# **Supplemental Materials**

Acute Stress, Worry, and Impairment in Health Care and Non-health Care

Essential Workers During the COVID-19 Pandemic

Table S1. Predictors of Functional Impairment in Essential Workers During COVID-19, Including Interaction between Type of Essential Worker and Needed Childcare (N=1,797)

**Adjusted Multivariate Model** Variable beta b 95% CI p -0.25, 0.02 Health care workera -0.04-0.12 .094 0.05 .027 0.15 0.02, 0.28 Needed childcare 0.16 0.33, 0.58 <.001 0.45 Unable to obtain health care 0.07 0.13 0.04, 0.22 .004 Lost wages Prior mental health dxb 0.16 0.35 0.25, 0.45 <.001 Prior physical health dx<sup>c</sup> 0.12 0.10 0.06, 0.14 <.001 -0.01, -0.002 -0.08 -0.005.002 Age Race/Ethnicity<sup>d</sup> 0.03 0.09 -0.03, 0.22 .157 Black, Non-Hispanic 0.05 0.02, 0.29 .025 Other/2+ races, Non-Hispanic 0.15 0.10 0.28 0.15, 0.40 <.001 Hispanic **Education**e -0.05 -0.11 -0.38, 0.15 .403 High school graduate -0.08 -0.12-0.38, 0.14 .349 Some college -0.09 -0.05 -0.35, 0.18 .510 BA or above Female gender 0.07 0.12 0.04, 0.19 .002 -0.02 -0.03, 0.02 Income -0.001 .526 Regionf Midwest -0.02 -0.03 -0.14, 0.08 .634 -0.03 -0.05 South -0.16, 0.07 .416 0.01 -0.10. 0.14 West -0.02 .777 Cohortg 0.03 0.06 -0.03, 0.14 .199 3/29/20-4/7/20 0.05 0.005, 0.18 4/8/20-4/18/20 0.09 .039 -0.06 -0.50 -0.90, -0.11 .012 Health care worker x needed childcare 1.59 1.27, 1.90 <.001 Constant  $F(21, 1775)=12.38, p<.001, R^2=.13$ Model statistics

<sup>&</sup>lt;sup>a</sup>Non-health care essential worker=0; <sup>b</sup>emotional/nervous/psychiatric problem, anxiety disorder, depression (0=none; 1=one or more); <sup>c</sup>high cholesterol, hypertension, diabetes/high blood sugar, heart disease, stroke, cancer, lung disease, other diagnoses (0-8); <sup>d</sup>White=0; <sup>e</sup><high school=0; <sup>f</sup>Northeast=0; <sup>g</sup>Cohort 1: 3/18/20-3/28/20=0

Table S2. Predictors of Health-Related Worries in Essential Workers During COVID-19, Including Interaction between Type of Essential Worker and Lost Wages (N=1,800)

**Adjusted Multivariate Model** Variable 95% CI beta b р Health care worker<sup>a</sup> 0.02 0.08 -0.12, 0.27 .443 0.04 0.13 Needed childcare -0.03, 0.30 .100 Unable to obtain health care 0.11 0.41 0.26, 0.58 <.001 Lost wages 0.12 0.27 0.15, 0.39 <.001 Prior mental health dxb 0.09 0.24 0.11, 0.36 <.001 Prior physical health dx<sup>c</sup> 0.09 0.09 0.05, 0.14 <.001 -0.08 -0.01 -0.01, -0.002 .002 Age Race/Ethnicity<sup>d</sup> Black, Non-Hispanic 0.01 0.03 -0.13, 0.19 .751 -0.03, 0.32 Other/2+ races, Non-Hispanic 0.04 0.15 .096 Hispanic 0.08 0.29 0.13, 0.46 <.001 Education<sup>e</sup> High school graduate -0.08 -0.24 -0.59, 0.10 .169 -0.15-0.32 -0.66, 0.01 .061 Some college BA or above -0.11 -0.23-0.58, 0.11 .177 Female gender 0.14 0.29 0.20,0.39 <.001 Income 0.005 0.003 -0.03, 0.03 .858 Regionf Midwest -0.05 -0.13 -0.28, 0.02 .099 South -0.09 -0.20 -0.35, -0.05 .007 -0.14 -0.30. 0.01 West -0.06.070 Cohort<sup>g</sup> 3/29/20-4/7/20 0.09 0.21 0.10, 0.32 <.001 4/8/20-4/18/20 0.09 0.19 0.08, 0.30 .001 Healthcare worker x lost wages -0.07 -0.42-0.77, -0.07 .018 2.24, 3.04 Constant 2.64 <.001 Model statistics *F*(21, 1778)=10.05, *p*<.001,  $R^2 = .11$ 

<sup>&</sup>lt;sup>a</sup>Non-health care essential worker=0; <sup>b</sup>emotional/nervous/psychiatric problem, anxiety disorder, depression (0=none; 1=one or more); <sup>c</sup>high cholesterol, hypertension, diabetes/high blood sugar, heart disease, stroke, cancer, lung disease, other diagnoses (0-8); <sup>d</sup>White=0; <sup>e</sup><high school=0; <sup>f</sup>Northeast=0; <sup>g</sup>Cohort 1: 3/18/20-3/28/20=0

Table S3. Predictors of Acute Stress Symptoms in Essential Workers During COVID-19, Including Interaction between Type of Essential Worker and Lost Wages (N=1,803)

**Adjusted Multivariate Model** P Variable 95% CI beta b Health care workera -0.02 -0.04 -0.17, 0.09 .514 0.09 0.12, 0.34 Needed childcare 0.24 <.001 Unable to obtain health care 0.13 0.34 0.23, 0.44 <.001 Lost wages 0.13 0.24 0.16, 0.32 <.001 Prior mental health dxb 0.12 0.23 0.15, 0.32 <.001 Prior physical health dx<sup>c</sup> 80.0 0.06 0.02, 0.09 .001 -0.13 -0.01 -0.01, 0.005 <.001 Age Race/Ethnicity<sup>d</sup> Black, Non-Hispanic 0.01 0.04 -0.07, 0.14 .510 -0.05, 0.18 .304 Other/2+ races, Non-Hispanic 0.02 0.06 80.0 0.07, 0.30 Hispanic 0.19 .001 Education<sup>e</sup> High school graduate -0.09 -0.19 -0.42, 0.05 .115 Some college -0.13 -0.19 -0.41, 0.03 .095 -0.32, 0.14 .438 BA or above -0.06 -0.09 0.22 0.16, 0.29 <.001 Female gender 0.15 Income 0.02 0.01 -0.01, 0.03 .345 Regionf Midwest -0.05 -0.08 -0.18, 0.02 .114 South -0.08 -0.12 -0.22, -0.02 .018 West -0.04 -0.06 -0.17, 0.04 .243 Cohort<sup>9</sup> 3/29/20-4/7/20 0.07 0.10 0.03, 0.18 .008 4/8/20-4/18/20 0.08 0.13 0.05, 0.21 .001 Healthcare worker x lost wages -0.07 -0.32 -0.56, -0.08 .008 1.96 <.001 1.70, 2.23 Constant  $F(21, 1781)=15.54, p<.001, R^2=.15$ Model statistics

<sup>&</sup>lt;sup>a</sup>Non-health care essential worker=0; <sup>b</sup>emotional/nervous/psychiatric problem, anxiety disorder, depression (0=none; 1=one or more); <sup>c</sup>high cholesterol, hypertension, diabetes/high blood sugar, heart disease, stroke, cancer, lung disease, other diagnoses (0-8); <sup>d</sup>White=0; <sup>e</sup><high school=0; <sup>f</sup>Northeast=0; <sup>g</sup>Cohort 3/18/20-3/28/20=0

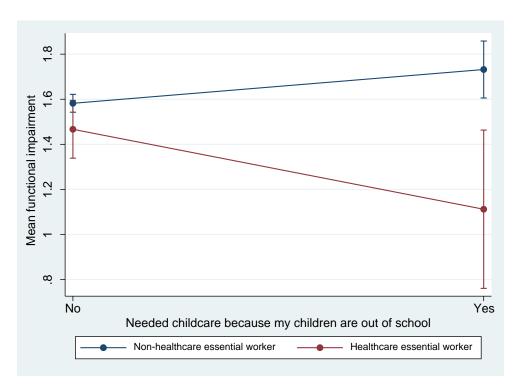


Figure S1. Interaction between type of essential worker and needed childcare on functional impairment, adjusted for covariates

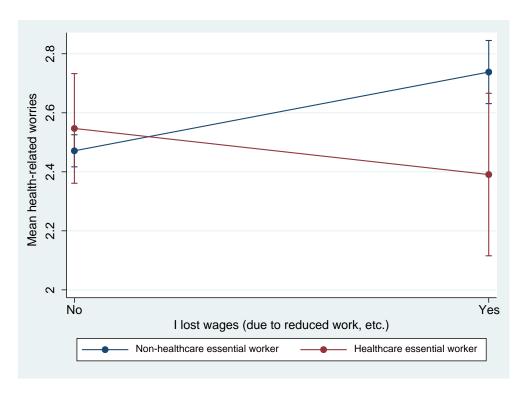


Figure S2. Interaction between type of essential worker and lost wages on health-related worries, adjusted for covariates

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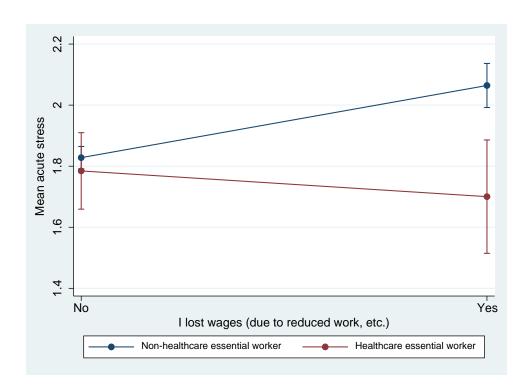


Figure S3. Interaction between type of essential worker and lost wages on acute stress symptoms, adjusted for covariates

# **Survey Instrument**

### **ESSENTIAL WORKER STATUS**

Which of the following describe(s) your personal experiences related to the Coronavirus outbreak? *Please select all that apply.* 

- 1. My job requires in-person interaction and I am still working
- 2. I work in an essential service (e.g., grocery store, healthcare) and am working extra hours

## **SECONDARY STRESSORS**

Which of the following have you experienced <u>as a result of the coronavirus outbreak?</u> Please select all that apply.

- 1. I lost wages (due to reduced work, etc.)
- 2. I have been unable to obtain necessary health care
- 3. I have needed to find childcare for my child/children because they are out of school

#### **HEALTH-RELATED WORRIES**

Using the scale provided, please answer the following questions. How often in the past week...

- 1. ...have you had fears that you will get very sick or die from the Coronavirus outbreak?
- 2. ...have you worried that someone you care about (e.g., family, close friends) will get very sick or die from the Coronavirus outbreak?

# Response Options:

- 1. Never
- 2. Rarely
- 3. Sometimes
- 4. Often
- 5. All the time

### **FUNCTIONAL IMPAIRMENT**

Now we would like to ask you a few questions about your health.

During the past 7 days, how much of the time has your **PHYSICAL HEALTH...** 

- 1. Interfered with your social activities (like connecting with friends, relatives, etc.)?
- 2. Made it difficult for you to perform your work or other regular daily activities (e.g., it took extra effort)?

During the past 7 days, how much of the time has your **EMOTIONAL HEALTH...** 

- 1. Interfered with your social activities (like connecting with friends, relatives, etc.)?
- 2. Made it difficult for you to perform your work or other regular daily activities (e.g., it took extra effort)?

# Response Options:

- 1. None of the time
- 2. A little of the time
- 3. Some of the time
- 4. Most of the time
- 5. All of the time