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

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Abstract

Using a strict, age-specific lockdown order for adults aged 65 and older in Turkey, we examine the mental health consequences of an extended period of tight mobility restrictions on senior adults. Adopting a regression discontinuity design, we find that the curfew-induced decline in mobility substantially worsened mental health outcomes, including somatic and nonsomatic symptoms of mental distress (approximately 0.2 standard deviation). Exploring potential channels, we document an increase in social and physical isolation, with no evidence of robust changes in labor market outcomes or intrahousehold conflict for this subpopulation.

JEL Classification: I18, I31, O15

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Mental health conditions account for 20 percent of all disabilities worldwide and cost approximately more than 1 trillion USD annually (World Health Organization 2019). Social isolation and loneliness have shown strong correlations with depression and anxiety and can significantly predict adult morbidity and chronic diseases that lead to early mortality (Idler and Benyamini 1997; Ortega et al. 2010; Steptoe et al. 2013; Holwerda et al. 2016; Domènech-Abella et al. 2017).

Recent anecdotal evidence suggests a considerable increase in mental health disorders after the introduction of movement restrictions to slow the spread of COVID-19 (The New York Times May 12, 2020). The share of the U.S. population who report symptoms of depression and anxiety, for example, rose to around 40 percent during the COVID-19 pandemic compared to 11 percent in early 2019 (Center for Disease Control and Prevention 2020).[1] Stay-at-home orders are associated with an increased number of internet search queries related to mental health, most strikingly suicide intentions (Jacobson et al. 2020).[2] Mental health effects are expected to worsen over time as self- or government-imposed quarantine and other social distancing measures create increased social isolation, physical immobility, and economic uncertainty. The financial cost of treating COVID-19 related mental health conditions is staggering: one recent estimate, for example, suggests a 1.6 trillion USD additional annual burden to the U.S. healthcare system (Cutler and Summers 2020). Despite the mounting descriptive evidence coupled with increasing concern among public health and medical communities (Armitage and Nellums 2020; Brooks et al. 2020; Galea et al. 2020; Holmes et al. 2020; Panchal et al. 2020), scant empirical evidence exists to show the causal impact of restricted mobility on mental health outcomes.

We help fill this gap by quantifying the effects of binding stay-at-home orders for those aged 65 and older implemented in Turkey on individuals' mental health. The Turkish government imposed a strict stay-at-home order for the high-risk population of those 65 and older starting on March 21, 2020. Severe financial penalties were imposed for noncompliance with these mandated movement restrictions. The strict curfew orders remained in effect until June 2020, making it one of the longest confinement policies enacted worldwide to reduce COVID-19 mortality.

[1] In Spain, similarly, based on a cross-sectional survey, González-Sanguino et al. (2020) report psychological stress among 87 percent of survey participants and attribute its excessive prevalence to confinement.

[2] Similarly, individuals exposed to stay-at-home orders in the United States report increased health concerns, financial anxiety, and loneliness compared to those who are not exposed to them (Tull et al. 2020).

Our study exploits the binding age cutoff to causally estimate the impact of the age-specific curfew on mental health outcomes. We rely on the fact that individuals who were born around the age cutoff at which the curfew becomes binding have no systematic differences in predetermined characteristics and are thus comparable. To this end, we conducted a phone survey from late May to early July, targeting the specific age group of 59- to 70-year-old adults, and compared those who were just below the age cutoff of 65 and thus not affected by the stay-at-home order to those just above 65 who were affected. In addition to using the 20-item Self Reporting Questionnaire (SRQ-20) developed by the World Health Organization (WHO 1994)—a validated mental health measure used in a variety of nonclinical settings—we designed a survey to capture various channels through which the curfew can impact mental health outcomes.

Social isolation may generate adverse mental health consequences through several different channels we examined in this study. First, stay-at-home orders reduce one's contact with other individuals and reduce social interactions, leading to increased feelings of loneliness and anxiety. Since older adults are already at risk for depression and mental illness, being prohibited from seeing their close relatives or friends is likely to act as an additional stressor, making them feel lonelier, more anxious, and forgotten (Armitage and Nellums 2020; Santini et al. 2020; Newman and Zainal 2020). Second, stay-at-home orders may prevent individuals from participating in the workforce and reduce their potential income, leading to additional stress due to financial constraints (Fetzer et al. 2020a; Beland et al. 2020).[3,4] Third, being confined at home with other family members for an extended time period can also increase the likelihood of intrahousehold conflict, and in extreme cases, can give rise to physical or psychological abuse (Leslie and Wilson 2020; Ravindran and Shah 2020).[5]

[3]In the U.S. context, negative effects on labor market outcomes have occurred (Forsythe et al. 2020). These studies also document a smaller and imprecisely estimated effect for the labor market outcomes of older adults (Gupta et al. 2020). Similarly, since we focus on a relatively older segment of the population, a large proportion of which is already out of the labor force, one might expect to see smaller effects on labor market outcomes.

[4]The retirement age in Turkey is 58 for women and 60 for men. For new entrants to the pension system after October 2008, the retirement age will gradually rise to 65 (OECD 2017). Hence, our respondents were not differentially affected by the retirement age cutoff. Using the HLFS 2019, Figure A1 illustrates graphically that the probability of retirement increases monotonically from age 63 to 68. Note that the HLFS 2019 does not contain birth month information, which is necessary to conduct an RD analysis. It is also important to remember that no specific government programs in Turkey exist that are similar to Medicare in the US for which individuals qualify once they turn 65.

[5]Although the incidence of domestic violence appears smaller among older adults, it is far from negligible, ranging from around 3 to 10 percent (Nelson 2002; Tufan 2011).

We adopt a regression discontinuity design (RD) using a narrow age bandwidth and report three main results. First, our RD estimates show that the curfew reduced the number of days that individuals had gone outside in the previous week by around one day, corresponding to an approximately 47 percent decline relative to the control group. Similarly, it increased the probability of never leaving home by approximately 30 percentage points, corresponding to a 149 percent increase relative to the control group.

Second, we find that the curfew-induced reduction in mobility increases the probability of experiencing mental distress markedly, measured both by somatic indicators that capture physical symptoms of anxiety and depression and nonsomatic indicators that represent more subjective assessments of anxiety and depression. Our RD estimates imply that exposure to the curfew results in a 0.18 standard deviation increase in somatic symptoms and a 0.16 standard deviation increase in nonsomatic symptoms of mental distress.[6]

Lastly, examining potential channels, we document that social and physical isolation play a particularly important role in explaining our results. Our results indicate that exposure to the curfew results in a 8.8 percentage point (16 percent) increase in the probability of having limited social interaction with friends and family, and a 24.8 percentage point (54 percent) increase in the probability of having limited physical activity. We find no evidence of a robust significant change in labor market outcomes or intrahousehold conflict measures.

We note upfront that the order of questions asked in the survey may lead to potential priming effects. In particular, the respondents were asked about their mobility indicators prior to their mental health outcomes. If this order of questions makes mobility restrictions more salient, such priming could lead to a change in the respondents' reported mental health measures. However, it is important to note that there were a range of other questions in between mobility and mental health questions as shown in Appendix C, which potentially mitigate such concerns. Adding these transition questions might offset any priming effects.[7]

We make several contributions to the existing literature. First, we show that the adverse

[6]These effect sizes are similar to those reported in studies that document the substantial effects of cash transfers on psychological well-being and depression (Baird et al. 2013; Haushofer and Shapiro 2016).

[7]In surveys to measure Gallup-Sharecare Well-Being Index, it was observed that when subjective well-being questions are asked after political preference questions, the respondents reported substantially lower life satisfaction. In a randomized setting, Deaton (2011) shows that adding a single transition question between the political and subjective well-being questions almost fully mitigates the priming effects of political questions. The study suggests that the relevant mechanism is reorientating the respondent's attention away from politics.

impacts of social and physical isolation on mental health are substantial. Despite the well-known associations, most of the previous studies that document adverse mental health effects stemming from quarantine and social isolation are based on small sample sizes and fail to account for reverse causality (Brooks et al. 2020; Newman and Zainal 2020). As unobservables, such as earlier life events, childhood circumstances, and ability, might affect both social isolation and mental health outcomes, establishing a causal relationship has been difficult. Our empirical setup allows us to estimate the effects of an exogenous decline in mobility on somatic and nonsomatic mental distress indicators.

Our study more closely relates to a smaller subset of empirical studies that rely on the differential timing of lockdown measures.[8] Using two waves of cross-section data from the U.S., Adams-Prassl et al. (2020) compares the respondents from states that imposed strict stay-at-home orders to those that did not before and after the lockdown. Both Brodeur et al. (2020) and Tubadji et al. (2020) use Google Trends data from the US and Europe and compare the intensity of searching for mental health terms before and after a lockdown. While these studies suggest increased mental distress related to lockdowns, they face challenges in separately identifying the impact of mandated lockdowns from the private responses to COVID-19 cases. Our study provides an empirical setup that isolates the effects of mandated curfews and uses validated measures of mental health.

Second, our findings contribute to better understanding the costs associated with lockdowns, which go beyond financial losses. The growing literature on the optimal policy response to the pandemic often uses a susceptible-infectious-recovered (SIR) framework, assuming that different subpopulations might have different rates of infection and survival (Acemoglu et al. 2020; Alvarez et al. 2020; Brotherhood et al. 2020). Acemoglu et al. (2020), for instance, suggest that it is possible to achieve better outcomes through a simple "targeted policy that applies an aggressive lockdown" on individuals above age 65. If the policy response to COVID-19 creates a mental health crisis by placing already susceptible populations at higher risk of depression and suicide, these consequences would call for additional policy interventions to address such adverse effects. Such policy measures may include setting up mental health call centers, improving access to telehealth services, and

[8] We provide a detailed table in the Appendix A that summarizes some of the most recent studies on this topic (Adams-Prassl et al. 2020; Armbruster and Klotzbücher 2020; Banks and Xu 2020; Burdett et al. 2020; Daly et al. 2020; Etheridge and Spantig 2020; Fetzer et al. 2020a,b; Giuntella et al. 2020; Holman et al. 2020; Proto and Quintana-Domeque 2020).

establishing on-the-ground local support services for at-risk populations (Galea et al. 2020).

This paper is organized as follows. Section 1 provides a brief description of the COVID-19 lockdown in Turkey. Section 2 presents the data used for the analysis, the identification strategy, and preliminary checks for the RD analysis. Section 3 presents the main results, and Section 4 discusses the evidence on potential causal channels. Section 5 concludes the paper.

1 Background

The Turkish Ministry of Health reported the first case of the novel coronavirus on March 10, 2020, and the first COVID-19-related death on March 17.[9] From this early period, the older population and individuals with underlying medical conditions were defining features of the government's response to the COVID-19 pandemic. In stark contrast to the rest of the world, the Turkish government imposed strict and long-lasting mobility restrictions exclusively on senior citizens. The first curfew decree was issued on March 21 and imposed an absolute lockdown on individuals aged 65 and older and those with certain health conditions.[10] The central government formed local support teams to provide basic needs for individuals subject to the decree and who needed assistance, while no exceptions existed that could breach the stay-at-home order.[11] The age-specific curfew along with other government measures to contain the virus, such as mask wearing in public spaces, were routinely enforced by the local security forces and the offenders were fined.[12, 13]

Only after May 10, individuals who were subject to the curfew were allowed a period of four hours to walk outside their home on Sundays, which was conditional on wearing a mask and social distancing.[14] One week later, the government allowed a similar exception

[9] `https://covid19.saglik.gov.tr/` - last accessed April 14, 2021.

[10] These conditions include autoimmune disorders, chronic pulmonary disease, asthma, cardiovascular disease, hypertension, renal, and liver-related diseases, `https://www.icisleri.gov.tr/65-yas-ve-ustu-ile-kronik-rahatsizligi-olanlara-sokaga-cikma-yasagi-genelgesi` – last accessed April 14, 2021.

[11] In case of a health emergency, those aged 65 and older could call the emergency number 112, and an ambulance could be sent to their premises for transport to the closest hospital or health clinic for emergency treatment.

[12] According to the law, the fine for curfew offenders was set between 789-3,180 Turkish Liras (https://blog.lexpera.com.tr/bulasici-hastaliklara-iliskin-tedbirlere-aykiri-davranma-sucu-tck-m-195/ – last accessed April 14, 2021). Anecdotal evidence suggests that the upper limit was used to deter potential offenders (see, for example, https://www.hurriyet.com.tr/gundem/sokaga-cikma-yasagina-ragmen-kahvehanede-oyun-oynarken-yakalandilar-41492692 - last accessed April 14, 2021.) As a reference, the minimum monthly wage in Turkey during the same period was 2,943 Turkish Liras.

[13] We also note that the lockdown policy did not place any restrictions on household visitors.

[14] `https://www.goc.gov.tr/65-yas-ve-uzeri20-yas-altikronik-rahatsizligi-bulunan-kisilerin`

for six hours.[15] On May 21, senior citizens were allowed to travel to a specific location, which was conditional on staying for at least one month and not leaving their new shelter.[16] On May 29, actively employed senior citizens were exempt from the lockdown. Finally, on June 10, the curfew was relaxed and all individuals who were subject to it were allowed to be outside between 10 a.m. and 8 p.m.

The heterodox policy response to the pandemic has stirred controversy, as a lack of empirical evidence failed to demonstrate that the decision to impose age-specific curfews would slow down the death toll or virus spread.[17] The Turkish Medical Association (TMA), for example, argues that the excessive restrictions on senior citizens' mobility adversely affected their mental health, severely disrupted their daily routines, and created a sense of unfairness among those under lockdown.[18] According to the TMA, the policy lacks the epidemiological evidence to show its effectiveness in protecting vulnerable populations at the expense of their mental well-being.[19]

In official announcements, the Turkish Ministry of Internal Affairs does not mention a specific birthday cutoff for the curfew and uses the term "age 65 and older" to indicate the senior population that is subject to lockdown, although anecdotal evidence suggests that birth year is the sole determinant.[20] To confirm the threshold in our sample, we directly asked respondents whether they were subject to the age-specific curfew the government imposed. We then ran a simulation in which we split our analysis sample into treatment and control groups using each birth year and month as the curfew threshold to estimate the average difference in exposure to the curfew between the treatment and control groups

-sokaga-cikma-kisitlamasi-istisnasi-genelgesi-merkezicerik – last accessed April 14, 2021

[15] https://www.icisleri.gov.tr/65-yas-ve-uzeri-ile-kronik-rahatsizligi-olan-vatandaslarin-sokaga-cikma-gun-ve-saatleri –last accessed April 14, 2021

[16] https://www.icisleri.gov.tr/81-il-valiligine-65-yas-ve-uzeri-vatandaslarimiz-icin-seyahat-izin-belgesi-genelgesi – last accessed April 14, 2021

[17] The Turkish government does not provide detailed and consistent epidemic data, thus to the best of our knowledge, no empirical studies confirm or refute the success of the age-specific curfew policy. In addition, the reported aggregate figures on deaths substantially underestimate the total case and death toll; one study showed that excess mortality is at least twice as high as the official government death counts due to COVID-19 (Altindag 2020).

[18] https://www.ttb.org.tr/415yi6z – last accessed April 14, 2021

[19] According to the Ministry of Health, the total number of confirmed COVID-19 cases was 583 in 100,000 for 50–64-year-old individuals and 553 in 100,000 for 65–79-year-olds between June 1 and June 18, 2020. The corresponding death rate for all confirmed cases was 3.19 percent for the former group while it was 13.0 percent for the latter one.

[20] Separate curfews were imposed on individuals aged 18 and 20, and government announcements indicate that year of birth determines inclusion in that age group. See, for example, https://www.icisleri.gov.tr/sokaga-cikma-yasagi-bulunan-18---20-yas-arasindaki-genclerle-ilgili-istisnalar – last accessed April 14, 2021.

for each of the simulated thresholds.

As shown in Figure A2 and in line with field observations, we obtain the greatest difference in being subject to the curfew between individuals who were born just before and after January 1956. The estimated coefficient indicates that individuals born before or in December 1955 are 85 percentage points more likely to claim to be subject to the curfew than those who were born in January 1956 or later. In the empirical analysis, we rely on this threshold, which provides the strongest discontinuity in exposure to the treatment, as shown by various measures in Figure 2.

2 Data and Empirical Methodology

2.1 Data

We use a unique dataset covering individuals born in Turkey between 1950 and 1961. The data were collected by KONDA Research and Consultancy, a reputable research and consultancy firm in Istanbul, Turkey. Since the firm regularly conducts nationally representative surveys to provide information on public opinion on a wide range of political issues, they have built a surveyor base throughout the country. Their regular surveys—called KONDA Barometer surveys—are conducted 11 times per year and have successfully predicted election outcomes in recent general elections. Given their record and well-respected position in both the Turkish[21] and international media[22] (The Economist 2008, Reuters 2011, The Economist 2019), we contacted KONDA to implement our survey instrument.

Specifically, we approached KONDA to collect survey data from their existing respondent database with the following two criteria: (i) respondents should reside in urban areas where the curfews are strictly imposed, and (ii) they should be aged between 59 and 70 to have 6 treatment and 6 control cohorts on each side of the curfew threshold. Consequently, the survey instrument was implemented in urban areas across 26 regions from May 29 to July 4 through phone interviews.[23] The average response rate for our survey was 88

[21] https://www.hurriyet.com.tr/gundem/hangi-anket-sirketi-secimlerin-sonucunu-dogru-bildi-29224184

[22] See, for example, https://www.economist.com/briefing/2008/07/17/flags-veils-and-sharia?story_id=E1_TTSQVVSD, https://www.reuters.com/article/us-turkey-referendum-poll/poll-shows-backing-for-turk-reforms-on-eve-of-vote-idUSTRE68A0EV20100911?feedType=RSS&feedName=everything&virtualBrandChannel=11563, https://www.economist.com/erasmus/2019/07/01/in-turkey-demography-is-a-brake-on-islamisation.

[23] On average, the respondents were subject to the curfew for 8 to 9 weeks when they were contacted.

percent. Although response rates are slightly lower for those not exposed to the curfew, Figure A3 shows no evidence of a significant break in nonresponse rates around the age threshold of 65.[24] Appendix C provides the full list of questions asked in the survey.

Appendix Table A1 compares basic demographic information from our analysis sample to the 2019 Household Labor Force Survey (HLFS), focusing on individuals born between 1950 and 1961. We observe that the average age is 64 for both samples and that the marital status indicators are quite similar. Our analysis sample has relatively fewer women. It is also composed of more educated individuals than the HLFS due to the urban sampling frame.

Appendix Table 1 presents the summary statistics for our analysis sample composed of a maximum of 1909 individuals. We observe that 27 percent of the sample completed high school or above. The household size prior to the COVID-19 outbreak was 3.3, with approximately 11 percent of the respondents having ever received psychological support and 57 percent having a chronic disease.[25] We observe that 48 percent of the respondents in our sample reported being subject to the curfew and the average number of days spent outside in the previous week was 1.9 days.

Finally, we observe that 13 percent worked for pay, and 15 percent worked either for pay or in family businesses. In addition, 14 percent had a job that they could not attend in the previous week. Approximately 60 percent experienced limited social interaction, and 55 percent experienced limited physical activity.[26] Their current household size was 3.4, and approximately 37 percent reported having a conflict with a household member over the last month.

To assess mental health outcomes, a set of mental health screening tools have been developed in nonclinical settings. These range from depression scales such as the Beck Depression Inventory (Beck et al. 1961) to more general psychological distress scales such as the K10 scale (Kessler et al. 2002). In our survey, we use the 20-Item Self Reporting

[24]Since we did not have a universal database of telephone numbers that matched the owners' age, it was not possible to collect data through random digit dialing. Instead, we rely on the existing respondent database of KONDA to draw a sample of individuals between ages 59 and 70 living in urban areas. Sampling from an existing respondent database may also explain our relatively high response rate for a phone survey.

[25]Less than 7 percent of the respondents reported that they were living alone at home.

[26]Limited social interaction is a dummy variable that takes the value of 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 is a dummy variable that takes the value of 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.

Questionnaire (SRQ-20) developed by the World Health Organization (WHO 1994). Table 2 details the list of SRQ-20 questions along with their summary statistics. Among the several mental health screening tools, the SRQ-20 is one of the few specifically designed for low- and middle-income settings. The questions are designed to identify mental distress that captures typical anxiety and depression symptoms, such as poor concentration or suicidal thoughts, and less-known somatic symptoms such as digestive problems or frequent aches.[27] The questions' short format and the dichotomous answers used in the SRQ-20 render it particularly useful in settings with limited resources (van der Westhuizen et al. 2016).[28]

Following Anderson (2008) and Erten and Keskin (2020), we construct three summary indices: (i) a mental distress index, which is an average of the z-scores of 20 mental health indicators; (ii) a somatic symptoms of distress index, which is an average of 4 indicators related to the body and are therefore more objective measures of anxiety and depression; and (iii) a nonsomatic symptoms of distress index, which is an average of the remaining 16 indicators that represent more subjective assessments of anxiety and depression. We create these indices to have a mean of 0 and a standard deviation of 1, following Anderson (2008); the variables that compose each index are described in Appendix A. Higher index values reflect higher mental distress levels.

In addition, we include a more standard measure of mental distress using SRQ-20 by summing "yes" answers to the questions included in the SRQ-20 inventory. This variable provides an alternative measure of mental distress, with higher values capturing higher distress levels.[29]

[27]The American Psychiatric Association also suggests that anxiety and depression symptoms include not only classic psychological signs such as loss of interest but also somatic symptoms such as general aches and pains or trembling (American Psychiatric Association 2013).

[28]The SRQ-20 has been cross-validated across many countries, including Brazil (Iacoponi and de Jesus Mari 1989), China (Chen et al. 2009), Vietnam (Giang et al. 2006) and India (Patel et al. 2008), and has been shown to be a reliable tool for measuring mental health distress in low- and middle-income contexts.

[29]In the psychology literature, some studies used certain cutoff points of the SRQ score varying between 0 and 20 to identify the presence of mental disorders. However, as WHO (1994) has described, it is necessary to conduct an empirical validation against a sample of in-depth psychiatric interviews in order to determine the country- and culture-specific cutoff point (Harpham et al. 2003). Since we do not have a study that conducted such a validation in Turkey, we opted for not using any specific cutoff point.

2.2 Identification

As explained in Section 1, COVID-19 lockdowns were strictly imposed on individuals born before or in December 1955 while those born in January 1956 or later were exempt. The context thus offers an ideal setting to implement an RD design to estimate the curfew's impact on a range of outcomes.

Our RD design leverages the quasi-random assignment of curfew around the age cutoff to estimate the reduced-form (RF) effects of the curfew on our outcomes of interest. The causal interpretation of both estimates relies on the identifying assumption that around the vicinity of the curfew age cutoff, the assignment to curfew is as good as random. Our identifying assumption is that these two cohorts born one month apart do not exhibit any systematic differences other than whether they were exposed to the curfew or not. For our RF estimates, we use the following specification:

$$y_i = \alpha + \beta z_i + f(x_i) + \epsilon_i \tag{1}$$

$$\forall x_i \in (c - h, c + h)$$

where y_i captures the outcome of interest, which is regressed on a treatment indicator z_i that equals one for individuals who were born before January 1956 and zero otherwise. x_i is the forcing variable defined as the number of months that the respondent is older than the index month of the curfew threshold. The function $f(x_i)$ is a continuous local linear function fit separately on each side of the threshold point c. The standard errors are clustered at the month-year of birth to account for the correlation in outcomes across individuals who were born in the same year-month cell (Lee and Card 2008). We additionally control for month of birth fixed effects, province fixed effects, surveyor fixed effects, as well as indicator variables for education levels, ethnicity, and gender. For the regression sample restriction, we use the Imbens and Kalyanaraman (2012) procedure to choose the optimal bandwidth h.[30] As discussed in Section 3, our results are robust to a range of bandwidths and a quadratic control function.

To address concerns related to multiple hypothesis tests, we report p-values that account for the false discovery rate (FDR) (Benjamini et al. 2006; Anderson 2008). It is necessary to correct for FDR in our study since we examine multiple outcomes within the same do-

[30] We use a uniform kernel in our estimations. The results are highly similar when we use a triangular kernel.

main, which increases the likelihood that some of our estimates are statistically significant by chance alone. We use the FDR approach presented in Anderson (2008), based on the methodology in Benjamini et al. (2006). This procedure converts p-values into q-values, which control the expected proportion of rejections that are Type I errors, or false discoveries. Following Field et al. (2021), we make these adjustments for multiple hypothesis testing within domains defined by the set of outcomes considered in each table (e.g., we adjust within all mobility outcomes in Table 3), or each panel within tables (e.g. we adjust within all labor market outcomes in Panel A of Table 5).[31]

One could be concerned that exposure to the curfew affects the perceived likelihood of getting sick in addition to its effects on mobility. However, this concern is highly unlikely given that those just below the cutoff point have heard the same information about COVID-19's higher risks for older people and people with chronic diseases. Nevertheless, if this concern was valid, the estimates capture the combined effect of the lockdown and fear related to COVID-19.

The optimal bandwidth according to Imbens and Kalyanaraman (2012) (IK)'s method is 45 for the variable capturing days spent outside during the previous week. For brevity, we will use the RD estimates for this optimal bandwidth in interpreting the magnitudes of the results. For robustness, we also present our results using the corresponding optimal bandwidth calculated by Calonico et al. (2014) algorithm, which is 17 months. In addition, we use two additional constant bandwidths of 30 and 60 months around the discontinuity in our main tables. The results are highly similar with different bandwidths and control functions.

2.3 Preliminary Checks

We conduct two standard checks to validate our RD design (Imbens and Lemiuex 2008). The first is to test whether the forcing variable is subject to manipulation around the predetermined threshold (McCrary 2008). In our specific setup, rejecting a one-sided null hypothesis would indicate that individuals falsify their birthday to exempt themselves from the curfew. This, however, is highly unlikely because we asked individuals to read their birthday from their national IDs, which is the standard tool that local security forces use

[31]Other standard routines for q-value conversion developed by Simes (1986) and Romano and Wolf (2016) yield similar results, which are available from the authors upon request.

to enforce the curfew. Figure A4 provides visual evidence that the local quadratic fits on the left- and righthand side of the age threshold for the curfew do not exhibit any jumps in observation frequency. A formal test provided in McCrary (2008) also fails to reject the null hypothesis.[32]

Second, we examine whether the predetermined covariates are balanced around the discontinuity. In Figure 1, each graph plots local averages of the outcome in one-month bins against the forcing variable. We find no evidence of a significant break at the discontinuity for indicator variables of whether the respondents completed high school, whether they are illiterate, whether they are female, whether they are married, whether they are widowed or separated, whether they are of non-Turkish ethnic origin, whether they have ever received psychological support, whether they have a chronic disease, and their household size prior to COVID-19.[33]

3 Effects of the Curfew on Mobility and Mental Health Outcomes

3.1 Mobility Outcomes

We begin by testing the curfew's effect on mobility outcomes. Panel A of Figure 2 plots local averages of three mobility outcomes in monthly bins against the respondent's month and year of birth with a cutoff of December 1955.[34] As described in 1, the curfew required those born before this date to stay at home, whereas younger cohorts were free to leave their homes at any time. Local linear smoothed fits on each side of the cutoff are overlaid on each figure. Figure 2(a) shows a clear downward shift at the discontinuity with an approximately 1-day decline in the number of days that respondents went out during the week prior to the interview. Similarly, Figure 2(b) also reveals a clear jump around the discontinuity in the self-reported probability of being subject to the curfew. Similarly, in Figure 2(c), the probability of never going outside—the likelihood of never leaving home—increases abruptly around the age threshold. Compared to the control group averages, all

[32] To conduct the test, we use our first-stage optimal bandwidth of 45 months. The test yields a p-value of 0.8.

[33] In regression-based tests reported in Appendix Table A2, we note that none of the predetermined covariates display any evidence of a statistically significant jump at the discontinuity across different bandwidths. SUR tests of the coefficients' joint significance result in p-values ranging from 0.25 to 0.75, depending on the bandwidth.

[34] Appendix Figure A5 provides a residualized version of Figure 2 after regressing outcomes on fixed effects and controls, displaying very similar results.

of these indicators show a substantial decline in the mobility of respondents older than 65 years of age at the time the curfew was imposed.

In Table 3, we present the corresponding first-stage estimates using the main estimating equation at various bandwidths. Crossing the treatment threshold reduces the number of days the respondents went outside in the previous week by 1–1.1 days. The estimates are robust to different bandwidths and roughly correspond to a 47 percent decline in mobility relative to the control group mean.[35]

Related indicators exhibit similarly large declines in mobility: being born before 1955 increases reporting of being subject to the curfew by 71 percentage points and raises the probability of never going out by 30 percentage points. Relative to the control group means, these estimates correspond to an approximately 7-fold increase in the probability of reporting being subject to the curfew and a 149 percent increase in the probability of never leaving home. These estimates are robust to different bandwidths and control functions, as shown in Appendix Tables A3 and A8.

3.2 Mental Health Outcomes

We next examine the curfew's impact on mental health outcomes. Following recent RD studies[36], we graphically illustrate the average of each index as a function of monthly distance from being born in December 1955. In particular, we residualize the outcomes by regressing them on fixed effects and controls, and then plot local averages of these residualized outcomes in monthly bins against the respondent's month and year of birth with a cutoff of December 1955 in Figure 3. These graphs suggest a sharp increase in all mental distress indicators around the discontinuity.[37]

Table 4 quantifies the magnitude of these effects by reporting the reduced-form RD treatment effects of being born before December 1955 with a linear control function in the month-year of birth on each side of the discontinuity across different bandwidths. Remarkably, the RD estimates show a substantial impact of the curfew on all measures of mental distress; the first-row estimates imply a 0.21 standard deviation increase in

[35]The results are very similar if we examine the curfew's effects on the number of times the respondent went outside over the last month in a week on average, or the number of times the respondent went outside in the last week apart from the legally permitted times.

[36]See, for example, Asher and Novosad (2020).

[37]Appendix Figure A6, which provides an unresidualized version of Figure 3, shows very similar results.

the mental distress index.[38] We estimate similar effects for the more objective measure of depression—the somatic symptoms index (0.18 standard deviation)—which includes only physical symptoms of depression. The corresponding effect size of the nonsomatic symptoms index is an increase of 0.16 standard deviation. Finally, the RD estimates indicate that the curfew had a positive impact of 0.7 on the sum of "yes" answers in SRQ-20 inventory reported by the respondents. This corresponds to a 10.4 percent increase relative to the control group mean. These estimates are robust to different bandwidths and control functions, as shown in Appendix Tables A4 and A8.[39,40]

4 Effects of the Curfew on Potential Causal Channels

We proceed by examining potential causal channels through which the curfew negatively impacted mental health outcomes. We divide our analysis into three subsections by focusing on the curfew's effects on the following outcomes: (i) employment and income, (ii) social and physical isolation, and (iii) household conflict.

4.1 Employment and Income Outcomes

If exposure to the curfew prevents one from going to work, it can negatively impact one's ability to work outside the home and earn a living. Such negative labor market impacts can lead to additional anxiety and a deterioration of mental health outcomes. We explore

[38]One could consider scaling the magnitudes of these reduced-form estimates by different mobility measures to get a sense of the treatment effects on the complier population. Scaling by reporting that the respondent was under curfew results in larger two-stage-least-squares estimates than the reduced-form estimates since the estimated coefficient for differential likelihood of being under curfew range 0.7 for the optimal bandwidth of 45 months. In particular, complying with the curfew leads to a 0.29 standard deviation increase in the mental distress index. In contrast, scaling with respect to days spent outside last week results in slightly smaller estimates as the reduced-form coefficients are divided by the first-stage estimates of around 1.1 days. For instance, a one-day reduction in days spent outside due to the curfew results in a 0.19 standard deviation increase in mental distress index.

[39]When we examine the effects of the curfew on individuals' self-perception of their health, Panel A of Appendix Table A5 shows that those exposed to the curfew report a higher probability of having poor physical health compared to those not exposed. Interestingly, we find no evidence that exposure to the curfew has a significant impact on the probability of reporting poor mental health. Hence, despite a significant worsening in their mental distress outcomes as measured by SRQ-questions, those exposed to the curfew do not recognize these symptoms as a deterioration in their mental health.

[40]Moreover, we asked respondents two questions about their life satisfaction using the Cantril Scale, which is frequently used in Gallup Surveys. In reporting scale scores, Gallup refers to those respondents who have poor ratings of their current life situation (4 and below) and negative ratings for the next five years (4 and below) as "suffering", or having well-being that is at high risk (Gallup 2013). In Panel B of Appendix Table A5, we also examine whether the curfew had a significant impact on the probability of reporting higher suffering measured by these indicators, but we find no evidence of a significant change in this measure.

this mechanism by testing whether the curfew negatively impacts employment and income outcomes.

In Panel A of Table 5, we find no evidence that the curfew significantly impacts labor market outcomes or household finances after adjusting for multiple hypothesis testing. These include whether the respondent was working in paid, or paid/unpaid employment, or whether the respondent has a job that he/she cannot attend. Similarly, we find no evidence of the curfew significantly impacting having enough money to meet usual needs, or being worried about spending money.[41] Hence, we conclude that the employment and income channel does not seem to explain our results.

4.2 Social and Physical Isolation Outcomes

Confinement may severely limit an individual's social interaction and physical mobility. Social isolation, loneliness, and disconnectedness from the community may lead to mental health problems among the senior population. Moreover, continuous confinement within the same physical space and a lack of physical mobility and exercise could further magnify the risk of a mental breakdown.

In Panel B of Table 5, the RD estimates show that the curfew had a positive impact on having a very limited or extremely limited social interaction and physical activity in the last month compared to pre-COVID times.[42] In particular, exposure to the curfew results in a 8.8 percentage point increase in the probability of having limited social interaction with friends and family, corresponding to a 16 percent increase relative to the control group. Similarly, exposure to the curfew leads to a 24.8 percentage point increase in the probability of having limited physical activity such as walking, running, or participating in sports, corresponding to a 54 percent increase compared to the control group. Overall, we conclude that the social and physical isolation channel can potentially explain our results.

4.3 Household Conflict Outcomes

While being confined to the home reduces time spent with people outside of the home, it tends to result in an increase in time spent with household members. This additional time

[41] In our survey, we also asked respondents about their monthly income more explicitly. However, many respondents answered this question by reporting that they have retirement income. Since retirement income varies widely across individuals, we do not have a consistent measure of household income.

[42] The results are very similar if we only focus on experiencing an extreme limitation in social interaction and physical activity over the same time period.

could mechanically increase the probability of having conflict with a household member. Moreover, the additional stress of social isolation could also increase the probability of experiencing a conflict at home.

In Panel C of Table 5, the RD estimates indicate no evidence of change in the current household size, implying no significant impact of the curfew on household composition. We also find no evidence of a significant change in the probability of having a conflict with a household member driven by home confinement. However, we note as a caveat that the precision of estimates for the household conflict effect do not allow us to rule out meaningful results. Overall, the household conflict channel does not appear to explain our results. The graphical illustration of these potential channels presented in Figure A7 are consistent the results shown in Table 5.

Individual beliefs and practices Finally, we explore some potential consequences of the curfew for individual beliefs and practices. For example, age-specific curfews might create a sense of social unfairness among individuals subject to them. As shown in Table 6, individuals subject to the curfew are substantially less likely to support the curfew policy. In particular, exposure to the curfew reduced support for the 65 and over age-specific curfew by 14.6 percent compared to the control group. In contrast, we find no evidence of a robust significant change for satisfaction with the government's overall COVID-19 policy response. Lastly, we examine the change in religious practices and religiosity as a coping mechanism under social isolation. The estimates provided in Appendix Table A7 show no evidence of the curfew significantly impacting religious beliefs and practices.

Note that these estimates are robust to using this study's different bandwidths and control functions as shown in Appendix Tables A6 and A8.

5 Conclusion

The policy response to the COVID-19 pandemic has involved lockdown orders with different degrees of strictness. While the lockdown policies generally brought benefits in reducing the spread of the virus, they also posed potential costs on certain subpopulations. While macroeconomic models incorporating the SIR framework often recommend age-specific lockdowns targeting adults age 65 and older, they often neglect the mental

health consequences of these movement restrictions.

Using a rather unique setup in Turkey—which imposed a strict curfew for the high-risk population group of those aged 65 and over on March 21, 2020—we implement an RD design comparing those just under the binding age cutoff to those above it using data from a detailed phone survey covering 59- to 70-year-old adults.

Our findings reveal that the curfew had striking mental health consequences. We find that the curfew reduced the number of days spent outside the week prior to the interview by approximately one day. In turn, the curfew-induced reduction in mobility increases the probability of experiencing mental distress substantially, with approximately 0.2 standard deviation increases in somatic and nonsomatic symptoms of mental distress. These sizable effects are all the more concerning since older adults are already more susceptible to a higher risk of depression and suicide.

These mental health consequences of strict lockdown policies call for a rethinking of how additional policy measures—ranging from mental health call centers and telehealth services to on-the-ground local support for senior adults—can be used to alleviate the mental health burden on susceptible populations.

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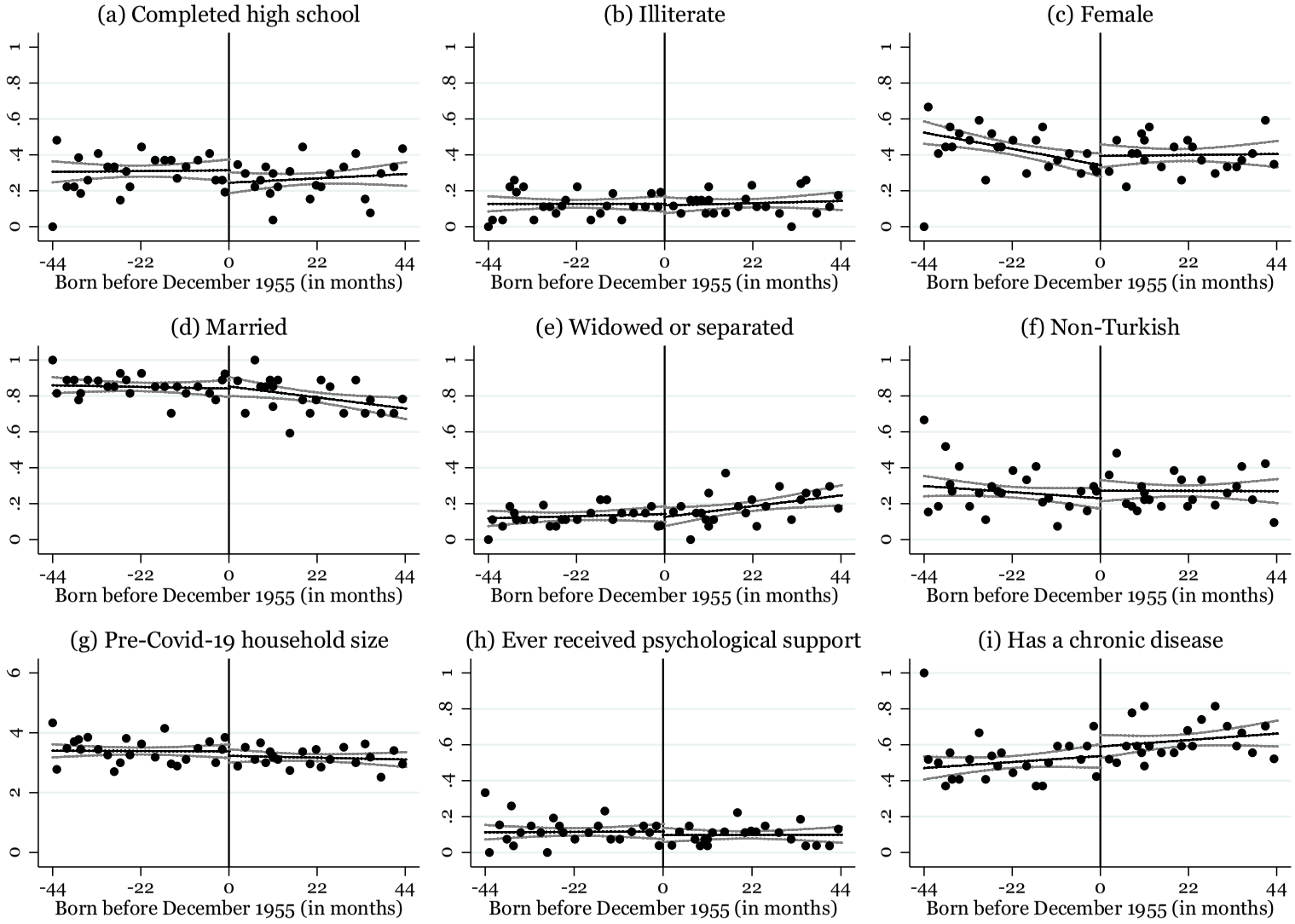
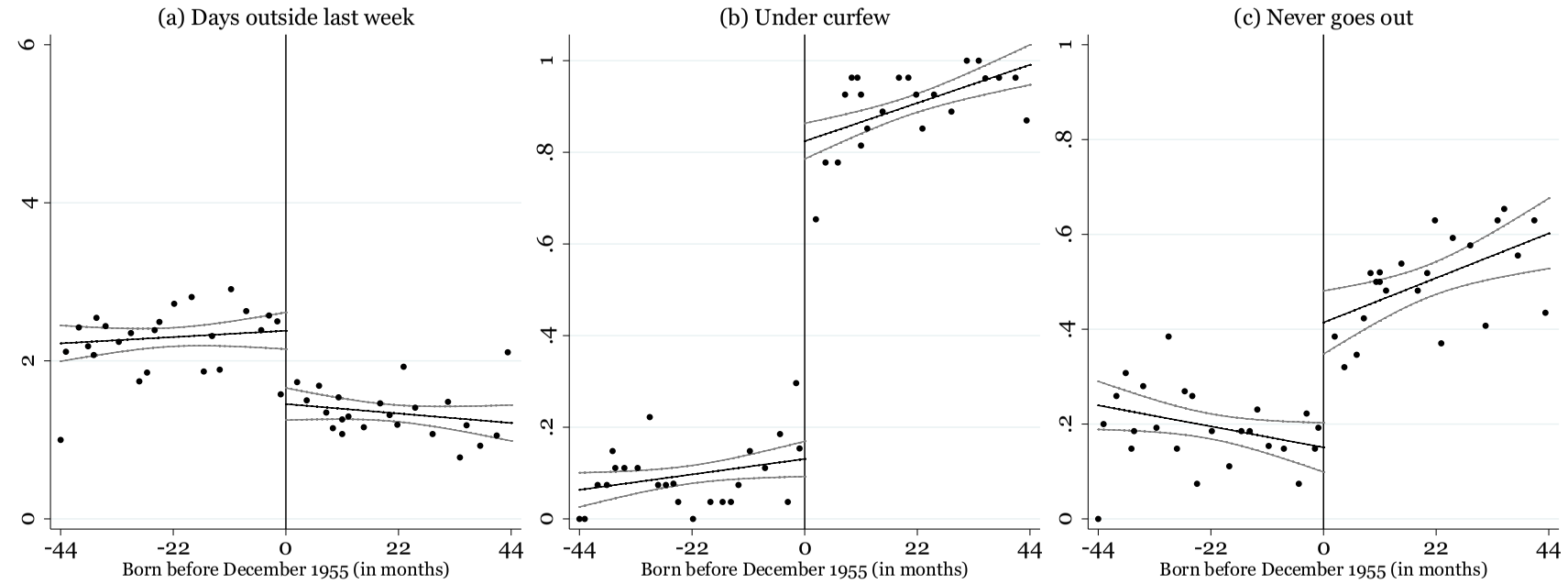
FIGURE 1: BALANCED COVARIATES



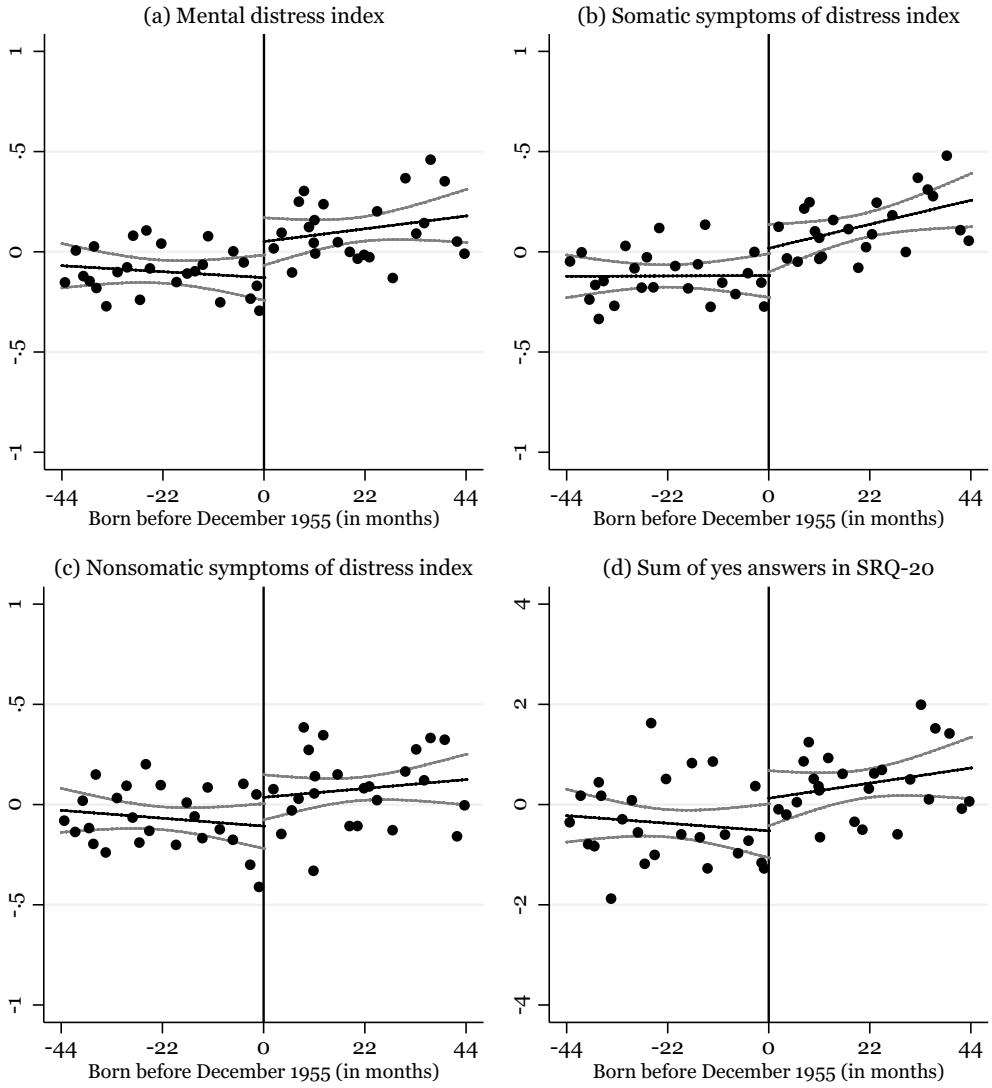
Note: The sample includes all individuals born before and after 44 months around the cutoff point, December 1955. The figures plot predetermined covariates in monthly bins against the month-year of birth of being born in December 1955. The vertical line in each graph represents the cutoff point. Gray lines show 95 percent confidence intervals around the mean level. Variable definitions are listed in Appendix B.

FIGURE 2: RD TREATMENT EFFECTS ON MOBILITY OUTCOMES



Note: The figures plot the non-residualized values 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 3: RD TREATMENT EFFECTS ON MENTAL HEALTH 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 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.

TABLE 1: SUMMARY STATISTICS FOR 59-70 YEAR-OLD INDIVIDUALS

	Mean	S.D.	Min	Max	Obs.
Panel A: Pre-determined Characteristics					
Completed high school	0.27	0.44	0	1	1896
Illiterate	0.13	0.34	0	1	1896
Female	0.43	0.50	0	1	1909
Married	0.81	0.40	0	1	1907
Widowed or separated	0.18	0.38	0	1	1907
Non-Turkish	0.26	0.44	0	1	1881
Pre-Covid-19 household size	3.29	1.73	1	10	1909
Ever received psychological support	0.11	0.31	0	1	1887
Has a chronic disease	0.57	0.50	0	1	1898
Panel B: Mobility Outcomes					
Days outside last week	1.87	1.79	0	7	1896
Under curfew	0.48	0.50	0	1	1907
Never goes out	0.36	0.48	0	1	1885
Panel C: Potential Channels					
Paid employed	0.13	0.34	0	1	1892
Paid or unpaid employed	0.15	0.36	0	1	1897
Has a job but could not attend last week	0.14	0.35	0	1	1876
Has money for usual needs	0.61	0.49	0	1	1894
Worried about spending money	0.60	0.49	0	1	1890
Limited social interaction	0.60	0.49	0	1	1905
Limited physical activity	0.55	0.50	0	1	1878
Current household size	3.42	1.83	1	10	1909
Conflict with a household member	0.37	0.48	0	1	1868

Notes: The table presents the means, standard deviations, minimum values, maximum values, and number of observations. The sample includes 59–70 year-old individuals born within 72 months before and after December 1955. The variables are described in Appendix B.

TABLE 2: LIST OF SRQ-20 QUESTIONS AND THEIR SUMMARY STATISTICS

	Mean	S.D.	Min	Max	Obs.
Over the last 4 weeks,					
have you often had headaches?	0.47	0.50	0	1	1904
has your appetite been poor?	0.38	0.49	0	1	1903
have you slept badly?	0.49	0.50	0	1	1904
have you been easily frightened?	0.31	0.46	0	1	1897
have you had shaking hands?	0.19	0.39	0	1	1894
have you felt nervous, tense, or worried?	0.66	0.47	0	1	1891
has your digestion been poor?	0.32	0.47	0	1	1890
have you had trouble in thinking clearly?	0.41	0.49	0	1	1889
have you felt unhappy?	0.57	0.50	0	1	1890
have you cried more often than usual?	0.18	0.38	0	1	1877
have you found it difficult to enjoy your daily activities?	0.52	0.50	0	1	1887
have you found it difficult to make decisions?	0.36	0.48	0	1	1888
has your daily work suffered?	0.46	0.50	0	1	1887
have you been unable to play a useful part in life?	0.22	0.41	0	1	1883
have you lost interest in things?	0.38	0.49	0	1	1880
have you felt that you are a worthless person?	0.21	0.41	0	1	1879
has the thought of ending your life been on your mind?	0.04	0.20	0	1	1882
have you felt tired all the time?	0.50	0.50	0	1	1895
have you had uncomfortable feelings in your stomach?	0.42	0.49	0	1	1899
have you gotten tired easily?	0.56	0.50	0	1	1895

Notes: The table presents the list of questions included in the SRQ-20 inventory, and their summary statistics, including the means, standard deviations, minimum values, maximum values, and number of observations. The sample includes 59–70 year-old individuals born within 72 months before and after December 1955. The variables are described in Appendix B.

TABLE 3: EFFECTS OF CURFEW ON MOBILITY OUTCOMES

	±17	±30	±45	±60
Days outside last week				
Born before 1955	-1.011	-1.106	-1.09	-1.023
	(0.308)	(0.230)	(0.180)	(0.166)
	[0.002]	[<0.001]	[<0.001]	[<0.001]
	⟨0.003⟩	⟨0.001⟩	⟨0.001⟩	⟨0.001⟩
Observations	506	832	1214	1601
Control group mean	2.30	2.33	2.30	2.40
Under curfew				
Born before 1955	0.609	0.663	0.708	0.723
	(0.071)	(0.057)	(0.045)	(0.036)
	[<0.001]	[<0.001]	[<0.001]	[<0.001]
	⟨0.001⟩	⟨0.001⟩	⟨0.001⟩	⟨0.001⟩
Observations	511	837	1222	1610
Control group mean	0.12	0.09	0.09	0.08
Never goes out				
Born before 1955	0.213	0.301	0.297	0.245
	(0.079)	(0.045)	(0.036)	(0.034)
	[0.011]	[<0.001]	[<0.001]	[<0.001]
	⟨0.004⟩	⟨0.001⟩	⟨0.001⟩	⟨0.001⟩
Observations	500	825	1203	1591
Control group mean	0.17	0.18	0.20	0.18

Notes: This table presents first-stage estimates of the effect of being born before December 1955 on the mobility outcomes 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 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 4: EFFECTS OF CURFEW ON MENTAL HEALTH OUTCOMES

	±17	±30	±45	±60
Mental distress index				
Born before 1955	0.264	0.359	0.205	0.238
	(0.188)	(0.115)	(0.094)	(0.077)
	[0.169]	[0.003]	[0.032]	[0.003]
	⟨0.422⟩	⟨0.011⟩	⟨0.095⟩	⟨0.011⟩
Observations	475	777	1133	1485
Somatic symptoms of distress index				
Born before 1955	0.343	0.296	0.175	0.198
	(0.195)	(0.121)	(0.085)	(0.080)
	[0.087]	[0.018]	[0.043]	[0.015]
	⟨0.422⟩	⟨0.019⟩	⟨0.095⟩	⟨0.016⟩
Observations	503	824	1203	1580
Nonsomatic symptoms of distress index				
Born before 1955	0.153	0.272	0.158	0.188
	(0.182)	(0.118)	(0.092)	(0.073)
	[0.404]	[0.025]	[0.088]	[0.011]
	⟨0.422⟩	⟨0.019⟩	⟨0.095⟩	⟨0.016⟩
Observations	478	781	1137	1491
Sum of "yes" answers in SRQ-20				
Born before 1955	1.163	1.236	0.734	0.816
	(0.936)	(0.517)	(0.440)	(0.384)
	[0.222]	[0.02]	[0.098]	[0.036]
	⟨0.422⟩	⟨0.019⟩	⟨0.095⟩	⟨0.021⟩
Observations	475	777	1133	1485
Control group mean	7.03	7.17	7.05	7.16

Notes: This table presents regression discontinuity estimates of the effect of the curfew on mental health outcomes. See the Appendix B for details of index construction. 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 5: Effects of Curfew on Potential Channels

	±17	±30	±45	±60
Panel A: Employment and Income Outcomes				
Paid employed				
Born before 1955	-0.032	-0.083	-0.071	-0.064
	(0.074)	(0.048)	(0.037)	(0.032)
	[0.671]	[0.090]	[0.059]	[0.044]
	⟨1.000⟩	⟨0.812⟩	⟨0.423⟩	⟨0.285⟩
Observations	506	832	1215	1597
Control group mean	0.16	0.15	0.16	0.18
Paid or unpaid employed				
Born before 1955	-0.020	-0.031	-0.025	-0.039
	(0.083)	(0.052)	(0.041)	(0.034)
	[0.814]	[0.549]	[0.542]	[0.263]
	⟨1.000⟩	⟨1.000⟩	⟨1.000⟩	⟨0.358⟩
Observations	506	832	1216	1601
Control group mean	0.18	0.18	0.19	0.21
Has a job but could not attend last week				
Born before 1955	-0.016	-0.010	-0.022	-0.042
	(0.090)	(0.047)	(0.035)	(0.032)
	[0.864]	[0.836]	[0.527]	[0.187]
	⟨1.000⟩	⟨1.000⟩	⟨1.000⟩	⟨0.333⟩
Observations	500	825	1207	1586
Control group mean	0.14	0.16	0.16	0.18
Has enough money for usual needs				
Born before 1955	0.028	0.044	0.063	0.074
	(0.096)	(0.062)	(0.058)	(0.048)
	[0.775]	[0.481]	[0.276]	[0.121]
	⟨1.000⟩	⟨1.000⟩	⟨1.000⟩	⟨0.320⟩
Observations	507	832	1218	1601
Control group mean	0.58	0.56	0.58	0.57
Worried about spending money				
Born before 1955	-0.120	-0.045	-0.021	-0.030
	(0.066)	(0.052)	(0.047)	(0.042)
	[0.080]	[0.393]	[0.660]	[0.478]
	⟨0.670⟩	⟨1.000⟩	⟨1.000⟩	⟨0.434⟩
Observations	506	829	1213	1597
Control group mean	0.62	0.59	0.60	0.62

TABLE 5: EFFECTS OF CURFEW ON POTENTIAL CHANNELS, CONT'D.

	±17	±30	±45	±60
Panel B: Social and Physical Isolation Outcomes				
Limited social interaction				
Born before 1955	0.222	0.074	0.088	0.083
	(0.071)	(0.058)	(0.051)	(0.042)
	[0.004]	[0.211]	[0.088]	[0.049]
	⟨0.002⟩	⟨0.119⟩	⟨0.047⟩	⟨0.026⟩
Observations	509	835	1220	1608
Control group mean	0.61	0.57	0.56	0.53
Limited physical activity				
Born before 1955	0.365	0.203	0.248	0.219
	(0.092)	(0.064)	(0.054)	(0.047)
	[<0.001]	[0.003]	[<0.001]	[<0.001]
	⟨0.001⟩	⟨0.006⟩	⟨0.001⟩	⟨0.001⟩
Observations	499	822	1201	1585
Control group mean	0.45	0.45	0.46	0.45
Panel C: Household Conflict Outcomes				
Household size				
Born before 1955	-0.098	0.032	-0.047	0.013
	(0.244)	(0.183)	(0.161)	(0.146)
	[0.690]	[0.860]	[0.771]	[0.930]
	⟨1.000⟩	⟨0.756⟩	⟨0.784⟩	⟨1.000⟩
Observations	511	838	1224	1612
Control group mean	3.53	3.50	3.50	3.54
Conflict with a household member				
Born before 1955	0.035	0.091	0.052	0.023
	(0.093)	(0.055)	(0.042)	(0.037)
	[0.705]	[0.105]	[0.220]	[0.523]
	⟨1.000⟩	⟨0.265⟩	⟨0.784⟩	⟨1.000⟩
Observations	498	820	1200	1579
Control group mean	0.34	0.36	0.38	0.38

Notes: This table presents regression discontinuity estimates of the effect of the curfew on potential channels. 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 6: Effects of Curfew on Political Support for Curfew and Covid-19-specific Policies

	±17	±30	±45	±60
Supports the 65+ age-specific curfew				
Born before 1955	-0.222	-0.129	-0.115	-0.086
	(0.088)	(0.049)	(0.041)	(0.034)
	[0.017]	[0.010]	[0.006]	[0.014]
	⟨0.036⟩	⟨0.022⟩	⟨0.012⟩	⟨0.029⟩
Observations	505	828	1207	1590
Control group mean	0.83	0.80	0.79	0.81
Satisfied with the government's Covid-19 policy response				
Born before 1955	-0.122	-0.093	-0.032	-0.002
	(0.099)	(0.051)	(0.047)	(0.038)
	[0.227]	[0.071]	[0.490]	[0.958]
	⟨0.129⟩	⟨0.037⟩	⟨0.325⟩	⟨0.919⟩
Observations	501	822	1197	1579
Control group mean	0.74	0.70	0.69	0.69

Notes: This table presents regression discontinuity estimates of the effect of the curfew on supporting the 65+ age-specific curfew and being satisfied with the government's Covid-19 policy response 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.

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 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 Pitsburgh 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.[43,44] 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.[45] 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.[46]

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

[44]Rapidly 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.

[45]These 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).

[46]While previous studies have discussed the pandemic's scarring effects on long-term beliefs affecting economic outcomes (Kozlowski 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 of the respondent reports having a poor or very poor physical health.
- Poor mental health: A dummy variable equal to one of 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

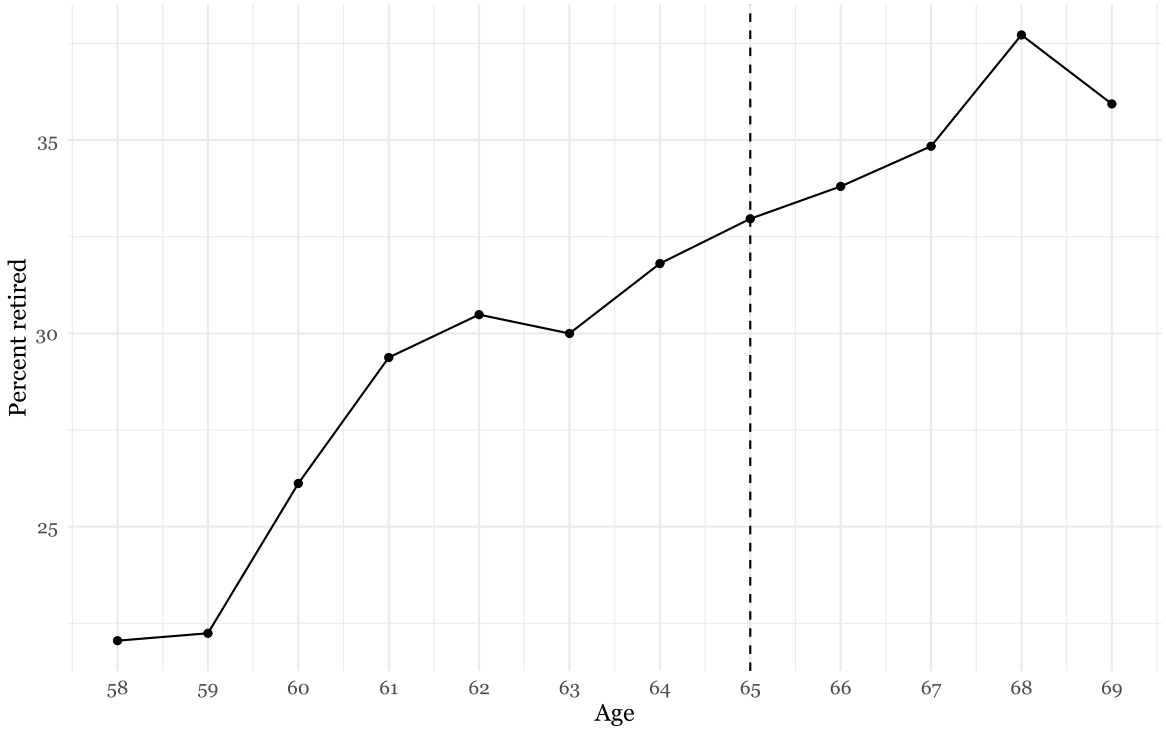
    c. Arab

    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

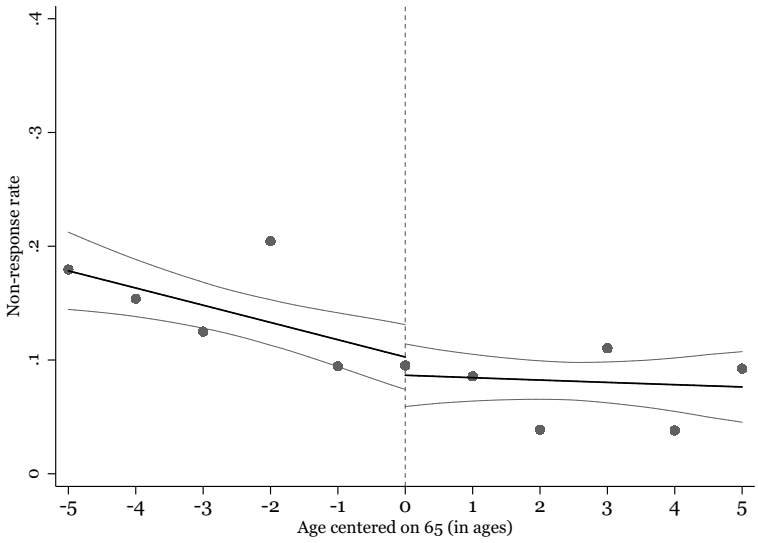


Note: The sample includes all individuals born between January 1950 and December 1961. The vertical line represents the cut-off point by age in 2019.

FIGURE A2: GRID SEARCH FOR RD TREATMENT THRESHOLDS

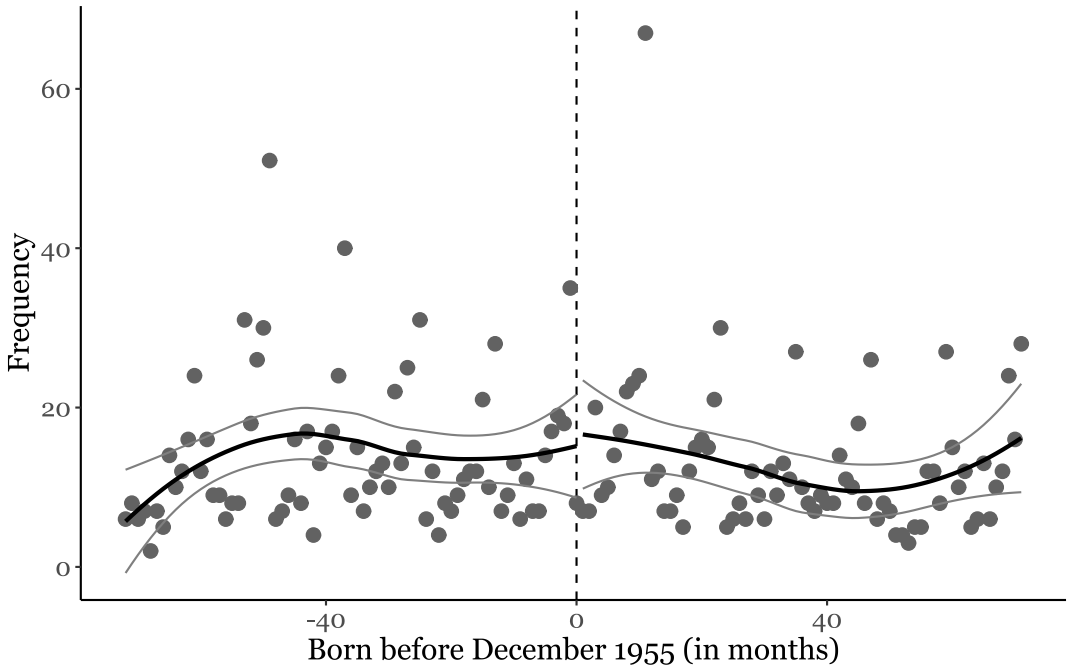
Note: The sample includes all individuals born between January 1950 and December 1961. The vertical line represents the birth year and birth month for which the estimated coefficient of difference in exposure to curfew between the treatment and the control group is maximum. Variable definitions are listed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

FIGURE A3: NONRESPONSE RATE AROUND THE AGE THRESHOLD



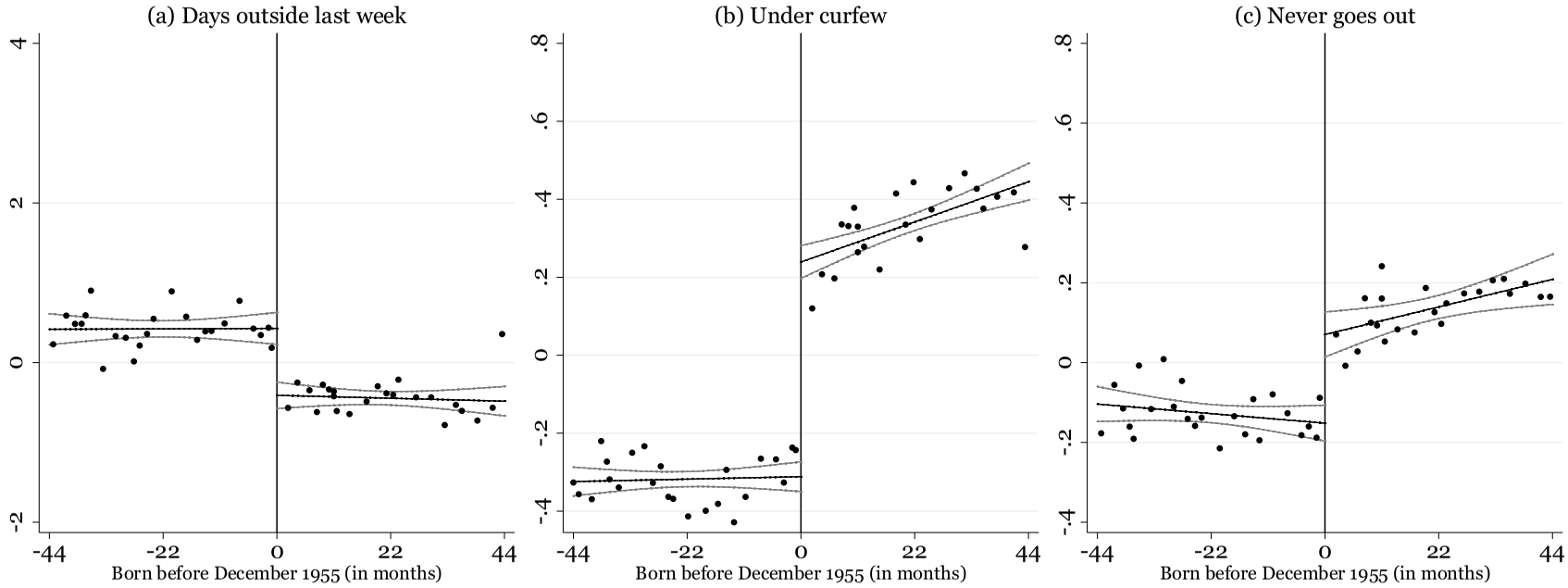
Note: The figure plots the nonresponse rate against the age of the respondent centered on 65. The sample includes all individuals born before and after 5 years around the cutoff age of 65. The vertical line in each graph represents the cut-off point, age 65. Gray lines show 95 percent confidence intervals 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



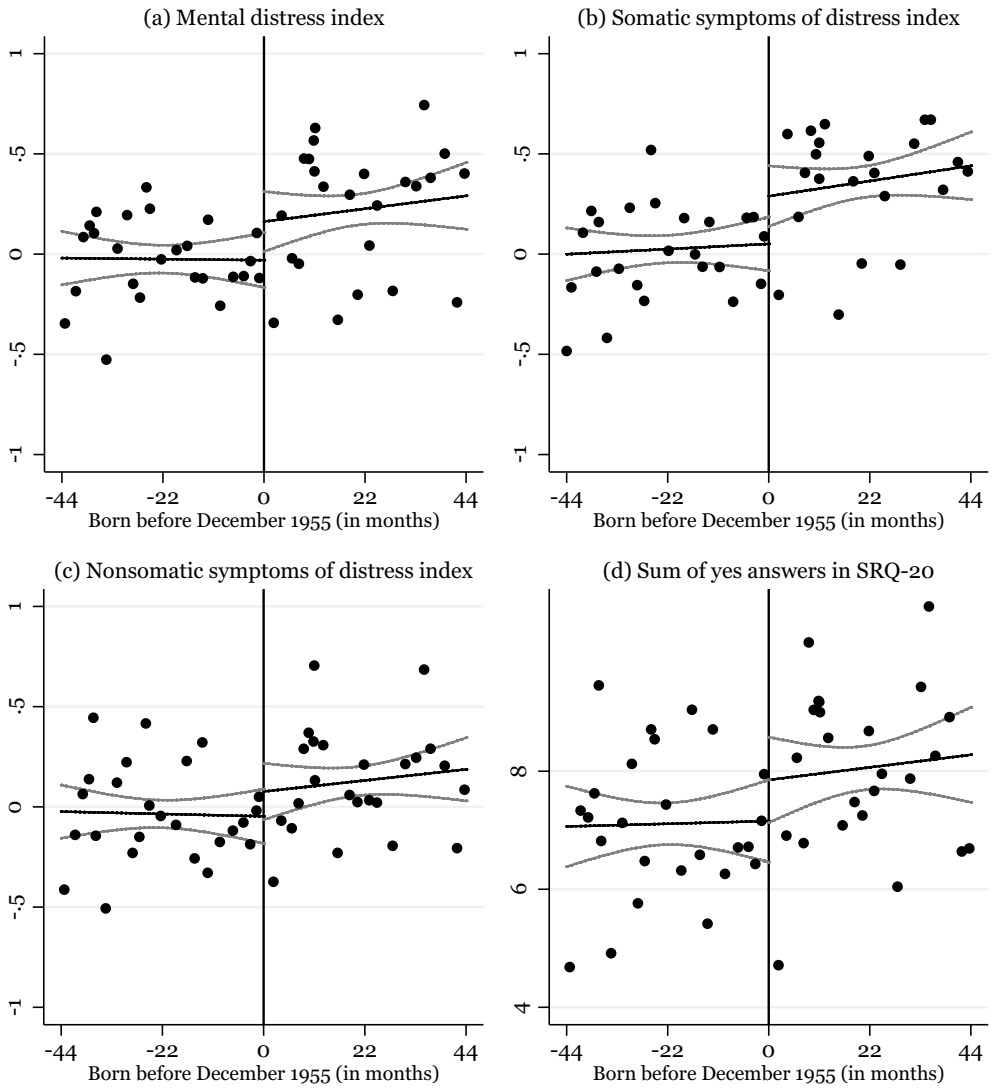
Note: The sample includes all individuals born between January 1950 and December 1961. The vertical line in each graph represents the cut-off point, December 1955. Circles indicate the raw number of observations for each birth month-year bin. Gray lines show 95 percent confidence intervals around the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

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



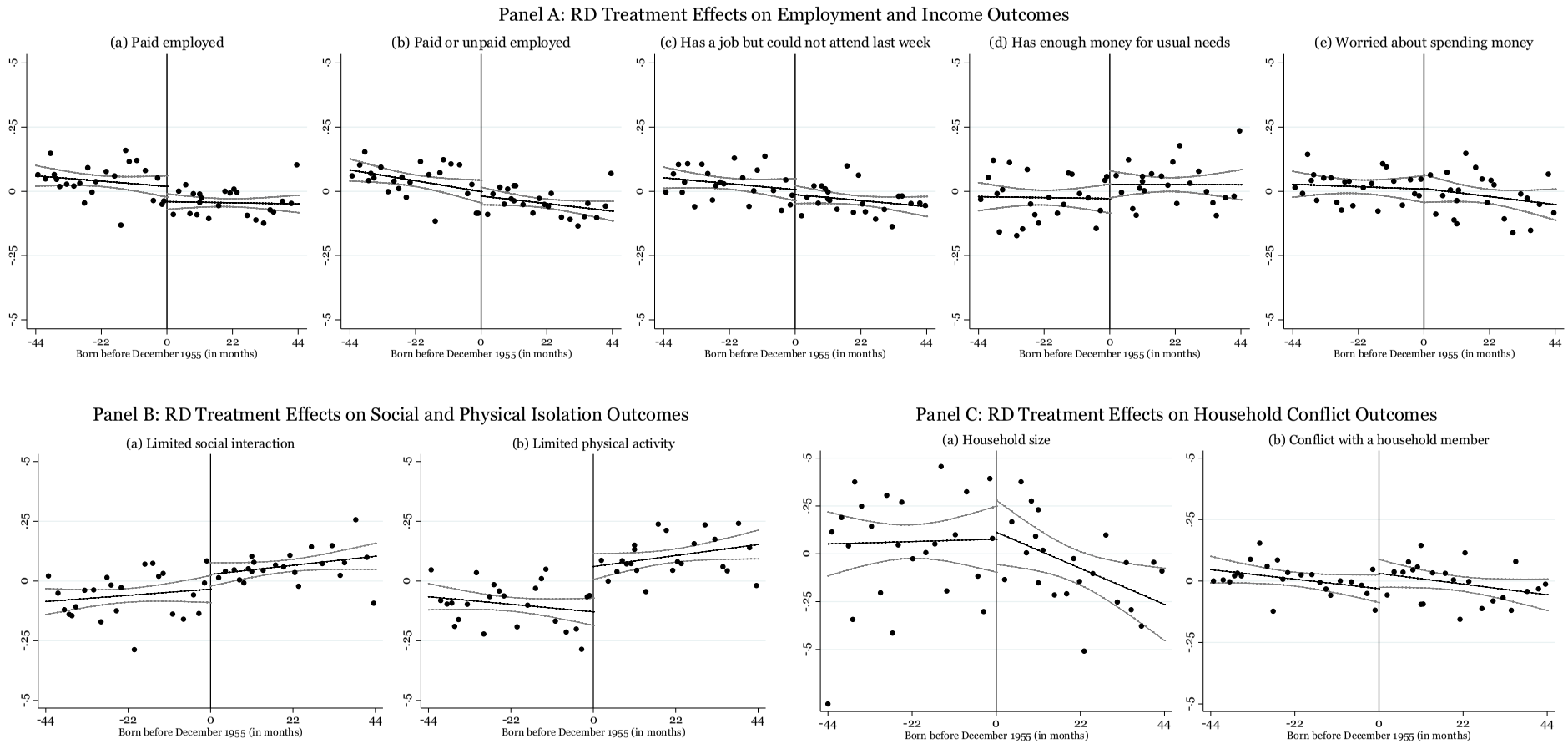
Note: The figures plot the residualized values (after controlling for all variables in the main specification other than distance to the cutoff) of the number of days spent outside last week, the probability of being subject to the curfew, and the probability of never going outside against the month-year 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

	Household Labor Force Survey (2019)			Analysis Sample		
Variable	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
Completed high school								
Born before 1955	0.051	0.025	-0.056	-0.037	-0.055	-0.039	-0.024	-0.013
	(0.080)	(0.073)	(0.074)	(0.071)	(0.063)	(0.060)	(0.054)	(0.049)
	[0.527]	[0.733]	[0.453]	[0.602]	[0.381]	[0.520]	[0.657]	[0.791]
	⟨1.000⟩	⟨1.000⟩	⟨1.000⟩	⟨1.000⟩	⟨1.000⟩	⟨1.000⟩	⟨1.000⟩	⟨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
Illiterate								
Born before 1955	-0.018	-0.023	-0.004	-0.011	-0.007	-0.015	-0.030	-0.032
	(0.052)	(0.047)	(0.039)	(0.040)	(0.034)	(0.032)	(0.029)	(0.027)
	[0.738]	[0.629]	[0.928]	[0.775]	[0.835]	[0.652]	[0.297]	[0.237]
	⟨1.000⟩	⟨1.000⟩	⟨1.000⟩	⟨1.000⟩	⟨1.000⟩	⟨1.000⟩	⟨1.000⟩	⟨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
Female								
Born before 1955	0.019	0.040	0.056	0.076	0.040	0.029	0.032	0.027
	(0.080)	(0.062)	(0.065)	(0.060)	(0.056)	(0.055)	(0.050)	(0.046)
	[0.809]	[0.518]	[0.389]	[0.208]	[0.477]	[0.592]	[0.521]	[0.553]
	⟨1.000⟩	⟨1.000⟩	⟨1.000⟩	⟨1.000⟩	⟨1.000⟩	⟨1.000⟩	⟨1.000⟩	⟨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
Married								
Born before 1955	0.018	0.019	0.024	0.015	0.017	0.012	-0.014	-0.019
	(0.069)	(0.054)	(0.051)	(0.045)	(0.042)	(0.041)	(0.036)	(0.034)
	[0.801]	[0.722]	[0.640]	[0.737]	[0.679]	[0.768]	[0.697]	[0.590]
	⟨1.000⟩	⟨1.000⟩	⟨1.000⟩	⟨1.000⟩	⟨1.000⟩	⟨1.000⟩	⟨1.000⟩	⟨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
Widowed or separated								
Born before 1955	-0.013	0.004	-0.017	-0.015	-0.021	-0.020	0.004	0.009
	(0.068)	(0.048)	(0.049)	(0.043)	(0.041)	(0.040)	(0.035)	(0.033)
	[0.851]	[0.930]	[0.721]	[0.727]	[0.603]	[0.621]	[0.918]	[0.787]
	⟨1.000⟩	⟨1.000⟩	⟨1.000⟩	⟨1.000⟩	⟨1.000⟩	⟨1.000⟩	⟨1.000⟩	⟨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
Non-Turkish								
Born before 1955	0.200	0.127	0.088	0.059	0.050	0.062	0.013	0.012
	(0.104)	(0.087)	(0.072)	(0.065)	(0.058)	(0.055)	(0.048)	(0.042)
	[0.062]	[0.153]	[0.224]	[0.369]	[0.387]	[0.260]	[0.786]	[0.780]
	⟨1.000⟩	⟨1.000⟩	⟨1.000⟩	⟨1.000⟩	⟨1.000⟩	⟨1.000⟩	⟨1.000⟩	⟨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
Pre-Covid-19 household size								
Born before 1955	-0.162	-0.211	-0.276	-0.226	-0.176	-0.147	-0.155	-0.193
	(0.223)	(0.192)	(0.166)	(0.165)	(0.155)	(0.151)	(0.134)	(0.126)
	[0.473]	[0.278]	[0.102]	[0.175]	[0.258]	[0.333]	[0.252]	[0.127]
	⟨1.000⟩	⟨1.000⟩	⟨1.000⟩	⟨1.000⟩	⟨1.000⟩	⟨1.000⟩	⟨1.000⟩	⟨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
Ever received psychological support								
Born before 1955	-0.032	-0.069	-0.049	-0.032	-0.019	-0.018	-0.010	-0.028
	(0.051)	(0.046)	(0.042)	(0.037)	(0.034)	(0.033)	(0.032)	(0.028)
	[0.544]	[0.135]	[0.250]	[0.395]	[0.574]	[0.591]	[0.761]	[0.325]
	⟨1.000⟩	⟨1.000⟩	⟨1.000⟩	⟨1.000⟩	⟨1.000⟩	⟨1.000⟩	⟨1.000⟩	⟨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
Has a chronic disease								
Born before 1955	-0.067	-0.026	-0.011	0.026	0.064	0.055	0.052	0.042
	(0.071)	(0.053)	(0.047)	(0.044)	(0.043)	(0.042)	(0.036)	(0.033)
	[0.354]	[0.630]	[0.824]	[0.557]	[0.135]	[0.187]	[0.147]	[0.209]
	⟨1.000⟩	⟨1.000⟩	⟨1.000⟩	⟨1.000⟩	⟨1.000⟩	⟨1.000⟩	⟨1.000⟩	⟨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
Days outside last week					
Born before 1955	-1.015	-1.116	-1.037	-1.023	-0.994
	(0.236)	(0.213)	(0.170)	(0.166)	(0.153)
	[<0.001]	[<0.001]	[<0.001]	[<0.001]	[<0.001]
	⟨0.001⟩	⟨0.001⟩	⟨0.001⟩	⟨0.001⟩	⟨0.001⟩
Observations	672	976	1274	1601	1856
Control group mean	2.40	2.33	2.33	2.40	2.41
Under curfew					
Born before 1955	0.662	0.685	0.718	0.723	0.730
	(0.063)	(0.052)	(0.043)	(0.036)	(0.032)
	[<0.001]	[<0.001]	[<0.001]	[<0.001]	[<0.001]
	⟨0.001⟩	⟨0.001⟩	⟨0.001⟩	⟨0.001⟩	⟨0.001⟩
Observations	678	982	1283	1610	1866
Control group mean	0.10	0.10	0.09	0.08	0.08
Never goes out					
Born before 1955	0.304	0.317	0.285	0.245	0.281
	(0.051)	(0.038)	(0.034)	(0.034)	(0.032)
	[<0.001]	[<0.001]	[<0.001]	[<0.001]	[<0.001]
	⟨0.001⟩	⟨0.001⟩	⟨0.001⟩	⟨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
Mental distress index					
Born before 1955	0.337	0.224	0.215	0.238	0.155
	(0.133)	(0.113)	(0.086)	(0.077)	(0.077)
	[0.014]	[0.051]	[0.014]	[0.003]	[0.046]
	⟨0.062⟩	⟨0.118⟩	⟨0.059⟩	⟨0.011⟩	⟨0.093⟩
Observations	629	912	1187	1485	1725
Somatic symptoms of distress index					
Born before 1955	0.292	0.193	0.178	0.198	0.164
	(0.147)	(0.104)	(0.081)	(0.080)	(0.070)
	[0.053]	[0.066]	[0.031]	[0.015]	[0.021]
	⟨0.081⟩	⟨0.118⟩	⟨0.059⟩	⟨0.016⟩	⟨0.093⟩
Observations	666	967	1262	1580	1833
Nonsomatic symptoms of distress index					
Born before 1955	0.230	0.157	0.165	0.188	0.109
	(0.126)	(0.111)	(0.085)	(0.073)	(0.071)
	[0.075]	[0.161]	[0.054]	[0.011]	[0.129]
	⟨0.081⟩	⟨0.118⟩	⟨0.059⟩	⟨0.016⟩	⟨0.101⟩
Observations	632	916	1191	1491	1731
Sum of "yes" answers in SRQ-20					
Born before 1955	1.045	0.876	0.751	0.816	0.487
	(0.633)	(0.491)	(0.425)	(0.384)	(0.361)
	[0.105]	[0.079]	[0.080]	[0.036]	[0.179]
	⟨0.086⟩	⟨0.118⟩	⟨0.064⟩	⟨0.021⟩	⟨0.101⟩
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				
Poor physical health				
Born before 1955	0.140	0.119	0.103	0.070
	(0.065)	(0.046)	(0.033)	(0.034)
	[0.038]	[0.012]	[0.003]	[0.041]
	⟨0.083⟩	⟨0.026⟩	⟨0.006⟩	⟨0.089⟩
Observations	511	838	1224	1612
Control group mean	0.08	0.10	0.12	0.10
Poor mental health				
Born before 1955	0.037	0.052	0.022	-0.012
	(0.069)	(0.039)	(0.035)	(0.031)
	[0.602]	[0.192]	[0.536]	[0.701]
	⟨0.431⟩	⟨0.107⟩	⟨0.366⟩	⟨0.540⟩
Observations	509	836	1221	1607
Control group mean	0.11	0.13	0.14	0.13
Panel B: Life Satisfaction Outcomes				
Suffering				
Born before 1955	-0.101	-0.005	0.000	-0.013
	(0.075)	(0.045)	(0.039)	(0.033)
	[0.184]	[0.906]	[0.990]	[0.692]
	⟨0.226⟩	⟨1.000⟩	⟨1.000⟩	⟨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					
Paid employed					
Born before 1955	-0.089	-0.062	-0.069	-0.064	-0.060
	(0.058)	(0.041)	(0.035)	(0.032)	(0.030)
	[0.133]	[0.140]	[0.053]	[0.044]	[0.051]
	⟨0.361⟩	⟨0.566⟩	⟨0.360⟩	⟨0.285⟩	⟨0.268⟩
Observations	673	977	1275	1597	1851
Control group mean	0.16	0.15	0.16	0.18	0.19
Paid or unpaid employed					
Born before 1955	-0.035	-0.016	-0.032	-0.039	-0.044
	(0.064)	(0.045)	(0.039)	(0.034)	(0.033)
	[0.586]	[0.722]	[0.413]	[0.263]	[0.187]
	⟨1.000⟩	⟨1.000⟩	⟨0.671⟩	⟨0.358⟩	⟨0.268⟩
Observations	673	977	1276	1601	1856
Control group mean	0.18	0.18	0.2	0.21	0.22
Has a job but could not attend last week					
Born before 1955	0.005	-0.005	-0.042	-0.042	-0.045
	(0.058)	(0.042)	(0.036)	(0.032)	(0.031)
	[0.939]	[0.899]	[0.241]	[0.187]	[0.147]
	⟨1.000⟩	⟨1.000⟩	⟨0.474⟩	⟨0.333⟩	⟨0.268⟩
Observations	666	968	1268	1586	1836
Control group mean	0.16	0.16	0.17	0.18	0.18
Has enough money for usual needs					
Born before 1955	-0.027	0.088	0.069	0.074	0.074
	(0.067)	(0.060)	(0.056)	(0.048)	(0.043)
	[0.686]	[0.145]	[0.216]	[0.121]	[0.084]
	⟨1.000⟩	⟨0.566⟩	⟨0.474⟩	⟨0.320⟩	⟨0.268⟩
Observations	673	978	1279	1601	1856
Control group mean	0.56	0.57	0.58	0.57	0.58
Worried about spending money					
Born before 1955	-0.126	-0.032	-0.021	-0.030	-0.048
	(0.062)	(0.045)	(0.044)	(0.042)	(0.040)
	[0.048]	[0.481]	[0.630]	[0.478]	[0.228]
	⟨0.313⟩	⟨0.927⟩	⟨0.671⟩	⟨0.434⟩	⟨0.268⟩
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					
Limited social interaction					
Born before 1955	0.109	0.106	0.102	0.083	0.088
	(0.065)	(0.056)	(0.050)	(0.042)	(0.042)
	[0.101]	[0.063]	[0.046]	[0.049]	[0.039]
	⟨0.054⟩	⟨0.033⟩	⟨0.024⟩	⟨0.026⟩	⟨0.021⟩
Observations	676	981	1281	1608	1864
Control group mean	0.57	0.57	0.55	0.53	0.53
Limited physical activity					
Born before 1955	0.319	0.255	0.257	0.219	0.216
	(0.071)	(0.061)	(0.052)	(0.047)	(0.045)
	[<0.001]	[<0.001]	[<0.001]	[<0.001]	[<0.001]
	⟨0.001⟩	⟨0.001⟩	⟨0.001⟩	⟨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					
Household size					
Born before 1955	0.019	0.002	-0.018	0.013	0.000
	(0.210)	(0.183)	(0.160)	(0.146)	(0.132)
	[0.927]	[0.991]	[0.910]	[0.930]	[1.000]
	⟨1.000⟩	⟨0.982⟩	⟨0.835⟩	⟨1.000⟩	⟨1.000⟩
Observations	678	984	1285	1612	1868
Control group mean	3.55	3.50	3.52	3.54	3.52
Conflict with a household member					
Born before 1955	0.041	0.103	0.060	0.023	0.010
	(0.063)	(0.049)	(0.039)	(0.037)	(0.035)
	[0.518]	[0.038]	[0.133]	[0.523]	[0.770]
	⟨1.000⟩	⟨0.084⟩	⟨0.362⟩	⟨1.000⟩	⟨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
Considers himself/herself religious				
Born before 1955	-0.119	-0.031	-0.022	0.028
	(0.085)	(0.047)	(0.039)	(0.033)
	[0.174]	[0.519]	[0.575]	[0.390]
	⟨1.000⟩	⟨1.000⟩	⟨1.000⟩	⟨1.000⟩
Observations	494	815	1191	1573
Control group mean	0.82	0.79	0.79	0.81
Prays daily				
Born before 1955	-0.057	0.019	0.028	0.050
	(0.084)	(0.046)	(0.041)	(0.035)
	[0.500]	[0.683]	[0.493]	[0.150]
	⟨1.000⟩	⟨1.000⟩	⟨1.000⟩	⟨1.000⟩
Observations	502	819	1197	1574
Control group mean	0.67	0.67	0.67	0.68
Agrees that one should live by the holy book				
Born before 1955	-0.038	0.009	0.016	0.015
	(0.092)	(0.047)	(0.041)	(0.034)
	[0.681]	[0.852]	[0.703]	[0.66]
	⟨1.000⟩	⟨1.000⟩	⟨1.000⟩	⟨1.000⟩
Observations	479	785	1156	1519
Control group mean	0.69	0.69	0.68	0.69
Agrees that virus is a God-sent warning				
Born before 1955	-0.093	-0.042	-0.005	0.029
	(0.100)	(0.058)	(0.047)	(0.042)
	[0.357]	[0.473]	[0.919]	[0.492]
	⟨1.000⟩	⟨1.000⟩	⟨1.000⟩	⟨1.000⟩
Observations	483	790	1159	1521
Control group mean	0.58	0.56	0.56	0.58
Religiosity index				
Born before 1955	-0.180	-0.017	0.009	0.082
	(0.228)	(0.104)	(0.092)	(0.078)
	[0.435]	[0.868]	[0.919]	[0.299]
	⟨1.000⟩	⟨1.000⟩	⟨1.000⟩	⟨1.000⟩
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	0.601	0.256		
	(0.246)	(0.064)	(0.053)		
	[<0.001]	[<0.001]	[<0.001]		
	⟨0.001⟩	⟨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	0.253	0.173	1.004	
	(0.132)	(0.125)	(0.132)	(0.564)	
	[0.038]	[0.046]	[0.194]	[0.078]	
	⟨0.102⟩	⟨0.102⟩	⟨0.108⟩	⟨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	0.012	0.023	-0.011	-0.033
	(0.054)	(0.058)	(0.048)	(0.086)	(0.059)
	[0.441]	[0.841]	[0.631]	[0.896]	[0.580]
	⟨1.000⟩	⟨1.000⟩	⟨1.000⟩	⟨1.000⟩	⟨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	0.056			
	(0.078)	(0.068)			
	[0.041]	[0.416]			
	⟨0.089⟩	⟨0.263⟩			
Observations	1201	1220			
Control group mean	0.46	0.56			
	Household size	Conflict with a household member			
Born before 1955	0.148	0.138			
	(0.241)	(0.066)			
	[0.542]	[0.040]			
	⟨0.372⟩	⟨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.