JULIAN BOND INSTITUTE | Research Fellow Report

Financial Stress Among Low- and Moderate-Income Latino Adults in California: The Role of Price Pressures and Holiday Spending

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September 2026

Abstract
We examine financial stress among low- and moderate-income Latino adults in California during a period of elevated prices and the 2025 holiday season. Participants from the Mobile Financial Diary cohort (n = 69; 218 person-wave observations) completed four monthly surveys covering November 2025 through February 2026. We compare four measures of financial health, wellbeing, stress, and anxiety across income groups and analyze open-ended responses using the RADaR technique. Respondents below the sample median income had lower financial health and higher financial stress and anxiety, whereas perceived financial wellbeing did not differ significantly. Holiday stress was similar across groups, but lower-income respondents attributed it to not having enough money to spend, while higher-income respondents more often cited overspending. Rising costs of groceries, gas, rent, and health insurance is associated with financial stress; stable income and planning characterized those reporting none. Single measures of perceived financial wellbeing may understate income gaps in financial stress.

Keywords: financial stress, financial wellbeing, financial behavior, mixed methods, financial diaries, Latino/Hispanic households

Acknowledgements: We are thankful for the funding provided by the Julian Bond Institute and to the in-kind support from Pepperdine School of Public Policy. This project relies on data from survey(s) administered by the Understanding America Study (UAS), which is maintained by the Center for Economic and Social Research (CESR) at the University of Southern California (USC). We are thankful to Bart Orriens and Livia Montana from the UAS team for supporting all data collection activities. The article's contents are solely the responsibility of the authors and do not necessarily represent the official views of Pepperdine University, the Julian Bond Institute, USC, or UAS.

1. Introduction

Money and the economy are two of the major stressors among adults in the United States. According to the 2025 Stress in America Survey, 66 percent of adults recognized money as a very or somewhat significant source of stress in their lives (APA, 2025). This survey also shows that 75 percent of adults considered the economy as a major stressor when prompted in the context of inflation and unemployment rates (APA, 2025). Price increases and concerns about finding and keeping a job also seem to be a common financial concern in the US (Board of Governors of the Federal Reserve System, 2026).

Developing a better understanding of the financial lives of Latinos is important, especially in the current environment where money and the economy are major stressors.[1] Latino adults are more financially vulnerable in comparison to White adults, where financial vulnerability is associated with an individual's financial situation, money management, and financial literacy (Hasler et al., 2023). There is evidence that financial knowledge has a predictive power on financial behavior (Angrisani et al., 2023). Latino adults are also more likely to score lower than White adults when using objective measures of financial knowledge (Blanco et al., 2024). Learning more about the financial pressures of Latinos is of relevance given the large representation of this demographic group in the United States. While Latinos represent a total of 20 percent of the US population, their representation is much larger in a state like California, where 41 percent of the population identifies with this ethnic group (US Census Bureau, 2026a, 2026b).

Understanding the financial pressures of Low and Moderate Income (LMI) Latino households in an environment of elevated prices and the holiday season is relevant in order to

[1] Please note that we use the term Latino interchangeably with Hispanic for simplicity.

better devise policies to improve their financial wellbeing. When looking at the Consumer Price Index (CPI), we observe that the CPI for all items increased by 2.7 percent between 2024 and 2025. During this period of time, the price of food and energy increased by 3.1 and 2.3 percent, respectively, which are higher rates in comparison to those in 2024 and 2023 (U.S. Bureau of Labor Statistics, 2026). Similarly, the cost of living in other areas such as utilities, fuel oil, and hospital and related services saw increases ranging from 7 to 11 percent in this same period. There is also evidence that LMI households experience higher inflation rates in comparison to other income groups given their consumption patterns and budget constraints (Klick & Stockburger, 2024). LMI households have less flexibility to adjust their spending when prices rise because necessities already account for a larger share of their budgets and they may have already opted for lower-cost alternatives (Horwich, 2024).

We conducted a mixed-methods study on the financial lives of Latino adults in California in the context of an environment of elevated prices and the 2025 holiday season. This study is a continuation of the Mobile Financial Diary (MFD) project, which collected data among a convenience sample of 134 LMI Latinos in California for 8 months in 2018-2019. Data among MFD project participants (n=84) was also collected in November of 2020 to study their financial lives during COVID-19 (Blanco et al., 2021). For this study, we recruited participants from the initial sample from the MFD and conducted four monthly surveys covering November 2025 through February 2026. Our analysis here is based on quantitative and qualitative data provided by 69 participants.

In our analysis of the 2018-2019 MFD data, which captured the holiday season, we found qualitative evidence that the holidays placed pressure on household finances.[2] This, we wanted to

[2] Unpublished preliminary data analysis.

expand on this previous finding by learning more about the experiences of households managing the holiday season in an environment of elevated prices, which was different from the previous waves of data collection for the MFD. Our previous study found that holiday-related expenses can be considered "expected-unexpected." Although the holiday season is predictable, households with tight budgets are more likely to struggle with setting aside the sufficient funds for the increased expenditures during this season.

We also found previously that the Financial Health Score (FHS) and the CFPB Financial Wellbeing Scale (FWS) moved in opposite directions over the same period (Blanco et al., 2021). We hypothesize that this trend difference is due to one measure capturing financial behavior (FHS) and the other one capturing long-term perceptions of financial wellbeing (FWS). In our previous study, we also learned that measures of stress are especially relevant because they capture the impact of finances on the mental state of individuals.

The present study has two aims. First, to study how sustained price pressures and the financial demands of the holiday season shape financial behavior and stress among a convenience sample of Latino adults in California. Second, we are interested in studying how different measures of financial behavior and stress are related. We evaluate differences in financial behavior, wellbeing and stress measures across income groups within the same wave, which allows us to isolate measurement differences from changes over time.

Our findings show differences across income groups in measures of financial behavior, stress, and anxiety, but not in perceived financial wellbeing. Participants in the below-median income group show lower levels of the Financial Health Score (FHS), but higher levels of financial stress and anxiety than those in the at-or-above median income group. We do not observe differences across income groups for the CFPB Financial Wellbeing Scale (FWS). We

also observe that price and holiday pressures are similar across income groups, but the reasons for the stress can differ across groups. Those in the below-median income group attribute their levels of financial stress during the holiday season to "not having enough money to spend," while those in the at-or-above-median income group attribute it to "spending too much." Our qualitative data analysis complements the quantitative analysis by providing evidence of the financial pressures felt in an environment of elevated prices, especially for groceries, gas, rent, and health.

The paper is organized as follows. We present a background section where we review the related literature. In the methodology section we describe our data, measures, and specific methodological approaches for the quantitative and qualitative data analysis. We elaborate on the results from our quantitative and qualitative data analysis in two separate sections. We provide a discussion section where we connect our main contributions to previous work. Our conclusion section summarizes main findings and provides insights for policymakers and stakeholders.

2. Background

The Burdens of Financial Hardship on Low- and Moderate-Income (LMI) Households

Since 2019, financial stress has increased for a large majority of adults in the United States (APA, 2023b). Financial stress has persisted in the aftermath of the pandemic due to elevated prices, resulting from supply shocks, the ongoing war between Russia and Ukraine, and, more recently, the imposition of tariffs and the ongoing conflict between the US and Iran. Thus, rising living expenses have become a prominent concern in people's everyday lives in the US. Research has identified two distinct constructs of financial wellbeing: stress related to the day-to-day management of money and a sense of security about one's financial future (Netemeyer et

al., 2018). Such differences matter as households can appear financially stable yet experience psychological strain.

Financial worries can carry psychological costs. Using data from the 2016 National Health Interview Survey, Weissman et al. (2020) found that more than half of US adults reported two or more financial worries, and these worries were associated with serious psychological distress. In fact, a systematic review of 40 observational studies has confirmed positive associations between financial stress and depression (Guan et al., 2022).

There are racial and ethnic differences in relation to experiencing financial stress in the United States. According to the 2023 Making Ends Meet Survey, 38% of families reported difficulty paying expenses, an increase of 2% from the year prior (Consumer Financial Protection Bureau [CFPB] 2023). The report detailed an increasing divergence in financial condition across income levels and race, where Black and Latino adults have lower financial wellbeing and have more difficulty paying bills and accessing credit, in comparison to White adults. Similar patterns have been shown in the Survey of Household Economics and Decision Making (SHED; Board of Governors of the Federal Reserve System, 2024). According to the 2024 SHED report, 72% of adults reported doing at least "okay" financially by late 2023. While 76% of White adults and 82% of Asian adults reported doing at least "okay" financially, 61% of Latino adults reported the same.

Extensive research shows that household financial fragility existed before the pandemic and the current state of elevated prices. Using the "$2,000 in 30 days" metric, Lusardi et al. (2011) found that approximately 25% of US households reported they could not access such funds if needed. They also found that nearly half of households in the US are financially vulnerable. Morduch and Siwicki (2017) presented similar evidence of financial fragility in their

US Financial Diaries study of 235 Low- and Moderate-Income (LMI) households. These findings show how fluctuations in income can create financial strain even when annual income appears sufficient. For households with limited savings or little flexibility in their budgets, increases in the prices of necessities may further constrain their ability to meet regular expenses.

One relevant financial trigger for stress are tariff-related consumer price hikes on imported final goods and imported intermediate inputs. Recent evidence from Minton et al. (2026) found that tariffs implemented through November 2025 raised core-goods personal consumption expenditure (PCE) prices by an estimated 3.1 percent through February 2026 and increased overall PCE prices by 0.8 percent. However, the burden of price hikes would likely be distributed unequally. Carroll and Hur (2023) note that tradeables account for 38 percent of expenditures among the bottom 25 percent of wealth, compared with 31 percent for the top 25 percent of wealth. Hacioglu-Hoke and Feler (2026) used transaction-level consumer-purchase data and found that the price burden from the tariffs on lower-income households caused losses of 0.19 percent of income compared with 0.02 percent for higher-income households.

For households already struggling to cover basic living expenses, the holidays and other celebratory periods can increase financial strain and reliance on risky financial tactics. This puts critical pressure on LMI households, as they have to justify certain expenses in the name of social expectations. When households fail to incorporate anticipated expenses into their budget, they become "expected-unexpected expenses." Hill (2023) surveyed 1085 people, and over 70% of respondents said the holiday season strains their mental health due to stress, depression, and general worry about overall financial wellbeing. A survey of 2,000 respondents about holiday expenses found that only 51% had a budget, yet 64% expected to overspend that budget (Beyond Finance, 2025). The APA (2023a) surveyed 2,061 adults about holiday-related stress and found

that 24% of those earning $50,000 or less reported high stress, compared with 18% of those earning over $100,000. The holiday season puts LMI households in an unstable environment, who must choose between holiday traditions and necessities, and social pressure makes it difficult to opt out from holiday spending.

Households with limited savings regularly face income-expense mismatches, in which expenses outstrip income, even without financial shocks. Bufe et al. (2022) examined which financial shocks (income, expenses, or medical) hurt households most and found that income shocks were the most damaging, with twice the effect of expense shocks. For LMI households with inconsistent income, a financial shock could trigger a downward spiral into poor financial practices. Morduch and Siwicki (2017) defined income variability, or income swings, in two ways. Between-job volatility, where one's current job status is ever-changing, and within-job volatility, where paycheck amounts are not consistent. They observed that lower within-job volatility greatly reduces the chances of episodic poverty for households near the poverty threshold.

To manage income and bill variability, households commonly turn to credit-based services. Greene and Stavins (2023) show that many households carry credit card debt while also holding liquid assets because they need liquidity for expenses that credit cannot cover. Bufe et al. (2022) found that liquid savings were the best buffer against financial shocks, but they only work as a short-term solution. They highlighted that using credit to cover losses from income shocks is problematic since debt accrues while income remains unresolved. Nonetheless, debt use in some circumstances is a rational and informed decision made by LMI households managing their personal finances in an uncertain environment (Blanco, 2017).

Borrowing and reliance on credit are established responses to financial pressure in the Latino population. The CFPB (2023) confirmed that access to credit remains constrained for Latino consumers, even as reliance on credit to cover everyday expenses increases. Vargas and Sanchez's (2020) research show evidence that limited savings and restricted access to mainstream credit is likely to drive households to higher-cost borrowing options.

Financial Challenges Among Latinos in California

The recent pandemic made structural vulnerabilities more evident among Latino households. Vargas and Sanchez (2020) documented the acute economic impact on Latino households in the early months of the pandemic. Just over half of respondents reported reduced work hours while still employed, and 29% had lost their jobs entirely. Additionally, 41% struggled to pay rent or mortgages. Latino financial coping strategies were revealing: 42% depleted most or all savings, 33% borrowed from close ones, and 26% resorted to payday or high-interest loans.

These results coincide with earlier evidence from the Mobile Financial Diary (MFD) project in California. Blanco et al. (2021) used mixed-methods data from 84 LMI California Latino adults during the pandemic, which documented financial stress tied to state closures, job loss, childcare, and income insecurity. Although some financial behavior indicators improved during the pandemic, partly due to relief programs instituted at the time, qualitative findings from MFD participants indicated persistent stress related to uncertainties about employment and household expenses.

The gravity of the situation is heightened in California, where affordability pressures are already high. Cuelle Mejia et al. (2025) analyzed the status of homeownership in California, and they noted that housing security is unequal across racial groups. Latino households face lower

rates of homeownership and weaker wealth-building opportunities than White households. Bonilla et al. (2026) similarly showed the elevated pressure Latino households face in California through the combined burden of gasoline, transportation, and housing costs.

California is a high-cost environment, which has important implications for the financial wellbeing of Latino households. According to the U.S. Bureau of Economic Analysis's 2024 Regional Price Parities, California had the highest overall price level in the nation. According to the Regional Price Parity (RPP) for California (110.7), the state's overall prices were 10.7 percent above the national average in 2024. Housing costs were a key driver, as California's housing-rents RPP was 154.3, which is 54.3 percent above the national average, the highest in the country. Latino households face pricing challenges with equally limited resources and access to homeownership.

In 2023, 45.9 percent of Latino households were homeowners, 18.5 percentage points below that of White households, while 63.3 percent of Latino renters spent more than 30 percent of their income on rent and utilities (Cuellar Mejia et al., 2025). In addition, Latinos composed 56 percent of California workers experiencing poverty in 2024 while comprising 40 percent of all working adults. In California, 10 percent of workers (1.6 million people) ages 25-64 were living in poverty (Bohn et al., 2026).

An important constraint facing household budgets is rising healthcare costs. Spending for national health care is projected to reach nearly $9 trillion or 20.6 percent of GDP by 2034, due to legislative changes, increased use of medical goods and services, and an increase in Medicare (Fiore et al., 2026). California has been experiencing the changes in health care which has left noticeable effects. Expenditures on health care across public and private payers have increased from $377.6 billion in 2022 to $408.6 billion in 2023, an 8.2 percent increase (California

Department of Health Care Access and Information [HCAI], 2025). Increases to statewide spending on health care does not automatically translate to higher household costs, but add other pressure mechanisms onto consumers. The 2026 California Health Policy Survey found that 70 percent of Californians experienced financial strain associated with health care costs, 59 percent reported that they or a family member had skipped or delayed care because of cost, and 40% reported medical debt (Joynt et al., 2026). Therefore, the spillover consumers may experience are beyond their expenses on health care.

Among LMI households, increases in health insurance premiums and medical costs can reduce their capacity to save and intensify the need to make trade-offs in other areas of spending. In 2026, due to the nonrenewal of the Enhanced Premium Tax Credit (EPTC), which expanded eligibility to more LMI households and subsidies for high-income households, eligibility and subsidies were reduced to their 2021 levels, raising health insurance premiums for those still eligible and pushing many into uninsured status (Fernandez, 2025). These premium increases affected 1.7 million Californians, especially as the state saw a sharp decline in insurance enrollment (Covered California, 2026). The combination of losing eligibility for lower-income individuals and lower subsidies for higher-income enrollees meant many households felt the financial, physical, and mental toll of losing the EPTC.

3. Methodology

Data

This study is a continuation of Blanco et al. (2021), which examined financial stress among low- and moderate-income Latino adults in California during the COVID-19 pandemic in 2020. Participants belong to the Understanding America Study (UAS) Internet Panel at the

University of Southern California, an address-based probability panel of about 7,400 households designed to be representative of the United States population, aged eighteen and older (USC Dornsife Center for Economic and Social Research, 2021). The respondents in this study were drawn from the subset of that panel who took part in the Mobile Financial Diary (MFD) project, a convenience sample of 134 low- and moderate-income California Latino adults recruited in 2018 and 2019. The MFD collected monthly financial and mental-health data to study the link between finances and stress in this population.

Data collection ran across four monthly online surveys fielded from December 2025 through March 2026, each completed by respondents on a mobile device or computer. Each survey was fielded in one month and asked about the month before, so the four waves track financial experiences from November 2025 through February 2026. Of the MFD participants invited, 69 responded to at least one of the four surveys, a response rate of 51 percent. Of the 69 respondents, 59 entered at the first survey wave, 6 first appeared in the second wave, and 4 in the third survey wave; 38 are observed in all four waves and 8 are observed only once. In total, there are 218 person-wave observations. In the analysis, baseline refers to each respondent's earliest observed wave, and the cross-sectional comparisons reported below use that baseline observation so that each respondent enters once. We will also present wave-level analyses of the four primary measures, where we use the available observations in each wave. Our study was approved by Pepperdine University Institutional Review Board (IRB, #18-07-830).[3]

Measures

The quantitative analysis uses four primary measures, each constructed from the survey items. These measures come from the same sources used in the prior study. Financial health is

[3] This study was initially approved by Pepperdine IRB in 2018, and it has been amended for the 2021 and 2025-2026 data collection. UAS also conducts its own IRB application for all studies.

measured with the Financial Health Score (FHS) developed by the Financial Health Network (FHN), which combines eight indicators across four dimensions of financial behavior, spending, saving, borrowing, and planning, into a single 0 to 100 score with established Vulnerable, Coping, and Healthy tiers (Financial Health Network, 2021). Financial wellbeing is measured with the Consumer Financial Protection Bureau (CFPB) Financial Wellbeing Scale (FWS), scored to its published 19 to 82 range (CFPB, 2015). The FHS tracks financial behavior, while the FWS captures a respondent's own assessment of their financial wellbeing.

The other two scales measure stress and anxiety. Financial stress is a single item rescaled to run from 1 to 4, where higher values indicate more stress fielded by the FHS via UAS in the past. Anxiety is measured with the GAD-2, the validated two-item screen for generalized anxiety, scored 0 to 6 with a positive screen at a score of 3 or higher (Spitzer et al., 2006); the GAD-2 is the short form of the GAD-7 used in the prior study. As in the prior study, respondents who reported any financial stress were also asked whether that stress affected their physical health, mental health, family life, and work or school; these four items are reported individually because no validated composite exists for the set.

Two modules distinguish this study from Blanco et al. (2021) and stand in place of the pandemic-specific content. The first added module is a battery of seven items on the sources of financial pressure, each rated very much, somewhat, or not at all. The sources of financial pressures evaluated are high cost of living, high interest rates, low returns on investments, not having enough left to save or invest after expenses, the absence of a stable job or income, the absence of a financial plan, and the burden of supporting parents or relatives. These questions are derived from a study conducted by The Julian Bond Institute for Financial Equity Research

(Spotser et al., 2026). A companion item asks how much financial stress price increases over the past twelve months have caused the household.

The second module, included in Waves 1 through 3, covers the holiday season: the level of holiday financial stress, whether stress rises during the season, the causes of that stress, the strategies used to cope with it, and holiday spending and how it was paid for. The four scales, the financial-behavior items, and the price-pressure battery were asked in all four waves; the holiday module was asked only in Waves 1 through 3. The analysis follows the mixed-methods and descriptive approach used in the earlier study. We next discuss our quantitative and qualitative approaches separately.

Quantitative Analysis

Table A1 in the Appendix includes a description of the measures we use for our quantitative analysis. The quantitative analysis describes differences between groups divided by household income. Household income was collected in brackets, from less than $5,000 to $150,000 or more. Respondents were divided at the $60,000 bracket, which represented the median income for the sample. Thus, we evaluate differences in our measures of interest for two income groups; those at or below the $50,000 to $59,999 bracket and those at the $60,000 to $74,999 bracket or above. Income group assignment was based on each respondent's baseline value and remained fixed across the analysis. Accordingly, 37 respondents fell below the median and 32 respondents were at or above the median. The 69 study participants were drawn from a convenience sample, so the findings should not be interpreted as casual or representative of all Latino adults in California, but as a description of the experiences of this group during the study period.

Statistical analyses on the differences across income groups were conducted using the baseline cross-section, with one observation per respondent. This approach avoids counting the same respondent multiple times in the group comparisons. For continuous measures, we used Welch's two-sample t-test. This test does not assume equal variances between the two income groups and is generally preferable when groups are small or unequal in size. For binary measures, we used Fisher's exact test. Fisher's exact test is appropriate when expected cell counts may be small because it does not rely on the large-sample approximation used by a chi-square test. All tests are two-sided, and results are discussed using a 5 percent significance level.

The four survey waves are interpreted as a descriptive picture of financial conditions across the season rather than as a formal before-and-after design. Wave-level figures include 95 percent confidence intervals. Given the short observation period and small number of respondents in all four waves, we present changes across waves descriptively rather than conducting formal hypothesis tests of within-person change. Additionally, because the analysis includes numerous income-group comparisons, individual p-values should be interpreted cautiously. Thus, results here should be treated as descriptive, and individual findings significant at conventional thresholds should be interpreted as suggestive rather than confirmatory.

Qualitative Analysis

The study also includes a qualitative analysis of open-ended responses about financial stress and coping, as in Blanco et al. (2021). This study includes the same open-ended questions related to household finances and financial stress in the previous month. Two open-ended questions were added to this study to capture the current environment regarding personal experiences with price increases, both overall and in relation to health insurance. Table A2 in the Appendix lists the open-ended questions used in our analysis.

Applying the qualitative data analysis approach of Blanco et al. (2021), we coded and analyzed the data using the Rigorous and Accelerated Data Reduction (RADaR) technique (Watkins, 2017). For our qualitative data analysis, we also followed the grounded theory framework (Glaser and Strauss, 2012). We expanded on the previous study methodology by also conducting a parallel analysis of the qualitative data using Gemini.

Following the RADaR technique, we revised the codebook from the previous study, and two team members individually coded the four open-ended questions using this codebook. The codebook used to code the data is available in Table A3 in the Appendix. Before the full coding process started, the PI held an initial meeting with the coders to discuss the approach and compare coding of 20 observations to ensure consistency in the process. The two team members who coded the data then applied the RADaR technique to find the prevalent themes in the qualitative data.

After the two team members identified the themes, a meeting with the PI was held to discuss and identify themes that overlapped between the two team members. After the overlapping themes between the two researchers were identified, the PI analyzed the qualitative data using Gemini. Pepperdine IRB and the UAS team approved the process for qualitative data analysis using Gemini.[4] The PI provided the AI model with the de-identified qualitative data and a prompt to apply the RADaR technique. Please refer to Tables A4 and A5 in the Appendix, which describe the steps and prompts for applying the RADaR technique with Gemini. This process was conducted by the PI in Gemini for each question separately. We compared the

[4] We worked closely with the UAS team in this process, as current UAS policy prohibits the use of AI models in the analysis of UAS public data. An exception was granted for our analysis because the data were collected for this project by the research team rather than obtained from UAS public data files, and a specific protocol suggested by UAS was followed. The procedure for entering the de-identified qualitative data into the AI model was approved by the Pepperdine University IRB and the UAS team (Gemini is the official AI model provided by Pepperdine University).

themes identified independently by the coders with those produced by AI, and we organized overlapping themes across coders into two categories.

There are some things to note about the qualitative data. First, our question related to participants' experiences with stress and increases in prices, unexpected expenses, and/or borrowing was added starting in the second wave. We also adjusted the wording of this question: the first two times we asked about experiences in the past 6 months, and in the last wave we asked about the last month. Please note that the intention was to transition the questions to "past month" when asked a second time, but there was a programming error.

Second, we provided examples of answers for the open-ended questions related to experiences of financial strain, since this worked well in getting participants to share more about their experiences in previous studies. In this data collection, we noticed that a couple of participants responded very similarly to the examples we provided. We deleted those answers that were too similar to our examples. One thing to note is that our examples did not mention the holidays to avoid biasing participants towards reflecting on this topic.

Third, we had two open-ended questions with a very small number of observations. For the open question related to health care cost increases, which was only asked among participants who reported an increase in health insurance and in waves 3 and 4, we have qualitative data from a small sample of 17 responses from 10 unique participants. For the question on being affected by health care cost increases, 18 of 72 person-wave responses (25.0 percent) indicated being affected. At the respondent level, 11 of 48 participants with a valid response (22.9 percent) reported being affected in at least one wave.

In this study, we also added an open-ended question on payday lending, which was included in all waves. Still, since there were very few participants who had used payday lending

in our sample, we did not analyze these data (15 answers from seven unique participants). Seven participants (10.1 percent) reported current or recent-past payday-loan use, accounting for 15 person-wave observations. Table A6 in the Appendix shows counts of two distinct uses: change in cost or access to health care and who used payday loans.

Fourth, counts reported in qualitative analysis results refer to responses rather than participants, unless otherwise noted. Thus, participants who respond in more than one wave contribute multiple responses to our qualitative data analysis. Findings from quantitative and qualitative analysis are presented separately in the following sections.

4. Quantitative Analysis Results

Sample Characteristics and Income Group Differences

Table 1 describes the sample and presents demographic and socioeconomic characteristics for the full sample and the two subsample income groups (below- and at-or-above-median income). All 69 respondents identify as Hispanic or Latino. The average age is 45 years, with respondents ranging from age 32 to 60. Most participants are female (64 percent) and English-speaking (97 percent), while about one-quarter are foreign-born. Nearly two-thirds are married or cohabiting with a partner, 81 percent are employed, and 91 percent report having health insurance. Educational attainment varies across the sample. Twelve percent did not complete high school, 17 percent are high school graduates, 48 percent have some college education or an associate degree, and 23 percent have a bachelor's degree or higher.

<TABLE 1 HERE>

Dividing the sample at the $60,000 income bracket leaves 37 respondents below the median and 32 at or above it. Table 1 also presents the sample characteristics by income group,

where we only observe a statistically significant difference at the 5 percent level in educational attainment. Participants in the below-median group show lower educational attainment than those in the at-or-above-median group.

Table 2 provides a general picture of household financial circumstances for the full sample and by income groups. About three-quarters of participants report that they can predict their income in most or every month, and a similar share say that their monthly income is generally stable. At the same time, only 41 percent report using a household budget. More than half of respondents rent (58 percent) rather than own their home, and credit card use is common, with eighty-four percent reporting that their household has at least one. Among those with credit cards, 82 percent have carried an unpaid balance, and 75 percent have at some point paid only the minimum payment. Less than half of the sample, 43 percent, report having emergency or rainy-day savings.

<TABLE 2 HERE>

Table 2 also shows a picture of the financial circumstances of participants by income groups. We observe that there is a statistically significant difference between below- and at-or-above-median income groups on income predictability and stability. While 93 percent of participants at-or-above-median group can predict their income in most or every month, only 57 percent of those in the below-median group can do the same. Income is roughly the same for 86 percent of those in the at-or-above-median group, but only for 60 percent of those in the below-median group.

Table 3 presents the baseline results of FHS and FWS by income group. In general, respondents with household incomes below the $60,000 income bracket reported lower financial health than respondents at or above the median. The difference in financial health was especially

pronounced. The below-median group had an average FHS of 50.6, compared with 64.2 for the at-or-above-median group; this 13.6-point difference was statistically significant ($p = 0.010$).

<TABLE 3 HERE>

The FHS sub-scores in Table 3 shed light on specifics of the financial-health gap across income groups. The below-median group scores significantly lower on spending ($p = 0.033$), saving ($p = 0.005$), and borrowing ($p = 0.022$); the gap on planning runs the same way but is not significant ($p = 0.191$). The tier distribution of FHS further illustrates the difference. Among below-median respondents, 41 percent fall in the Financially Vulnerable tier against 12 percent of the at-or-above group ($p = 0.014$), while the share reaching the Financially Healthy tier is similar across groups, at 16.2 and 15.6 percent, respectively ($p = 1.000$). We observe a larger share of participants in the at–or-above median group in the Financially Coping group, in comparison to those in the below-median group (difference of 28.6 percentage points, $p = 0.028$). Lower-income respondents are far more likely to be financially vulnerable, but financial health in its full sense seems to be rare, and it is equally rare in both groups.

Table 3 also shows that scores on the FWS were lower among respondents below the median income, averaging 49.6 compared with 53.3 for respondents at or above the median. Although the direction of the difference is consistent with the other measures, it was not statistically significant in this sample ($p = 0.256$). Low financial wellbeing, defined as a CFPB score below 50, followed a similar pattern, with 45.9 percent of respondents below the median compared to 34.4 percent above the median falling into this category, remaining not statistically significant ($p = 0.461$).

Table 4 presents the baseline results for the measures of financial stress and anxiety across income groups, where there are significant differences across income groups. On the four-

point scale for the financial stress measure, below-median income respondents averaged 2.84, whereas at-or-above median income respondents averaged 2.06 ($p = 0.003$). Anxiety followed a similar pattern. The mean GAD-2 score was 1.95 among respondents below-median income, compared with 0.72 among those at-or-above it ($p = 0.004$), and the difference across groups was statistically significant at the 1 percent level. Thirty percent of respondents below the median income screened positive for anxiety, compared with 9 percent of respondents in the higher-income group ($p = 0.042$). This difference across groups is statistically significant at the 5 percent level.

<TABLE 4 HERE>

Moderate or high financial stress was reported by 65 percent of below-median income respondents and 31 percent of at-or-above median income respondents ($p = 0.008$), and the difference across groups is statistically significant at the 1 percent level. Among those who reported experiencing financial stress, the impact of this stress on physical and mental health, family life, and work or school is higher for below-median group compared to the higher at-or-above-median group, yet no significant differences were found.

Figure 1 shows the baseline standardized income-group differences for our variables of interest. This figure shows that there are statistically significant differences across income groups for all measures but the FWS. While we observe that among those in the at-or-above-median group the FHS is higher, for the GAD-2 and the Financial Stress measures it is lower, in comparison to the below-median group.

<FIGURE 1 HERE>

We next compare the four primary measures across income groups and survey waves. Figure 2 shows the four scales across the four survey waves by income group; the error bars

represent 95 percent confidence intervals. Respondents below the $60,000 income bracket had somewhat lower average FHS and FWS in every wave. The FWS does not show much variation for either income groups across all waves. The FHS shows a wider gap in wave 1 that narrows by wave 4, driven by the movement in the below $60,000 income bracket.

<FIGURE 2 HERE>

GAD-2 and financial stress also show a gap between income groups in the first wave in Figure 2. Financial stress showed more variation than GAD-2, with a slight decline in the below-median group over the wave periods. For the financial stress measure, the below-median group began near 2.8 in Wave 1 and declined to about 2.3 by Wave 4. In contrast, the at-or-above-median group remained close to 2.0 in each wave. The two groups moved somewhat closer together after the holiday period in relation to financial stress, although the below-median income group reported higher financial stress in every wave.

Table 5 presents the estimates across the four waves (per-wave) of the main measures of financial behavior, stress, and anxiety by income groups, with the group differences across and p-values for the significance of the differences across groups. For these estimations, we include all available observations. These estimates align with what we observe in Figure 2. Panel A presents the FWS means for both income groups, where there are no statistically significant differences for this measure in any wave. For the estimates shown in Panel B for the FHS, we observe that this mean is statistically significantly higher in waves 1 and 2 for the at-or-above-median income group at least at the 5 percent level, in comparison to the below-median group. In Panel C, we observe that the below-median group has higher anxiety levels in waves 1 and 3 at least at the 5 percent level, in comparison to the other group. Panel D shows that financial stress

is only statistically significantly higher for the below-median group in wave 1 at the 1 percent level, in comparison to the other income group.

<TABLE 5 HERE>

When comparing our measures of interest across income groups, we conduct several estimations to better understand the nature of the results discussed here and as a robustness checks. First, we evaluated whether our results might be driven by attrition, and estimated a t-test for the difference in the measures in Wave 1 among those who did not complete the study and those who did. Table A7 in the Appendix shows these estimates, and we find no statistically significant differences associated with attrition. Second, we conduct a t-test for the difference among completers and non-completers for the measures of interest for the different income groups and show these estimates in Table A8 in the Appendix. Here, we also observe that there are no statistically significant differences related to attrition when looking at different income groups for the four measures.

We also assess how much variation we observe across our outcomes among participants over time. We estimated random-intercept models for respondents observed in all four waves and include estimates in Table A9 in the Appendix (interclass correlations). We observe that between person differences accounted for most of the variance in the measures of FWS, FHS, and GAD-2 with 13-19 percent or variance within persons. Financial stress was the most time-varying measure with 28.4 percent variance occurring within respondents. Thus, this indicates that FWS and FHS measures were relatively stable measures during the study, but financial stress was more responsive to month-to-month variation.

Relationship Between Measures

Table A10 in the appendix presents baseline correlations for the full sample and each income group. All full-sample correlations are significant at $p < .001$. Within each income group, correlations are significant at $p < .05$ except those of FWS with financial stress and GAD-2 in the at-or-above-income group. The correlation between the FWS and FHS is positive at above 0.70 for all groups. FWS is negatively correlated with financial stress and GAD-2 for all groups; these correlations are the highest at -0.77 and statistically significant for the below-median group (-0.77 and -0.65, respectively). FHS is negative and has a statistically significant correlation with GAD-2 and financial stress for all income groups. We also observe a positive, statistically significant correlation between the GAD-2 and financial stress measure for all groups; this correlation has the largest magnitude for the below-median group at 0.70.

We conduct an OLS regression analysis for the baseline sample to evaluate how the FHS measure, which captures financial behavior in different domains (spending, saving, borrowing, and planning), is related to financial stress. We include these estimates in Table 6, where column 1 presents the model with income only, then column 2 adds the FHS, and column 3 presents estimates fully adjusted by including individual characteristics. Here we observe that the income coefficient falls from -0.775 to -0.353 after we add FHS, which is a reduction of 54.4 percent. FHS remains strongly negatively associated with financial stress, even after controlling for other individual characteristics. Please note that in this regression, we only include the baseline value in the same cross-section. Further, there is no temporal ordering, and we interpret the finding of the relationship between financial stress and FHS as pure association and not as a causal relationship.

<TABLE 6 HERE>

Financial Pressures, Prices, and Holiday Season Stress

Table 7 reports the financial pressure battery by income group at baseline, and here the two groups look relatively similar across most items. The high cost of living is the dominant stressor for both, named by 84 percent of the below-median group and 91 percent of the at-or-above group, with no significant difference ($p = 0.489$). Most of the individual stressors do not differ significantly by income. The one clear exception is the absence of a financial plan, named by 68 percent of the below-median group against 41 percent for the at-or-above-median group ($p = 0.031$). The lack of a stable job or income also differs (46 percent against 25 percent), yet at the margin ($p = 0.084$). Additionally, moderate or high stress from price increases over the past year is higher for the below-median group but not significantly so (54 percent against 34 percent, $p = 0.146$). In general, price pressure is felt across the whole sample, with below-median income respondents more likely to report having no financial plan and unstable employment or income, in comparison to the at-or-above-median income group.

<TABLE 7 HERE>

The holiday season related questions are shown in Table 8. Here we observe a difference between the two income groups. Both groups experience similar levels of holiday related financial stress. High or moderate holiday financial stress is reported by 68 percent of the below-median group and 62 percent of the at-or-above-median group, a difference that is not significant ($p = 0.801$). The difference is in the cause. Among the below-median group, 68 percent attribute their holiday stress to not having enough money to spend, compared to 22 percent of the at-or-above group ($p < .001$). The at-or-above-median group leans instead toward spending too much (47 percent against 24 percent, $p = 0.076$) and the pressure to make the holidays special (50 percent against 27 percent, $p = 0.080$). The same season seems to be experienced as scarcity by one group and as overspending by the other.

<TABLE 8 HERE>

Coping strategies for holiday stress do not differ significantly between the groups. Here we observe that in both income groups, the most important strategy was cutting back spending on other areas which was used by more than half of the participants. Overall, our analysis here suggests that similar reported levels of stress may reflect different underlying financial concerns.

We next examine reported causes among respondents experiencing moderate or high holiday stress. Table 9 presents the differences across income groups on the causes of stress among the moderate/high holiday stress group. For this subsample, we observe a robust significant difference at the 1 percent level for the attribution of not having enough money to spend across income groups, where this was a cause among 80 percent of those in the below-median group, but this cause was only recognized by 35 percent of those in the at-or-above median group.

<TABLE 9 HERE>

Evaluating Magnitude of Differences across Income Groups

To better understand the magnitude of the differences across income groups in relation to our variables of interest of financial wellbeing, behavior, stress and anxiety, we calculate Cohen's d. Table A11 in the Appendix presents the raw differences across income groups, the Cohen d and the 95 percent confidence intervals. Recall that Cohen d estimates between 0.20 and 0.49 are considered of small magnitude, those within 0.50 and 0.79 of medium magnitude and those equal or above 0.80 of large magnitude (Cohen, 1988).

These estimates are helpful for interpreting the magnitude of the differences for the variables where we observe a statistically significant difference across groups in Tables 3 and 4. The magnitude of the differences across income groups for the FHS and the spending, saving and

borrowing subscales are of medium size according to the Cohen d estimates (within 0.52 and 0.69). Similarly, the difference across income groups for the GAD-2 and financial stress is of medium magnitude with Cohen d values of -0.71 and -0.74 respectively.

We also recognize the limitation of our study given the small sample size, which might lead to differences not being statistically significant given that we do not have enough power. We therefore calculated the minimum detectable effects for the four continuous measures and include these estimates in Table A12 in the Appendix. At $\alpha = .05$ with 37 and 32 participants by income groups, the design detects a standardized difference of d=0.686 with 80 percent power.

In Table A12, we can observe that the estimates for GAD-2 and financial stress have the desirable power of above 80 percent. The FHS has a power observed at 0.73, which is close to 80 percent. The FWS comparison across groups has a power of 0.19, reflecting an observed difference of d=0.27, which is less than half the magnitude of the other measures. Although the FWS difference was not statistically significant, its 95 percent confidence interval of (-0.20 to 0.75) includes medium-sized differences. We therefore cannot conclude that the difference is small or that the groups are equivalent.

5. Qualitative Analysis Results

Participants were surveyed with open-ended questions to examine their financial experiences during the period from November 2025 to February 2026 (4 months). We next discuss the main themes that emerged from our qualitative data analysis, organized into two main categories: (1) the drivers of financial stress and (2) how households respond.[5]

Category 1: The Drivers of Financial Stress

[5] Please note that when adding participants' quotes, we slightly formatted them for better flow without changing their meaning.

We saw evidence of financial stress among participants when we asked the question, "In the last 6 months, was the level of stress you experienced linked to the impact of an increase on prices, unexpected expenses, and/or borrowing?"[6] We have 150 responses recorded for this question across three waves, of which 96 (64%) report mild to high stress. Personal narratives highlight financial stress associated with increased household financial stress related to rising prices of everyday necessities, holiday spending, employment, and legislative insurance changes. We discuss the following themes in this category.

Theme 1: Everyday Necessities

As discussed before, there has been an upward trend in the prices of everyday items during our data collection period, and this is reflected in the analysis of our qualitative data. We observe that this increase in prices seems associated with participants reconsidering their budgets for necessities or what they deem necessary.

A theme that emerged among respondents was heightened stress due to higher grocery prices. Several participants also shared that the increase in prices has not been reflected in higher salaries. One participant stated, "it's stressful that every day prices goes up and salaries stays the same." One participant's comment provides a picture of the level of financial stress experienced among several participants in the current environment: "This past month I feel stressed because every trip to the grocery store the list keeps getting shorter but I'm paying a lot more, it's expensive to buy food." Another participant expressed the stress of going to the grocery store, given the uncertainty around rising prices: "The uncertainty in how much one will spend just going to the store due to the rising cost of things has contributed to some financial stress."

[6] Please note that this question was asked beginning in the second wave, with the wording "last 6 months" used in waves 2 and 3, then switched to "last month" in wave 4. The idea was to switch to "last month" in wave 3, but there was a programming error in the question.

Participants not only commented on the impact of rising grocery prices on their personal finances but also on other important areas related to the cost of living, such as gas, rent, and healthcare. One participant shared frustration about price increases across different categories and noted, "Everything is so expensive now, I get charged more for healthcare coverage. Groceries are expensive, and now gas prices are up." When households rely on their car as their primary mode of transportation for work and school, an increase in gas prices can make it very challenging, especially for those on a tight budget. Increases in gas prices seem to be related to financial stress in our qualitative data, where one participant said, "I felt stressed because of the cost of gas, and my car is the primary car for the kids' transportation."

Basic living standards, such as paying rent, were also a challenge for some participants, which adds to the impact of rising grocery prices. One participant noted that rising rent and grocery prices forced them to use their savings to cover expenses, which increased their stress. Specifically, two participants noted the link between increasing prices and high stress: "the stress I felt was from not being able to buy the same amount as before." and "I feel stress because sometimes it's even hard to get groceries. We have to eat less." Although some respondents reported adapting and changing their financial habits, a large share of participants reported increased stress, with the rise in grocery prices being the most common financial stressor.

Theme 2: Holiday Related Expenses

As everyday costs rise, holiday expenses make it challenging for people to manage their personal finances. The holidays bring people together, which can create financial stress for households due to expenses for food, presents, and decorations. Holiday expenses can be considered “expected-unexpected” expenses because households expect holidays to follow the calendar year. Still, they are unexpected because it is hard for households with tight budgets to

plan and save for them. We observe the complexity of managing household budgets in the context of holiday expenses among our participants: some people plan and save for holidays, while others still struggle financially, especially in the current environment of elevated prices.

Holiday shopping was a major concern among our participants due to the cultural expectation of gift-giving in the US. One participant captures this overall increase in spending during the holidays: "We spent a lot of money for holiday gifts and celebrations." Another participant expressed how holiday expenses impacted their ability to cover household expenses: "I fell behind on my payments because of the holidays."

One participant shows how holidays are related to stress: "I was moderately stressed trying to meet my personal, household, and credit card payments while trying to have a decent Thanksgiving dinner. Moderately stressed, thinking about Christmas shopping and everything is so expensive." One participant reported that, with the holidays, there were unexpected celebratory expenses: "I had a party and had to pay unexpected expenses." As bills are a primary financial priority, minor, unexpected expenses like parties may not have been budgeted for. In our data, we also observe participants' tension between saving and spending, especially during the holidays. As one participant noted, "Decided to watch my spending and not buy too many gifts this year. Putting money away for future savings."

Some anticipate the holidays and budget accordingly. However, several participants used credit cards to defer the strain on their liquid assets and worry less when holiday expenses arise. One participant said, "I had to use my credit card for my holiday gift expenses because my income mainly covered my bills." When holiday expenses arise, using credit cards seems to be a way to reduce financial stress in the short term. We will discuss this further in Category 2, which relates to how participants respond to holiday expenses.

Theme 3: Employment-Related Pressures and Uncertainty

We observed some participants experiencing financial stress related to employment pressures when we asked the open question, "Overall, how would you describe the household finances in the last month?" We collected 206 responses to this question and found that over 20% related to employment circumstances associated with financial strain, particularly disability and unemployment.

Some participants experienced job-related shocks, such as unemployment, which lowered their expected income. For example, weather can affect employment in certain physical jobs, as one participant stated, "Last December of 2025, because of the rain, I didn't work pretty much at all." When a job's variability comes into play, individuals may need to look for other avenues. Some participants reported seeking additional sources of income because their primary income is insufficient to cover their costs. Some participants expressed how there is uncertainty in relation to employment, where one mentioned, "I worked more hours this past month; however, my income is low due to working with a friend versus for a firm. I've been looking for a good weekend job and found one that is 4 hours a week but need to find something better." One participant quote also represents this job uncertainty as well: "I was on unemployment. I found a job and worked for a month, then I was fired."

Some participants also reported receiving disability benefits for a work-related injury and receiving monthly checks. While disability checks create a bridge between income and individuals whose ability to work has been affected, these checks do not fully supplement one's expected income. One participant said, "I have been stressed out because my disability checks are only about 70% of my normal pay." Thus, with rising prices, the financial pressure of keeping up with household expenses among those receiving disability benefits is exacerbated.

Theme 4: The Rising Cost of Health Insurance

Regarding healthcare expenses, our data collection on participants' financial lives covered January and February of 2026. These months coincided with the expiration of the enhanced premium tax credits at the beginning of the year. We observe that among participants who have seen an increase in their health care expenses, the increase in costs comes from higher monthly insurance payments and doctor visit co-payments.

Some participants acknowledged the impact of higher health insurance prices on their personal finances. One participant said, "My health care coverage charge almost doubled from what it was last year. Also, I have dental bills that my insurance refuses to cover." Another participant also shared how health care costs increased to a large degree: "Co-payments to go to the doctors increased from 20 to 30 now. Also, coverage for my family and me went up by almost $ 200 a month. It is a big change."

The rising burden of health expenses becomes even more challenging at the household level, as increases in health care costs affect not only participants themselves but also their dependents. For example, one participant shared, "My family's health insurance increased." Another participant also shared this experience with high health care costs: "I pay a very high price for health insurance. I earn enough to include all my dependents on my work insurance. I can see how hard it would be for other people to cover everybody in their household." In relation to the family health care expenses, another participant mentioned, "Health Insurance is very unaffordable. I have to pay coverage for self, spouse, and two dependents, and the cost is very high."

The affordability of health insurance creates challenges for participants in other areas of their financial lives, explaining the experiences of high stress. One participant claimed that the

increase in health insurance led to a struggle to pay for groceries. "I went from paying around $80 to paying $150. This is ridiculous. I can't even buy groceries now."

Category 2: How Households Respond

Our qualitative data show how participants responded to current financial pressures stemming from the rising cost of living, holiday expenses, employment uncertainty, and rising health insurance costs. Next, we present the themes that emerged regarding how participants adapted by cutting back on expenses and relying on credit card borrowing. We also share the experiences of participants who have managed the current financial environment with relatively low stress and stability.

Theme 1: Cutting Back and Prioritizing Necessities

In our qualitative data, we observed that the stress on household finances from increasing prices is leading participants to shift their financial focus to necessities and reduce expenses. Cutting back expenses and prioritizing necessities was a theme that emerged across different questions, so we discuss this qualitatively rather than by frequency. Participants seemed more mindful of what they were spending and more likely to allocate their financial means towards necessities, such as groceries. In the participants' responses, we observed that prioritizing necessities is reducing participants' ability to spend on other leisure activities. One participant said, "We did very little outside activities to lessen our spending." Another participant claimed that they cut down on their subscriptions, demonstrating their choice to reduce their spending on their wants and focus on their needs, sharing the following: "Bills were paid on time and saving money. Cutting costs and subscriptions to save money."

With rising prices, participants seem more likely to evaluate what they deem necessary in their households, with one participant saying, "we only used what we have." Another relevant

participant quote on this theme is: "Everything is more expensive, and we just minimize and enjoy life." Several participants also seem to have spent on the bare minimum, demonstrating the removal of leisure activities. One participant shared how changes in spending habits were related to lower levels of stress: "Last month, my stress level was low, and I started focusing on changing my spending habits. Saving money and cutting costs." For example, one participant who was receiving disability benefits shared how they spent less on non-essentials: "I am currently on short-term disability with my job. I get benefits, but it's only 70% of what I usually get. I am trying to spend less on non-essentials. Less eating out, less shopping for frivolous items. Only buying necessities."

Theme 2: Borrowing and Reliance on Credit

We observed in our quantitative data that the majority of participants rely on credit cards as a primary source of borrowing: 83% have a credit card, 82% carry a balance, and 75% pay only the minimum. Thus, in our qualitative data, we observe that participants used credit cards and borrowed money to cover their bills in response to rising prices. In particular, covering holiday expenses was a main theme in borrowing and relying on credit cards.

One participant said, "Since being laid off, my spending has been reduced. I put purchases on my credit card for Christmas gifts." This illustrates an overlap between participants' unemployment and reduced spending, with reliance on credit cards as an alternative during the holidays. Another participant who utilized their credit card as a source of payment said, "For gifts we put some on a credit card and paid most of it off this month. There was an additional trip for a night out in the city that was pre-planned. Our primary bills are always accounted for before anything else." One participant shared how different holidays accumulated and put pressure on household finances and how the credit card was used to accommodate that: "It was a big birthday

for my mom, so we took her out to celebrate. It is also Thanksgiving, and groceries were more expensive this year. It is also a few close family birthdays, and I did some spending on black Friday to get some Christmas shopping done. I paid some of it with cash but had to put some on my credit card."

Participants who relied on credit cards tended to experience increased stress due to the obligation to pay their credit card balance, but not necessarily from the purchase itself. One participant said, "I been paying my credit cards and it is stressful." Credit card usage can also lead to a debt burden, with some participants trying to bridge the gap on their payments. Another participant said, "My credit card payments increased, and it was hard to keep up paying my bills."

Theme 3: Financial Planning and Stability are Mediators for Low Financial Stress

Participants who reported no financial stress tended to have savings and/or a stable job with a steady income. What seems to distinguish participants experiencing no financial stress from the rest is not necessarily high income but predictable income, which is likely associated with a stable job and the ability to work overtime. Of the 204 responses to the question on whether stress was linked to their household financial situation the previous month, 46 responses indicated no financial stress (22%).

No stress was indicated among participants who demonstrated proactive characteristics, such as planning and saving ahead of time to ensure they can deal with unexpected circumstances. One participant said, "My stress level was fairly low. Even though I try to set money aside specifically for the season, spending it is still stressful for me because I'm always thinking about other ways it could be used. That said, I did plan and save for the season, so my stress stayed relatively low overall. Work was good, and we made an effort to plan ahead as

much as possible." Another participant shared how planning allowed them to be stress-free: "I didn't have any stress because I planned everything ahead and feel good." In relation to holiday expenses and planning, one participant expressed the following: "Last month I was not too stressed because I plan ahead for the holiday's events, parties, and gifts. I have my job and income that provides for my family."

Participants who experienced no stress were also likely to mention having a stable job. For example, one participant said, "I was not stressed at all because I have a stable job and a stable paycheck." Another participant explained how they can pay their credit card bills and manage their expenses with minimal stress. This participant shared the following: "I worked the same hours; income was very good. I usually use credit cards to purchase items but pay it right away. Thankfully, we have been able to manage expenses."

It seems that participants showing no financial stress are also more likely to work extra hours. One participant mentioned that they had the opportunity for overtime and extra income. Here is one example of how one participant managed unexpected expenses with lower stress due to savings and being able to work extra hours: "In the past month I had no stress. I have enough money saved for unexpected expenses. Also, my job is currently offering overtime for those who want to work extra hours." Another participant expressed the following, which is related to working extra time: "There was no stress last month. I worked 6 to 7 days a week and had extra money."

6. Discussion

This study provides updated evidence about the common financial stress among Latino Californians. The findings are based on mixed-methods analyses from a survey and analysis of

open-ended responses among 69 respondents who responded longitudinally between one and 4 months, with a total of 218 person-wave observations. Overall, results demonstrate very real issues of financial hardship. For example, less than half of the sample has an emergency or rainy-day savings, and more than 4 in 5 have carried an unpaid credit card balance. There are also meaningful associations between financial wellbeing and financial stress with anxiety and other physical and mental health measures. For example, households making less than $60,000 scored 13.6 points lower on the FHS, and this difference was statistically significant, relative to higher-income households. These lower-income households also had lower FWS scores, though not statistically significantly different.

Rates of moderate or high financial stress among lower-income respondents was double the rate among higher-income respondents (65 versus 31 percent). Stress was largely driven by the high cost of living for all groups. Whereas the whole sample largely felt these stressors, the lower-income members of the sample had the lowest capacity to address the shortfalls. This is particularly relevant when high-cost credit may be used to fill gaps.

The results of this study are similar to the results from a nationally representative survey commissioned by the Julian Bond Institute at the Center for Responsible Lending and fielded by NORC at the University of Chicago (Spotser et al., 2026). That survey found that 45 percent of Millennial Latino adults and 49 percent of Gen X Latino adults reported that they either “find it difficult to get by” or are “just getting by” financially, underscoring the importance of continuing to study and address both the causes and impacts of these realities.

Qualitative data from this study help fill in additional details about the drivers. Study participants across the income distribution highlighted the rising cost of living and everyday necessities as a determinant, while wages stayed stagnant. Groceries, holiday shopping needs,

housing, and healthcare costs were all named as causes of financial insufficiency, which produced stress. Low baseline wages, having work hours cut, and losing jobs were also all highlighted.

The study also looked deeper at holiday spending, which created an added financial stress on top of the baseline insufficiency: about two-thirds of the sample reported high or moderate holiday financial stress. The biggest holiday difference between the lower- and higher- income groups was related to not having enough money to spend (68% of the below-median income group versus 22% of the at-or-above median group). In response, families were taking a variety of actions to address their financial shortfalls. Many had to implement new budgets and cut back on spending, while others relied more heavily on borrowing and credit.

These findings complement survey results that indicate that 80 percent of Millennial (age 29-44) Latinos and 78 percent of Gen X (age 45-60) Latinos agreed or strongly agreed that "not having enough money to save or invest after paying expenses and bills" would prevent them from achieving their financial goals over the next year. Additionally, 89 percent of Latino Millennials and 88 percent of Latino Gen X also agreed that the high cost of living contributed (Spotser et al., 2026).

Although this study relies on a small sample, the findings underscore the importance of how credit products are being used by many, especially in times of financial strain and income insufficiency, to finance basic household needs. As credit continues to be used to fill structural gaps, including stagnant wages with rising housing, healthcare, and basic expenses, the financial and emotional impacts will continue to be felt by those households with tight budget constraints and income instability.

7. Conclusion

Continuing the Mobile Financial Diaries study (Blanco et al., 2021), we analyzed quantitative and qualitative data on the financial lives of 69 LMI Latino adults in California during a period of elevated prices and the holiday season (November 2025 to February 2026). There are four important findings to highlight from our study.

First, we find differences across income groups in our measures of financial behavior and stress (FHN, FS, and GAD-2), but not in the financial wellbeing measure (FWS). Below-median income participants score lower on the FHS and higher on financial stress and GAD-2, with medium effect sizes. For the FWS, the observed gap was small ($d = 0.27$) and insignificant, although the confidence interval does not rule out a moderate difference. This finding aligns with Blanco et al. (2021), who found that the FHS specifically captures behavior, while the FWS relates more to a longer-term perception of financial wellbeing. Thus, this finding highlights the importance of considering different measures of financial behavior, wellbeing, and stress, as they appear to capture different dimensions of how finances affect individuals.

Second, our regression analysis finds an association between financial behavior and financial stress, with behavior appearing to mediate the income-stress link. In the analysis in which we include the financial stress variable as the dependent variable, we find that adding the FHS variable reduces the income coefficient on stress by 54 percent. We also find differences across income groups in the FHS dimensions of spending, saving, and borrowing, but not in planning. Thus, we provide associative evidence of the relationship between financial behavior and stress.

Third, our analysis provides evidence on the impact of the holidays on financial behavior and stress, and we find differences across income groups. Holiday expenses, which can be

considered “expected-unexpected” expenses, bring similar levels of financial stress across income groups, but the reason for this stress differs across groups. While those in the below-median group recognize “not having enough money to spend” as the primary cause of holiday financial stress, those in the at-or-above-median group were more likely to attribute this stress to “spending too much.”

Fourth, our quantitative and qualitative data analysis highlights the relationship between income stability, financial planning, and overall financial wellbeing. Our quantitative analysis shows that those in the below-median group are less likely to predict income, experience more income variability, and are less likely to have a financial plan than those in the above-median group. Our qualitative data analysis supports the relationship between income predictability and financial planning as a mediator of financial stress (Category 2, Theme 3). Thus, our study supports the importance of income predictability and planning for financial wellbeing.

This study identifies household constraints and reported tradeoffs that provide relevant insights for policymakers and stakeholders. First, because financial wellbeing is associated with income stability, tools and employer practices that make income more predictable can help, especially for LMI adults with tight budgets. Second, helping individuals plan for expected and unexpected expenses by creating a holiday fund, in addition to emergency savings, can be a useful practice for households to better manage their finances. Third, credit mechanisms and consumer protections are relevant in the current environment of elevated prices where the reliance on credit cards seems prevalent. We observe that most participants carry credit card balances and pay only the minimum. Thus, credit management support programs for LMI households can play an important role for the long-term financial wellbeing of this population. Fourth, our study provides evidence on the importance of using different measures of financial

behavior, wellbeing, and stress. Researchers and practitioners should pair measures of financial behavior and wellbeing with stress-related measures, since they capture different dimensions of people's financial lives.

We recognize that our study findings have some limitations, especially because we work with a convenience sample of LMI Latino adults recruited through UAS. Our sample is composed primarily of English-speaking adults, so our results are not likely to extend to Spanish-speaking adults. Our small sample also does not provide enough power, given that a detectable effect is of large magnitude (d=0.686). Thus, our results should be interpreted cautiously and cannot be confirmatory. We have attrition in our sample, as only 38 of 69 participants completed the four waves of data collection. While we do not find significant differences associated with attrition, our analysis is limited by this small sample size.

For future research, we suggest expanding the sample so we can evaluate these insights with more power. Additionally, conducting this analysis with a larger representation of Spanish-speaking Latinos will help us better understand the challenges and opportunities relevant to this group and how they compare and contrast with English-speaking Latinos. Future work on affordability in California will also benefit by conducting this analysis across different racial and ethnic groups so that we can develop an understanding of the financial needs of different populations.

Statement on the Use of Generative AI

Generative AI tools were used in two distinct roles in this study, and their use was designed to strengthen, not replace, human analytic judgment.

Qualitative coding. Google Gemini 3.1 Pro, Pepperdine University's institutionally approved platform for processing participant data, served as one of three independent coders of open-ended responses, alongside two human coders. Following the rigorous and accelerated data reduction (RADaR) technique (Watkins, 2017), the three sets of codes were compared and all disagreements were reconciled by the research team. The AI-generated codes served as a comparison point for assessing coding consistency; final codes and thematic interpretations were determined by the authors. Participant-level data were processed only within this approved platform.

Research support. Generative AI tools were used to identify related literature; all sources were retrieved and verified by the authors, and only works read by the authors are cited. Claude (Anthropic) was used to develop qualitative coding prompts and analytic frameworks, to build templates for inter-coder comparison, to assist in writing Stata code for the quantitative analysis, and to format references. Statistical tables were generated in Stata using this code, which was reviewed, executed, and checked by the research team. Appendix tables describing variables and survey questions were created directly with Claude's assistance and verified by the authors against the survey instruments and codebook. The manuscript was written by the authors; in a limited number of passages, including the interpretation of selected appendix tables and this statement, Claude was used to draft or revise text, which the authors then edited and verified. Grammarly was used to check grammar and spelling. No participant-level data were shared with Claude or Grammarly.

The authors reviewed all AI-assisted output and take full responsibility for the content, analysis, and conclusions of this paper. No AI tool is listed as an author.

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Table 1. Demographic and socioeconomic characteristics, by income group

Characteristic	Total (N=69)	Below $60k (n=37)	At/Above $60k (n=32)	p
Female	63.8	67.6	59.4	.616
English-speaking	97.1	97.3	96.9	1.000
Foreign-born	24.6	18.9	31.3	.273
Married or cohabiting	63.8	62.2	65.6	.806
Educational attainment				.016*
Less than high school	11.6	13.5	9.4	
High school graduate	17.4	29.7	3.1	
Some college or associate	47.8	40.5	56.3	
Bachelor's or higher	23.2	16.2	31.3	
Employed	81.2	75.7	87.5	.236
Health insurance	90.9	85.3	96.9	.198
Age, mean years	45.0	44.8	45.2	.810

*Note. Values are percentages unless noted. Fisher exact tests are used for categorical variables; age uses a Welch t test. Education is tested once as a 2x4 omnibus comparison. Health-insurance percentages exclude uncertain responses (n=66). *p<.05.*

Table 2. Financial characteristics and behaviors at analytic baseline

Characteristic	Valid n	Total %	Below $60k %	At/Above $60k %	p
Income and housing					
Can predict income most/every month	59	74.6	56.7	93.1	.002**
Income roughly the same each month	59	72.9	60.0	86.2	.039*
Owns home (or buying)	59	28.8	30.0	27.6	1.000
Rents	59	57.6	63.3	51.7	.435
Lives rent-free	59	6.8	0.0	13.8	.052
Other housing arrangement	59	6.8	6.7	6.9	1.000
Budgeting and credit					
Uses a household budget	56	41.1	42.9	39.3	1.000
Has at least one credit card	68	83.8	80.6	87.5	.521
Ever carried a balance (card holders)	51	82.4	84.0	80.8	1.000
Ever paid only the minimum (card holders)	51	74.5	80.0	69.2	.523
Financial resilience					
Set aside emergency funds	68	42.6	32.4	54.8	.086

*Note. Percentages use valid item responses. Housing has n=30 below $60k and n=29 at/above $60k. Rent-free and other housing are shown to reconcile the housing denominator. Budget use has n=28 and n=28; credit-card ownership n=36 and n=32; balance/minimum follow-ups n=25 and n=26; emergency funds n=37 and n=31. Uncertain responses are excluded. Credit-card follow-ups are among card holders who answered the item. Fisher exact tests. *p<.05; **p<.01.*

Table 3. Financial wellbeing and health, by income group (analytic baseline)

Measure	Below $60k (n=37)	At/Above $60k (n=32)	Diff	p
Scores, mean (SD)				
FHS (0-100)	50.6 (23.8)	64.2 (18.9)	+13.65	.010*
FHS: Spend	61.0 (27.1)	73.8 (21.9)	+12.81	.033*
FHS: Save	43.6 (30.1)	62.1 (22.3)	+18.53	.005**
FHS: Borrow	52.8 (29.0)	67.3 (22.7)	+14.57	.022*
FHS: Plan	45.0 (26.8)	53.7 (27.5)	+8.67	.191
FWS (19-82)	49.6 (14.7)	53.3 (12.5)	+3.75	.256
Groupings, % of group				
Financially Vulnerable (FHS, <40)	40.5	12.5	-28.0 pp	.014*
Financially Coping (FHS, 40 to <80)	43.2	71.9	+28.6 pp	.028*
Financially Healthy (FHS, >=80)	16.2	15.6	-0.6 pp	1.000
Low financial wellbeing (FWS, <50)	45.9	34.4	-11.6 pp	.461

*Note. Diff is at/above $60k minus below $60k. Welch t tests for scores; Fisher exact tests for groupings. Corrected FHS tiers classify all 69 respondents using continuous cut points. *p<.05; **p<.01.*

Table 4. Financial stress and anxiety, by income group (analytic baseline)

Measure	Below $60k (n=37)	At/Above $60k (n=32)	Diff	p
Scores, mean (SD)				
Financial stress (1-4)	2.84 (1.14)	2.06 (0.91)	-0.78	.003**
GAD-2 (0-6)	1.95 (1.93)	0.72 (1.44)	-1.23	.004**
Screens, % of group				
Positive GAD-2 screen (>=3)	29.7	9.4	-20.4 pp	.042*
Moderate or high financial stress	64.9	31.2	-33.6 pp	.008**
Stress impact domains, mean (1-4), stress reporters				
Physical health	2.03	1.77	-0.26	.329
Mental health	2.23	1.91	-0.32	.211
Family life	2.23	1.73	-0.51	.072
Work or school	2.14	1.56	-0.58	.069

*Note. Diff is at/above $60k minus below $60k. Welch t tests for scores/domains; Fisher exact tests for screens. Impact domains are among respondents reporting any financial stress (n=30 and n=22; work/school n=22 and n=18). *p<.05; **p<.01.*

Table 5. Per-wave means, standard deviations, and differences between income groups

Measure and group	Wave 1	Wave 2	Wave 3	Wave 4
Panel A: FWS				
FWS, below $60k	49.50 (15.21), n=30	49.76 (14.65), n=29	49.97 (13.53), n=30	49.67 (13.57), n=24
FWS, at/above $60k	53.79 (12.91), n=29	53.56 (11.03), n=25	54.00 (10.98), n=28	54.00 (12.18), n=21
FWS, diff (p)	+4.29 (.247)	+3.80 (.283)	+4.03 (.216)	+4.33 (.265)
Panel B: FHS				
FHS, below $60k	51.58 (22.98), n=30	54.59 (22.79), n=29	54.31 (25.63), n=30	55.63 (22.13), n=23
FHS, at/above $60k	64.96 (18.45), n=29	65.33 (15.14), n=23	62.48 (19.76), n=27	63.13 (16.84), n=19
FHS, diff (p)	+13.37 (.017)	+10.74 (.048)	+8.16 (.181)	+7.50 (.220)
Panel C: GAD-2				
GAD-2, below $60k	1.97 (1.94), n=30	1.55 (1.98), n=29	1.67 (1.90), n=30	1.70 (2.18), n=23
GAD-2, at/above $60k	0.59 (1.12), n=29	0.87 (1.25), n=23	0.64 (1.34), n=28	0.75 (1.48), n=20
GAD-2, diff (p)	-1.38 (.002)	-0.68 (.136)	-1.02 (.021)	-0.95 (.101)
Panel D: Financial Stress				
Financial stress, below $60k	2.83 (1.12), n=30	2.52 (1.21), n=29	2.37 (1.10), n=30	2.30 (1.02), n=23
Financial stress, at/above $60k	2.00 (0.89), n=29	2.04 (0.71), n=23	2.04 (0.69), n=28	2.00 (0.86), n=20
Financial stress, diff (p)	-0.83 (.002)	-0.47 (.085)	-0.33 (.173)	-0.30 (.294)

Note. Cells are mean (SD) and the available-case n. Diff is at/above $60k minus below $60k. Available-case Welch t tests; p-values are unadjusted.

Table 6. Baseline financial-stress regressions

Term	Income only	Income + FHS	Fully adjusted
At-or-above $60k	-0.775 (0.252) p=.003	-0.353 (0.204) p=.088	-0.375 (0.215) p=.087
FHS composite		-0.031 (0.005) p<.001	-0.031 (0.005) p<.001
Age			-0.023 (0.013) p=.071
Female			-0.269 (0.213) p=.210
HS graduate vs <HS			0.086 (0.376) p=.820
Some college vs <HS			0.207 (0.323) p=.524
Bachelor's+ vs <HS			0.010 (0.359) p=.978
N	69	69	69
R-squared	.124	.487	.528
Adjusted R-squared	.111	.471	.473

Note. OLS coefficients with standard errors in parentheses. The income coefficient is at/above $60k versus below $60k. Baseline cross-section only.

Table 7. Sources of financial pressure, by income group (analytic baseline)

Stressor, rated very much or somewhat	Below $60k (n=37)	At/Above $60k (n=32)	p
High cost of living	83.8	90.6	.489
High interest rates	78.4	65.6	.286
Low returns on investments	45.9	40.6	.808
Not enough to save or invest after expenses	70.3	62.5	.610
No stable job or source of income	45.9	25.0	.084
No financial plan	67.6	40.6	.031*
Supporting parents or relatives	45.9	40.6	.808
Price-increase stress, moderate or high	54.1	34.4	.146

*Note. Values are percentages of the income group. Fisher exact tests; p-values are unadjusted. The first seven rows are a study-specific battery. *p<.05.*

Table 8. Holiday-season stress and coping, by income group (analytic baseline)

Item	Below $60k (n=37)	At/Above $60k (n=32)	p
Holiday financial stress			
High or moderate holiday stress	67.6	62.5	.801
Stress increases during the holidays	37.8	31.3	.619
Causes of holiday stress			
Not enough money to spend	67.6	21.9	.0001**
Spending too much	24.3	46.9	.076
Pressure to make the holidays special	27.0	50.0	.080
Borrowing too much	5.4	0.0	.495
Coping with holiday stress			
Cut back spending in other areas	51.4	62.5	.466
Reduced holiday activities	37.8	28.1	.450
Used credit cards or borrowed	27.0	21.9	.781
Relied on savings or emergency funds	13.5	6.3	.437

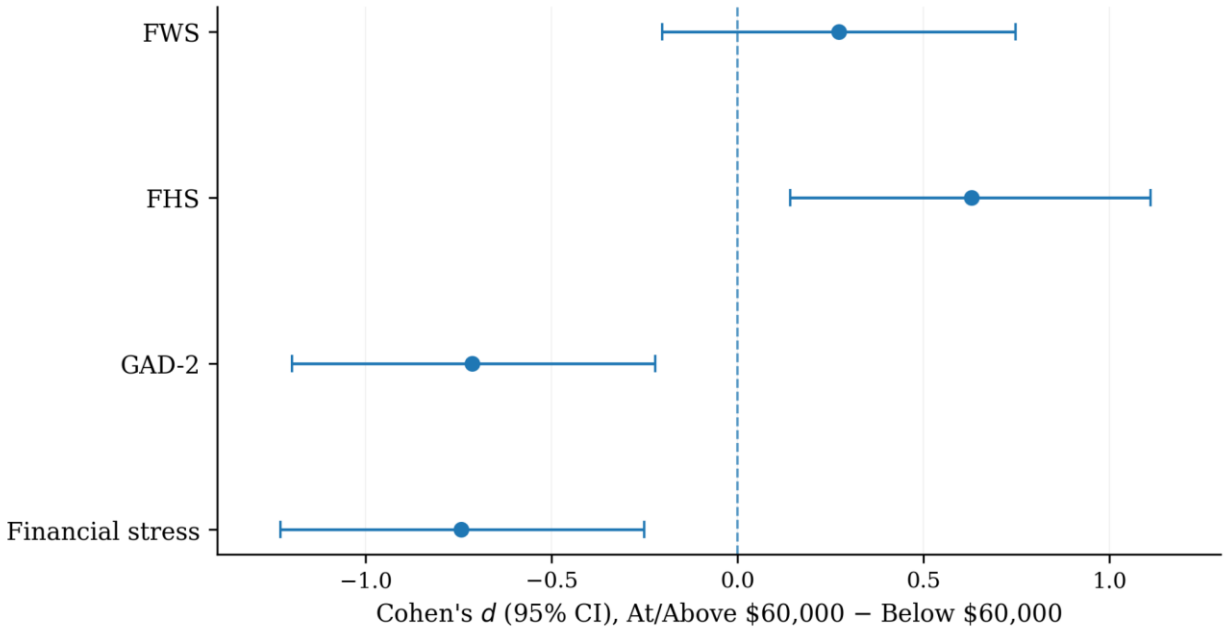
*Note. Values are percentages of the income group. Fisher exact tests. Cause and coping items were asked of all respondents and are multi-select; they do not sum to 100. The module ran in Waves 1-3; this table uses analytic baseline. **p<.01.*

Table 9. Holiday causes among respondents with moderate/high holiday stress

Cause	Below $60k (n=25)	At/Above $60k (n=20)	Diff	p
Not enough money to spend	80.0	35.0	-45.0 pp	.005
Spending too much	20.0	35.0	+15.0 pp	.320
Pressure to make it special	28.0	55.0	+27.0 pp	.125

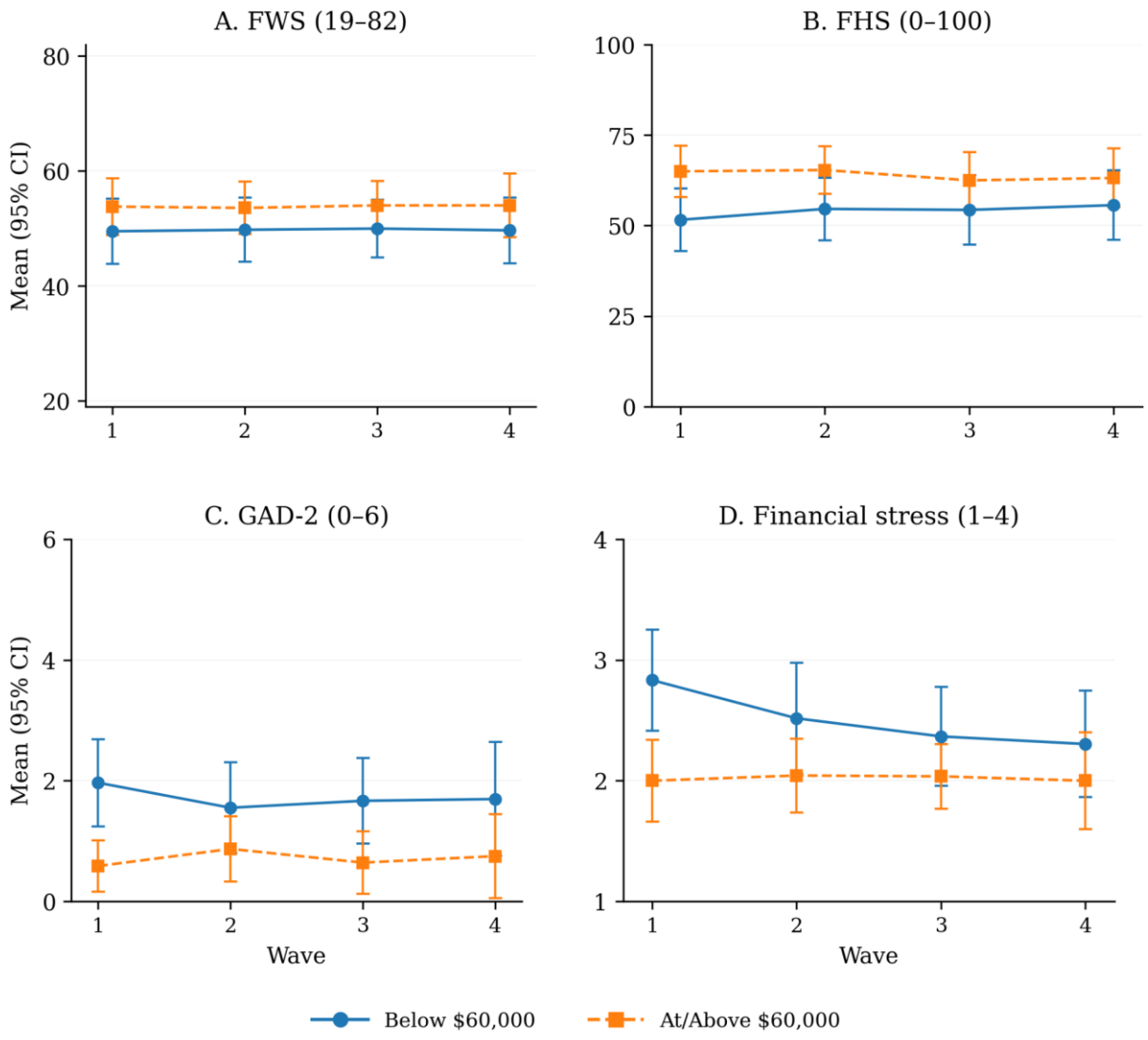
Note. Diff is at/above $60k minus below $60k. Fisher exact tests.

Figure 1. Baseline standardized income-group differences



Note. Authors' creation.

Figure 2. Scale trajectories by income, full observed sample



Note. Within each outcome, we used the available observations in each wave. Bars are t-based 95% confidence intervals.

Appendix

Table A1. Quantitative measures used in the analysis

Measure	Source	Description	Range	Waves
Financial Health Network (FHN) score *Financial Health Network (2021)*	Prior study	Composite of eight indicators across four dimensions of financial behavior — spending, saving, borrowing, and planning. Reported as a single score with established Vulnerable, Coping, and Healthy tiers.	0–100	1–4
CFPB Financial Well-Being Scale *CFPB (2015)*	Prior study	Self-assessed measure of financial security and perceived control over one's financial situation, scored to the published range.	19–82	1–4
Financial stress *Financial Health Network*	Prior study	Single item on the level of stress arising from personal finances, rescaled so that higher values indicate greater stress.	1–4	1–4
Impact of financial stress *Financial Health Network*	Prior study	Four items asked of respondents reporting any financial stress: whether that stress affected physical health, mental health, family life, and work or school. Reported individually, as no validated composite exists for the set.	Binary	1–4
GAD-2 anxiety screen *Spitzer et al. (2006)*	Modified	Validated two-item screen for generalized anxiety disorder, with a positive screen at a score of 3 or higher. Short form of the GAD-7 used in the prior study.	0–6	1–4
Financial behavior items *SHED, Federal Reserve Board*	Prior study	Items on income predictability, monthly income variation, banking and credit card use, budgeting, emergency savings, and housing tenure.	Various	1–4
Sources of financial pressure *Developed for this study*	New	Battery of seven items, each rated very much, somewhat, or not at all: high cost of living; high interest rates; low returns on investments; not enough left to save or invest after expenses; absence of a stable job or income; absence of a financial plan; burden of supporting parents or relatives.	3-point	1–4
Stress from price increases *Developed for this study*	New	Companion item on how much financial stress price increases over the past twelve months have caused the household.	Ordinal	1–4
Holiday financial stress module *Developed for this study*	New	Level of holiday-related financial stress; whether stress rises during the season; the causes of that stress; coping strategies used; and holiday spending and how it was paid for.	Various	1–3
Health insurance items *Developed for this study*	New	Whether the respondent currently has health insurance (he005); main source of coverage (he006); and whether the respondent is being affected by changes to health insurance access or cost in 2026 (he006_a).	Categorical	3–4

Note. Measures marked "Prior study" were carried forward from the Mobile Financial Diary project and were used in Blanco et al. (2021), allowing comparison across collections. The

GAD-2 is the two-item short form of the GAD-7 used in the prior study; the substitution reduces respondent burden in a repeated monthly instrument but limits direct comparability of anxiety scores with the earlier collection. Measures marked "New" were developed for the present study and stand in place of the pandemic-specific content used in 2021. All measures were administered in every wave except where noted.

Table A2. Open-ended survey items used in the qualitative analysis

Item	Source	Coded	Question wording and illustrative example	Notes
fi009	MFD / Blanco et al. (2021)	**206 responses**	Overall, how would you describe the household finances in the last month, [MONTH]? Please write a couple of sentences describing your situation. Below we provide an example of how to answer this question. Please answer based on your own experience. *Illustrative example provided to participants:* *"I worked less hours this past month, and my income was lower. I also had to fix my car and spent $200 to get it fixed. This was an unexpected expense. This past month we used our credit card to cover for the car expense, but we weren't able to cover some bills."*	Asked in all four waves with the reference month updated each time (November 2025, December 2025, January 2026, February 2026).
he007	MFD / Blanco et al. (2021)	**204 responses**	In the last month, [MONTH], was the level of stress you experienced, either low or high, linked to your household financial situation? Explain. Please write a couple of sentences describing your situation. Below we provide an example of how to answer this question. Please answer based on your own experience. *Illustrative example provided to participants:* *"Last month I was very stressed because I lost my job. I have started looking for jobs, and I am trying to keep a positive attitude. We rely on my income for paying for rent and other stuff in the house and we don't have savings we could use at the moment. I felt depressed and down a couple of days last month because of our household financial situation."*	Asked in all four waves with the reference month updated each time.
ex009	New to this study	**150 responses**	Waves 2 and 3: In the last 6 months, was the level of stress you experienced linked to the impact of an increase on prices, unexpected expenses, and/or borrowing? Explain. — Wave 4: In the last month, February of 2026, was the level of stress you experienced linked to the impact of an increase on prices, unexpected expenses, and/or borrowing? Explain. Please write a couple of sentences describing your situation. Below we provide an example of how to answer this question. Please answer based on your own experience. *Illustrative example provided to participants:*	Introduced in wave 2. The six-month reference period was used in waves 2 and 3 and narrowed to one month in wave 4.

Item	Source	Coded	Question wording and illustrative example	Notes
			"This past month I felt stressed because the cost of groceries and rent went up. I had to use part of my savings to cover the bills, and that made me anxious. I'm trying to spend less and avoid borrowing, but it's been hard to keep up with prices."	
ex011	New to this study	**17 responses**	Please elaborate on how your access and/or cost of health insurance is changing in 2026 and whether this change has affected your financial stress. Below we provide an example of how to answer this question. Please answer based on your own experience. *Illustrative example provided to participants:* *"In 2026 the health insurance cost for me and my family will increase from $900 dollars a month to $1,200. This increase on the cost of health insurance will affect my family budget. This change has led me to worry about our family budget."*	Fielded in waves 3 and 4 only, and presented conditionally to respondents who reported having health insurance and who indicated they were being affected by changes to health insurance access or cost in 2026.
ex008	MFD / Blanco et al. (2021)	15 responses	Have you taken a payday loan in the last month? If so, please describe your experience, any difficulty in repaying it, and what happened afterwards.	Fielded in all four waves (six, four, two, and three responses respectively) but answered by too few respondents to support thematic coding. Excluded from the qualitative analysis.

Note. Coded counts are responses; participant counts are shown where the responses have been deduplicated by participant, since respondents answering in more than one wave contribute multiple responses. Items fi009 and he007 were carried forward from the Mobile Financial Diary project and were used in Blanco et al. (2021), with the reference month updated in each wave; retaining their wording allows comparison with the earlier study. Items ex009 and ex011 are new to the present study and stand in place of the pandemic-specific items used in 2021. Each item was accompanied by an illustrative example intended to guide participants on the expected length and specificity of a response. The payday loan item (ex008) is shown for completeness but was not coded. An item on financial technology and buy-now-pay-later applications (ex010) was fielded in waves 3 and 4 and is not analyzed in this paper.

Table A3. Qualitative codebook, by open-ended item

Category	Code	Label
Panel A. Item Fi009 — Overall household finances *"Overall, how would you describe the household finances in the last month, November of 2025?"*		
I. Income shock	I1	Job-related income shock
	I2	Other income shock not otherwise specified
E. Unexpected expense shock	E1	Health or medical bill expense
	E2	Transportation-related expense
	E3	Family expenses (childcare, lending to family, family visits)
	E4	School expenses, for children or self
	E5	Holiday-related expenses
	E6	Vacations or trips
	E7	New career or internship
	E8	Other unexpected expenses not otherwise specified
IE. Monthly expenses versus income	IE1	Income and expenses as expected
	IE2	Income greater than expenses
	IE3	Income lower than expenses
	IE4	Income equal to expenses
	IE5	Not ascertainable from the response
	IE6	High expenses reported
P. Perception of own finances	P1	Perception of finances is good
	P2	Perception of finances is bad
S. Saving-related response	S1	Able to save
	S2	Not able to save
D. Debt-related response	D1	High debt reported
	D2	Manageable debt reported
	D3	Increasing debt

Category	Code	Label
	D4	Reducing debt
FS. Stress-related response	FS1	Stress indicated
	FS2	No stress indicated
FO. Other	FO	Other categories or information not otherwise captured
Panel B. Item He007 — Financial stress *"In the last month, November 2025, was the level of stress you experienced, either low or high, linked to your household financial situation?"*		
SL. Stress level	SL1	No stress reported
	SL2	Manageable (low) stress reported
	SL3	High stress reported
SS. Sources of stress	SS1	Job-related stress
	SS2	Debt-related stress from credit cards
	SS3	Debt-related stress, other
	SS4	Unexpected expense
	SS5	Family stressors
	SS6	Housing, shelter, and rent
	SS7	Food and groceries
	SS8	Holiday or vacation-related stress
	SS9	Stress from bills
	SS10	Other reasons not otherwise specified
	SS11	Higher prices
	SS12	Transportation costs
	SS13	Government programs and benefits
	SS14	Health
Panel C. Item Ex009 — Stress from prices, unexpected expenses, and borrowing *"In the last 6 months, was the level of stress you experienced linked to the impact of an increase in prices, unexpected expenses, and/or borrowing?"*		
SL. Stress level	SL1	No stress
	SL2	Manageable (low) stress
	SL3	High stress

Category	Code	Label
SS. Sources of stress	SS1	Job-related
	SS2	Used debt — credit cards
	SS3	Debt stress
	SS4	Unexpected expense
	SS5	Family stressors
	SS6	Housing, shelter, rent
	SS7	Food and grocery
	SS8	Holiday or vacation stress
	SS9	Concerns about bills
	SS10	Other not otherwise specified
SP. Prices	SP0	Increase in prices, overall
	SP1	Increase in prices, groceries
	SP2	Increase in prices, gas
	SP3	Increase in prices, health
	SP4	Increase in prices, other
SI. Impact of financial stress	SI1	Borrowing (payday loan, friends, other)
	SI2	Using savings
	SI3	Cut down spending, necessities
	SI4	Cut down spending, other
SJ. Job status	SJ1	Lost job or had job loss
	SJ2	Maintained employment, essential worker
S. Saving-related response	S1	Able to save
	S2	Not able to save
S0. Other	S0	Other not otherwise specified
Panel D. Item Ex011 — Health insurance access and cost *"Please elaborate on how your access and/or cost of health insurance is changing in 2026 and whether this change has affected your financial stress."*		
IH. Higher insurance expenses	IH1	Drastic increases

Category	Code	Label
	IH2	Mild increases
	IH3	Higher deductibles
	IH4	Higher copays
IL. Lower insurance expenses	IL	Lower insurance expenses reported
IN. No change	IN	No change reported

Note. Codes were applied separately to each of the four open-ended items. The schemes were adapted from the codebook developed for Blanco et al. (2021), with additions specific to the present study — principally the price-related codes (SP0–SP4) and the health insurance item (Panel D), which had no counterpart in the earlier collection. Items Fi009 and He007 reference the month preceding the survey; item Ex009 references the preceding six months; item Ex011 references changes occurring in 2026. Because the items differ in focus and reference period, code identifiers are item-specific: identifiers that repeat across panels (for example, SS1) denote different categories and should not be read as equivalent.

Table A4. Procedure for the model-assisted coding pass

Step	Stage	Procedure	Safeguard or note
1	**De-identification**	Participant identifiers were replaced with a pseudonymous link (Pseudo_Link) encoding a participant number and wave. The real UAS identifier was never provided to the model.	*Applied before any data left the analysis file.*
2	**Session isolation**	Each question was processed in a separate model session, so that the code set for one question could not influence coding of another.	*One question per session; four sessions total.*
3	**Prompt 0 — code list**	The question text and its complete, closed code list were supplied, with instructions to use only those codes, never to invent, rename, merge, or borrow a code from another question, and to mark a response UNCODED if no code applied. The model was asked to echo the code list back before receiving data.	*Confirms the model has loaded the correct scheme before coding begins.*
4	**Prompt 1 — coding**	De-identified responses were supplied. For each response the model returned the verbatim answer, the verbatim phrase justifying each code assignment, a human-readable code list, and a binary indicator column for every code in the scheme.	*Requiring a verbatim justification phrase makes every assignment auditable against the source text.*
5	**Uncoded and uncertain rows**	The model was asked to return, separately, per-code frequency totals, a list of responses it could not code, and a list of responses it was uncertain about with a one-line reason for each.	*Uncoded and uncertain rows were reviewed by the research team and fed back into codebook revision.*
6	**Phase 2 — data reduction**	Coded responses were grouped by code into a reduced table retaining verbatim excerpts, with uncoded rows set aside separately. Material of uncertain relevance was retained and flagged rather than dropped.	*Follows the RADaR reduction procedure (Watkins 2017).*
7	**Phase 3 — theme consolidation**	Codes were consolidated into candidate higher-order themes, each defined and accompanied by constituent codes, a count of distinct participants, and verbatim exemplar quotes. Themes not traceable to specific codes and quotes were not permitted.	*Participant counts deduplicated on participant identifier so that multi-wave respondents were not counted more than once.*
8	**Phase 4 — findings narrative**	A short narrative was produced for each candidate theme, stating the pattern, its participant coverage, and illustrative verbatim quotes, with thinly supported themes flagged as such.	*Used as an input to team discussion, not as draft manuscript text.*

Step	Stage	Procedure	Safeguard or note
9	**Cross-question synthesis**	Theme summaries from the four questions were synthesized in a separate session, using theme-level summaries only and no participant-level data. Linking individual participants across questions was explicitly prohibited.	*Pseudonymous identifiers were not matched across questions.*
10	**Three-way comparison**	The two independent human codings and the model coding were aligned by response and compared row by row, classifying each disagreement as interpretive, repertoire drift, granularity, or omission. The model was instructed not to compute agreement statistics and not to resolve disagreements.	*Disagreements were adjudicated by the human coders.*
11	**Verification**	All frequencies reported in the manuscript were recomputed by the research team from the binary code matrices. Model-reported counts were treated as provisional throughout.	*Model output was not relied upon for arithmetic.*

Note. The model coding was used to triangulate the two human codings and to surface candidate gaps in the codebook. All themes reported in this paper were determined by the research team. Where the model coding diverged from the human codings, divergence occurred predominantly through omission — responses left uncoded — rather than through conflicting code assignments.

Table A5. Prompts supplied to the model, item He007

Prompt	Text supplied to the model
Prompt 0 *Setup*	You are coding ONE question, He007, with the RADaR technique (Watkins, 2017). Rules for the whole session: use ONLY this question's listed codes; never invent, rename, merge, or borrow a code from another question — even if it would obviously fit. If nothing fits, mark all matrix columns 0 and write UNCODED in Codes. Quote verbatim (notes = the exact phrase justifying the codes; answer = the full verbatim response). Refer to participants by Pseudo_Link only; never infer real identity. Output a table that pastes cleanly into Excel. Question: "In the last month, [MONTH], was the level of stress you experienced, either low or high, linked to your household financial situation?" The ONLY codes you may use: SL1 = No stress reported | SL2 = Manageable (low) stress | SL3 = High stress | SS1 = Job-related | SS2 = Debt stress from credit cards | SS3 = Debt, other | SS4 = Unexpected expense | SS5 = Family stressors | SS6 = Housing/shelter/rent | SS7 = Food and groceries | SS8 = Holiday/vacation | SS9 = Stress from bills | SS10 = Other not mentioned | SS11 = Higher prices | SS12 = Transportation costs | SS13 = Government programs/benefits | SS14 = Health | SI = Impact of financial stress (category — no sub-codes in this question) | S0 = Others not mentioned Confirm you have loaded these codes and list them back, then wait for the data.
Prompt 1 *Coding*	Code the data using ONLY the codes above. For each row output these columns, in this exact order: pseudo_id | question | time | answer | notes | Codes | SL1 | SL2 | SL3 | SS1 | SS2 | SS3 | SS4 | SS5 | SS6 | SS7 | SS8 | SS9 | SS10 | SS11 | SS12 | SS13 | SS14 | SI | S0 answer = verbatim response; notes = the verbatim phrase(s) justifying the codes; Codes = human-readable list; matrix columns = 1 if the code applies to that response, else 0 (numeric, one column per code). After the table, give: (1) a frequency total for each code, (2) a list of UNCODED rows, (3) rows you were unsure about with a one-line reason each. Then also produce the full coded table as a downloadable .xlsx file: one sheet, the same columns in the exact order above, one row per response, 0/1 values stored as numbers (not text). State the file's row count so it can be checked against the input. [de-identified He007 data supplied here]

Note. Prompt 0 was supplied first and the model was required to echo the code list back before any data was provided. Prompt 1 was then supplied together with the de-identified responses. [MONTH] denotes the reference month, which was updated in each wave. The prompts for items Fi009, Ex009, and Ex011 followed the same structure, differing only in the question text and the code list; those code lists are reproduced in the codebook appendix.

Table A6. Health-insurance change and payday lending

Topic	Basis	Yes	Valid	%
Insurance access/cost change	Wave 3 person-waves	9	40	22.5
Insurance access/cost change	Wave 4 person-waves	9	32	28.1
Insurance access/cost change	Waves 3-4 pooled	18	72	25.0
Insurance access/cost change	Respondents ever yes	11	48	22.9
Payday loan: current/active	Respondents ever yes	5	69	7.2
Payday loan: past/current	Respondents ever yes	7	69	10.1

Note. Insurance denominators include valid yes/no responses. Payday percentages use all 69 respondents. The reference period for payday use changes across waves, so the current/active and broader past/current definitions are shown separately.

Table A7. Wave 1 entrants: eventual completers versus non-completers

Baseline measure	Non-completers (n=21)	Completers (n=38)	Diff	p
FWS	49.43	52.82	+3.39	.401
FHS	54.94	59.93	+4.99	.413
GAD-2	1.14	1.37	+0.23	.645
Financial stress	2.48	2.40	-0.08	.788

Note. Welch t tests on Wave 1 values. Diff is completers minus non-completers.

Table A8. Wave 1 entrants: eventual completers versus non-completers, comparison within each income group

Baseline measure and income group	Non-completers	Completers	Diff	p
FWS, below $60k	43.50 (n=10)	52.50 (n=20)	+9.00	.172
FWS, at/above $60k	54.82 (n=11)	53.17 (n=18)	-1.65	.730
FHS, below $60k	47.38 (n=10)	53.69 (n=20)	+6.31	.493
FHS, at/above $60k	61.82 (n=11)	66.88 (n=18)	+5.06	.503
GAD-2, below $60k	2.20 (n=10)	1.85 (n=20)	-0.35	.675
GAD-2, at/above $60k	0.18 (n=11)	0.83 (n=18)	+0.65	.068
Financial stress, below $60k	3.10 (n=10)	2.70 (n=20)	-0.40	.364
Financial stress, at/above $60k	1.91 (n=11)	2.06 (n=18)	+0.15	.665

Note. Welch t tests on Wave 1 values within each income group. Diff is completers minus non-completers.

Table A9. Intraclass Correlations for Outcome Measures Among Respondents Observed in All Four Waves

Measure	Respondents	Observations	ICC (95% CI)	Within-person share
FWS	37	148	.846 (.759, .905)	15.4%
FHS	34	136	.871 (.791, .923)	12.9%
GAD-2	35	140	.815 (.712, .887)	18.5%
Financial stress	35	140	.716 (.580, .821)	28.4%

Note. Random-intercept models estimated by restricted maximum likelihood. Each measure uses respondents observed on that outcome in all four waves.

Table A10. Baseline correlations

Measure pair	Overall (n=69)	Below $60k (n=37)	At/Above $60k (n=32)
FWS with FHS	.723	.708	.747
FWS with financial stress	-.623	-.771	-.362

Measure pair	Overall (n=69)	Below $60k (n=37)	At/Above $60k (n=32)
FWS with GAD-2	-.538	-.653	-.299
FHS with financial stress	-.681	-.766	-.419
FHS with GAD-2	-.549	-.544	-.406
GAD-2 with financial stress	.656	.702	.430

Note. All overall correlations have p<.001. Within the at/above-$60k group, FWS with financial stress (p=.072) and FWS with GAD-2 (p=.127) are not significant; the other subgroup correlations shown are significant at p<.05.

Table A11. Standardized mean differences

Measure	Raw diff	Cohen d	95% CI
FWS	+3.75	+0.27	[-0.20, 0.75]
FHS	+13.65	+0.63	[0.14, 1.11]
FHS: Spend	+12.81	+0.52	[0.03, 1.00]
FHS: Save	+18.53	+0.69	[0.20, 1.18]
FHS: Borrow	+14.57	+0.55	[0.07, 1.04]
FHS: Plan	+8.67	+0.32	[-0.16, 0.79]
GAD-2	-1.23	-0.71	[-1.20, -0.22]
Financial stress	-0.78	-0.74	[-1.23, -0.25]
Physical-health impact	-0.26	-0.28	[-0.83, 0.28]
Mental-health impact	-0.32	-0.36	[-0.91, 0.20]
Family-life impact	-0.51	-0.51	[-1.06, 0.05]
Work/school impact	-0.58	-0.59	[-1.22, 0.05]

Note. Positive values favor the at/above-$60k group for FWS/FHS; negative values indicate lower GAD-2, stress, or impact. Hedges' g values are nearly identical.

Table A12. Continuous-outcome minimum detectable effects

Measure	Pooled SD	MDE (scale units)	Observed diff	Observed |d|	Power at observed d
FWS	13.73	9.43 points	3.75	.27	.19
FHS	21.71	14.90 points	13.65	.63	.73
GAD-2	1.72	1.18 points	-1.23	.71	.83
Financial stress	1.04	0.72 points	-0.78	.74	.86

Note. Two-sided alpha=.05 and 80% power. Scale-unit MDE equals d=.686 multiplied by the baseline pooled SD.