

ONLINE APPENDIX

Mental Health Costs of Lockdowns: Evidence from Age-specific Curfews in Turkey

Onur Altindag ^{*} Bilge Erten [†] Pinar Keskin [‡]

April 6, 2021

^{*}Department of Economics, AAC 181, Bentley University, 175 Forest St, Waltham, MA 02452. Phone (office): (781) 216 7111. oaltindag@bentley.edu.

[†]Department of Economics, 43 Leon Street, 312A Lake Hall, Northeastern University, Boston, MA 02115. Phone (office): (617) 373-6275. b.erten@northeastern.edu.

[‡]Address for Correspondence: Department of Economics, Pendleton East, Wellesley College, 106 Central Street, Wellesley, MA 02481. Phone (office): (781) 283-2438. pinar.keskin@wellesley.edu.

Appendix A A review of the literature on the effects of Covid-19 on mental health

Study	Empirical strategy	Sample	Main finding
Adams-Prassl et al. (2020)	Difference-in-differences methodology.	Two-waves of repeated cross-section data collected in March and April 2020 from employed adults who live in the U.S.	Mental health score of individuals who live in the states that imposed a COVID-19 lockdown is 0.85SD below compared to those who did not.
Armbruster and Klotzbücher (2020)	Event study design.	Daily contacts to 91 healthline-centers in Germany collected between 01/01/2019 and 04/28/2020.	20% rise in counseling requests during the week of lockdown, even stronger increase in areas with stricter measures.
Banks and Xu (2020)	Difference between observed and counterfactual outcomes in the absence of pandemic in April 2020. Counterfactual outcomes are predicted by regression models using past data, including individual fixed-effects.	UK Household Longitudinal Study (UKHLS) waves 1-9 (2009-2019) merged with April 2020 COVID-19 Survey.	Mental health of adults in the U.K. deteriorated by 8.1% due to Covid-19 pandemic, with larger drops among younger and female population.
Beland et al. (2020)	Comparison of pre- and post-COVID outcomes adjusted for pre-determined covariates.	Canadian Perspective Survey Series 1 - Impacts of COVID-19 (CPSS)	Workers who are most severely affected by the pandemic report worse self-reported mental health than their peers.

Brodeur et al. (2020)	Difference-in-differences methodology and Regression Discontinuity Design.	Google Trends data related to 13 pre-defined well-being terms between January 1 st - April 10 th (2019 and 2020) from Europe and the U.S.	Following the restricted mobility, search intensity of Google users increase for boredom, loneliness, worry and decrease for stress, suicide, and divorce.
Burdett et al. (2020)	Difference-in-differences methodology that rely on variation in local weather conditions.	Covid-19 module from the UK Household Longitudinal Study (UKHLS) April, May, June, and July 2020 merged with the waves 10-11 (2019) of the main survey.	During the lockdowns, weather patterns (temperature, sunshine, and rainfall) have very little differential impact on mental health despite its strong impact on mobility.
Daly et al. (2020)	Longitudinal trend analysis.	Covid-19 module from the UK Household Longitudinal Study (UKHLS) April, May, and June 2020 merged with the wave 9 (2017-2019) of the main survey.	Proportion of individuals who report mental health problems increased by 13.5 percentage points from 2017-2019 baseline to April 2020 and remained high until June 2020.
Etheridge and Spantig (2020)	Longitudinal trend analysis by gender.	UK Household Longitudinal Study (UKHLS) waves 1-9 (2009-2019) merged with April 2020 COVID-19 Survey.	The decrease in mental health among the UK population is more than twice larger among women. Social factors such as loneliness explains the gender gap.

Fetzer et al. (2020a)	Trend analysis and online randomized experiment.	Google Trends data related to economic anxiety ("Recession", "Stock Market Crash", "Conspiracy Theory", "Survivalism"), two online experimental surveys from the U.S. (March 5 th and March 16 th , 2020).	Economic anxiety exhibits a strong upward trend in parallel to the course of the pandemic. Access to information and ways of communicating directly affect the economic anxiety.
Fetzer et al. (2020b)	Descriptive analysis and event study design.	Survey data collected from 100,000 participants and 58 countries in March and early April 2020.	Strong government response to COVID-19 leads to a decrease in the likelihood of respondents to report worry and depression.
Giuntella et al. (2020)	Longitudinal analysis of survey and biometric data.	Wearable health device data from University of Pittsburgh students between Spring 2019 and Spring 2020 with baseline and end-line surveys in each semester.	Substantial decrease in physical activity, increase in phone interaction and sleep, and 65% increase in depression risk.
Holman et al. (2020)	Longitudinal analysis of survey data	U.S. probability-based nationally representative survey NORC AmeriSpeak panel, three waves collected between March 18 th and April 18 th , 2020.	Increased likelihood of reporting symptoms of acute stress and depression. Poor baseline health and media exposure further deteriorates mental health.
Proto and Quintana-Domeque (2020)	Longitudinal subgroup analysis of survey data	Covid-19 module from the UK Household Longitudinal Study (UKHLS) April 2020 merged with the wave 9 (2017-2019) of the main survey.	Black, Asian, and other minorities in the UK experience a larger decrease in mental health compared to the white population.

Tubadji et al. (2020)	Difference-in-differences methodology and Regression Discontinuity Design.	Google Trends data related to mental health ("death", "suicide") collected from Italy and UK collected between March 12 th and March 23 rd , 2020.	Lockdowns have a negative impact on mental health through experienced fear of death.
-----------------------	--	--	--

We also note that our results add to the documented adverse mental health impacts following large-scale natural disasters and stressful events such as Zika and SARS outbreaks, major earthquakes, and terrorist attacks.^{1/2} In addition, our paper also contributes to the growing literature on the effects of pandemic-driven social isolation on at-risk populations, including adolescents, elderly people, homeless people, people with disabilities, and people with mental health concerns (Pfefferbaum and North 2020; Dotson and Koh 2020; Armitage and Nellums 2020). Given their heightened risk of physical and mental health problems, exposure to social isolation is a particularly important concern for the older adults we study in this paper. However, since several other high-risk groups also face the risk of adverse mental consequences due to social isolation, our findings have broader implications for evaluating the risks for such groups.³ Finally, potential scarring effects could impact the long-term mental health of isolated individuals; these effects are likely to pose problems long after the stay-at-home orders cease.⁴

¹See, for example, Galea et al. (2002), Lee et al. (2007), Neria et al. (2008), Yokoyama et al. (2014), and Galea et al. (2020).

²Rapidly growing literature on the impact of COVID-19 on mental wellbeing faces similar identification challenges. The majority of these studies report increased symptoms or cross-sectional correlates of mental health problems experienced by the general population of countries affected by the pandemic. These studies include, but are not limited to, Ahmed et al. (2020); González-Sanguino et al. (2020); Hwang et al. (2020); Lei et al. (2020); Liu et al. (2020); Lu et al. (2020); Moccia et al. (2020); Moghanibashi-Mansourieh (2020); Olagoke et al. (2020); Ozamiz-Etxebarria et al. (2020); Özdin and Bayrak Özdin (2020); El-Zoghby et al. (2020); Qiu et al. (2020); Samadarshi et al. (2020); Sønderskov et al. (2020); Wang et al. (2020a,b,c); Zhang and Ma (2020). See Xiong et al. (2020) for a more in-depth discussion of this literature.

³These risks are particularly serious for children and adolescents with special needs or disadvantages, such as disabilities, trauma experiences, and existing mental health problems (Fegert et al. 2020).

⁴While previous studies have discussed the pandemic's scarring effects on long-term beliefs affecting economic outcomes (Kozłowski et al. 2020), scant attention has been given to the potential scarring effects on long-term mental health outcomes. When we consider the historical accounts of the Spanish flu, demographic evidence suggests that exposed populations reported depression, mental distraction, and sleep disturbances even six years after the pandemic (Eghigian 2020).

Appendix B List of Variables

Outcome Variables:

- Days outside last week: The number of days the respondent went outside last week.
- Under curfew: A dummy variable equal to one if the respondent reported being subject to the curfew within the last month.
- Never goes out: A dummy variable equal to one if the respondent reported his/her current frequency of going outside as “never going outside”.
- Mental distress indices: Following [Anderson \(2008\)](#), each index is generated by demeaning its component outcomes and converting them to effect sizes through dividing by control group standard deviation. The demeaned values are subsequently combined by weighting according to the inverse of the covariance matrix.
 - Somatic symptoms of distress index: a z-score calculated by averaging the z-scores from each of the 4 somatic symptoms of distress indicators, including dummy variables equal to one if the respondent reports that she experienced the following within the last four weeks: (i) frequent headaches, (ii) shaking hands, (iii) poor digestion, and (iv) uncomfortable feelings in the stomach.
 - Nonsomatic symptoms of distress index: a z-score calculated by averaging the z-scores from each of the 16 nonsomatic symptoms of distress indicators, including dummy variables equal to one if the respondent reports that she experienced the following within the last four weeks: (i) poor appetite, (ii) sleeping badly, (iii) been easily frightened, (iv) felt nervous, tense, or worried, (v) had trouble in thinking clearly, (vi) felt unhappy, (vii) cried more often than usual, (viii) found it difficult to enjoy daily activities, (ix) found it difficult to make decisions, (x) daily work suffered, (xi) been unable to play a useful part in life, (xii) lost interest in things, (xiii) felt that he/she was a worthless person, (xiv) thought about suicide, (xv) felt tired all the time, and (xvi) got tired easily.
 - Mental distress index: A z-score calculated by averaging the z-scores from 20 symptoms of mental distress indicators, including 4 somatic and 16 nonsomatic indicators, as listed above.
- Paid employed: A dummy variable equal to one if the respondent reported working to earn income in cash or kind in the reference week.
- Paid or unpaid employed: A dummy variable equal to one if the respondent reported working to earn income or working as an unpaid family worker in the reference week.
- Has a job but could not attend last week: A dummy variable equal to one if the respondent reported having a job but could not attend this job last week.
- Has enough money for usual needs: A dummy variable equal to one if the respondent reported having enough money for satisfying his/her usual needs last month.

- Worried about spending money: A dummy variable equal to one if the respondent reported being worried about spending money last month.
- Limited social interaction: A dummy variable equal to one if the respondent reported that his/her social interaction with friends and family has been extremely limited or very limited in the last month compared to pre-Covid times.
- Limited physical activity: A dummy variable equal to one if the respondent reported that his/her physical activity (e.g. walking, running, doing sports, etc.) has been extremely limited or very limited in the last month compared to pre-Covid times.
- Household size: The number of people currently residing with the respondent in the same household.
- Conflict with a household member: A dummy variable equal to one if the respondent reported that he/she had a conflict with a household member last month.
- Supports the 65+ age-specific curfew: A dummy variable equal to one if the respondent reported being somewhat, very, or extremely supportive of the curfew policy.
- Satisfied with the government's Covid-19 policy response: A dummy variable equal to one if the respondent reported being somewhat, very, or extremely supportive of the government's policy response to Covid-19.

Covariates:

- Completed high school: A dummy variable equal to one if the respondent completed high school or above.
- Illiterate: A dummy variable equal to one if the respondent is illiterate.
- Female: A dummy variable equal to one if the respondent is female.
- Married: A dummy variable equal to one if the respondent is married.
- Widowed or separated: A dummy variable equal to one if the respondent is widowed or separated.
- Non-Turkish: A dummy variable equal to one if the respondent has a non-Turkish ethnic identity, e.g. Arabic, Kurdish, or other.
- Pre-Covid-19 household size: The number of people residing with the respondent in the same household prior to the Covid-19 outbreak.
- Ever received psychological support: A dummy variable equal to one if the respondent has ever received psychological support.
- Has a chronic disease: A dummy variable equal to one if the respondent has a chronic disease.

Outcome Variables in Appendix B:

- Poor physical health: A dummy variable equal to one if the respondent reports having a poor or very poor physical health.
- Poor mental health: A dummy variable equal to one if the respondent reports having a poor or very poor mental health.
- Suffering: A dummy variable equal to one if the respondent reports poor ratings of their current life situation (4 and below) and negative ratings for the next five years (4 and below).
- Each one of the below outcomes is a dummy variable that equals one if the respondent agreed with the statement:
 - *Considers himself/herself religious*: “Religion has an important place in my life.”
 - *Prays daily*: “I prayed most of the day during the last month.”
 - *Agrees that one should live by the holy book*: “One should live word-by-word the holy book.”
 - *Agrees that virus is a God-sent warning*: “Epidemics is a God sent warning to humanity.”
- Religiosity index: A standard normalized z-score calculated by averaging the individual 4 religiosity indicators defined above. Following [Anderson \(2008\)](#), the index is generated by demeaning its component outcomes and converting them to effect sizes through dividing by control group standard deviation. The demeaned values are subsequently combined by weighting according to the inverse of the covariance matrix.

Appendix C Survey Questionnaire

1. Province where the respondent lives in.
2. Type of residence
 - a. Rural
 - b. Urban
3. How many people are currently living in your household?
4. In normal times (prior to the pandemic), how many people live in your household?
5. What is your relationship to the household head?
 - a. Household head
 - b. Spouse
 - c. His/her children
 - d. Father / Mother
 - e. Brother / Sister
 - f. Father in law / Mother in law
 - g. Son in law / Daughter in law
 - h. Grandchild
 - i. Other relatives
 - j. Non-relatives
 - k. Housekeeper staying at home
6. Respondent's gender
 - a. Male
 - b. Female
7. How old are you?
8. What is your marital status?
 - a. Never married
 - b. Married
 - c. Divorced
 - d. Widowed
9. If married, how old is your spouse?
10. What is your education level, i.e. the highest degree of education you completed?
 - a. Illiterate.

- b. Literate but not completed any educational institution.
 - c. Completed primary school (5 years of schooling)
 - d. Completed lower secondary, vocational and technical secondary school, or primary education
 - e. Completed upper secondary school (high school)
 - f. Completed 2- or 3-year higher education or faculty or 4 years higher education or faculty (university)
 - g. Completed Master's degree (5 or 6 years faculty included) or PhD
11. What is your year of birth as written in your national ID card? [Please ask the respondent to look at his/her ID card and tell.]
 12. What is your month of birth as written in your national ID card? [Please ask the respondent to look at his/her ID card and tell.]
 13. As you know there has been some recent regulations regarding going outside due to the coronavirus outbreak. Were you subject to the curfew for citizens 65 and plus over the last month? (Yes/No)
 14. Over the last week, how many times did you go out?
 15. Over the last month, how many times did you go out in a week on average?
 16. As you know, those 65 and older were permitted to go outside in certain days of the week. Apart from these permits, how many times did you go out in the last week?
 17. Which of the following explains your status regarding going outside?
 - a. I go out as much as I used to.
 - b. I go out less often.
 - c. I go out only to satisfy basic needs such as shopping.
 - d. I go out only to work.
 - e. I never go out.
 18. Did you work to earn income in cash or kind in the reference week? (Yes/No)
 19. (Ask if answer to 18 is NO) Did you work for an hour in the reference week in order to earn income or as unpaid family workers, even if you are a housewife, student or retired? (Yes/No).
 20. Do you have a business or job in which you were temporarily absent in the reference week? (Yes/No)
 21. (Ask if answer to 20 is YES) Why were you absent from this work in the reference week?
 - a. His/her illness, injury or temporary ill

- b. Workplace shut down for economic reasons
 - c. Furlough
 - d. Government employment ban due to COVID-19
 - e. Laid off even though workplace did not shut down
 - f. Nature of work
 - g. There was no work
 - h. Other
22. What was your employment status at your most recent (or current) job?
- a. Wage or salaried employee or casual workers
 - b. Employer
 - c. Self-employed
 - d. Unpaid family worker
23. What is the sector that you work in?
24. What was your occupation at your most recent (or current) job?
25. Do you have enough money to satisfy your usual needs compared to those times prior to the outbreak of COVID-19 crisis? (Yes/No)
26. In the last month, have you ever worried about spending money? (Yes/No)
27. Please imagine a ladder with steps numbered from zero at the bottom to ten at the top. The top of the ladder represents the best possible life for you and the bottom of the ladder represents the worst possible life for you. On which step of the ladder would you say you personally feel you stand at this time? (Scale:1-10)
28. On which step do you think you will stand about one year from now? (Scale:1-10)
29. Would you say your own health, in general, is
- a. Very good
 - b. Good
 - c. Fair
 - d. Poor
 - e. Very poor
30. Would you say your own physical health, is
- a. Very good
 - b. Good
 - c. Fair

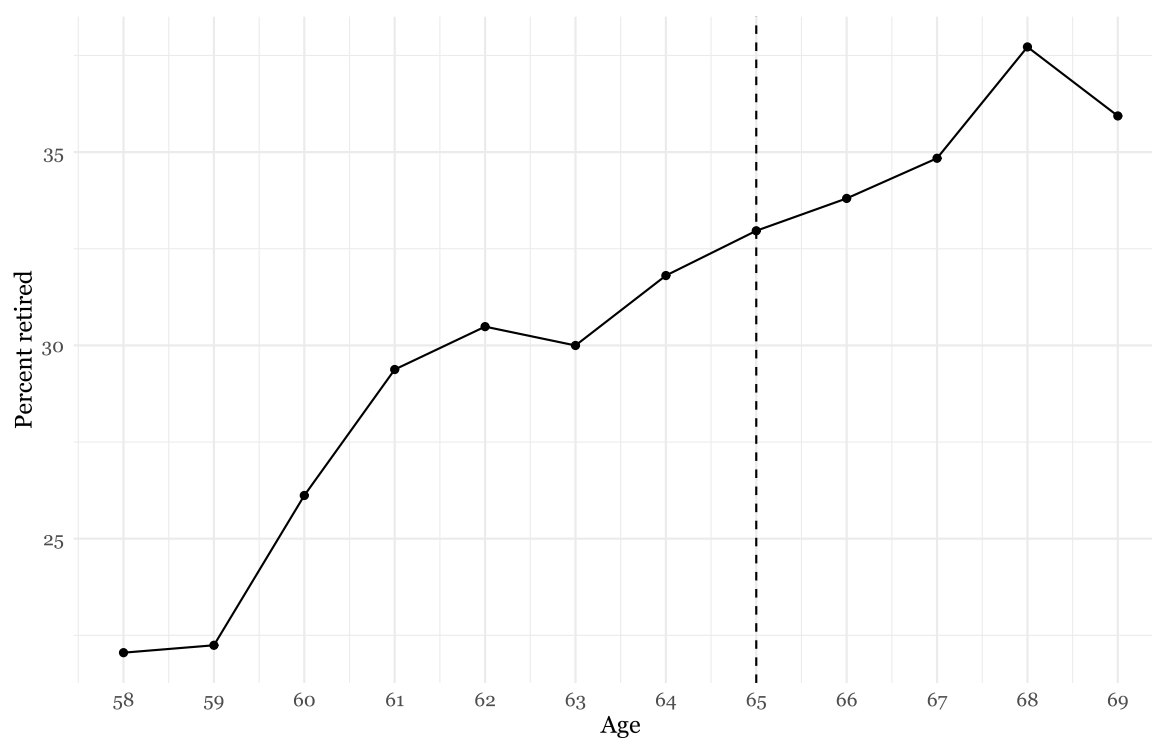
- d. Poor
 - e. Very poor
31. Would you say your own mental health, is
- a. Very good
 - b. Good
 - c. Fair
 - d. Poor
 - e. Very poor
32. Over the last month, how limited has your physical activity been compared to pre-Covid times?
- a. Extremely limited
 - b. Very limited
 - c. Somewhat limited
 - d. Not so limited
 - e. Not at all limited.
33. Over the last month, how limited has your social interaction with your family/friend been compared to pre-Covid times?
- a. Extremely limited
 - b. Very limited
 - c. Somewhat limited
 - d. Not so limited
 - e. Not at all limited.
34. Over the last 4 weeks, have you often had headaches? (Yes/No)
35. Over the last 4 weeks, has your appetite been poor? (Yes/No)
36. Over the last 4 weeks, have you slept badly? (Yes/No)
37. Over the last 4 weeks, have you been easily frightened? (Yes/No)
38. Over the last 4 weeks, have you had shaking hands? (Yes/No)
39. Over the last 4 weeks, have you felt nervous, tense, or worried? (Yes/No)
40. Over the last 4 weeks, has your digestion been poor? (Yes/No)
41. Over the last 4 weeks, have you had trouble in thinking clearly? (Yes/No)
42. Over the last 4 weeks, have you cried more often than usual? (Yes/No)

43. Over the last 4 weeks, have you found it difficult to enjoy your daily activities? (Yes/No)
44. Over the last 4 weeks, have you found it difficult to make decisions? (Yes/No)
45. Over the last 4 weeks, has your daily work suffered? (Yes/No)
46. Over the last 4 weeks, have you been unable to play a useful part in life? (Yes/No)
47. Over the last 4 weeks, have you lost interest in things? (Yes/No)
48. Over the last 4 weeks, have you felt that you are a worthless person? (Yes/No)
49. Over the last 4 weeks, has the thought of ending your life been on your mind? (Yes/No)
50. Over the last 4 weeks, have you felt tired all the time? (Yes/No)
51. Over the last 4 weeks, have you had uncomfortable feelings in your stomach? (Yes/No)
52. Over the last 4 weeks, have you gotten tired easily? (Yes/No)
53. Over the last 4 weeks, have you had high blood pressure? (Yes/No)
54. Do you have a chronic disease for which you regularly take medication, such as high blood pressure, diabetes, or heart disease?
55. Have you ever visited an expert to receive psychological treatment before the lockdown began? (Yes/No)
56. Since the lockdown began, have you seen a healthcare professional? (Yes/No)
57. Over the last 4 weeks, how many cigarettes have you smoked on average per day?
58. How satisfied are you from the government's policy response to Covid-19?
 - a. Extremely satisfied
 - b. Very satisfied
 - c. Somewhat satisfied
 - d. Not so satisfied
 - e. Not at all satisfied.
59. How much do you support the curfew for individuals 65 and older?
 - a. Extremely supportive
 - b. Very supportive
 - c. Somewhat supportive
 - d. Not so supportive
 - e. Not at all supportive.
60. Over the last month, did you experience a conflict with one of the household members?

61. If yes, which household members did you experience the conflict with? (Choose as many as applicable.)
- a. Spouse
 - b. His/her children
 - c. Father / Mother
 - d. Brother / Sister
 - e. Father in law / Mother in law
 - f. Son in law / Daughter in law
 - g. Grandchild
 - h. Other relatives
 - i. Non-relatives
 - j. Housekeeper staying at home
62. Do you agree with the following statements?
- a. Religion has an important place in my life.
 - b. I prayed most of the day during the last month.
 - c. One should live word-by-word the holy book.
 - d. Epidemics is a God-sent warning to humanity.
63. We are all citizens of the Republic of Turkey, but we may have different ethnic backgrounds. How do you define your ethnic identity?
- a. Turkish
 - b. Kurdish
 - c. Arab
 - d. Other
64. What is the total monthly income of all household members? Including all income earned by every household member, how much is the average sum of earnings in a month?

Appendix D Additional Figures and Tables

FIGURE A1: RETIREMENT BY AGE: HOUSEHOLD LABOR FORCE SURVEY 2019



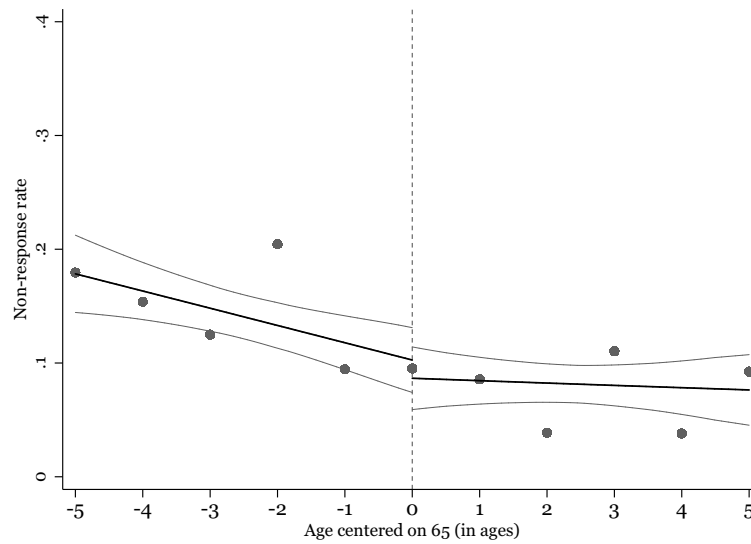
Note: The sample includes all individuals born between January 1950 and December 1961. The vertical line represents the cut-off point by age in 2019.

FIGURE A2: GRID SEARCH FOR RD TREATMENT THRESHOLDS



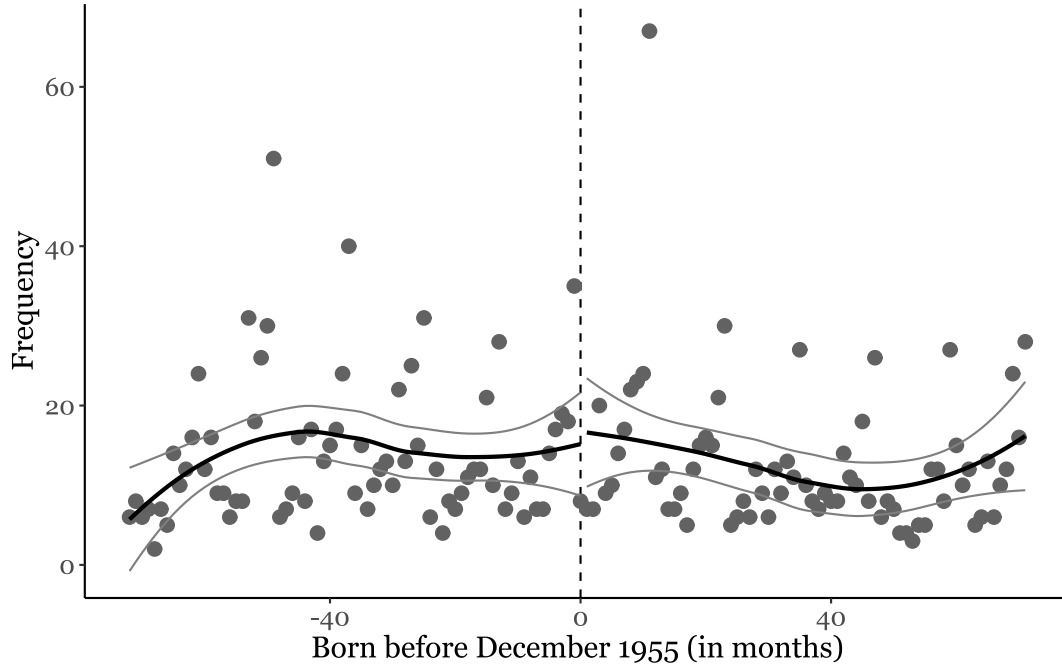
Note: The sample includes all individuals born between January 1950 and December 1961. The vertical line represents the birth year and birth month for which the estimated coefficient of difference in exposure to curfew between the treatment and the control group is maximum. Variable definitions are listed in [Appendix B](#).

FIGURE A3: NONRESPONSE RATE AROUND THE AGE THRESHOLD



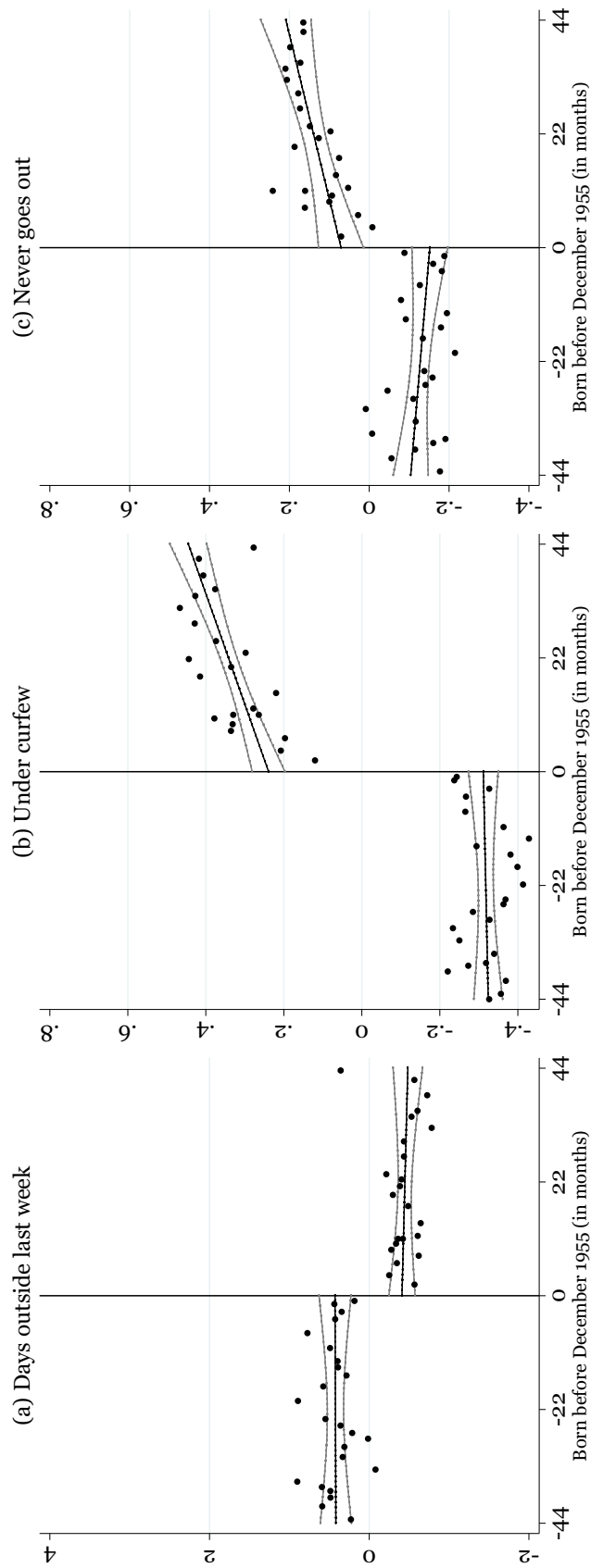
Note: The figure plots the nonresponse rate against the age of the respondent centered on 65. The sample includes all individuals born before and after 5 years around the cutoff age of 65. The vertical line in each graph represents the cut-off point, age 65. Gray lines show 95 percent confidence intervals around the mean level. The outcome variable captures the nonresponse rate of individuals who either did not answer the call, or refused to answer survey questions.

FIGURE A4: DISTRIBUTION OF RUNNING VARIABLE AROUND THE THRESHOLD



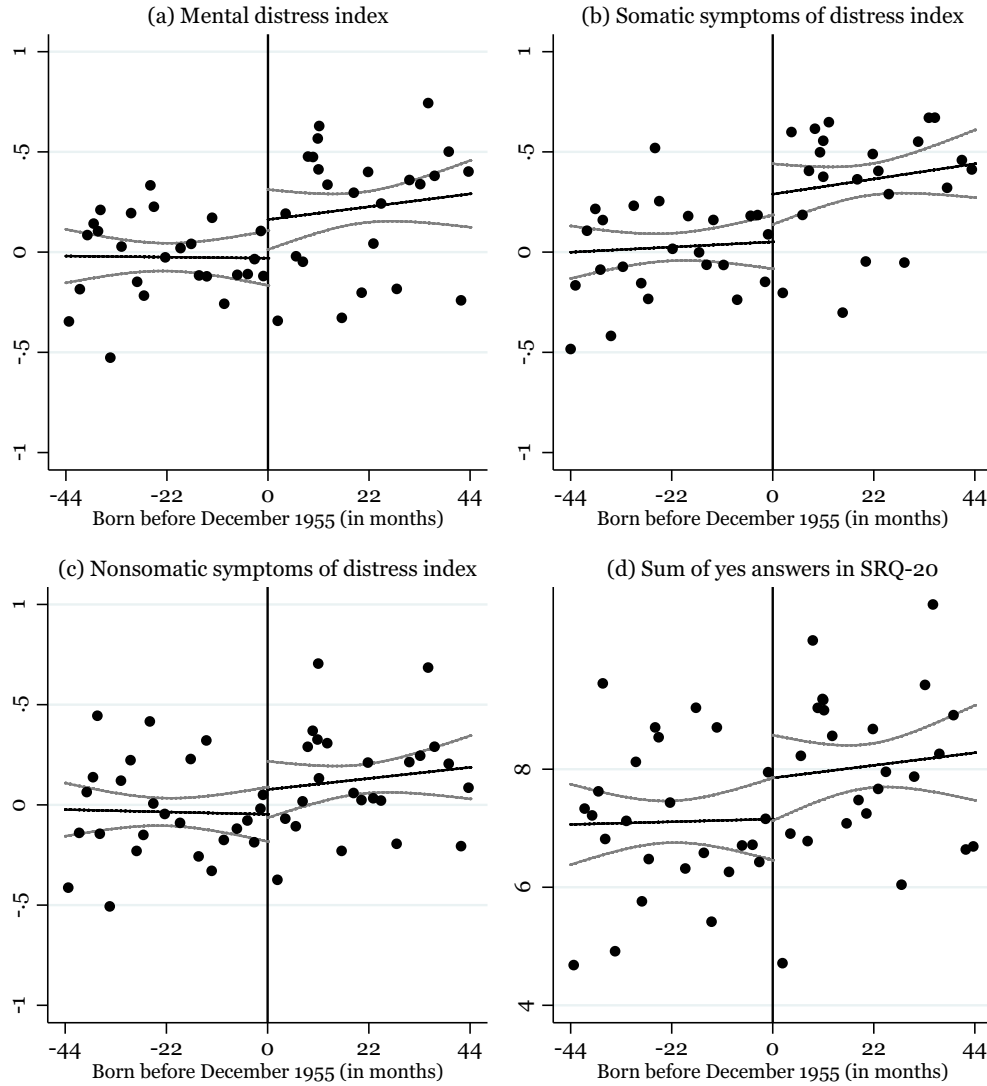
Note: The sample includes all individuals born between January 1950 and December 1961. The vertical line in each graph represents the cut-off point, December 1955. Circles indicate the raw number of observations for each birth month-year bin. Gray lines show 95 percent confidence intervals around the quadratic local polynomial. Variable definitions are listed in [Appendix B](#).

FIGURE A5: RD TREATMENT EFFECTS ON MOBILITY OUTCOMES USING RESIDUALIZED OUTCOMES



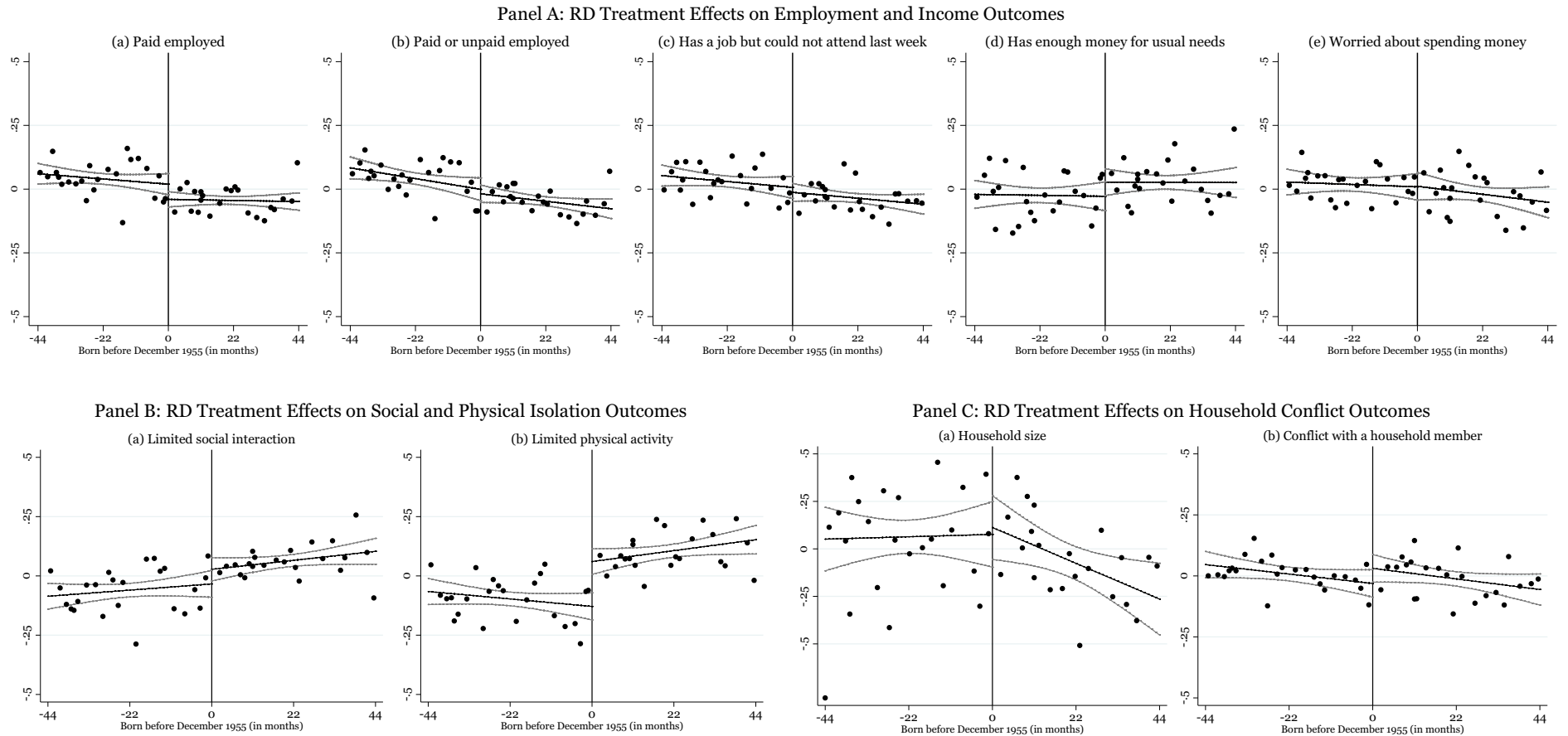
Note: The figures plot the residualized values (after controlling for all variables in the main specification other than distance to the cutoff) of the number of days spent outside last week, the probability of being subject to the curfew, and the probability of never going outside against the month-year of birth of being born in December 1955. The sample includes all individuals born before and after 44 months around the cutoff point, December 1955. The vertical line in each graph represents the cut-off point, December 1955. Gray lines show 95 percent confidence intervals around the mean level. Variable definitions are listed in Appendix B.

FIGURE A6: RD TREATMENT EFFECTS ON MENTAL HEALTH OUTCOMES USING NON-RESIDUALIZED OUTCOMES



Note: The figures plot the non-residualized values of the indices of mental distress outcomes over the month-year of birth of being born in December 1955. The sample includes all individuals born before and after 44 months around the cutoff point, December 1955. The vertical line in each graph represents the cut-off point, December 1955. Gray lines show 95 percent confidence intervals around the mean level. Variable definitions are listed in Appendix B.

FIGURE A7: RD TREATMENT EFFECTS ON POTENTIAL CHANNELS



Note: The figures plot the residualized values of potential channel outcomes over the month-year of birth of being born in December 1955. The sample includes all individuals born before and after 44 months around the cutoff point, December 1955. The vertical line in each graph represents the cut-off point, December 1955. Gray lines show 95 percent confidence intervals around the mean level. Variable definitions are listed in Appendix B.

TABLE A1: COMPARISON OF BASIC DEMOGRAPHIC INFORMATION WITH HOUSEHOLD LABOR FORCE SURVEY

Variable	Household Labor Force Survey (2019)			Analysis Sample		
	Mean	S.D.	Obs	Mean	S.D.	Obs
Age	64.07	3.43	53,584	64.21	3.34	1,909
Female (%)	0.52	0.50	53,584	0.43	0.50	1,909
Marital Status (%)						
Never Married	0.02	0.12	53,584	0.02	0.13	1,907
Married	0.83	0.37	53,584	0.81	0.40	1,907
Divorced	0.03	0.17	53,584	0.03	0.16	1,907
Widowed	0.12	0.33	53,584	0.15	0.36	1,907
Education (%)						
Illiterate	0.19	0.39	53,584	0.13	0.34	1,896
Literate but no formal schooling	0.08	0.28	53,584	0.08	0.27	1,896
Primary school	0.49	0.50	53,584	0.37	0.48	1,896
Secondary school	0.06	0.24	53,584	0.15	0.35	1,896
Highschool	0.09	0.29	53,584	0.16	0.37	1,896
College and above	0.08	0.27	53,584	0.11	0.31	1,896

Notes: The sample includes all individuals born between January 1950 and December 1961. Age is calculated as in 2020.

TABLE A2: RD TREATMENT EFFECTS ON PREDETERMINED COVARIATES

	±17	±24	±30	±36	±45	±48	±60	±72
<i>Completed high school</i>								
Born before 1955	0.051 (0.080) [0.527] (1.000)	0.025 (0.073) [0.733] (1.000)	-0.056 (0.074) [0.453] (1.000)	-0.037 (0.071) [0.602] (1.000)	-0.055 (0.063) [0.381] (1.000)	-0.039 (0.060) [0.520] (1.000)	-0.024 (0.054) [0.657] (1.000)	-0.013 (0.049) [0.791] (1.000)
Observations	523	692	854	1000	1246	1307	1638	1896
Control group mean	0.32	0.33	0.31	0.31	0.31	0.31	0.31	0.31
<i>Illiterate</i>								
Born before 1955	-0.018 (0.052) [0.738] (1.000)	-0.023 (0.047) [0.629] (1.000)	-0.004 (0.039) [0.928] (1.000)	-0.011 (0.040) [0.775] (1.000)	-0.007 (0.034) [0.835] (1.000)	-0.015 (0.032) [0.652] (1.000)	-0.030 (0.029) [0.297] (1.000)	-0.032 (0.027) [0.237] (1.000)
Observations	523	692	854	1000	1246	1307	1638	1896
Control group mean	0.12	0.13	0.12	0.12	0.13	0.13	0.12	0.11
<i>Female</i>								
Born before 1955	0.019 (0.080) [0.809] (1.000)	0.040 (0.062) [0.518] (1.000)	0.056 (0.065) [0.389] (1.000)	0.076 (0.060) [0.208] (1.000)	0.040 (0.056) [0.477] (1.000)	0.029 (0.055) [0.592] (1.000)	0.032 (0.050) [0.521] (1.000)	0.027 (0.046) [0.553] (1.000)
Observations	525	696	859	1007	1254	1316	1650	1909
Control group mean	0.39	0.39	0.40	0.42	0.44	0.44	0.45	0.46
<i>Married</i>								
Born before 1955	0.018 (0.069) [0.801] (1.000)	0.019 (0.054) [0.722] (1.000)	0.024 (0.051) [0.640] (1.000)	0.015 (0.045) [0.737] (1.000)	0.017 (0.042) [0.679] (1.000)	0.012 (0.041) [0.768] (1.000)	-0.014 (0.036) [0.697] (1.000)	-0.019 (0.034) [0.590] (1.000)
Observations	525	696	859	1006	1253	1315	1648	1907
Control group mean	0.83	0.84	0.85	0.85	0.85	0.85	0.84	0.84
<i>Widowed or separated</i>								
Born before 1955	-0.013 (0.068) [0.851] (1.000)	0.004 (0.048) [0.930] (1.000)	-0.017 (0.049) [0.721] (1.000)	-0.015 (0.043) [0.727] (1.000)	-0.021 (0.041) [0.603] (1.000)	-0.020 (0.040) [0.621] (1.000)	0.004 (0.035) [0.918] (1.000)	0.009 (0.033) [0.787] (1.000)
Observations	525	696	859	1006	1253	1315	1648	1907
Control group mean	0.15	0.15	0.13	0.13	0.13	0.13	0.14	0.14
<i>Non-Turkish</i>								
Born before 1955	0.200 (0.104) [0.062] (1.000)	0.127 (0.087) [0.153] (1.000)	0.088 (0.072) [0.224] (1.000)	0.059 (0.065) [0.369] (1.000)	0.050 (0.058) [0.387] (1.000)	0.062 (0.055) [0.260] (1.000)	0.013 (0.048) [0.786] (1.000)	0.012 (0.042) [0.780] (1.000)
Observations	513	682	843	991	1232	1294	1624	1881
Control group mean	0.23	0.26	0.25	0.26	0.26	0.26	0.25	0.25
<i>Pre-Covid-19 household size</i>								
Born before 1955	-0.162 (0.223) [0.473] (1.000)	-0.211 (0.192) [0.278] (1.000)	-0.276 (0.166) [0.102] (1.000)	-0.226 (0.165) [0.175] (1.000)	-0.176 (0.155) [0.258] (1.000)	-0.147 (0.151) [0.333] (1.000)	-0.155 (0.134) [0.252] (1.000)	-0.193 (0.126) [0.127] (1.000)
Observations	525	696	859	1007	1254	1316	1650	1909
Control group mean	3.38	3.39	3.34	3.37	3.39	3.40	3.41	3.40
<i>Ever received psychological support</i>								
Born before 1955	-0.032 (0.051) [0.544] (1.000)	-0.069 (0.046) [0.135] (1.000)	-0.049 (0.042) [0.250] (1.000)	-0.032 (0.037) [0.395] (1.000)	-0.019 (0.034) [0.574] (1.000)	-0.018 (0.033) [0.591] (1.000)	-0.010 (0.032) [0.761] (1.000)	-0.028 (0.028) [0.325] (1.000)
Observations	520	688	850	998	1243	1304	1634	1887
Control group mean	0.12	0.11	0.12	0.12	0.12	0.12	0.12	0.12
<i>Has a chronic disease</i>								
Born before 1955	-0.067 (0.071) [0.354] (1.000)	-0.026 (0.053) [0.630] (1.000)	-0.011 (0.047) [0.824] (1.000)	0.026 (0.044) [0.557] (1.000)	0.064 (0.043) [0.135] (1.000)	0.055 (0.042) [0.187] (1.000)	0.052 (0.036) [0.147] (1.000)	0.042 (0.033) [0.209] (1.000)
Observations	522	691	853	1001	1247	1309	1640	1898
Control group mean	0.52	0.51	0.51	0.51	0.51	0.51	0.50	0.49
Joint p-value	0.26	0.25	0.39	0.59	0.53	0.51	0.75	0.58

Notes: This table presents RD estimates of being born before December 1955 on the predetermined characteristics of individuals. The variable descriptions are provided in Appendix B. The first column presents results for individuals born within 17 months of the age threshold, December 1955. The second through fifth columns expand the sample to include individuals within 24, 30, 36, 45, 48, 60, and 72 months of the age threshold. Standard errors, clustered at the month-year cohort level, are in parenthesis. Corresponding p -values and Anderson (2008)'s sharpened q -values are in square and angle brackets, respectively.

TABLE A3: EFFECTS OF CURFEW ON MOBILITY OUTCOMES USING ALTERNATIVE BANDWIDTHS

	±24	±36	±48	±60	±72
<i>Days outside last week</i>					
Born before 1955	-1.015 (0.236) [<0.001] ⟨0.001⟩	-1.116 (0.213) [<0.001] ⟨0.001⟩	-1.037 (0.170) [<0.001] ⟨0.001⟩	-1.023 (0.166) [<0.001] ⟨0.001⟩	-0.994 (0.153) [<0.001] ⟨0.001⟩
Observations	672	976	1274	1601	1856
Control group mean	2.40	2.33	2.33	2.40	2.41
<i>Under curfew</i>					
Born before 1955	0.662 (0.063) [<0.001] ⟨0.001⟩	0.685 (0.052) [<0.001] ⟨0.001⟩	0.718 (0.043) [<0.001] ⟨0.001⟩	0.723 (0.036) [<0.001] ⟨0.001⟩	0.730 (0.032) [<0.001] ⟨0.001⟩
Observations	678	982	1283	1610	1866
Control group mean	0.10	0.10	0.09	0.08	0.08
<i>Never goes out</i>					
Born before 1955	0.304 (0.051) [<0.001] ⟨0.001⟩	0.317 (0.038) [<0.001] ⟨0.001⟩	0.285 (0.034) [<0.001] ⟨0.001⟩	0.245 (0.034) [<0.001] ⟨0.001⟩	0.281 (0.032) [<0.001] ⟨0.001⟩
Observations	667	966	1264	1591	1844
Control group mean	0.16	0.19	0.19	0.18	0.18

Notes: This table presents the effects of being born before December 1955 on the mobility outcomes of individuals across alternative bandwidth selections. The variable descriptions are provided in Appendix B. The first column presents results for individuals born within 24 months of the age threshold, December 1955. The second through fifth columns expand the sample to include individuals within 36, 48, 60, and 72 months of the age threshold. The specification includes month fixed effects, province fixed effects, surveyor fixed effects, as well as indicator variables for education levels, ethnicity, and gender. Standard errors, clustered at the month-year cohort level, are in parenthesis. Corresponding p -values and Anderson (2008)'s sharpened q -values are in square and angle brackets, respectively.

TABLE A4: EFFECTS OF CURFEW ON MENTAL HEALTH OUTCOMES USING ALTERNATIVE BANDWIDTHS

	± 24	± 36	± 48	± 60	± 72
<i>Mental distress index</i>					
Born before 1955	0.337 (0.133) [0.014] $\langle 0.062 \rangle$	0.224 (0.113) [0.051] $\langle 0.118 \rangle$	0.215 (0.086) [0.014] $\langle 0.059 \rangle$	0.238 (0.077) [0.003] $\langle 0.011 \rangle$	0.155 (0.077) [0.046] $\langle 0.093 \rangle$
Observations	629	912	1187	1485	1725
<i>Somatic symptoms of distress index</i>					
Born before 1955	0.292 (0.147) [0.053] $\langle 0.081 \rangle$	0.193 (0.104) [0.066] $\langle 0.118 \rangle$	0.178 (0.081) [0.031] $\langle 0.059 \rangle$	0.198 (0.080) [0.015] $\langle 0.016 \rangle$	0.164 (0.070) [0.021] $\langle 0.093 \rangle$
Observations	666	967	1262	1580	1833
<i>Nonsomatic symptoms of distress index</i>					
Born before 1955	0.230 (0.126) [0.075] $\langle 0.081 \rangle$	0.157 (0.111) [0.161] $\langle 0.118 \rangle$	0.165 (0.085) [0.054] $\langle 0.059 \rangle$	0.188 (0.073) [0.011] $\langle 0.016 \rangle$	0.109 (0.071) [0.129] $\langle 0.101 \rangle$
Observations	632	916	1191	1491	1731
<i>Sum of "yes" answers in SRQ-20</i>					
Born before 1955	1.045 (0.633) [0.105] $\langle 0.086 \rangle$	0.876 (0.491) [0.079] $\langle 0.118 \rangle$	0.751 (0.425) [0.080] $\langle 0.064 \rangle$	0.816 (0.384) [0.036] $\langle 0.021 \rangle$	0.487 (0.361) [0.179] $\langle 0.101 \rangle$
Observations	629	912	1187	1485	1725
Control group mean	7.00	7.05	7.05	7.16	7.07

Notes: This table presents the reduced-form effects of being born before December 1955 on the mental health outcomes across alternative bandwidths. The variable descriptions are provided in Appendix B. The first column presents results for individuals born within 24 months of the age threshold, December 1955. The second through fifth columns expand the sample to include individuals within 36, 48, 60, and 72 months of the age threshold. The specification includes month fixed effects, province fixed effects, surveyor fixed effects, as well as indicator variables for education levels, ethnicity, and gender. Standard errors, clustered at the month-year cohort level, are in parenthesis. Corresponding p -values and Anderson (2008)'s sharpened q -values are in square and angle brackets, respectively.

TABLE A5: EFFECTS OF CURFEW ON SELF-REPORTED HEALTH AND LIFE SATISFACTION

	±17	±30	±45	±60
Panel A: Self-reported Health Outcomes				
<i>Poor physical health</i>				
Born before 1955	0.140 (0.065) [0.038] ⟨0.083⟩	0.119 (0.046) [0.012] ⟨0.026⟩	0.103 (0.033) [0.003] ⟨0.006⟩	0.070 (0.034) [0.041] ⟨0.089⟩
Observations	511	838	1224	1612
Control group mean	0.08	0.10	0.12	0.10
<i>Poor mental health</i>				
Born before 1955	0.037 (0.069) [0.602] ⟨0.431⟩	0.052 (0.039) [0.192] ⟨0.107⟩	0.022 (0.035) [0.536] ⟨0.366⟩	-0.012 (0.031) [0.701] ⟨0.540⟩
Observations	509	836	1221	1607
Control group mean	0.11	0.13	0.14	0.13
Panel B: Life Satisfaction Outcomes				
<i>Suffering</i>				
Born before 1955	-0.101 (0.075) [0.184] ⟨0.226⟩	-0.005 (0.045) [0.906] ⟨1.000⟩	0.000 (0.039) [0.990] ⟨1.000⟩	-0.013 (0.033) [0.692] ⟨1.000⟩
Observations	486	801	1167	1538
Control group mean	0.21	0.22	0.23	0.23

Notes: This table presents regression discontinuity estimates of the effect of the curfew on self-reported health and life satisfaction measures. The variable descriptions are provided in Appendix B. The first column presents results for individuals born within 17 months of the age threshold, December 1955. The second through fourth columns expand the sample to include individuals within 30, 45, and 60 months of the age threshold. The specification includes month fixed effects, province fixed effects, surveyor fixed effects, as well as indicator variables for education levels, ethnicity, and gender. Standard errors, clustered at the month-year cohort level, are in parenthesis. Corresponding p -values and Anderson (2008)'s sharpened q -values are in square and angle brackets, respectively.

TABLE A6: EFFECTS OF CURFEW ON POTENTIAL CHANNELS USING ALTERNATIVE BANDWIDTHS

	± 24	± 36	± 48	± 60	± 72
Panel A: Employment and Income Outcomes					
<i>Paid employed</i>					
Born before 1955	-0.089 (0.058) [0.133] $\langle 0.361 \rangle$	-0.062 (0.041) [0.140] $\langle 0.566 \rangle$	-0.069 (0.035) [0.053] $\langle 0.360 \rangle$	-0.064 (0.032) [0.044] $\langle 0.285 \rangle$	-0.060 (0.030) [0.051] $\langle 0.268 \rangle$
Observations	673	977	1275	1597	1851
Control group mean	0.16	0.15	0.16	0.18	0.19
<i>Paid or unpaid employed</i>					
Born before 1955	-0.035 (0.064) [0.586] $\langle 1.000 \rangle$	-0.016 (0.045) [0.722] $\langle 1.000 \rangle$	-0.032 (0.039) [0.413] $\langle 0.671 \rangle$	-0.039 (0.034) [0.263] $\langle 0.358 \rangle$	-0.044 (0.033) [0.187] $\langle 0.268 \rangle$
Observations	673	977	1276	1601	1856
Control group mean	0.18	0.18	0.2	0.21	0.22
<i>Has a job but could not attend last week</i>					
Born before 1955	0.005 (0.058) [0.939] $\langle 1.000 \rangle$	-0.005 (0.042) [0.899] $\langle 1.000 \rangle$	-0.042 (0.036) [0.241] $\langle 0.474 \rangle$	-0.042 (0.032) [0.187] $\langle 0.333 \rangle$	-0.045 (0.031) [0.147] $\langle 0.268 \rangle$
Observations	666	968	1268	1586	1836
Control group mean	0.16	0.16	0.17	0.18	0.18
<i>Has enough money for usual needs</i>					
Born before 1955	-0.027 (0.067) [0.686] $\langle 1.000 \rangle$	0.088 (0.060) [0.145] $\langle 0.566 \rangle$	0.069 (0.056) [0.216] $\langle 0.474 \rangle$	0.074 (0.048) [0.121] $\langle 0.320 \rangle$	0.074 (0.043) [0.084] $\langle 0.268 \rangle$
Observations	673	978	1279	1601	1856
Control group mean	0.56	0.57	0.58	0.57	0.58
<i>Worried about spending money</i>					
Born before 1955	-0.126 (0.062) [0.048] $\langle 0.313 \rangle$	-0.032 (0.045) [0.481] $\langle 0.927 \rangle$	-0.021 (0.044) [0.630] $\langle 0.671 \rangle$	-0.030 (0.042) [0.478] $\langle 0.434 \rangle$	-0.048 (0.040) [0.228] $\langle 0.268 \rangle$
Observations	672	974	1274	1597	1852
Control group mean	0.61	0.59	0.61	0.62	0.62

TABLE A6: EFFECTS OF CURFEW ON POTENTIAL CHANNELS USING ALTERNATIVE BANDWIDTHS, CONT.'D

	±24	±36	±48	±60	±72
Panel B: Social and Physical Isolation Outcomes					
<i>Limited social interaction</i>					
Born before 1955	0.109 (0.065) [0.101] ⟨0.054⟩	0.106 (0.056) [0.063] ⟨0.033⟩	0.102 (0.050) [0.046] ⟨0.024⟩	0.083 (0.042) [0.049] ⟨0.026⟩	0.088 (0.042) [0.039] ⟨0.021⟩
Observations	676	981	1281	1608	1864
Control group mean	0.57	0.57	0.55	0.53	0.53
<i>Limited physical activity</i>					
Born before 1955	0.319 (0.071) [<0.001] ⟨0.001⟩	0.255 (0.061) [<0.001] ⟨0.001⟩	0.257 (0.052) [<0.001] ⟨0.001⟩	0.219 (0.047) [<0.001] ⟨0.001⟩	0.216 (0.045) [<0.001] ⟨0.001⟩
Observations	664	965	1262	1585	1837
Control group mean	0.44	0.45	0.46	0.45	0.45
Panel C: Household Conflict Outcomes					
<i>Household size</i>					
Born before 1955	0.019 (0.210) [0.927] ⟨1.000⟩	0.002 (0.183) [0.991] ⟨0.982⟩	-0.018 (0.160) [0.910] ⟨0.835⟩	0.013 (0.146) [0.930] ⟨1.000⟩	0.000 (0.132) [1.000] ⟨1.000⟩
Observations	678	984	1285	1612	1868
Control group mean	3.55	3.50	3.52	3.54	3.52
<i>Conflict with a household member</i>					
Born before 1955	0.041 (0.063) [0.518] ⟨1.000⟩	0.103 (0.049) [0.038] ⟨0.084⟩	0.060 (0.039) [0.133] ⟨0.362⟩	0.023 (0.037) [0.523] ⟨1.000⟩	0.010 (0.035) [0.770] ⟨1.000⟩
Observations	662	962	1257	1579	1829
Control group mean	0.35	0.38	0.38	0.38	0.37

Notes: This table presents the reduced-form effects of being born before December 1955 on the potential channels across different bandwidths. The variable descriptions are provided in Appendix B. The first column presents results for individuals born within 24 months of the age threshold, December 1955. The second through fifth columns expand the sample to include individuals within 36, 48, 60, and 72 months of the age threshold. The specification includes month fixed effects, province fixed effects, surveyor fixed effects, as well as indicator variables for education levels, ethnicity, and gender. Standard errors, clustered at the month-year cohort level, are in parenthesis. Corresponding p -values and Anderson (2008)'s sharpened q -values are in square and angle brackets, respectively.

TABLE A7: EFFECTS OF CURFEW ON RELIGIOSITY OUTCOMES

	± 17	± 30	± 45	± 60
<i>Considers himself/herself religious</i>				
Born before 1955	-0.119 (0.085) [0.174] $\langle 1.000 \rangle$	-0.031 (0.047) [0.519] $\langle 1.000 \rangle$	-0.022 (0.039) [0.575] $\langle 1.000 \rangle$	0.028 (0.033) [0.390] $\langle 1.000 \rangle$
Observations	494	815	1191	1573
Control group mean	0.82	0.79	0.79	0.81
<i>Prays daily</i>				
Born before 1955	-0.057 (0.084) [0.500] $\langle 1.000 \rangle$	0.019 (0.046) [0.683] $\langle 1.000 \rangle$	0.028 (0.041) [0.493] $\langle 1.000 \rangle$	0.050 (0.035) [0.150] $\langle 1.000 \rangle$
Observations	502	819	1197	1574
Control group mean	0.67	0.67	0.67	0.68
<i>Agrees that one should live by the holy book</i>				
Born before 1955	-0.038 (0.092) [0.681] $\langle 1.000 \rangle$	0.009 (0.047) [0.852] $\langle 1.000 \rangle$	0.016 (0.041) [0.703] $\langle 1.000 \rangle$	0.015 (0.034) [0.66] $\langle 1.000 \rangle$
Observations	479	785	1156	1519
Control group mean	0.69	0.69	0.68	0.69
<i>Agrees that virus is a God-sent warning</i>				
Born before 1955	-0.093 (0.100) [0.357] $\langle 1.000 \rangle$	-0.042 (0.058) [0.473] $\langle 1.000 \rangle$	-0.005 (0.047) [0.919] $\langle 1.000 \rangle$	0.029 (0.042) [0.492] $\langle 1.000 \rangle$
Observations	483	790	1159	1521
Control group mean	0.58	0.56	0.56	0.58
<i>Religiosity index</i>				
Born before 1955	-0.180 (0.228) [0.435] $\langle 1.000 \rangle$	-0.017 (0.104) [0.868] $\langle 1.000 \rangle$	0.009 (0.092) [0.919] $\langle 1.000 \rangle$	0.082 (0.078) [0.299] $\langle 1.000 \rangle$
Observations	461	755	1110	1458

Notes: This table presents regression discontinuity estimates of the effect of the curfew on religiosity outcomes using a linear control function. The variable descriptions are provided in Appendix B. The first column presents results for individuals born within 17 months of the age threshold, December 1955. The second through fourth columns expand the sample to include individuals within 30, 45, and 60 months of the age threshold. The specification includes month fixed effects, province fixed effects, surveyor fixed effects, as well as indicator variables for education levels, ethnicity, and gender. Standard errors, clustered at the month-year cohort level, are in parenthesis. Corresponding p -values and Anderson (2008)'s sharpened q -values are in square and angle brackets, respectively.

TABLE A8: EFFECTS OF CURFEW ON MAIN OUTCOMES USING A QUADRATIC CONTROL FUNCTION

	Days outside last week	Under curfew	Never goes out		
Born before 1955	-0.964 (0.246) [<0.001] <0.001>	0.601 (0.064) [<0.001] <0.001>	0.256 (0.053) [<0.001] <0.001>		
Observations	1214	1222	1203		
Control group mean	2.30	0.09	0.20		
	Overall depression index	Somatic depression index	Nonsomatic depression index	Sum of "yes" answers in SRQ-20	
Born before 1955	0.278 (0.132) [0.038] <0.102>	0.253 (0.125) [0.046] <0.102>	0.173 (0.132) [0.194] <0.108>	1.004 (0.564) [0.078] <0.102>	
Observations	1133	1203	1137	1133	
	Paid employed	Paid or unpaid employed	Has a job but could not attend last week	Has enough money for usual needs	Worried about spending money
Born before 1955	-0.042 (0.054) [0.441] <1.000>	0.012 (0.058) [0.841] <1.000>	0.023 (0.048) [0.631] <1.000>	-0.011 (0.086) [0.896] <1.000>	-0.033 (0.059) [0.580] <1.000>
Observations	1215	1216	1207	1218	1213
Control group mean	0.16	0.19	0.16	0.58	0.60
	Limited physical activity	Limited social interaction			
Born before 1955	0.162 (0.078) [0.041] <0.089>	0.056 (0.068) [0.416] <0.263>			
Observations	1201	1220			
Control group mean	0.46	0.56			
	Household size	Conflict with a household member			
Born before 1955	0.148 (0.241) [0.542] <0.372>	0.138 (0.066) [0.040] <0.088>			
Observations	1224	1200			
Control group mean	3.50	0.38			

Notes: This table presents the reduced-form regression discontinuity estimates of the effect of the curfew main outcome variables using a quadratic control function. The variable descriptions are provided in Appendix B. All columns report the reduced-form RD treatment effects of being born before December 1955 with a quadratic control function in the month-year of birth on each side of the discontinuity. The sample consists of individuals born within 45 months of the age threshold, December 1955. Standard errors, clustered at the month-year cohort level, are in parenthesis. Corresponding p -values and Anderson (2008)'s sharpened q -values are in square and angle brackets, respectively.

References

- Adams-Prassl, Abi, Teodora Boneva, Marta Golin, Christopher Rauh et al.,** "The Impact of the Coronavirus Lockdown on Mental Health: Evidence from the US," Technical Report 2020.
- Ahmed, Md Zahir, Oli Ahmed, Zhou Aibao, Sang Hanbin, Liu Siyu, and Akbaruddin Ahmad,** "Epidemic of COVID-19 in China and associated Psychological Problems," *Asian journal of psychiatry*, 2020, 51, 102092–102092.
- Anderson, Michael L,** "Multiple inference and gender differences in the effects of early intervention: A reevaluation of the Abecedarian, Perry Preschool, and Early Training Projects," *Journal of the American statistical Association*, 2008, 103 (484), 1481–1495.
- Armbruster, Stephanie and Valentin Klotzbücher,** "Lost in lockdown? COVID-19, social distancing, and mental health in Germany," Technical Report, Diskussionsbeiträge 2020.
- Armitage, Richard and Laura B Nellums,** "COVID-19 and the consequences of isolating the elderly," *The Lancet Public Health*, 2020, 5 (5), e256.
- Banks, James and Xiaowei Xu,** "The mental health effects of the first two months of lockdown and social distancing during the Covid-19 pandemic in the UK," Technical Report, IFS Working Papers 2020.
- Beland, Louis-Philippe, Abel Brodeur, Derek Mikola, and Taylor Wright,** "The Short-Term Economic Consequences of COVID-19: Occupation Tasks and Mental Health in Canada," 2020.
- Brodeur, Abel, Andrew Clark, Sarah Fleche, and Nattavudh Powdthavee,** "Covid-19, lockdowns and well-being: Evidence from google trends," 2020.
- Burdett, Ashley, Ben Etheridge, and Lisa Spantig,** "Well-Being and Weather During Lockdown," 2020.
- Daly, Michael, Angelina R Sutin, and Eric Robinson,** "Longitudinal changes in mental health and the COVID-19 pandemic: Evidence from the UK Household Longitudinal Study," *Psychological medicine*, 2020, pp. 1–10.
- Eghigian, Greg,** "The Spanish Flu Pandemic and Mental Health: A Historical Perspective," Technical Report, Psychiatric Times 2020.
- El-Zoghby, Safaa M, Enayat M Soltan, and Hend M Salama,** "Impact of the COVID-19 Pandemic on Mental Health and Social Support among Adult Egyptians," *Journal of community health*, 2020, 45 (4), 689–695.
- Etheridge, Ben and Lisa Spantig,** "The gender gap in mental well-being during the Covid-19 outbreak: evidence from the UK," Technical Report, Institute for Social and Economic Research 2020.
- Fegert, Jörg M, Benedetto Vitiello, Paul L Plener, and Vera Clemens,** "Challenges and burden of the Coronavirus 2019 (COVID-19) pandemic for child and adolescent mental health: a narrative review to highlight clinical and research needs in the acute phase and the long return to normality," *Child and adolescent psychiatry and mental health*, 2020, 14, 1–11.

- Fetzer, Thiemo, Lukas Hensel, Johannes Hermle, and Christopher Roth, "Coronavirus perceptions and economic anxiety," *Review of Economics and Statistics*, 2020, pp. 1–36.
- Fetzer, Thiemo R, Marc Witte, Lukas Hensel, Jon Jachimowicz, Johannes Haushofer, Andriy Ivchenko, Stefano Caria, Elena Reutskaja, Christopher P Roth, Stefano Fiorin et al., "Global Behaviors and Perceptions at the Onset of the COVID-19 Pandemic," Technical Report, National Bureau of Economic Research 2020.
- Galea, Sandro, Jennifer Ahern, Heidi Resnick, Dean Kilpatrick, Michael Bucuvalas, Joel Gold, and David Vlahov, "Psychological sequelae of the September 11 terrorist attacks in New York City," *New England journal of medicine*, 2002, 346 (13), 982–987.
- , Raina M Merchant, and Nicole Lurie, "The mental health consequences of COVID-19 and physical distancing: The need for prevention and early intervention," *JAMA internal medicine*, 2020, 180 (6), 817–818.
- Giuntella, Osea, Kelly Hyde, Silvia Saccardo, and Sally Sadoff, "Lifestyle and Mental Health Disruptions During COVID-19," *Available at SSRN 3666985*, 2020.
- González-Sanguino, Clara, Berta Ausín, Miguel Ángel Castellanos, Jesús Saiz, Aída López-Gómez, Carolina Ugidos, and Manuel Muñoz, "Mental health consequences during the initial stage of the 2020 Coronavirus pandemic (COVID-19) in Spain," 2020, 87, 172–176.
- Holman, E. Alison, Rebecca R. Thompson, Dana Rose Garfin, and Roxane Cohen Silver, "The unfolding COVID-19 pandemic: A probability-based, nationally representative study of mental health in the United States," *Science Advances*, 2020, 6 (42).
- Hwang, Tzung-Jeng, Kiran Rabheru, Carmelle Peisah, William Reichman, and Manabu Ikeda, "Loneliness and social isolation during the COVID-19 pandemic," *International psychogeriatrics*, 2020, 32 (10), 1217–1220.
- Kozlowski, Julian, Laura Veldkamp, and Venky Venkateswaran, "Scarring body and mind: the long-term belief-scarring effects of Covid-19," *NBER Working Paper*, 2020, (27439).
- Lee, Antoinette M, Josephine GWS Wong, Grainne M McAlonan, Vinci Cheung, Charlton Cheung, Pak C Sham, Chung-Ming Chu, Poon-Chuen Wong, Kenneth WT Tsang, and Siew E Chua, "Stress and psychological distress among SARS survivors 1 year after the outbreak," *The Canadian Journal of Psychiatry*, 2007, 52 (4), 233–240.
- Lei, Lei, Xiaoming Huang, Shuai Zhang, Jinrong Yang, Lin Yang, and Min Xu, "Comparison of Prevalence and Associated Factors of Anxiety and Depression Among People Affected by versus People Unaffected by Quarantine During the COVID-19 Epidemic in Southwestern China," *Medical science monitor*, 2020, 26, e924609–e924609.
- Liu, Nianqi, Fan Zhang, Cun Wei, Yanpu Jia, Zhilei Shang, Luna Sun, Lili Wu, Zhuoer Sun, Yaoguang Zhou, Yan Wang, and Weizhi Liu, "Prevalence and predictors of PTSS during COVID-19 outbreak in China hardest-hit areas: Gender differences matter," *Psychiatry research*, 2020, 287, 112921–112921.
- Lu, Haiyang, Peng Nie, and Long Qian, "Do quarantine experiences and attitudes towards COVID-19 affect the distribution of mental health in China? A quantile regression analysis," *Applied Research in Quality of Life*, 2020, pp. 1–18.

- Moccia, Lorenzo, Delfina Janiri, Maria Pepe, Luigi Dattoli, Marzia Molinaro, Valentina De Martin, Daniela Chieffo, Luigi Janiri, Andrea Fiorillo, Gabriele Sani, and Marco Di Nicola,** "Affective temperament, attachment style, and the psychological impact of the COVID-19 outbreak: an early report on the Italian general population," *Brain, behavior, and immunity*, 2020, 87, 75–79.
- Moghanibashi-Mansourieh, Amir,** "Assessing the anxiety level of Iranian general population during COVID-19 outbreak," *Asian journal of psychiatry*, 2020, 51, 102076–102076.
- Neria, Yuval, Arijit Nandi, and Sandro Galea,** "Post-traumatic stress disorder following disasters: a systematic review," *Psychological medicine*, 2008, 38 (4), 467.
- Olagoke, Ayokunle A, Olakanmi O Olagoke, and Ashley M Hughes,** "Exposure to coronavirus news on mainstream media: The role of risk perceptions and depression," *British journal of health psychology*, 2020, 25 (4), 865–874.
- Ozamiz-Etxebarria, Naiara, Maria Dosil-Santamaria, Maitane Picaza-Gorrochategui, and Nahia Idoiaga-Mondragon,** "Stress, anxiety, and depression levels in the initial stage of the COVID-19 outbreak in a population sample in the northern Spain," *Cadernos de saúde pública*, 2020, 36 (4), e00054020–e00054020.
- Pfefferbaum, Betty and Carol S North,** "Mental health and the Covid-19 pandemic," *New England Journal of Medicine*, 2020.
- Proto, Eugenio and Climent Quintana-Domeque,** "COVID-19 and Mental Health Deterioration among BAME Groups in the UK," 2020.
- Qiu, Jianyin, Bin Shen, Min Zhao, Zhen Wang, Bin Xie, and Yifeng Xu,** "A nationwide survey of psychological distress among Chinese people in the COVID-19 epidemic: implications and policy recommendations," *General psychiatry*, 2020, 33 (2), e100213–e100213.
- Samadarshi, Saurav Chandra Acharya, Sharmistha Sharma, and Jeevan Bhatta,** "An online survey of factors associated with self-perceived stress during the initial stage of the COVID-19 outbreak in Nepal," *Ethiopian Journal of Health Development*, 2020, 34 (2).
- Samuel, Samantha Ciarocco Dotson and Katherine A Koh,** "Disaster psychiatry and homelessness: creating a mental health COVID-19 response," *The Lancet Psychiatry*, 2020.
- Sønderskov, Kim Mannemar, Peter Thisted Dinesen, Ziggi Ivan Santini, and Søren Dinesen Østergaard,** "The depressive state of Denmark during the COVID-19 pandemic," *Acta neuropsychiatrica*, 2020, 32 (4), 226–228.
- Tubadji, Annie, Frederic Boy, and Don J Webber,** "Narrative economics, public policy and mental health," *Covid Economics*, 2020, 20, 109–131.
- Wang, Cuiyan, Riyu Pan, Xiaoyang Wan, Yilin Tan, Linkang Xu, Cyrus S Ho, and Roger C Ho,** "Immediate psychological responses and associated factors during the initial stage of the 2019 coronavirus disease (COVID-19) epidemic among the general population in China," *International journal of environmental research and public health*, 2020, 17 (5), 1729.
- , –, –, –, –, –, **Roger S McIntyre, Faith N Choo, Bach Tran, Roger Ho, Vijay K Sharma et al.,** "A longitudinal study on the mental health of general population during the COVID-19 epidemic in China," *Brain, behavior, and immunity*, 2020.

- Wang, Huiyao, Qian Xia, Zhenzhen Xiong, Zhixiong Li, Weiyi Xiang, Yiwen Yuan, Yaya Liu, and Zhe Li**, "The psychological distress and coping styles in the early stages of the 2019 coronavirus disease (COVID-19) epidemic in the general mainland Chinese population: A web-based survey," *Plos one*, 2020, 15 (5), e0233410.
- Xiong, Jiaqi, Orly Lipsitz, Flora Nasri, Leanna MW Lui, Hartej Gill, Lee Phan, David Chen-Li, Michelle Iacobucci, Roger Ho, Amna Majeed et al.**, "Impact of COVID-19 pandemic on mental health in the general population: A systematic review," *Journal of affective disorders*, 2020.
- Yokoyama, Yukari, Kotaro Otsuka, Norito Kawakami, Seiichiro Kobayashi, Akira Ogawa, Kozo Tannno, Toshiyuki Onoda, Yumi Yaegashi, and Kiyomi Sakata**, "Mental health and related factors after the Great East Japan earthquake and tsunami," *PloS one*, 2014, 9 (7), e102497.
- Zhang, Yingfei and Zheng Feei Ma**, "Impact of the COVID-19 pandemic on mental health and quality of life among local residents in Liaoning Province, China: A cross-sectional study," *International journal of environmental research and public health*, 2020, 17 (7), 2381.
- Özdin, Selçuk and Şükriye Bayrak Özdin**, "Levels and predictors of anxiety, depression and health anxiety during COVID-19 pandemic in Turkish society: The importance of gender," *International journal of social psychiatry*, 2020, 66 (5), 504–511.