Data Appendix for "Disparities and Protective Behavior during COVID-19"

Table I. Variable Construction: CIS and Benchmarks

The table below provides definitions for variables in this paper constructed from the COVID Impact Survey (CIS). Where comparisons were made with external sources for pre-COVID period, the benchmark data source is listed. Remaining comparability issues are noted in the final column.

CIS Variables	CIS Definition	Benchmark Data Source and Period	Exceptions to Comparability
Employed (share employed)	Rs defined as employed if worked for someone else for pay or self-employed in the past 7 days.	2018 ACS. 1% Sample households under 1970, 1990, and 2000 definitions (selected using GQ). IPUMS comparison variable is WRKLSTWK.	Benchmark and CIS differ in instructions to respondents working without pay in family businesses. Benchmark question refers to "last week"; CIS refers to "past 7 days."
Hours worked (change in hours)	Number of hours worked over the last 7 days. Only reported by Rs who worked for someone else for pay in the past 7 days. Not reported for self-employed. Change equals the difference between hours worked in the past 7 days and usual hours worked per week prior to 3/1/20 for Rs who worked for someone else for pay in the past 7 days. Change equals 0 minus usual hours worked prior to 3/1/20 for Rs who did not work for pay over the past 7 days.	January-December 2019 Basic Monthly CPS. Households with month-in-sample = 1 (selected using MISH). IPUMS comparison variable is AHRSWORKT. Selected working for someone else for pay subsample on CLASSWKR.	The benchmark measure excludes unpaid family workers. Otherwise consistent with CIS coding. Benchmark question refers to "last week"; CIS refers to "past 7 days."
Food insecure (share food insecure)	1 if responded "often true" or "sometimes true" to CIS questions	CPS 2016, 2017, and 2018 December Food Security Supplement.	The 30-day food security questions were only asked to Rs

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	ECON5A_A and ECON5A_B – i.e. whether they worried their food would run out or their food did run out before they could afford more, both over the past 30 days. 0 if "Never true" to both.	Households with month-in-sample = 1-4 (selected using MISH). IPUMS comparison variables are FSWROUTMO and FSBUYMRMO. FSSUPINT was used to exclude households who did not respond to the supplement.	who were screened into completing the supplement and answered "often true" or "sometimes true" to the same questions over the past 12 months. Rs were asked to respond with "yes" or "no" to the 30-day questions. CPS household-level weights (FSSUPPWTH) used to construct this share at the geographic level. Food Security Supplement person-level weight (FSSUPPWT) used to construct share at the demographic group level.
Unable to cover $400 emergency expense (share unable to cover $400 emergency expense)	1 if indicated they would not be able to pay a $400 expense right now. 0 if indicated they could pay.	2019 SHED	
Poor mental health days indicator (share with any poor mental health days)	1 if indicated 1-2 days or more on any of four CES-D scale items indicating negative mental health states in the past 7 days. 0 if indicated less than 1 day on all four.	BRFSS, 2018 microdata (for state-level comparisons) and 2017 SMART BRFSS MMSA microdata (for MSA-level comparisons). BRFSS comparison variable is _MENT14D.	_ment14d classifies number of days in last 30 with poor mental health. Zero category is equated to 0 on CIS poor mental health in last 7 days. Other categories equated to 1 on CIS indicator. Reference window in CIS is past 7 days; in BRFSS is past 30 days. When comparing to CIS household income categories, lowest category was cut at $35k in BRFSS

			compared to $40k in CIS. Top income category cut was $75k in both.
Total restrictions experienced/impactful	Total number of restrictions (see list in A. below) R reported taking affirmatively	N/A	
Behavior index of total protective steps taken	Total number of protective steps (see list in B. below) R reported taking affirmatively	N/A	
Affected by school closure	Equals 1 if "yes" to A, B, or C restrictions in list A below; 0 if "no" to all three.	N/A	
Layoff, furlough, or unemployed since 3/1	Equals 1 if responded layoff, furlough, or unemployed since 3/1. Equals 0 if worked for pay last 7 days or did no work for pay last 7 days for other reasons.	N/A	
Received or sought food aid	Equals 1 if R responded "received", "applied," or "tried to apply" for SNAP/Food Stamps or other food pantry. Equals 0 if "no" to both.	N/A	
Social connectedness (change in social connectedness)	Sum of 2 5-point scales indicating of frequency of communication with friends, family and neighbors; min =1, max=10. Change is difference in connectedness between current month and a typical pre-COVID month.	N/A	
CES-D Index	Sum of four-level (0 to 3) scale of frequency of on 4 CES-D items: depression, loneliness,	N/A	

	hopelessness, nervousness/anxiety. Min=0, max=12.		
Respondent or household member diagnosed with COVID-19	Equals 1 if "yes" to health care provider ever told R or someone R lives with that they have COVID-19. Equals 0 if "no" to both.	N/A	
Friend or family died from COVID-19 or respiratory illness since 3/1/20	Equals 1 if "yes" to family member or close friend died from COVID-19 or respiratory illness since 3/1/20. Equals 0 if "no."	N/A	
Race/ethnicity definitions	Categorical variable defined as "White, non-Hispanic," "Black, non-Hispanic," "Hispanic," or "Other, non-Hispanic." Hispanic Rs are defined as "Hispanic" regardless of race. Non-Hispanic Rs who identify as two or more races are defined as "Other, non-Hispanic."	All benchmark sources listed above.	Comparable across all benchmark sources.
Number of Children definition	Indicator variable for if R's household included any persons under 18 years old.	All benchmark sources listed above.	**ACS and CPS**: Indicator variable for if R's <u>own</u> children <u>of any age</u> resides with them. Constructed using the IPUMS variable NCHILD. **SHED and BRFSS**: Comparable.
Metropolitan statistical area definitions	CIS uses 2019 county-based MSA definitions.	ACS, CPS and BRFSS samples, listed above. IPUMS USA comparison variable is MET2013. IPUMS CPS comparison variable is METFIPS. BRFSS comparison variable is _mmsa.	MSA-level comparisons are not exact for Birmingham-Hoover, AL. Walker County, AL, is not included in the CIS definition of this MSA but is included in benchmark data definitions of this MSA.

List A. Potentially Impactful Restrictions. Respondents were asked, "In the past 7 days, have your personal plans been changed or affected by the following types of restrictions, or not?" They were allowed to answer Yes, No, or Not Sure to each. The order of presentation was randomized. Options were the following:

A. K-12 school closure
B. Pre-K or child care closure
C. College or training closure
D. Ban on gatherings of 250 people or more
E. Ban on gatherings of 50 people or more
F. Ban on gatherings of 10 people or more
G. Closure of place of worship
H. Reduced public transportation
I. Other reduced public services
J. Closure of bars
K. Closure of restaurants
L. Closure of gyms or fitness facilities
M. Closure of other businesses
N. Canceled sport events
O. Closure of work
P. Work from home requirements
Q. Quarantine requirements or stay-at-home orders
R. International travel restrictions or bans
S. Domestic travel restrictions or bans

List B. Potential Protective Behaviors (Steps). Respondents were asked, "Which of the following measures, if any, are you taking in response to the coronavirus?" Respondents were allowed to check all that apply. Response options were the following:

1. Canceled a doctor appointment
2. Worn a face mask
3. Visited a doctor or hospital
4. Canceled or postponed work activities
5. Canceled or postponed school activities
6. Canceled or postponed dentist or other appointment
7. Canceled outside housekeepers or caregivers
8. Avoided some or all restaurants

9. Worked from home
10. Studied at home
11. Canceled or postponed pleasure, social, or recreational activities
12. Stockpiled food or water
13. Avoided public or crowded places
14. Prayed
15. Avoided contact with high-risk people
16. Washed or sanitized hands
17. Kept six feet distance from those outside my household
18. Stayed home because I felt unwell
19. Wiped packages entering my home

References

Sarah Flood, Miriam King, Renae Rodgers, Steven Ruggles and J. Robert Warren. Integrated Public Use Microdata Series, Current Population Survey: Version 7.0 [dataset]. Minneapolis, MN: IPUMS, 2020. https://doi.org/10.18128/D030.V7.0

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