# The Power of Love: Emotional Support and Financial Hardship

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## Abstract

Using microdata from two complementary U.S. household surveys, I document that individuals who lack emotional support from family and friends are more likely to experience financial hardship. This pattern is substantially stronger for women as well as for those prone to anxiety and depression. Further evidence suggests a belief-based channel through which emotional support improves financial preparedness for potential adverse shocks. Overall, these findings underscore the importance of the psychological dimension of social networks in shaping household financial outcomes.

# 1.   Introduction

Financial hardship is both prevalent and persistent in the United States: four in 10 adults have difficulty handling an unexpected expense of $400 (Federal Reserve Board, 2020); some have frequent trouble with money and their children face similar prospects (Athreya, Mustre-del-Río, and Sánchez, 2019; Kreiner, Leth-Petersen, and Willerslev-Olsen, 2020). Although this phenomenon has attracted considerable attention among policy makers and economists alike, especially since the 2008 financial crisis, why some households are financially fragile while many others are not is still not fully understood.

In this paper, I explore a novel determinant of household financial fragility — emotional support from family and friends. It has long been recognized that family and friends play a critical risk-sharing role (Fafchamps, 2011). For instance, during periods of sickness, they provide informal care and help with paying medical bills (e.g., Arno, Levine, and Memmott, 1999; Kaiser Family Foundation, 2016). In addition to such practical help as well as financial assistance, they offer job search advice and information about employment opportunities in the event of job displacement (e.g., Topa, 2001). It remains largely unknown, however, what role the *psychological* dimension of networks of family and friends plays when households face potential adverse shocks.

To weather these shocks, it is important that households not only effectively use financial instruments, but also plan ahead (e.g., Ameriks, Caplin, and Leahy, 2003). While formulating a financial plan is a daunting task for many households because of their limited financial knowledge (e.g., Campbell, 2006; Lusardi and Mitchell, 2014; Campbell, 2016), carrying out a plan as straightforward as setting up a rainy-day fund can be equally challenging, psychologically. The key insight of this paper is that emotional support from family and friends can overcome psychological barriers that impede the execution of financial plans, which in turn improves financial preparedness and lowers the propensity toward financial hardship.

Building on this idea, I investigate the relationship between emotional support and finan-

cial hardship using two complementary U.S. household surveys: (i) the National Longitudinal Survey of Youth 1979 Child and Young Adult cohort (NLSY79 CYA); and (ii) the Health and Retirement Study (HRS). Importantly, respondents in both the NLSY79 CYA sample (i.e., the young adult sample) and the HRS sample (i.e., the elderly sample) report the level of emotional support from family and friends. Leveraging this unique feature, I document in both samples that individuals who lack emotional support are more likely to experience financial hardship, controlling for a wide array of demographic and economic characteristics. This effect is economically material: a one standard deviation decline in emotional support increases the likelihood of a household experiencing financial hardship by 19 to 21 percent in the young adult sample, and by 7 to 9 percent in the elderly sample.

A potential concern with this finding is that there may be unobserved characteristics that affect both emotional support and the likelihood of financial hardship. I perform two analyses to alleviate this concern. First, many respondents in the young adult sample have siblings and their siblings are also in the sample. I leverage this feature to exploit between-siblings variation in emotional support using mother fixed effects, which difference out confounding factors that are fixed within the family the siblings grew up in (e.g., parental education and parenting style). I show that individuals with weaker emotional support in adulthood than their siblings have a higher propensity toward financial hardship. Second, I leverage the fact that a majority of the respondents in both samples report emotional support in multiple waves. In particular, I exploit within-individual variation in emotional support using individual fixed effects, which eliminate time-invariant confounding individual heterogeneity (e.g., childhood experience and social skill). I find that individuals are more likely to experience financial hardship as emotional support dwindles.

Another potential concern is reverse causality, as individuals in better financial situations may spend more time with their family and friends and therefore enjoy stronger emotional support from them. To address this concern as well as to further mitigate potential omitted variable bias, I use the elderly sample to investigate the impact of an event that results in

arguably exogenous variation in emotional support — loss of parents. After their parents' death, individuals are more likely to experience financial hardship, controlling for any changes in household economic characteristics including family income and household wealth. Further investigation reveals that this finding is almost entirely driven by loss of mother, who tends to have a stronger emotional bond with her adult child than the father does (e.g., Lye, 1996).

I proceed to assess the possibility that my findings reflect financial, rather than emotional, support from family and friends. This is unlikely because the estimates of the buffering effect of emotional support on financial hardship in both samples remain largely the same among households that receive little to no financial assistance. Additionally, I provide evidence that the buffering effect is also distinct from the effect of either practical help (e.g., informal care) or informational support (e.g., financial advice) from family and friends.

To offer more direct evidence that points to the emotional aspect of support from family and friends, I perform a heterogeneity analysis along two dimensions — gender and personality. Since women tend to suffer more emotional distress than men (e.g., Mirowsky and Ross, 1995), I examine whether there is a gender difference in the buffering effect of emotional support on financial hardship. The magnitude of the effect for women is more than double that for men in the young adult sample. The buffering effect is almost entirely concentrated among women in the elderly sample. Along the personality dimension, I focus on one of the Big Five personality traits — neuroticism, a trait of emotional instability characterizing a tendency toward negative feelings such as anxiety and depression (Goldberg, 1993). I show in both samples a stronger buffering effect for individuals with higher levels of neuroticism.

Why would emotional support affect the likelihood of financial hardship? Further analysis shows that individuals who lack emotional support are less likely to set aside emergency savings as well as to plan for retirement, suggesting that they are less likely to take precautions to mitigate potential adverse shocks. To shed more light on the pathway linking emotional support to financial hardship, it is instructive to conceptualize the execution of a financial plan as a choice of effort (Kuhnen and Melzer, 2018). While it is costly to exert effort today,

in not doing so, one is more likely to experience financial hardship in the future. I propose two channels through which a lack of emotional support can discourage effort provision. One is preference-based: the lack of emotional support may make individuals less patient, which reduces the attractiveness of avoiding financial hardship in present value terms. The other channel is belief-based: the lack of emotional support may induce individuals to hold overly pessimistic beliefs about the effectiveness of their effort.

If the buffering effect of emotional support on financial hardship operates through the preference-based channel, one would expect a stronger effect for impatient individuals. In neither sample, however, do I find a heterogeneous effect for patient versus impatient individuals. To evaluate the belief-based channel, I perform a heterogeneity analysis by self-efficacy, or belief in one's capacity to execute behaviors and accomplish tasks (Bandura, 1977). I find in both samples a stronger buffering effect for individuals with lower levels of self-efficacy and hence more pessimistic beliefs about the returns to their effort, a pattern consistent with the belief-based channel through which emotional support improves financial preparedness for potential adverse shocks.

This paper contributes to several strands of literature. First, I build on the literature that studies the determinants of household financial distress. A non-exhaustive list of important determinants includes: job displacement (e.g., Keys, 2018); medical costs (e.g., Gross and Notowidigdo, 2011); credit market environment (e.g., Livshits, MacGee, and Tertilt, 2010); educational attainment (e.g., Cole, Paulson, and Shastry, 2014); cognitive abilities (e.g., Gerardi, Goette, and Meier, 2013); and noncognitive skills (e.g., Xu et al., 2015; Kuhnen and Melzer, 2018; Parise and Peijnenburg, 2019). I contribute to this literature by proposing emotional support from family and friends as a novel determinant. In particular, I offer a social network perspective and highlight the psychology of financial distress.

Second, this paper relates to the literature on women's financial decision-making (Duflo, 2012). Using data from a discount brokerage firm, Barber and Odean (2001) document that women trade less frequently than men and in turn earn higher portfolio returns. This patten

largely reflects men's overconfidence in stock trading (e.g., Bordalo et al., 2019; D'Acunto, 2020). Relatedly, Goldsmith-Pinkham and Shue (2020) find that women's investment return is lower than men's in the housing market, which explains a substantial portion of the gender gap in wealth accumulation. When it comes to retirement planning, Lusardi and Mitchell (2008) show that older women in the U.S. display very low levels of financial literacy and a majority of them have not done any retirement planning calculations. Even for women who are financially sophisticated, their influence over intrahousehold financial decision-making is constrained by traditional gender norms (Ke, 2021). The current study complements this literature by documenting a substantial gender difference in the buffering effect of emotional support on financial hardship.

This paper also relates to behavioral work on the role of emotion in shaping economic and financial decision-making (Elster, 1998; Loewenstein, 2000; Hirshleifer, 2001). In particular, a strand of the behavioral finance literature focuses on whether and how sentiment and mood affect investor trading behavior and, in turn, stock returns (e.g., Hirshleifer and Shumway, 2003; Baker and Wurgler, 2006; Edmans, García, and Norli, 2007; Goetzmann et al., 2015). This paper extends this line of work by suggesting an important link between emotion and household financial distress.

This paper further relates to the emerging literature that studies the effects of interactions through social networks on household financial behavior (Hirshleifer, 2015, 2020; Kuchler and Stroebel, 2021). This literature has documented peer effects on active trading (e.g., Hong, Kubik, and Stein, 2004; Kaustia and Knüpfer, 2012; Heimer, 2016), retirement savings (e.g., Duflo and Saez, 2003; Beshears et al., 2015), home ownership (e.g., Bailey et al., 2018), mortgage refinancings and defaults (e.g., Guiso, Sapienza, and Zingales, 2013; Gupta, 2019; Maturana and Nickerson, 2019), household debt (e.g., Georgarakos, Haliassos, and Pasini, 2014; Kalda, 2020), and consumer bankruptcy (e.g., Kleiner, Stoffman, and Yonker, 2021), among others. A common thread through these studies is that the documented peer effects predominantly operate through an information channel that involves changes in beliefs and

sometimes preferences. This paper, by sharp contrast, highlights the role of the psychological dimension of social interactions in shaping household financial outcomes.

The remainder of this paper proceeds as follows. Section 2 describes the data, Section 3 presents the results, and Section 4 concludes.

## 2.  Data

I draw on microdata from two complementary U.S. household surveys: (i) the National Longitudinal Survey of Youth 1979 Child and Young Adult cohort (NLSY79 CYA); and (ii) the Health and Retirement Study (HRS). The NLSY79 CYA is a panel of biological children of the female respondents in the NLSY79, which itself is a nationally representative panel survey of 12,686 individuals aged between 14 and 22 in 1979. The HRS is a longitudinal study that surveys a nationally representative sample of individuals over the age of 50. A unique common feature of these two data sets is that respondents in both the NLSY79 CYA sample (i.e., the young adult sample) and the HRS sample (i.e., the elderly sample) report the level of emotional support from family and friends, which is crucial for the analysis in this paper. Meanwhile, both of these surveys collect information on financial hardship, in addition to a wide array of demographic and economic characteristics. The main variables in both samples are described below, and Table IA1 in the Internet Appendix provides additional details.

### 2.1   The NLSY CYA Sample

I limit the young adult sample to those aged 21 or above, a group that is more likely to be financially independent. The sample period starts in 2008, when information on emotional support was collected for the first time. Four questions are used to characterize emotional support: (i) "How much do you feel loved and cared for by your relatives?" (ii) "How much can you open up to your relatives if you need to talk about your worries?" (iii) "How much do you feel loved and cared for by your friends?" and (iv) "How much can you open up

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to your friends if you need to talk about your worries?" For each question, a respondent's rating ranges from one to five, where one means "not at all" and five means "a great deal." I then sum all four ratings to get a total raw rating ranging between four and 20. To ease comparisons across samples, I convert respondents' total raw ratings to percentile ranks.[1]

To capture financial hardship, I construct two indicators indicating (i) whether the household had either "quite a bit" or "a great deal" of difficulty in paying bills over the past year; and (ii) whether the household has to put off buying necessities (e.g., food, clothing, medical care, and housing) either "frequently" or "all the time." I focus on these two aspects of financial hardship because similar information is available in the elderly sample, which enables me to examine the relationship between emotional support and financial hardship in a unified framework. I show in Section 3.3.2 that my findings are robust to three alternative financial hardship indicators.

In addition to standard demographic and economic variables, I quantify the time and risk preferences of the respondents. In particular, time preference is measured as the average rating of impulsiveness in childhood evaluated by the mother based on the statement "child is impulsive or acts without thinking." These ratings range from one to three, where one means "often true" and three means "not true." To capture risk preference, I calculate the average self-rating of risk aversion based on the statement "I enjoy taking risks" on a scale from one to four, where one means "strongly agree" and four means "strongly disagree."

Moreover, I measure both cognitive and noncognitive abilities. Specifically, I use the average score of the Peabody Individual Achievement Tests on mathematics, reading recognition, and reading comprehension to proxy for cognitive ability. To characterize noncognitive skills, I focus on self-efficacy and neuroticism, both of which are important determinants of financial distress (Xu et al., 2015; Kuhnen and Melzer, 2018; Parise and Peijnenburg, 2019).

I use the Pearlin Mastery Scale to capture self-efficacy, which reflects confidence in one's own ability to execute behaviors and accomplish tasks (Bandura, 1977). The scale is compiled

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[1]Using total raw ratings rather than percentile ranks yields results of similar economic magnitudes as well as statistical significance. The same is true for the emotional support measure in the elderly sample.

from self-ratings based on seven statements: (i) "There is really no way I can solve some of the problems I have;" (ii) "Sometimes I feel that I'm being pushed around in life;" (iii) "I have little control over the things that happen to me;" (iv) "I can do just about anything I really set my mind to;" (v) "I often feel helpless in dealing with the problems of life;" (vi) "What happens to me in the future mostly depends on me;" and (vii) "There is little I can do to change many of the important things in my life." The ratings range from one to four, where one means "strongly agree" and four means "strongly disagree." The scoring for items (iv) and (vi) is reversed so that higher scores correspond to higher levels of self-efficacy.

To measure neuroticism, which is a trait of emotional instability characterizing a tendency toward negative feelings such as anxiety and depression (Goldberg, 1993), I adopt the Ten-Item Personality Inventory Scale, a standard measure of the Big Five personality traits. In particular, neuroticism is measured as self-assessment of the personality trait pair of (i) "anxious, easily upset" and (ii) "calm, emotionally stable" on a scale from one to seven, where one means "strongly disagree" and seven means "strongly agree." The scoring for item (ii) is reversed so that higher scores correspond to higher levels of neuroticism.

## 2.2   The HRS Sample

Turning to the elderly sample, the sample period starts in 2004, when the study began to collect information on emotional support coming from (i) spouse, (ii) children, (iii) other immediate family members, and (iv) friends. Respondents are asked (i) how much they can open up to each source about worries; and (ii) how much each source really understands the way they feel, both on a scale from zero to three, where zero means "not at all" and three means "a lot." A rating of zero is assigned if a respondent does not have anyone from a particular source.[2] I sum all eight ratings to get a total raw rating ranging between zero and 24, which is then converted to a percentile rank as in the young adult sample.[3]

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[2]My findings are insensitive to this choice because they are robust to excluding respondents with ratings of zero.

[3]My findings are robust to using alternative weighting schemes (e.g., 1/6 on spouse, 1/6 on children, 1/6 on other immediate family members, and 1/2 on friends so that family and friends are equally weighted).

To characterize financial hardship, I construct two indicators similar to those in the young adult sample, indicating (i) whether it is either "very difficult" or "completely difficult" for the household to meet monthly bill payments; and (ii) whether the respondent either ate less than they should over the past year because there was insufficient money to buy food, or ended up taking less medication than was prescribed over the past two years due to cost. Other individual as well as household characteristics are measured in a similar fashion as in the young adult sample. It is important to emphasize that detailed information is collected in the elderly sample on household wealth, one of the most important determinants of household financial decisions (e.g., Mankiw and Zeldes, 1991; Calvet, Campbell, and Sodini, 2007).

## 2.3   Summary Statistics

Table 1 reports summary statistics. In the young adult sample, 9.6 percent of the households had great difficulty in paying bills over the past year and the same proportion of households have to put off buying necessities such as food and medical care either frequently or all the time. In the elderly sample, 9.1 percent of the households report substantial difficulty in meeting monthly bill payments and 13.8 percent of the respondents either ate less than they should over the past year because there was insufficient money to buy food, or ended up taking less medication than was prescribed over the past two years due to cost. These statistics reflect the prevalence of financial hardship across samples.

Turning to demographic and economic characteristics, 48 percent of the respondents in the young adult sample are men, 34 percent are black, and the average age is 28. Sixty-one percent receive college education, 25 percent are married, and 54 percent are in great health. The average labor income is about $35,800 and home ownership rate is 22 percent. In the elderly sample, 43 percent of the respondents are men, 16 percent are black, and the average age is 67. More than half of the respondents are college-educated, almost half are married, and 41 percent are in great health. The average family income is close to $64,000, home ownership rate is 76 percent, and the median household wealth is approximately $155,000.

The differences in demographic and economic profiles between the two samples capture the fact that the respondents in these two samples are in fairly different phases of their life cycles.

## 3. Results

### 3.1 Baseline

To investigate the relationship between emotional support and financial hardship, I estimate

$$y_{it} = \beta \cdot Emotional\ support_{it} + \gamma' \mathbf{X}_{it} + \delta_t + \varepsilon_{it}, \tag{1}$$

where $y$ indicates financial hardship and *Emotional support* is the key explanatory variable constructed in Section 2. The vector $\mathbf{X}$ contains control variables that are important for household financial decisions (Campbell, 2006; Guiso and Sodini, 2013; Gomes, Haliassos, and Ramadorai, 2021), including the gender, race, age, educational attainment, marital status, health status, time and risk preferences, cognitive ability, and noncognitive skills of the respondent, as well as family income and home ownership.[4] I include year fixed effects, $\delta_t$, to absorb all sources of variation over the years. I further control for household wealth in the elderly sample. The coefficient of interest, $\beta$, captures the relationship between emotional support and financial hardship, conditional on all of the aforementioned controls. I run ordinary least square regressions and cluster standard errors at the household level.[5]

Table 2 reports the baseline results showing a strong negative association between emotional support and financial hardship in both samples. In particular, column (1) shows that controlling for a wide array of demographic and economic characteristics, the likelihood of a household in the young adult sample having great difficulty in paying bills over the past year increases by 7.0 percentage points when moving from the top of the emotional support

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[4]In the elderly sample, the family member who answers questions about household finances is designated as the respondent in a nonsingle household. My findings are insensitive to this choice because they are robust to including only single individuals, as shown in Table IA2 in the Internet Appendix.

[5]Using a probit model yields similar results.

distribution to the bottom (i.e., from the 100<sup>th</sup> to the 0<sup>th</sup> percentile). This estimate implies that a one standard deviation reduction in emotional support leads to a 2.0 percentage point increase in the probability of a household having great difficulty in paying bills. Since 9.6 percent of the households in the young adult sample had great difficulty in paying bills, this represents an increase of 21 percent, which is economically material. In column (2), I find a similar pattern for the other financial hardship indicator. Specifically, a one standard deviation decrease in emotional support increases the probability of a household putting off buying necessities such as food and medical care by 1.9 percentage points. Given that 9.6 percent of the households in the young adult sample put off buying necessities, this implies an economically significant increase of 19 percent.

To put this buffering effect of emotional support on financial hardship into perspective, I compare it with the effect of family income, which is one of the most important determinants of financial hardship. The first two columns in Table 2 suggest that a one standard deviation decline in family income leads to an 18 percent rise in the probability of a household having great difficulty in paying bills and a 23 percent increase in the likelihood of a household putting off buying necessities. Hence, the effect of emotional support and that of family income are comparable in economic magnitude.

Turning to the next two columns in which the baseline results for the elderly sample are reported, column (3) shows that a one standard deviation reduction in emotional support leads to a 0.8 percentage point increase in the probability of a household reporting substantial difficulty in meeting monthly bill payments. Given that 9.1 percent of the households face significant bill payment difficulties, this represents an economically significant increase of 9 percent. Column (4) shows that a one standard deviation decline in emotional support is associated with a 1.0 percentage point rise in the likelihood of an individual either eating less than they should over the past year because there was insufficient money to buy food, or ending up with taking less medication than prescribed over the past two years due to cost. Since 13.8 percent of the respondents cut back on food or medication, this implies an

increase of 7 percent, which is again economically material.

In short, I document in this subsection a substantial buffering effect of emotional support on financial hardship: a one standard deviation reduction in emotional support increases the likelihood of a household experiencing financial hardship by 19 to 21 percent in the young adult sample, and by 7 to 9 percent in the elderly sample.

## 3.2 Endogeneity

In this subsection, I evaluate potential endogeneity concerns about the finding above by comparing between siblings, analyzing the same individuals over time, and investigating the impact of parental loss as an arguably exogenous shock to emotional support.

**3.2.1 Comparison between siblings.** A potential concern with identifying the effect of emotional support is unobserved characteristics that affect both emotional support and the likelihood of financial hardship. To alleviate this concern, I leverage the feature of the young adult sample that many respondents have siblings and that their siblings are also in the sample. In particular, I exploit between-siblings variation in emotional support by including mother fixed effects in the baseline regression specification, which differences out confounding factors that are fixed within the family the siblings grew up in (e.g., parental education and parenting style).

Table 3 reports the results and shows that individuals with weaker emotional support in adulthood than their siblings are more likely to experience financial hardship. Column (1) shows that a one standard deviation decline in emotional support leads to a 1.3 percentage point, or 14 percent, rise in the probability of a household having great difficulty in paying bills. Column (2) shows that a one standard deviation reduction in emotional support increases the probability of a household putting off buying necessities such as food and medical care by 1.2 percentage points, or 13 percent. These results suggest that the buffering effect of emotional support on financial hardship is unlikely to be driven by time-invariant

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family-level confounding factors.

**3.2.2 Within-individual analysis.** Even for siblings born and raised in the same family, they may differ along a number of dimensions such as childhood experience and social skill. To ensure that my baseline finding is neither driven by such confounding factors, I perform a within-individual analysis leveraging the fact that a majority of the respondents in both samples report emotional support in multiple waves. Specifically, I use within-individual variation in emotional support by including individual fixed effects in the baseline regression specification, which eliminates time-invariant confounding individual heterogeneity.

Table 4 presents the results and shows that individuals are more likely to experience financial hardship as emotional support dwindles. The first two columns report the results for the young adult sample. Column (1) shows that a one standard deviation reduction in emotional support increases the probability of a household having great difficulty in paying bills by 1.4 percentage points, or 14 percent. Column (2) shows that a one standard deviation decrease in emotional support is associated with a 1.0 percentage point, or 11 percent, rise in the likelihood of a household putting off buying necessities such as food and medical care. Results for the elderly sample are reported in the next two columns. Column (3) shows that with a one standard deviation reduction in emotional support, households are 0.9 percentage point, or 10 percent, more likely to report substantial difficulty in meeting monthly bill payments. Column (4) shows that a one standard deviation decrease in emotional support is associated with a 1.0 percentage point, or 8 percent, rise in the likelihood of an individual cutting back on food or medication. Given that the buffering effect of emotional support on financial hardship remains both statistically and economically significant, it is unlikely that my baseline finding is confounded by time-invariant individual heterogeneity.

The above results also address the concern about the subjective aspect of the emotional support measures and financial hardship indicators. To elaborate, one might argue that different individuals can have fairly different interpretations of whether there is "a great deal"

of emotional support, or whether it is "completely difficult" to meet monthly bill payments. Such concern is unwarranted because the buffering effect of emotional support on financial hardship continues to hold in this within-individual analysis, where the heterogeneity in interpretation of survey questions across individuals is eliminated.

**3.2.3  Impact of parental loss.**  Another potential concern is reverse causality, as individuals in better financial situations may spend more time with their family and friends and therefore enjoy stronger emotional support from them. To address this concern as well as to further alleviate potential omitted variable bias, I use the elderly sample to investigate the impact of an event that results in arguably exogenous variation in emotional support — loss of parents.[6]

Specifically, I estimate

$$y_{it} = \beta \cdot Loss_{it} + \gamma' \mathbf{X}_{it} + \delta_t + \theta_i + \varepsilon_{it}, \tag{2}$$

where $y$ indicates financial hardship and *Loss* indicates whether both of the parents are dead. The vector $\mathbf{X}$ contains control variables in the baseline regression specification and $\delta_t$ denotes the year fixed effects. I additionally include individual fixed effects, $\theta_i$, to make comparisons within the same individuals before and after the parental loss. Since this event study is not constrained by having an emotional support measure, I extend the sample back to 1995 to maximize the number of incidences of parental loss over the sample period. Accordingly, I focus on the financial hardship indicator indicating whether the respondent cuts back on food or medication.[7]

Table 5 reports the results. Column (1) shows that controlling for any changes in household economic characteristics including family income and household wealth, loss of parents

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[6]I use only the elderly sample because the number of incidences of parental loss is considerably smaller in the young adult sample.

[7]This is because the HRS started to ask this question in 1995, whereas the question on difficulty of meeting monthly bill payments was not asked until 2004.

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increases the likelihood of an individual cutting back on food or medication by 1.5 percentage points. Since 12 percent of the respondents cut back on food or medication in this extended sample, this represents an increase of 12 percent, which is economically material. The next two columns split the sample by gender and shows that loss of parents increases the likelihood of experiencing financial hardship by 1.1 percentage points for men, and by 1.8 percentage points for women.

Next, I separately investigate the impacts of loss of father and loss of mother. Column (4) shows that loss of mother leads to a 1.2 percentage point increase in the probability of an individual experiencing financial hardship, compared with a statistically insignificant 0.4 percentage point increase for loss of father. The next two columns split the sample by gender and further shows that loss of mother increases the likelihood of experiencing financial hardship by 1.8 percentage points for women, and by only 0.6 percentage point for men. These findings point to the emotional nature of the impact of parental loss because mother tends to have a stronger emotional bond with her adult child, particularly with her daughter, than the father does (e.g., Lye, 1996).

A potential concern with using the full extended sample in this event study is that individuals who experience loss of parents can be fundamentally different from those who do not. To alleviate this concern, I pair each individual who experiences parental loss over the sample period (i.e., the treated) with a matched individual without such an experience (i.e., the nontreated). Specifically, the matching approach minimizes the Mahalanobis distance between a vector of observed covariates including gender, race, age, educational attainment, marital status, health status, family income, home ownership, and household wealth across the treated and nontreated individuals. Table IA3 in the Internet Appendix reports the results and shows an almost identical pattern as in Table 5. The first three columns show that an individual is 1.5 percentage point more likely to cut back on food or medication after loss of mother and that this effect primarily comes from daughters. Loss of father, by contrast, has no statistically significant effect on financial hardship, neither for sons nor for

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daughters, as shown in the next three columns.

In summary, the buffering effect of emotional support on financial hardship continues to hold when I compare between siblings, analyze the same individuals over time, or examine the impact of parental loss as an arguably exogenous shock to emotional support. While each of the three specifications in and of itself may not be definitive, the stability of the results across the different sources of variation in emotional support suggests that my findings are unlikely to be driven by confounding factors.

## 3.3   Robustness

I conduct several tests in the Internet Appendix to assess the robustness of the buffering effect of emotional support on financial hardship.

**3.3.1   Alternative regression specifications.** Since emotional support and financial hardship are measured contemporaneously in the baseline regression specification, one might be concerned that respondents report lower levels of emotional support because they have recently experienced financial hardship. Such concern is unlikely to be important because of the evidence from the event study on parental loss in Section 3.2.3. To further alleviate this reverse causality concern, I rerun the baseline regressions using instead emotional support lagged by two to four years as the key explanatory variable. Table IA4 reports the results and shows that the estimates of the buffering effect of emotional support on financial hardship are somewhat attenuated, but remain both statistically and economically significant.

One might also be concerned that the reported level of emotional support is subject to measurement error. Again, such concern is likely to be unwarranted because of the evidence from the event study on parental loss in Section 3.2.3, which does not require explicitly measuring emotional support. To further mitigate this concern, I use the average value of emotional support over the years as the key explanatory variable and perform a purely cross-sectional analysis. Specifically, I collapse the individual-year observations to the individual

level, coding the financial hardship indicators as their maximums over the sample period (i.e., whether the respondent experiences financial hardship at least once over the years). Meanwhile, the time-varying control variables are averaged over the sample period. Table IA5 report the results and shows that a one standard deviation decrease in emotional support increases the likelihood of a household experiencing financial hardship by 18 to 19 percent in the young adult sample, and by 7 percent in the elderly sample. These estimates are comparable to those in the baseline regressions.

**3.3.2  Alternative financial indicators.** In this paper, I focus on payment difficulties and cutting back on necessities as two primary aspects of household financial hardship. Here I take advantage of the rich information available in the young adult sample and construct three alternative financial indicators, indicating (i) whether the household ended up with insufficient money to make ends meet at the end of each month over the past year; (ii) whether the household has been more than 60 days late on required debt payments (mortgage, credit card debt, auto loan, or other debt) over the last 12 months; and (iii) whether the household has been more than 60 days late on utilities, medical, or other bills over the last 12 months. I rerun the baseline regressions with these alternative financial hardship indicators as the dependent variable and Table IA6 reports the results.

Column (1) shows that a one standard deviation reduction in emotional support increases the probability of a household ending up with insufficient money to make ends meet by 1.6 percentage points. Given that 6.6 percent of the households cannot make ends meet, this implies an economically significant increase of 24 percent. Column (2) shows that a one standard deviation decline in emotional support leads to a 1.2 percentage point rise in the probability of being late by 60 days or more on required debt payments. Since 11.2 percent of the households report late debt payments, this represents an economically significant increase of 11 percent. Column (3) shows that a one standard deviation decrease in emotional support is associated with a 2.3 percentage point increase in the likelihood of a household being late

by 60 days or more on medical, utilities, or other bills. Since 13.3 percent of the households report late bill payments, this implies an increase of 17 percent, which is again economically material. This robustness analysis suggests that my findings are likely to generalize to aspects of financial hardship beyond payment difficulties and cutting back on necessities.

## 3.4   Emotional vs. Non-Emotional Support

Having established the buffering effect of emotional support on financial hardship, I turn to the next natural question: does emotional support from family and friends simply reflect non-emotional support from them? To answer this question, I start by examining the role of financial support by performing a subsample analysis on households that receive little to no financial assistance. Specifically, I rerun the baseline regressions limiting the young adult sample to households that did not receive financial support from anyone in the past year and the elderly sample to those who did not receive financial help totaling $500 or more from their children, other immediate family members, or friends in the past two years.

Table 6 report the results. The first two columns show that a one standard deviation reduction in emotional support increases the probability of a household in the young adult sample experiencing financial hardship by 17 to 21 percent. The next two columns shows that a one standard deviation decrease in emotional support is associated with a 10 percent increase in the likelihood of a household in the elderly sample experiencing financial hardship. These estimates are comparable to or slightly larger than those in the baseline regressions, indicating that my findings are not driven by financial support from family and friends.

Another possibility is that emotional support is a proxy for practical help such as informal child and elderly care and I conduct two subsample analyses to evaluate this possibility. In the young adult sample, I focus on single individuals, a group that is less likely to receive informal child care from family and friends. The first two columns in Table IA2 in the Internet Appendix show that a one standard deviation reduction in emotional support increases the probability of a single individual experiencing financial hardship by 20 to 22 percent. In the

elderly sample, I focus on individuals who do not have any impairment or health problem that limits their work, a group that is less likely to receive informal elderly care from family and friends. Table IA7 in the Internet Appendix shows that a one standard deviation decrease in emotional support leads to a 7 to 9 percent rise in the likelihood of an elderly individual with no work-limiting conditions experiencing financial hardship. These estimates are almost identical in magnitude to those in the baseline regressions, suggesting that my findings cannot be explained by practical help from family and friends.

Relatedly, one might argue that emotional support from family and friends could capture informational support such as financial advice from them. If this is the case, one would expect an attenuated effect for narrow-minded individuals. To measure narrow-mindedness, I use a question asked in the elderly sample: "how well does broad-minded describe you?" I classify individuals who answer either "a little" or "not at all" as narrow-minded and examine the interaction effects of emotional support with narrow-mindedness on financial hardship. Table IA8 in the Internet Appendix reports the results showing no statistically significant differential effect by narrow-mindedness, suggesting that my findings are neither driven by informational support from family and friends.

To provide more direct evidence that points to the emotional aspect of support from family and friends, I perform a heterogeneity analysis along two dimensions — gender and personality. Since women tend to suffer more emotional distress than men (e.g., Mirowsky and Ross, 1995), one would expect a stronger buffering effect of emotional support on financial hardship for women. Table 7 reports the interaction effects of emotional support with gender on financial hardship and documents a substantial gender difference. The first two columns report the results for the young adult sample. Column (1) shows that a one standard deviation reduction in emotional support increases the probability of an individual having great difficulty in paying bills by 2.8 percentage points for women, and by only 1.2 percentage points for men. Since 7.6 percent of the male respondents report great difficulty in paying bills, the 1.6 percentage point gap in the buffering effect of emotional support on

financial hardship implies a gender difference of 22 percent, which is economical material. Column (2) shows that a one standard deviation decrease in emotional support is associated with a 2.5 percentage point rise in the likelihood of a women putting off buying necessities. Men, by contrast, are only 1.2 percentage point more likely to put off buying necessities with a one standard deviation decrease in emotional support. Given that 8.4 percent of the male respondents put off buying necessities, the 1.3 percentage point gap implies an economically significant gender difference of 16 percent.

The next two columns report the results for the elderly sample. Column (3) shows that a one standard deviation reduction in emotional support leads to a 1.7 percentage point, or 15 percent, increase in the probability of a woman reporting substantial difficulty in meeting monthly bill payments. Column (4) shows that a one standard deviation decline in emotional support is associated with a 1.8 percentage point, or 10 percent, rise in the likelihood of a woman cutting back on food or medication. Importantly, in both columns, the buffering effect of emotional support on financial hardship for men is indistinguishable from zero.

Along the personality dimension, I focus on one of the Big Five personality traits — neuroticism (Goldberg, 1993). This is a trait of emotional instability characterizing a tendency toward negative feelings such as anxiety and depression. One would therefore expect a stronger buffering effect of emotional support on financial hardship for individuals with higher levels of neuroticism. Table 8 reports the interaction effects of emotional support with the neuroticism personality trait on financial hardship. The first two columns show that in the young adult sample, moving from the 25th to the 75th percentile of the neuroticism distribution increases the effect of emotional support on the probability of a household having great difficulty in paying bills from 16 to 24 percent. The same rise in the level of neuroticism increases the effect of emotional support on the likelihood of a household putting off buying necessities from 12 to 25 percent.

The next two columns show that in the elderly sample, moving from the 25th to the 75th percentile of the neuroticism distribution increases the effect of emotional support on the

probability of a household reporting substantial difficulty in meeting monthly bill payments from 0 to 17 percent. The same rise in the level of neuroticism increases the effect of emotional support on the likelihood of an individual cutting back on food or medication from 3 to 12 percent. These results further suggest that my findings reflect the emotional aspect of support from family and friends.

## 3.5 Pathway

Why would emotional support affect the likelihood of financial hardship? To investigate this question, I start by exploring whether emotional support improves financial preparedness. This analysis is motivated by the importance of planning ahead for household financial well-being (Ameriks, Caplin, and Leahy, 2003). To capture financial preparedness in the young adult sample, I construct an indicator indicating whether the household sets aside emergency funds that would cover expenses for three months in case of sickness, job loss, economic downturn, or other emergencies. In the elderly sample, I use the question asking how much the respondent thinks about retirement on a scale from zero to three, where zero means "hardly at all" and three means "a lot."

Table 9 presents evidence that emotional support improves financial preparedness. Column (1) shows that individuals in the young adult who lack emotional support are less likely to set aside emergency savings. In particular, a one standard deviation reduction in emotional support leads to an economically significant 8 percent decline in the likelihood of a household setting aside emergency savings. Column (2) shows that individuals in the elderly sample who lack emotional support are less likely to plan for retirement. Specifically, a one standard deviation decrease in emotional support is associated with a 3 percent increase in the propensity to plan for retirement.

To shed more light on the pathway linking emotional support to financial hardship, it is instructive to conceptualize the execution of a financial plan as a choice of effort (Kuhnen and Melzer, 2018). While it is costly to exert effort today, in not doing so, one is more

likely to experience financial hardship in the future. I propose two channels through which a lack of emotional support can discourage effort provision. One is preference-based: the lack of emotional support may make individuals less patient, which reduces the attractiveness of avoiding financial hardship in present value terms. If the buffering effect of emotional support on financial hardship operates through this channel, one would expect a stronger effect for impatient individuals. Table 10 reports the interaction effects of emotional support with patience on financial hardship. In neither sample is there a statistically significant heterogeneous effect for patient versus impatient individuals. If anything, the buffering effect of emotional support is slightly stronger for patient individuals.

The other channel is belief-based: the lack of emotional support may induce individuals to hold overly pessimistic beliefs about the effectiveness of their effort. To evaluate this channel, I perform a heterogeneity analysis by self-efficacy, or belief in one's capacity to execute behaviors and accomplish tasks (Bandura, 1977). Table 11 reports the results showing a stronger buffering effect of emotional support on financial hardship for individuals with lower levels of self-efficacy and hence more pessimistic beliefs about the returns to their effort. The first two columns show that in the young adult sample, moving down from the 75th to the 25th percentile of the self-efficacy distribution increases the effect of emotional support on the probability of a household having great difficulty in paying bills from 17 to 25 percent. The same decline in the level of self-efficacy increases the effect of emotional support on the likelihood of a household putting off buying necessities from 15 to 24 percent.

The next two columns show that in the elderly sample, moving down from the 75th to the 25th percentile of the self-efficacy distribution increases the effect of emotional support on the probability of a household reporting substantial difficulty in meeting monthly bill payments from 4 to 20 percent. The same decline in the level of self-efficacy increases the effect of emotional support on the likelihood of an individual cutting back on food or medication from 1 to 12 percent. These results confirm the belief-based channel through which a lack of emotional support psychologically discourages taking precautions to avoid financial hardship.

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# 4. Conclusion

This paper uncovers a novel and important determinant of household financial distress — emotional support from family and friends. Drawing on microdata from two complementary U.S. household surveys, I document that individuals who lack emotional support are more likely to experience financial hardship. This effect is stronger for women and for those prone to anxiety and depression. Further investigation suggests a belief-based channel through which a lack of emotional support psychologically discourages taking precautionary actions to mitigate potential adverse shocks.

These findings raise several important open questions for future research. First, I focus on family and friends as the primary source of emotional support in this paper. Other sources such as support groups and religious communities, however, might as well be relevant. Evaluating the relative importance of various sources will provide a more comprehensive view of how emotional support affects financial distress. Second, emotional support may play important roles in shaping aspects of household financial behavior and outcomes beyond financial distress. Examples include entry into entrepreneurship and stock market participation, both of which bear important implications for wealth distribution in the economy (Lucas, 1978; Guvenen, 2009; Favilukis, 2013). Finally, while this paper does not focus on how emotional support arises and evolves over time, thoroughly examining this process within a network framework would be a promising avenue to advance our understanding of how emotional support shapes household financial decision-making.

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**Table 1. Summary Statistics**

This table reports summary statistics for (i) the National Longitudinal Survey of Youth 1979 Child and Young Adult (NLSY79 CYA) cohort aged 21 or above for the period 2008 to 2018; and (ii) the Health and Retirement Study (HRS) sample for the period 2004 to 2016. Variables are defined in Table IA1 in the Internet Appendix.

| | NLSY79 CYA ($N = 23,917$) | | HRS ($N = 26,173$) | |
|---|---|---|---|---|
| | Mean | SD | Mean | SD |
| Emotional support | 0.50 | 0.29 | 0.46 | 0.28 |
| Payment difficulties | 0.10 | 0.29 | 0.09 | 0.29 |
| Cutting necessities | 0.10 | 0.29 | 0.14 | 0.34 |
| Male | 0.48 | 0.50 | 0.43 | 0.49 |
| Black | 0.34 | 0.48 | 0.16 | 0.37 |
| Age | 27.74 | 4.84 | 67.39 | 10.25 |
| College | 0.61 | 0.49 | 0.51 | 0.50 |
| Married | 0.25 | 0.43 | 0.50 | 0.50 |
| Healthy | 0.54 | 0.50 | 0.41 | 0.49 |
| Log family income | 9.10 | 3.19 | 10.44 | 1.45 |
| Own home | 0.22 | 0.41 | 0.76 | 0.43 |
| Household wealth | | | 0.42 | 0.99 |
| Patience | 0.72 | 0.22 | 0.60 | 0.26 |
| Risk aversion | 0.49 | 0.18 | 0.46 | 0.26 |
| Cognitive ability | 0.52 | 0.22 | 0.59 | 0.23 |
| Self-efficacy | 0.72 | 0.11 | 0.76 | 0.17 |
| Neuroticism | 0.32 | 0.16 | 0.33 | 0.19 |

## Table 2. Emotional Support and Financial Hardship: Baseline Regressions

This table reports the baseline estimates of the effect of emotional support on financial hardship. Variables are defined in Table IA1 in the Internet Appendix. Standard errors in parentheses are clustered at the household level and levels of significance are denoted as follows: * $p < 0.10$, ** $p < 0.05$, and *** $p < 0.01$.

| | NLSY79 CYA | | HRS | |
| --- | --- | --- | --- | --- |
| | Payment difficulties | Cutting necessities | Payment difficulties | Cutting necessities |
| | (1) | (2) | (3) | (4) |
| Emotional support | −0.070*** | −0.065*** | −0.029*** | −0.036*** |
| | (0.008) | (0.008) | (0.008) | (0.009) |
| College | −0.017*** | −0.026*** | 0.005 | −0.001 |
| | (0.006) | (0.006) | (0.004) | (0.005) |
| Married | −0.002 | −0.008 | −0.005 | 0.002 |
| | (0.005) | (0.005) | (0.005) | (0.006) |
| Healthy | −0.026*** | −0.014*** | −0.021*** | −0.067*** |
| | (0.004) | (0.004) | (0.004) | (0.004) |
| Log family income | −0.005*** | −0.007*** | −0.020*** | −0.022*** |
| | (0.001) | (0.001) | (0.002) | (0.002) |
| Own home | −0.026*** | −0.030*** | −0.043*** | −0.066*** |
| | (0.005) | (0.005) | (0.006) | (0.007) |
| Household wealth | | | −0.007*** | −0.006*** |
| | | | (0.001) | (0.002) |
| Patience | −0.038*** | −0.033*** | −0.022*** | −0.032*** |
| | (0.011) | (0.011) | (0.008) | (0.009) |
| Risk aversion | −0.040*** | −0.013 | −0.014* | −0.001 |
| | (0.013) | (0.013) | (0.008) | (0.010) |
| Cognitive ability | −0.010 | −0.011 | −0.037*** | −0.061*** |
| | (0.012) | (0.012) | (0.011) | (0.013) |
| Self-efficacy | −0.135*** | −0.185*** | −0.208*** | −0.160*** |
| | (0.022) | (0.024) | (0.016) | (0.018) |
| Neuroticism | 0.092*** | 0.090*** | 0.115*** | 0.096*** |
| | (0.016) | (0.016) | (0.014) | (0.016) |
| Gender FE | Yes | Yes | Yes | Yes |
| Race FE | Yes | Yes | Yes | Yes |
| Age FE | Yes | Yes | Yes | Yes |
| Year FE | Yes | Yes | Yes | Yes |
| Observations | 23,917 | 23,917 | 26,173 | 26,173 |
| Adj. $R^2$ | 0.054 | 0.057 | 0.109 | 0.130 |

## Table 3. Comparisons between Siblings

This table relies on the NLSY79 CYA sample and analyzes the effect of emotional support on financial hardship by including mother fixed effects in the baseline regressions in Table 2. Standard errors are clustered at the household level and levels of significance are denoted as follows: * $p < 0.10$, ** $p < 0.05$, and *** $p < 0.01$.

|  | Payment difficulties | Cutting necessities |
|---|---|---|
|  | (1) | (2) |
| Emotional support | −0.046*** | −0.042*** |
|  | (0.009) | (0.009) |
| Controls + FEs | Yes | Yes |
| Mother FE | Yes | Yes |
| Observations | 23,772 | 23,772 |
| Adj. $R^2$ | 0.142 | 0.133 |

## Table 4. Within-Individual Analysis

This table analyzes the effect of emotional support on financial hardship by including individual fixed effects in the baseline regressions in Table 2. Standard errors are clustered at the household level and levels of significance are denoted as follows: * $p < 0.10$, ** $p < 0.05$, and *** $p < 0.01$.

|  | NLSY79 CYA | | HRS | |
|---|---|---|---|---|
|  | Payment difficulties | Cutting necessities | Payment difficulties | Cutting necessities |
|  | (1) | (2) | (3) | (4) |
| Emotional support | −0.047*** | −0.035*** | −0.031** | −0.037** |
|  | (0.010) | (0.010) | (0.013) | (0.015) |
| Controls + FEs | Yes | Yes | Yes | Yes |
| Individual FE | Yes | Yes | Yes | Yes |
| Observations | 23,217 | 23,217 | 22,034 | 22,034 |
| Adj. $R^2$ | 0.213 | 0.234 | 0.354 | 0.378 |

## Table 5. The Impact of Parental Loss

This table extends the HRS sample back to 1995 and examines the impact of parental loss on financial hardship. Parents dead is a dummy equal to one if the respondent's parents are both dead. Mother dead is a dummy equal to one if the respondent's mother is dead. Father dead is a dummy equal to one if the respondent's father is dead. Controls and fixed effects in Table 2 are included and standard errors are clustered at the household level. Levels of significance are denoted as follows: * $p < 0.10$, ** $p < 0.05$, and *** $p < 0.01$.

| | Dependent variable: cutting necessities | | | | | |
| --- | --- | --- | --- | --- | --- | --- |
| | Full sample | Male | Female | Full sample | Male | Female |
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Parents dead | 0.015*** | 0.011** | 0.018*** | | | |
| | (0.004) | (0.005) | (0.007) | | | |
| Mother dead | | | | 0.012*** | 0.006 | 0.018** |
| | | | | (0.005) | (0.005) | (0.007) |
| Father dead | | | | 0.004 | 0.003 | 0.005 |
| | | | | (0.006) | (0.008) | (0.010) |
| Controls + FEs | Yes | Yes | Yes | Yes | Yes | Yes |
| Individual FE | Yes | Yes | Yes | Yes | Yes | Yes |
| Observations | 137,318 | 57,980 | 79,334 | 137,318 | 57,980 | 79,334 |
| Adj. $R^2$ | 0.375 | 0.351 | 0.377 | 0.375 | 0.351 | 0.377 |

## Table 6. Emotional vs. Financial Support

This table reruns the baseline regressions in Table 2 on households that receive little to no financial support. The NLSY79 CYA sample is limited to households that did not receive financial support in the past year and the HRS sample is limited to households that did not receive financial support totaling $500 or more from their children, other immediate family members, or friends in the past two years. Standard errors are clustered at the household level and levels of significance are denoted as follows: * $p < 0.10$, ** $p < 0.05$, and *** $p < 0.01$.

| | NLSY79 CYA | | HRS | |
| --- | --- | --- | --- | --- |
| | Payment difficulties | Cutting necessities | Payment difficulties | Cutting necessities |
| | (1) | (2) | (3) | (4) |
| Emotional support | −0.066*** | −0.055*** | −0.029*** | −0.043*** |
| | (0.008) | (0.009) | (0.008) | (0.009) |
| Controls + FEs | Yes | Yes | Yes | Yes |
| Observations | 18,784 | 18,784 | 21,662 | 21,662 |
| Adj. $R^2$ | 0.054 | 0.056 | 0.105 | 0.118 |

## Table 7. Heterogeneity: the Gender Difference

This table shows the gender difference in the effect of emotional support on financial hardship. Controls and fixed effects in Table 2 are included and standard errors are clustered at the household level. Levels of significance are denoted as follows: * $p < 0.10$, ** $p < 0.05$, and *** $p < 0.01$.

| | NLSY79 CYA | | HRS | |
|---|---|---|---|---|
| | Payment difficulties | Cutting necessities | Payment difficulties | Cutting necessities |
| | (1) | (2) | (3) | (4) |
| Emotional support × Female | −0.058*** | −0.047*** | −0.065*** | −0.061*** |
| | (0.015) | (0.016) | (0.014) | (0.016) |
| Emotional support | −0.040*** | −0.041*** | 0.007 | −0.002 |
| | (0.010) | (0.010) | (0.010) | (0.011) |
| Controls + FEs | Yes | Yes | Yes | Yes |
| Observations | 23,917 | 23,917 | 26,173 | 26,173 |
| Adj. $R^2$ | 0.055 | 0.057 | 0.110 | 0.131 |

## Table 8. Heterogeneity: the Effect of Neuroticism

This table reports the interaction effects of emotional support with neuroticism on financial hardship. Controls and fixed effects in Table 2 are included and standard errors are clustered at the household level. Levels of significance are denoted as follows: * $p < 0.10$, ** $p < 0.05$, and *** $p < 0.01$.

| | NLSY79 CYA | | HRS | |
|---|---|---|---|---|
| | Payment difficulties | Cutting necessities | Payment difficulties | Cutting necessities |
| | (1) | (2) | (3) | (4) |
| Emotional support × Neuroticism | −0.124*** | −0.193*** | −0.218*** | −0.178*** |
| | (0.047) | (0.049) | (0.042) | (0.046) |
| Emotional support | −0.030* | −0.002 | 0.042*** | 0.022 |
| | (0.016) | (0.016) | (0.014) | (0.015) |
| Controls + FEs | Yes | Yes | Yes | Yes |
| Observations | 23,917 | 23,917 | 26,173 | 26,173 |
| Adj. $R^2$ | 0.055 | 0.057 | 0.110 | 0.131 |

### Table 9. Emotional Support and Financial Preparedness

This table analyzes the effect of emotional support on financial preparedness. Emergency funds is a dummy equal to one if the household sets aside emergency funds that would cover expenses for three months in case of sickness, job loss, economic downturn, or other emergencies. Retirement planning measures how much the respondent thinks about retirement on a scale from zero to three, where zero means "hardly at all" and three means "a lot." Controls and fixed effects in Table 2 are included and standard errors are clustered at the household level. Levels of significance are denoted as follows: * $p < 0.10$, ** $p < 0.05$, and *** $p < 0.01$.

|  | NLSY79 CYA | HRS |
|---|---|---|
|  | Emergency funds | Retirement planning |
|  | (1) | (2) |
| Emotional support | 0.107*** | 0.155*** |
|  | (0.015) | (0.035) |
| Controls + FEs | Yes | Yes |
| Observations | 16,592 | 24,854 |
| Adj. $R^2$ | 0.094 | 0.049 |

### Table 10. Evaluating the Preference-Based Channel

This table reports the interaction effects of emotional support with patience on financial hardship. Controls and fixed effects in Table 2 are included and standard errors are clustered at the household level. Levels of significance are denoted as follows: * $p < 0.10$, ** $p < 0.05$, and *** $p < 0.01$.

|  | NLSY79 CYA | | HRS | |
|---|---|---|---|---|
|  | Payment difficulties | Cutting necessities | Payment difficulties | Cutting necessities |
|  | (1) | (2) | (3) | (4) |
| Emotional support $\times$ Patience | 0.039 | 0.032 | 0.016 | 0.008 |
|  | (0.034) | (0.035) | (0.027) | (0.030) |
| Emotional support | $-0.098$*** | $-0.088$*** | $-0.038$** | $-0.040$* |
|  | (0.026) | (0.027) | (0.019) | (0.021) |
| Controls + FEs | Yes | Yes | Yes | Yes |
| Observations | 23,917 | 23,917 | 26,173 | 26,173 |
| Adj. $R^2$ | 0.054 | 0.057 | 0.109 | 0.130 |

## Table 11. Evaluating the Belief-Based Channel

This table reports the interaction effects of emotional support with self-efficacy on financial hardship. Controls and fixed effects in Table 2 are included and standard errors are clustered at the household level. Levels of significance are denoted as follows: * $p < 0.10$, ** $p < 0.05$, and *** $p < 0.01$.

| | NLSY79 CYA | | HRS | |
|---|---|---|---|---|
| | Payment difficulties | Cutting necessities | Payment difficulties | Cutting necessities |
| | (1) | (2) | (3) | (4) |
| Emotional support × Self-efficacy | 0.170*** | 0.186*** | 0.319*** | 0.217*** |
| | (0.063) | (0.070) | (0.048) | (0.051) |
| Emotional support | −0.192*** | −0.198*** | −0.273*** | −0.202*** |
| | (0.047) | (0.052) | (0.040) | (0.042) |
| Controls + FEs | Yes | Yes | Yes | Yes |
| Observations | 23,917 | 23,917 | 26,173 | 26,173 |
| Adj. $R^2$ | 0.055 | 0.057 | 0.111 | 0.131 |

## Table IA1. Variable Definitions

This table defines variables in the NLSY79 CYA and the HRS samples. Emotional support and cognitive ability are in percentile ranks. Income and wealth variables are deflated in 2010 dollars by the price index for personal consumption expenditures. Patience, risk aversion, self-efficacy, and neuroticism are linearly rescaled to lie between zero and one.

| Panel A: NLSY79 CYA | |
|---|---|
| Emotional support | A composite of four variables rating (i) how much the respondent feels loved and cared for by relatives; (ii) how much the respondent can open up to relatives about worries; (iii) how much the respondent feels loved and cared for by friends; and (iv) how much the respondent can open up to friends about worries. The ratings range from one to five, where one means "not at all" and five means "a great deal." |
| Payment difficulties | A dummy equal to one if the household had "quite a bit" or "a great deal" of difficulty paying bills over the past 12 months. |
| Cutting necessities | A dummy equal to one if the household has to put off buying necessities (e.g., food, clothing, medical care, and housing) either "frequently" or "all the time." |
| Male | A dummy equal to one if the respondent is male. |
| Black | A dummy equal to one if the respondent is black. |
| Age | Age in years. |
| College | A dummy equal to one if the respondent is college-educated. |
| Married | A dummy equal to one if the respondent is married. |
| Healthy | A dummy equal to one if the respondent's self-reported health is either "very good" or "excellent." |
| Log family income | Logarithm of family income in the previous year. |
| Own home | A dummy equal to one if the household owns the home. |
| Patience | The average rating of impulsiveness in childhood evaluated by the mother based on the statement "child is impulsive or acts without thinking." The ratings range from one to three, where one means "often true" and three means "not true." |
| Risk aversion | The average self-rating of risk aversion based on the statement "I enjoy taking risks" on a scale from one to four, where one means "strongly agree" and four means "strongly disagree." |
| Cognitive ability | The average score of the Peabody Individual Achievement Tests on mathematics, reading recognition, and reading comprehension. |
| Self-efficacy | The average Pearlin Mastery Scale. |
| Neuroticism | The average assessment of the personality trait pair of (i) "anxious, easily upset" and (ii) "calm, emotionally stable" on a scale from one to seven, where one means "strongly disagree" and seven means "strongly agree." The scoring for (ii) is reversed so that higher scores correspond to higher levels of neuroticism. |

# Table IA1. Variable Definitions (Cont.)

Panel B: HRS

| Variable | Definition |
| --- | --- |
| Emotional support | A composite of eight variables rating how much the respondent can open up to (i) spouse, (ii) children, (iii) other immediate family members, and (iv) friends about worries; and how much each source really understands the way the respondent feels. The ratings range from zero to three, where zero means "not at all" and three means "a lot." A rating of zero is assigned if a respondent does not have anyone from a particular source. |
| Payment difficulties | A dummy equal to one if it is "very difficult" or "completely difficult" for the household to meet monthly bill payments. |
| Cutting necessities | A dummy equal to one if the respondent either ate less than they should over the past year because there was insufficient money to buy food, or ended up taking less medication than was prescribed over the past two years because of cost. |
| Male | A dummy equal to one if the respondent is male. |
| Black | A dummy equal to one if the respondent is black. |
| Age | Age in years. |
| College | A dummy equal to one if the respondent is college-educated. |
| Married | A dummy equal to one if the respondent is married. |
| Healthy | A dummy equal to one if the respondent's self-reported health is either "very good" or "excellent." |
| Log family income | Logarithm of family income in the previous year. |
| Own home | A dummy equal to one if the household owns the home. |
| Household wealth | The net value of total household wealth less all debts in millions. |
| Patience | The average self-rating of impulsiveness on a scale from one to four, where one means "a lot" and four means "not at all." The time preferences of respondents from earlier waves are measured based on the statement "I often rush into action without thinking about potential consequences" on a scale from one to six, where one means "strongly agree" and six means "strongly disagree." |
| Risk aversion | The average self-rating of risk aversion in the 2014 and 2016 waves based on the statement "I am generally a person who tries to avoid taking risks" on a scale from zero to 10, where zero means "not at all willing to take risks" and 10 means "very willing to take risks." The risk preferences of respondents from earlier waves are measured based on hypothetical income gamble questions on a scale from one to four, from least to most risk averse. |
| Cognitive ability | The average score of the tests on word recall and mental status. |
| Self-efficacy | The average assessment of (i) mastery and (ii) constraints on personal control on a scale from one to six, where one means "strongly disagree" and six means "strongly agree." The scoring for (ii) is reversed so that higher scores correspond to higher levels of self-efficacy. |
| Neuroticism | The average assessment of the personality traits of (i) moody, (ii) worrying, (iii) nervous, and (iv) calm on a scale from one to four, where one means "a lot" and four means "not at all." The scoring for (i), (ii), and (iii) is reversed so that higher scores correspond to higher levels of neuroticism. |

## Table IA2. Evidence from Single Individuals

This table reruns baseline regressions in Table 2 on single individuals. Standard errors are clustered at the household level and levels of significance are denoted as follows: * $p < 0.10$, ** $p < 0.05$, and *** $p < 0.01$.

|  | NLSY79 CYA | | HRS | |
|---|---|---|---|---|
|  | Payment difficulties | Cutting necessities | Payment difficulties | Cutting necessities |
|  | (1) | (2) | (3) | (4) |
| Emotional support | $-0.076$*** | $-0.068$*** | $-0.046$*** | $-0.035$** |
|  | (0.009) | (0.009) | (0.013) | (0.016) |
| Controls + FEs | Yes | Yes | Yes | Yes |
| Observations | 17,197 | 17,197 | 11,559 | 11,559 |
| Adj. $R^2$ | 0.052 | 0.054 | 0.110 | 0.134 |

## Table IA3. A Matched Sample Analysis of the Impact of Parental Loss

This table extends the HRS sample back to 1995 and performs a matched sample analysis of the impact of parental loss on financial hardship. The treatment event in the first three columns is loss of mother and the treatment event in the next three columns is loss of father. Each treated individual is matched with a nontreated individual one survey wave prior to the treatment event. The matching approach minimizes the Mahalanobis distance between a vector of observed covariates including gender, race, age, education attainment, marital status, health status, family income, home ownership, and household wealth across treated and nontreated individuals. Treat indicates whether the individual experiences loss of parent over the sample period. Post indicates whether it is after the treatment event, for both treated and nontreated individuals. Standard errors are clustered at the household level and levels of significance are denoted as follows: * $p < 0.10$, ** $p < 0.05$, and *** $p < 0.01$.

|  | Dependent variable: cutting necessities | | | | | |
|---|---|---|---|---|---|---|
|  | Treatment event: loss of mother | | | Treatment event: loss of father | | |
|  | Full sample | Male | Female | Full sample | Male | Female |
|  | (1) | (2) | (3) | (4) | (5) | (6) |
| Post × Treat | 0.015** | 0.011 | 0.019* | $-0.003$ | $-0.007$ | $-0.001$ |
|  | (0.006) | (0.008) | (0.008) | (0.009) | (0.011) | (0.014) |
| Post | $-0.004$ | $-0.010$ | 0.001 | $-0.010$ | $-0.005$ | $-0.013$ |
|  | (0.005) | (0.007) | (0.008) | (0.008) | (0.009) | (0.011) |
| Controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Individual + Year FEs | Yes | Yes | Yes | Yes | Yes | Yes |
| Observations | 57,756 | 26,210 | 31,546 | 29,093 | 12,862 | 16,231 |
| Adj. $R^2$ | 0.371 | 0.338 | 0.372 | 0.393 | 0.404 | 0.377 |

## Table IA4. Lagged Emotional Support and Financial Hardship

This table reports robustness results replacing contemporaneous emotional support in the baseline regression specification with emotional support lagged by two to four years. Standard errors are clustered at the household level and levels of significance are denoted as follows: * $p < 0.10$, ** $p < 0.05$, and *** $p < 0.01$.

| | NLSY79 CYA | | HRS | |
| --- | --- | --- | --- | --- |
| | Payment difficulties | Cutting necessities | Payment difficulties | Cutting necessities |
| | (1) | (2) | (3) | (4) |
| Lagged ES | −0.029*** | −0.048*** | −0.015* | −0.030*** |
| | (0.010) | (0.009) | (0.009) | (0.009) |
| Controls + FEs | Yes | Yes | Yes | Yes |
| Observations | 15,374 | 15,374 | 14,115 | 21,729 |
| Adj. $R^2$ | 0.048 | 0.055 | 0.092 | 0.124 |

## Table IA5. Estimations Using Data Collapsed at the Individual Level

This table collapses both the NLSY79 CYA and the HRS samples at the individual level and estimates the effect of emotional support on financial hardship. The financial hardship indicators take the value of one if the individual experiences financial hardship in any of the survey waves. Emotional support is the average value of emotional support across survey waves. Controls in Table 2 are included. For time-varying variables, their average values across survey waves are used. Gender, race, and average age are also controlled for. Robust standard errors are reported in parentheses and levels of significance are denoted as follows: * $p < 0.10$, ** $p < 0.05$, and *** $p < 0.01$.

| | NLSY79 CYA | | HRS | |
| --- | --- | --- | --- | --- |
| | Payment difficulties | Cutting necessities | Payment difficulties | Cutting necessities |
| | (1) | (2) | (3) | (4) |
| Emotional support | −0.185*** | −0.170*** | −0.031** | −0.059*** |
| | (0.022) | (0.023) | (0.013) | (0.015) |
| Controls | Yes | Yes | Yes | Yes |
| Observations | 7,073 | 7,073 | 12,709 | 12,709 |
| Adj. $R^2$ | 0.115 | 0.117 | 0.132 | 0.144 |

## Table IA6. Alternative Financial Hardship Indicators

This table relies on the NLSY79 CYA sample and reruns baseline regressions in Table 2 using alternative financial hardship indicators. Cannot make ends meet is a dummy equal to one if the household ended up with insufficient money to make ends meet at the end of each month over the past year. Late debt is a dummy equal to one if the household has been more than 60 days late on required debt payments (mortgage, credit card debt, auto loan, or other debt) over the last 12 months. Late bills is a dummy equal to one if the household has been more than 60 days late on utilities, medical, or other bills over the last 12 months. Standard errors are clustered at the household level and levels of significance are denoted as follows: * $p < 0.10$, ** $p < 0.05$, and *** $p < 0.01$.

|  | Cannot make ends meet | Late debt | Late bills |
|---|---|---|---|
|  | (1) | (2) | (3) |
| Emotional support | −0.055*** | −0.043*** | −0.081*** |
|  | (0.007) | (0.011) | (0.012) |
| Controls + FEs | Yes | Yes | Yes |
| Observations | 23,784 | 12,060 | 12,060 |
| Adj. $R^2$ | 0.062 | 0.025 | 0.059 |

## Table IA7. Emotional Support vs. Practical Help

This table relies on the HRS sample and reruns baseline regressions in Table 2 on individuals who have no impairment or health problem that limits the kind or amount of paid work they can do. Standard errors are clustered at the household level and levels of significance are denoted as follows: * $p < 0.10$, ** $p < 0.05$, and *** $p < 0.01$.

|  | Payment difficulties | Cutting necessities |
|---|---|---|
|  | (1) | (2) |
| Emotional support | −0.019** | −0.023** |
|  | (0.008) | (0.010) |
| Controls + FEs | Yes | Yes |
| Observations | 16,673 | 16,673 |
| Adj. $R^2$ | 0.074 | 0.092 |

## Table IA8. Emotional vs. Informational Support

This table relies on the HRS sample and reports the interaction effects of emotional support with narrow-mindedness on financial hardship. Narrow-minded is a dummy equal to one if the self-rating of broad-mindedness is either "a little" or "not at all." Controls and fixed effects in Table 2 are included and standard errors are clustered at the household level. Levels of significance are denoted as follows: * $p < 0.10$, ** $p < 0.05$, and *** $p < 0.01$.

| | Payment difficulties | | Cutting necessities | |
| --- | --- | --- | --- | --- |
| | (1) | (2) | (3) | (4) |
| Emotional support | −0.029*** | −0.026*** | −0.035*** | −0.036*** |
| | (0.008) | (0.009) | (0.009) | (0.010) |
| Emotional support × Narrow-minded | | −0.012 | | 0.000 |
| | | (0.016) | | (0.018) |
| Narrow-minded | | −0.007 | | −0.010 |
| | | (0.009) | | (0.010) |
| Controls + FEs | Yes | Yes | Yes | Yes |
| Observations | 26,138 | 26,138 | 26,138 | 26,138 |
| Adj. $R^2$ | 0.108 | 0.109 | 0.130 | 0.130 |