected employment loss.

Result: Regression (cont'd)

- ▶ DD estimator: Asians had 4-5% higher rates of major anxiety disorder immediately following 2021 Atl. Spa Shooting (the week of March 17-20, 2021)
- ▶ No long-term effects on anxiety

Regression: Falsification

Appendix B: Falsification Test

	Black	Anxiety Hispanic	Other
<i>Black × Post</i>	0.019665 (0.012903)		
<i>Hispanic × Post</i>		0.026256 (0.018698)	
<i>Other × Post</i>			-0.032493 (0.027241)
Controls	Y	Y	Y
Race Fixed Effects	Y	Y	Y
Week Fixed Effects	Y	Y	Y
N	249,619	249,619	249,619
R	0.081909	0.075878	0.075847

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Notes: Robust standard errors in parentheses. The sample is from Week 21 to 27.

Controls include gender at birth, income, age, marital status, educational attainment, employment status, sector of employment, and expected employment loss.



Regression: Event Study

Appendix C: DD with Leads and Lags

