Emotions related to time use in financial activities: Affective patterns in the US

José Ignacio Giménez-Nadal*[1], José Alberto Molina[1], and Jing Jian Xiao[2]

[1]IEDIS, University of Zaragoza, Zaragoza, Spain
[2]University of Rhode Island, Kingston

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Abstract

This study examines how individuals in the US allocate time to financial activities and how these activities relate to their well-being. Using data from the American Time Use Survey (ATUS), we find that financial tasks occupy a minimal share of daily time—averaging just 8.3 minutes— yet are associated with elevated stress and low happiness. Despite their negative emotional valence, financial activities are perceived as meaningful. Regression analyses reveal that time spent on financial tasks increases with education and income, and varies by gender, employment status, and race. Furthermore, affective experiences during financial activities differ significantly across sociodemographic lines: men and older individuals report more negative emotions, while higher education is linked to improved emotional outcomes. These findings allows us to test several hypothesis proposed in previous finantial research, and highlight the cognitive and emotional demands of everyday financial management.

Keywords: Financial behavior, financial literacy, time use data, instant feelings.

JEL classification: D14.

*Corresponding author at: Department of Economic Analysis, University of Zaragoza, C/ Gran Vía 2, 50005 Zaragoza, Spain; ngimenez@unizar.es.

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1 Introduction

In a context of growing economic complexity and individual responsibility for financial decision-making, a pressing higher-order problem is emerging: the unequal distribution of time available for financial management, and its role in reproducing socioeconomic inequality. As governments retreat from welfare provision and financial markets become more sophisticated, individuals must make increasingly consequential decisions about savings, investments, pensions, and debt (Campbell, 2006; Lusardi and Mitchell, 2014). Yet, the ability to make informed financial choices is not only constrained by knowledge or preferences, but also by the time individuals can dedicate to these cognitively demanding tasks. Time, unlike information, is an inherently scarce and unequally distributed resource—particularly across income, education, and gender lines (Aguiar and Hurst, 2007; Guryan et al., 2008; Bianchi et al., 2012). Those in lower socioeconomic strata often face greater time scarcity due to inflexible jobs, multiple roles, and chronic stress (Jacobs and Gerson, 2004; Schor, 1992), leaving them less equipped to navigate financial systems effectively. This temporal inequality can exacerbate wealth gaps and entrench disadvantage over time (Merz and Rathjen, 2014), especially as financial mistakes have long-term, compounding effects (Lusardi and Mitchell, 2014). Moreover, digital financial technologies, often heralded as tools for inclusion, may amplify these disparities if they assume universal access to time, attention, and literacy (Gomber et al., 2018). Understanding who has the time to manage their financial lives—and who doesn't—is therefore critical not only for individual welfare but also for designing equitable economic policy. Without addressing the temporal dimension of financial capability, interventions risk reinforcing the very inequalities they aim to reduce.

Classical economic theory suggests that individuals are rational agents who allocate their scarce time and money across competing uses in order to maximize utility, subject to constraints such as income, time availability, and prices (Becker, 1965; Deaton, 1992). Within this framework, engaging in financial decision-making—such as budgeting, saving, or comparing credit products—can be understood as both a consumption activity that provides immediate psychological benefits (e.g., a sense of control) and as an investment in future outcomes (e.g., higher returns or reduced risk) (Behrman et al., 2012; Van Rooij et al., 2011). However, empirical research increasingly shows that actual financial behaviors often deviate from this rational agent model. Individuals frequently under-save for retirement, make suboptimal borrowing decisions, or fail to diversify assets, even when the stakes are high (Campbell, 2006). These patterns suggest that cognitive limitations, time constraints, and inadequate financial literacy are central to understanding how people navigate financial tasks. While financial literacy—defined as the knowledge and skills required to make in-

formed and effective financial decisions—has been positively linked to better outcomes such as savings, wealth accumulation, and reduced financial distress (Lusardi and Mitchell, 2014; Hastings et al., 2013), its distribution is highly unequal, mirroring broader socioeconomic divides. Moreover, literacy alone is often insufficient: its benefits are conditioned by the availability of time and attention, which shape whether and how financial knowledge is put into practice (Bucher-Koenen et al., 2019). Additionally, emerging forms of financial behavior, such as investment in cryptocurrencies, further highlight the important role of financial literacy. For instance, recent evidence shows that young individuals with lower financial literacy are more likely to perceive Bitcoin as a legitimate currency rather than a speculative asset—especially when combined with distrust in traditional financial institutions and familiarity with digital platforms (Cascavilla, 2024). These findings underscore the importance of enhancing financial education, particularly among younger cohorts increasingly exposed to complex, high-risk financial products. Thus, financial capability must be understood as a multifaceted construct that includes knowledge, motivation, and the time and cognitive bandwidth to act.

Behavioral economics extends the standard model by incorporating bounded rationality, cognitive overload, and systematic biases into decision-making frameworks. Individuals may suffer from limited attention, procrastination, and inertia, especially when facing complex and unfamiliar financial products (Mullainathan and Shafir, 2013; Thaler, 1994; Benartzi and Thaler, 2004). Time scarcity exacerbates these effects, as people with less discretionary time are more likely to rely on heuristics or defer decisions altogether (Bertrand et al., 2004; Shah et al., 2012). For instance, financial decisions often require effortful comparison and delayed gratification, but present bias leads individuals to overweight short-term costs and underweight long-term benefits (Laibson, 1997). Moreover, decision fatigue and information overload can reduce the quality of financial choices over time (Sachar and Levav, 2011). Recent cross-national research highlights the importance of psychological traits—such as self-control and future time perspective—in explaining both current financial stress and expected financial security (van Raaij et al., 2023). Related work also shows that conscientiousness and material values play a significant role: individuals with high conscientiousness tend to manage money more effectively, while those who place a strong emotional value on possessions often avoid financial management, possibly due to the psychological discomfort it generates (Donnelly et al., 2012). These findings suggest that financial behavior is shaped not only by economic incentives and internal traits, but also by the cognitive and temporal resources individuals can mobilize—resources that are unequally distributed and help perpetuate socioeconomic disparities (Hastings et al., 2013).

The institutional framework in the United States places a disproportionate burden on individuals to ensure their financial well-being, making personal financial management not just a private task but a structural necessity. Unlike in many European countries with stronger welfare systems and centralized social insurance, the U.S. relies heavily on market-based mechanisms that demand active and informed individual participation. Defined-contribution retirement plans such as 401(k)s, the patchwork of employer-sponsored and private health insurance options, and the widespread reliance on consumer credit all require households to make high-stakes decisions with long-term implications (Campbell, 2006; Beshears et al., 2009; Madrian, 2014). For example, employees must choose how much to contribute to retirement accounts, how to allocate their portfolios, and when to withdraw funds, often without adequate guidance or expertise (Benartzi and Thaler, 2004; Lusardi and Mitchell, 2011). In healthcare, individuals navigate complex insurance plans, deductibles, and co-payments, and poor decisions can lead to catastrophic financial consequences (Finkelstein et al., 2012). Similarly, easy access to credit can be both enabling and dangerous, as households may overborrow or mismanage repayment schedules (Mian and Sufi, 2014). These institutional features amplify the importance of financial engagement but also exacerbate inequality by penalizing those with fewer resources, less education, or limited time to devote to such decisions. As a result, the cost of disengagement is not evenly distributed: it is often the most disadvantaged who suffer the harshest penalties from financial missteps (Hastings et al., 2013). This structure renders financial decision-making both a site of opportunity and a mechanism of exclusion, thereby deepening the socioeconomic divides it purports to help manage.

This study investigates time use and subjective well-being associated with financial activities—such as paying bills, managing household budgets, and interacting with financial institutions—highlighting an often overlooked dimension of financial capability. We draw on the American Time Use Survey (ATUS), a nationally representative dataset collected by the U.S. Bureau of Labor Statistics and the U.S. Census Bureau, which provides detailed 24-hour time diaries reporting how individuals allocate time across various daily activities, alongside contextual information including location, co-presence, and emotional state (Krueger et al., 2009). Additionally, we utilize the ATUS Well-Being Module (2010, 2012, 2013, 2021) to capture self-reported emotional experiences during randomly selected diary episodes, offering a richer understanding of affective profiles linked to daily activities (Kahneman et al., 2004). The empirical strategy combines descriptive statistics with regression models to analyze the demographic, socioeconomic, and well-being correlates of time spent on financial management tasks. Ordinary least squares (OLS) regressions are estimated for time allocation, where the dependent variable is minutes dedicated to financial activities, and key indepen-

dent variables include income, education, employment status, and household composition; models also incorporate state and year fixed effects to account for geographic and temporal variation (Krueger et al., 2009). To examine subjective well-being (SWB) during financial activities, we estimate linear regressions on happiness, stress, and meaningfulness ratings (0–6 scale), adjusting for episode characteristics such as duration, activity type, presence of others, and individual covariates, enabling analysis of differences by gender, income, and family responsibilities (Kahneman et al., 2004; Stone and Schneider, 2018).

Our results reveal substantial socioeconomic and demographic disparities in both the time devoted to financial activities and the emotional experience associated with them. Individuals with higher education and income levels spend significantly more time on financial tasks and report lower levels of stress, tiredness, and pain while doing so—highlighting the role of human capital and financial security in facilitating financial engagement. In contrast, women not only devote more time but also experience greater emotional strain during financial episodes, even after accounting for employment, education, and income, pointing to persistent gendered divisions in financial responsibilities. We also observe meaningful differences by race, age, and marital status, suggesting that financial inclusion, social support, and work experience can buffer some of the emotional burden linked to financial management. Overall, financial activities rank among the least enjoyable parts of daily life, perceived as more stressful and less meaningful than other activities, including objectively demanding ones such as paid work or childcare.

One key contribution of this study is to foreground time spent on financial activities—such as paying bills, budgeting, and banking—as a critical yet underexplored dimension of economic behavior. Traditional surveys often focus on income, assets, or expenditures but fail to capture the time costs of managing finances, which are essential for understanding financial capability and economic inequality (Campbell, 2006; Lusardi and Mitchell, 2014; Meuris and Gladstone, 2024). By leveraging detailed activity diaries from the American Time Use Survey (ATUS), this paper sheds light on how individuals allocate time to financial management and how this varies by socioeconomic status, providing new insights into the invisible labor of economic life.

A second key contribution of this paper is the integration of subjective well-being (SWB) data from multiple waves of the ATUS Well-Being Modules (2010, 2012, 2013, and 2021) into the analysis of financial activities. While prior research has linked psychological traits such as self-control, future time perspective, and personality to financial well-being outcomes—including money management stress and future financial security (van Raaij et al., 2023; Donnelly et al., 2012)—few studies have examined how financial tasks are experienced

emotionally in daily life. Using activity-level measures of happiness, stress, and meaningfulness, this study explores the affective profile of financial management activities such as bill paying and budgeting, revealing whether these tasks contribute positively or negatively to financial well-being. Our findings show that emotional experiences vary by socioeconomic status, gender, and family responsibilities, echoing evidence that cognitive constraints and financial literacy shape both financial perceptions and behaviors (Cascavilla, 2024). By situating financial decision-making within the lived emotional experience, this work advances the understanding of financial well-being as a multidimensional construct that includes not only objective outcomes but also the emotional costs and benefits of financial engagement. This perspective supports calls for interventions that consider psychological and emotional factors alongside knowledge and access, particularly for vulnerable groups facing time scarcity and cognitive overload (Stone and Schneider, 2018). Overall, this contribution bridges behavioral economics and financial psychology to enrich the literature on financial well-being with real-time affective data from a representative population.

The remainder of the paper is structured as follows. Section 2 reviews key hypotheses from the literature regarding the allocation of time to financial activities and their relationship to individual well-being, and outlines how these hypotheses will be empirically tested. Section 3 describes the data and sample construction, drawing on the American Time Use Survey and its Well-Being Modules. Section 4 presents the empirical strategy, including the regression specifications used to analyze both time allocation and affective experience. Section 5 reports the main results, focusing on the demographic correlates of financial activity and the emotional valence associated with such tasks. Finally, Section 6 concludes by summarizing the findings and discussing their implications for economic behavior, financial inclusion, and well-being research.

2 Hypotheses

This study examines how time spent on financial activities and the emotional experience associated with them vary across demographic and socioeconomic groups. We propose five hypotheses, each rooted in theoretical and empirical literature on financial behavior, time use, and subjective well-being.

- **Hypothesis 1: Budgeting Behavior as a Coping Mechanism among Low-Income Individuals**

Statement: Individuals in lower income brackets spend more time on financial activities

as a coping mechanism to manage limited resources, reflecting the behavioral hierarchy hypothesis.

Rationale: Financial stress among low-income households often necessitates increased engagement in financial planning to manage constraints. Xiao and O'Neill (2018) argue that budgeting and financial monitoring are more prevalent among resource-constrained individuals, who use such strategies to retain control.

- **Hypothesis 2: Emotional Burden of Financial Activities Decreases with Financial Capability**

Statement: Individuals with higher educational attainment or income experience less stress and more meaning during financial activities, reflecting greater financial capability.

Rationale: The theory of financial capability suggests that knowledge, confidence, and access to financial tools reduce the cognitive and emotional toll of financial decision-making (Lusardi and Mitchell, 2011). Individuals with higher education or income may be better equipped to manage finances efficiently and with less stress.

- **Hypothesis 3: Gender Differences in Financial Engagement Reflect Division of Labor Rather than Capability**

Statement: Women spend more time on financial activities than men, even after controlling for employment and income, indicating role-based differences rather than capability gaps.

Rationale: Gendered divisions of labor within households may lead women to assume more responsibility for day-to-day financial management, regardless of education or income (Pahl, 1989).

- **Hypothesis 4: The Emotional Cost of Financial Activities is Higher for Older Adults**

Statement: Older individuals report greater negative affect during financial activities due to cognitive and emotional fatigue associated with complex decisions.

Rationale: Cognitive aging can make financial tasks more emotionally taxing, particularly under conditions of complexity and uncertainty. Behavioral economics highlights that bounded rationality and decision fatigue may intensify with age (Agarwal et al., 2009). Thus, older adults may report more stress or fatigue during financial activities, even when they are relatively simple.

- **Hypothesis 5: Time Spent on Financial Activities Predicts Subjective Financial Capability**

Statement: Individuals who allocate more time to financial activities perceive those activities as more meaningful, suggesting a subjective sense of capability or control.

Rationale: According to the Knowledge-Behavior-Opportunity (KBO) framework (Atkinson and Messy, 2007), financial capability is not only about knowledge but also about engagement. Spending more time on financial tasks could reflect greater involvement and confidence, leading to a higher sense of meaning. Alternatively, excessive time might signal stress or complexity, lowering perceived control.

3 Data, sample and variables

This study uses data from the American Time Use Survey (ATUS), a nationally representative dataset jointly administered by the U.S. Bureau of Labor Statistics and the U.S. Census Bureau. Since 2003, the ATUS has collected detailed 24-hour time diaries from individuals aged 15 and older, documenting how they allocate their time across a wide range of activities, including work, caregiving, leisure, and household responsibilities. Each respondent reports all activities undertaken from 4:00 a.m. on the previous day to 4:00 a.m. on the interview day, along with contextual information such as who else was present, the location, and—for a subset of years—emotional experience during those episodes. The ATUS also includes rich demographic and socioeconomic information, allowing for disaggregated analysis by income, education, employment, and family characteristics. We restrict the analysis to individuals with complete information on socio-demographic and time use characteristics.

To capture engagement with personal finance, we use the ATUS activity codes (e.g., activity) that classify the main activities done by respondents during the day. Specifically, time spent on tasks such as paying bills, managing bank accounts, budgeting, filing taxes, or handling financial paperwork is coded under activity codes 20901 "Financial management", 20902 "Household and personal organization and planning", 80201 "Banking", 80202 "Using other financial services", 80203 "Waiting associated with banking or financial services", 80299 "Using financial services and banking, n.e.c.", 100103 "Obtaining licenses and paying fines, fees, or taxes" and 180802 "Travel related to using financial services and banking". This coding allows us to isolate episodes that reflect active financial management by respondents, a dimension often underrepresented in standard economic datasets. To analyze the time individuals devote to financial activities, we aggregate the total duration of episodes

associated with these activity codes at the diary level by summing the time spent across all relevant episodes.[1]

In addition to recording the nature of daily activities, the ATUS includes a Well-Being Module (ATUS-WB) administered in the years 2010, 2012, 2013, and 2021. This module randomly selects three activities per respondent and asks them to retrospectively evaluate their emotional experience during those episodes. The well-being questions measure subjective states using a 0 to 6 scale, including feelings of happiness, stress, sadness, pain, tiredness and how meaningful the activity felt (Kahneman et al., 2004; Krueger et al., 2009).[2] By linking these affective reports to the corresponding activity codes, we are able to analyze the emotional valence of financial activities relative to other time uses. This feature of the ATUS-WB offers a unique lens on the welfare implications of financial management beyond traditional economic outcomes.

We define several socio-demographic characteristics that have been shown to be important in time allocation decisions (Aguiar and Hurst, 2007; Guryan et al., 2008; Gimenez-Nadal and Sevilla, 2012): gender (male=1, female=0), age, working full-time (1,0), retired (1,0), education (less than high school degree, high school degree, more than high school degree), Hispanic origin (1,0), Married/cohabiting (1,0), ethnic origin (White, Black, Indian, Asian, Pacific, other races), household size, number of children in the household, age of youngest child in the household, and household income. To construct the household income variable, we use a categorical income measure reported in the dataset, which included a range of 16 income brackets. Respondents reported their total family income before taxes, grouped into the following categories: less than $5,000; $5,000 to $7,499; $7,500 to $9,999; $10,000 to $12,499; $12,500 to $14,999; $15,000 to $19,999; $20,000 to $24,999; $25,000 to $29,999; $30,000 to $34,999; $35,000 to $39,999; $40,000 to $49,999; $50,000 to $59,999; $60,000 to $74,999; $75,000 to $99,999; $100,000 to $149,999; and $150,000 and over.[3]

In analyzing individuals' emotional experiences during daily activities, it is crucial to account for contextual factors that may systematically influence reported well-being. First,

[1] We also analyze the time devoted to other non-financial activities. Following (Aguiar and Hurst, 2007) and (Gimenez-Nadal and Sevilla, 2012), we analyze the following activities: personal care, paid work, housework, childcare, adult care, study, and leisure. Activity codes included in each activity are shown in Table A1 in Appendix A

[2] The information on well-being for activities is obtained from a question with a seven-point scale that asks how happy/sad/tired/much pain/much stress the respondent felt during the activity. This information is collected for three randomly selected activities for each respondent. For activities to be eligible for selection, they must be at least five minutes in duration and may not include the following ACTIVITY codes: sleeping (0101xx), grooming (0102xx), personal activities (0104xx), refusal (500105), don't know (500106)

[3] Observations with missing or unreported values of the variables of interest were excluded from the analysis to ensure data quality and consistency.

the duration of the activity can affect emotional responses due to adaptation, fatigue, or enjoyment saturation (Kahneman et al., 2004; Stone et al., 2010). Longer engagements may intensify or diminish affect, depending on the activity's nature. Second, with whom the activity is performed (co-presence) is a well-documented determinant of experienced utility: individuals tend to report higher happiness and meaning when accompanied by close family or friends, and more negative emotions when alone or with non-voluntary company (Kahneman et al., 2004; Krueger et al., 2009). Third, the location of the activity also matters: activities at home, in nature, or in leisure-specific settings are often associated with higher affective states than those in workplaces or transit environments (MacKerron and Mourato, 2013; Golder and Macy, 2011). Neglecting these variables risks conflating the intrinsic emotional content of the activity with these contextual moderators. Following previous work we control for these features to isolate the net association between specific activities and emotional states (Giménez-Nadal et al., 2019).

Table 1 presents descriptive statistics on time use and socio-demographic characteristics for our sample of 191,038 respondents drawn from the American Time Use Survey (ATUS). On average, individuals allocate most of their time to personal care activities, including sleep and grooming (652 minutes per day), followed by leisure (342 minutes), market work (228 minutes), and housework (143 minutes). Time spent on childcare, studying, financial activities, and adult care is considerably lower, averaging fewer than 35 minutes per day. The sample is evenly split by gender, and the average age is 45. Educational attainment is relatively high, with more than half of the respondents having completed tertiary education. The racial composition is predominantly White (81%), with Black individuals representing 12%, and smaller shares of other racial groups. Regarding household structure, the average household size is three members, and there are on average 0.73 children under the age of 18 per household. Income distribution shows significant heterogeneity: while a sizable proportion of the population reports annual family incomes below $30,000, approximately 37% of individuals report incomes above $75,000. These figures reflect substantial variation in both socio-demographic profiles and time allocation across the population, underscoring the need to consider these differences when analyzing subjective well-being and time use patterns.

Table 2 provides summary statistics of subjective well-being indicators—happiness, sadness, pain, tiredness, stress, and sense of meaning—across different daily activities.[4] On

[4]The analysis focuses on individuals who provided well-being information for at least one episode during the years 2010, 2012, 2013, and 2021. The unit of analysis is the episode, with each respondent contributing, on average, approximately three episodes. Summary statistics for this restricted sample are presented in Table A3 in Appendix A.

average, individuals report the highest levels of happiness during childcare (mean = 4.00) and leisure (3.67), and the lowest during financial activities (3.20), highlighting a potential emotional burden associated with financial management tasks. Similarly, stress levels are notably higher during financial activities (2.46) compared to leisure (1.38), personal care (1.62), or even housework (1.67). Although pain levels during financial activities are similar to those during personal care and housework, stress and sadness levels are elevated, suggesting a unique emotional profile for financial decision-making. Interestingly, the sense of meaning reported during financial activities (4.91) is relatively high, surpassed only by childcare (5.19) and adult care (4.89), indicating that while these tasks may be emotionally taxing, they are perceived as purposeful. These findings align with existing literature highlighting the complex emotional nature of economically consequential tasks (Kahneman et al., 2004; Krueger et al., 2009), and underscore the importance of incorporating activity-specific emotional measures in models of utility and labor supply.

4 Empirical Strategy

Our empirical approach consists of regression analysis to examine the demographic, socioeconomic, and well-being correlates of time devoted to financial tasks. First, to analyze time allocation, we estimate ordinary least squares (OLS) regressions where the dependent variable is the number of minutes per day spent on financial management activities. The key independent variables include income, education, employment status, and household composition. To control for geographic and temporal heterogeneity, we include state and year fixed effects, following Krueger et al. (2009). We estimate the following OLS model:

$$\text{Time}_{ist} = \beta_0 + \beta_1 \text{X}_{ist} + \gamma_s + \delta_t + \varepsilon_{ist}, \tag{1}$$

where Time_{ist} denotes the minutes spent on daily activities by individual i in state s at time t, X_{ist} is a vector of socio-demographic characteristics of individual i in state s at time t, γ_s are state fixed effects, δ_t are year fixed effects, and ε_{ist} is the error term.

The vector of socio-demographic characteristics X_{ist} includes variables that will allow us to contrast our results with hypotheses established in previous literature: family income and education (H1: Individuals in lower income brackets or with lower education spend more time on financial activities), and gender (H3: Women spend more time on financial activities than men, indicating role-based differences).

Second, to investigate the subjective well-being (SWB) associated with financial activ-

ities, we estimate linear regression models with well-being indicators—such as happiness, stress, and meaningfulness—as dependent variables. These outcomes are measured on a 0–6 scale. Consistent with previous studies (Kahneman et al., 2004; Stone and Schneider, 2018), we adjust for episode characteristics (including duration, activity type, and presence of others) as well as individual-level covariates. This specification allows us to assess whether financial activities exhibit distinctive affective profiles and to explore heterogeneity by gender, income, and family responsibilities. We estimate the following OLS model:

$$\text{SWB}_{ijt} = \alpha_0 + \beta_1 \text{Activity}_{ijt} + \beta_2 \text{X}_{ist} + \beta_3 \text{ep}_{ijt} + \gamma_s + \delta_t + u_{ijt}, \tag{2}$$

where SWB_{ijt} is the well-being measure reported by individual i during episode j at time t, Activity_{ijt} is an indicator for engaging in non-financial activities, separated by activity type, X_{ist} is a vector of socio-demographic characteristics of individual i in state s at time t, ep_{ijt} includes episode-specific controls (e.g., duration, activity type, presence of others), γ_s are state fixed effects, δ_t are year fixed effects, and u_{ijt} is the error term.

This specification allows us, first, to compare the well-being of individuals during financial activities relative to other daily activities. By netting out observed socio-demographic differences and specifying financial activities as the reference category in the OLS regressions, we can interpret the estimated coefficients as differences in reported well-being relative to financial tasks. In this context, β_1 captures the average difference in well-being reported during other daily activities compared to financial activities.

Furthermore, the vectors of socio-demographic characteristics (X_{ist}) and episode characteristics (ep_{ijt}) will allow us to contrast our results with hypotheses established in previous literature: family income and education (H2: Individuals with higher educational attainment or income experience less stress and more meaning during financial activities), age (H4: Older individuals report greater negative affect during financial activities), and episode duration (H5: Individuals who allocate more time to financial activities perceive those activities as more meaningful).

All regression models are estimated using robust standard errors to account for heteroskedasticity. In addition, we apply the individual (regression 1 and episode-level (regression 2) weights provided by the survey to ensure that the estimates are representative of the target population and account for the complex sampling design of the data.

5 Results

The results in Table 3 provide strong evidence of socioeconomic disparities in the time devoted to financial activities. Contrary to hypothesis H1, individuals with higher educational attainment/income report significantly more time on these activities. Specifically, those with a university degree spend approximately 4.94 more minutes per day, which represents an increase of 59.5% relative to the daily average of 8.30 minutes. This suggests that education equips individuals with the skills, confidence, or awareness needed to engage more actively in financial matters. Income-related patterns also do not align with H1: while individuals in the lowest income brackets do not differ significantly from the reference group, those in middle and upper-income categories dedicate increasingly more time to financial activities, in comparison to individuals with less than $5,000. For instance, those earning $75,000–$99,999 spend 3.04 more minutes, a 36.6% increase relative to the mean, and those earning over $150,000 spend 3.74 more minutes, or 45.1% above the average. These findings indicate that higher-income individuals are more engaged in financial activities, potentially due to increased financial complexity, opportunities for investment, or awareness of financial tools.

Gender differences are also notable and lend strong support to hypothesis H3. Being male is associated with a 1.79-minute reduction in daily time spent on financial activities—equivalent to a 21.6% decrease compared to the average. This is a substantial difference, suggesting that women, on average, bear a disproportionate share of responsibility for managing household finances. Notably, this gender gap persists even after controlling for factors such as employment status, education, household size, and income. This implies that the observed differences are not merely structural but may reflect persistent gender norms or intra-household role differentiation, where women take on more of the planning, budgeting, or administrative financial tasks.

Other demographic characteristics also reveal meaningful disparities. Being White is associated with a 4.91-minute increase, or 59.2% more time than the average, while identifying as Black, Indian, or Other races is also positively associated with time spent, though to a lesser extent (e.g., 2.34 minutes for Black individuals, or 28.2% more). These racial differences may stem from variations in financial inclusion, household financial roles, or the need to actively manage constrained resources. Household size is negatively associated with financial time use: each additional household member corresponds to a 0.52-minute reduction, or 6.3% less time, and having more children under 18 is linked to a 0.55-minute increase, or 6.6% more time—perhaps due to the added complexity of family-related financial planning.

Interestingly, being retired is linked to a small yet statistically significant reduction of 0.03 minutes, which, although marginal (0.4%), is consistent with reduced financial activity post-retirement. Taken together, these patterns underscore the unequal distribution of financial engagement across socioeconomic, gender, and racial lines.

The results in Table 4 reveal that individuals with higher income and educational attainment experience these activities with significantly lower levels of stress, tiredness, and pain—suggesting not only differences in exposure but also in the emotional cost of engaging with financial matters. Compared to financial activities, most other daily activities are associated with noticeably more positive and less negative emotional experiences. For example, leisure and personal care episodes are linked to markedly higher happiness and lower stress. The increase in happiness during leisure activities represents about 0.33 units, which corresponds to roughly 40% of a standard deviation in happiness, indicating a substantial improvement over financial activities. Likewise, the reduction in stress during housework—almost half a point—amounts to approximately 25% of a standard deviation, a meaningful drop relative to the average stress level experienced during financial tasks. Childcare, while more tiring, stands out as a particularly meaningful activity, with an increase in perceived meaning of about 0.86 units, or nearly 70% of a standard deviation, suggesting a stark contrast with the more affectively neutral character of financial episodes. Overall, these comparisons highlight how financial activities are among the least enjoyable and most stressful parts of daily life, even relative to objectively demanding tasks like childcare or market work.

Turning to socio-economic characteristics, the findings are largely consistent with the hypothesis that individuals with higher income or education experience financial activities less negatively. For example, individuals with university education report notably lower levels of pain, tiredness, and stress during financial episodes. The reduction in pain is equivalent to nearly 30% of a standard deviation, while the drop in tiredness approaches 25%, suggesting that better-educated individuals are more emotionally resilient when handling financial matters. Similarly, those in the highest income bracket report a reduction in stress of about 20% of a standard deviation, compared to individuals with lower income. While these groups do not consistently report higher levels of meaning, they clearly experience fewer negative emotions, lending strong support to the hypothesis that financial security and cognitive resources mitigate the emotional burden of financial activities.

The evidence also supports the hypothesis that age amplifies the emotional costs of financial tasks. As individuals get older, they report more sadness, stress, and physical discomfort during financial episodes. For example, the increase in stress associated with age is about 6% of a standard deviation per decade, which, although modest, accumulates over time and

mirrors the emotional gap seen between different activity types. In contrast, longer financial episodes are associated with greater perceived meaning—an increase of about 0.09 units, or 25% of a standard deviation—supporting the idea that allocating more time to financial tasks may reflect engagement or perceived importance. Finally, other demographic differences are also informative: men report substantially less tiredness and stress—reductions of 20–25% of a standard deviation—but also lower levels of meaning, suggesting a more detached or instrumental engagement with financial activities. Meanwhile, married individuals experience significantly more happiness and less stress during these episodes, suggesting that social or emotional support may buffer some of the inherent stress linked to financial decision-making.

Additional socio-demographic characteristics also display meaningful associations with emotional responses during financial activities. Male respondents report significantly lower levels of sadness, pain, tiredness, stress, and meaning. For example, the reduction in stress for men corresponds to over one standard deviation of the stress distribution, indicating a substantial gender gap in the emotional burden of financial tasks. Marital status is similarly influential: married individuals report significantly less sadness, pain, and stress, with the reduction in sadness nearing half a standard deviation, suggesting a buffering effect of partnership on the emotional toll of financial matters. Regarding race and ethnicity, the most notable differences appear among Hispanic respondents, who report substantially greater levels of meaning—approximately 0.75 standard deviations higher than the sample average—during financial episodes, possibly reflecting differing cultural attitudes or responsibilities toward financial decision-making. Finally, those working full-time tend to report less sadness, pain, and stress during financial activities, which may reflect greater financial literacy, routine exposure, or a stronger sense of control over financial matters compared to those not employed full-time.

6 Conclusions

Understanding how individuals allocate time to financial activities is critical to assessing both economic behavior and financial well-being. Despite the increasing complexity of financial decision-making in modern economies, limited research has explored how socioeconomic and demographic characteristics influence time spent on these activities. This paper addresses that gap by analyzing time-use diary data from a large, nationally representative sample. We focus on identifying disparities across gender, income, education, and other sociodemographic factors, testing key hypotheses related to resource constraints and role-based specialization. By quantifying time spent in financial activities, we offer new insights into an underexplored

but economically meaningful domain of household behavior.

Our results reveal striking heterogeneity in financial time use. Individuals with university education spend nearly 60% more time on financial activities than the average, and those in higher income brackets similarly devote more time—up to 45% more among those earning over $150,000. These patterns suggest that financial engagement is positively associated with both educational attainment and economic resources, consistent with the notion that financial complexity and opportunity scale with socioeconomic status. In contrast, men spend 21.6% less time on financial activities than women, suggesting persistent gender roles in financial management. Racial disparities are also pronounced: for instance, White individuals spend nearly twice the sample average on financial tasks, indicating potential structural or informational barriers among minority groups. Taken together, the results demonstrate that time spent managing finances is unevenly distributed and systematically patterned along key demographic dimensions.

Our work also explores the implications of financial activity time use for individual well-being. We find that financial tasks are among the least emotionally rewarding parts of daily life, associated with higher levels of stress, tiredness, and pain, and lower levels of happiness and perceived meaning compared to most other activities. However, these emotional costs are not uniformly distributed: individuals with higher education or income experience significantly less negative affect during financial episodes, suggesting that cognitive and financial resources can mitigate their emotional burden. Conversely, older individuals and women tend to report more stress and discomfort, while married individuals and those employed full-time exhibit more positive emotional profiles during these tasks, likely reflecting the protective effects of social and economic support.

These findings carry important policy implications. The clear gradient in financial time use by income and education suggests that financial literacy programs may not only need to be expanded but also more precisely targeted to individuals who are less likely to engage with financial matters. Encouraging financial participation among lower-income and less-educated populations may help close gaps in financial preparedness and resilience. Furthermore, the gender gap underscores the importance of designing policies that recognize and address intra-household financial roles, potentially offering support mechanisms for the hidden labor often performed by women in managing household finances.

The elevated levels of stress, tiredness, and discomfort reported during financial activities—particularly among individuals with lower income and education—suggest that efforts to enhance financial literacy should be not only more accessible but also tailored to the cognitive and emotional needs of vulnerable populations. Programs that incorporate prac-

tical guidance, emotional support, and behaviorally informed design are likely to be more effective. The fact that women report both greater involvement and higher emotional strain highlights the need to recognize and alleviate gendered burdens in household financial management, potentially through tools that facilitate shared financial planning or through the integration of financial support services into broader social assistance programs. Moreover, the persistent disparities in emotional experiences across age and employment status indicate that financial education and services should be responsive to the life cycle, with particular attention to older adults and those outside the labor force. More broadly, these results suggest that policies aimed at financial inclusion should move beyond access and usage metrics to also consider the emotional costs of engaging with financial systems. Incorporating subjective well-being indicators into the evaluation of financial interventions could provide a more comprehensive assessment of their effectiveness and help design systems that are not only more equitable but also more humane.

Our study is not without limitations. The cross-sectional nature of the data limits our ability to make causal claims about the relationship between sociodemographic characteristics and financial time use. It is also possible that unobserved heterogeneity—such as personality traits, financial literacy, or cultural norms—may confound some of the observed associations. Moreover, time-use diaries, while rich in behavioral detail, may be subject to reporting biases. Future work using panel data or experimental designs could help establish causality and unpack the mechanisms driving these time-use patterns. Nonetheless, this paper offers an important first step in understanding the determinants of financial activity engagement and sets the foundation for richer analysis of its implications for well-being and policy design.

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Table 1: Time devoted to activities, hours per day

	Mean	**SD**
Personal care	651.98	(155.75)
Leisure	341.87	(228.66)
Market work	228.24	(280.36)
Housework	143.41	(155.79)
Childcare	32.80	(84.87)
Study	28.36	(111.50)
Financial activities	8.30	(34.17)
Adult care	5.04	(25.86)
Number of observations	191,038	

Notes: Standard deviations in parentheses. All statistics are weighted using the individual diary weights provided in the dataset. The sample comprises individuals who are the household heads in the 2003-2023 ATUS. The time devoted to daily activities is measured in hours per day, and is computed by dividing by 7 the original minutes per day reported by the individuals. Table A1 in Appendix A describes the activity codes included in each daily activity; an in-depth description of the ATUS activity codes can be found in www.atusdata.org. Table A2 in Appendix A shows the main socio-demographic characteristics of the sample.

Table 2: Average reported feelings by activity type

	Happiness		Sadness		Pain	
Activity	Mean	SD	Mean	SD	Mean	SD
Personal care (n=12,567)	3.70	(1.46)	1.01	(4.31)	1.28	(3.33)
Leisure (n=19,688)	3.67	(1.44)	0.95	(3.05)	1.18	(2.13)
Market work (n=8,948)	3.50	(1.36)	0.84	(2.48)	0.95	(1.87)
Housework (n=19,968)	3.56	(1.45)	0.81	(2.69)	1.22	(2.45)
Childcare (n=3,826)	4.00	(1.27)	0.70	(2.25)	0.76	(1.46)
Study (n=1,035)	3.35	(1.45)	0.71	(1.22)	0.74	(3.49)
Financial activities (n=1,214)	3.20	(1.45)	1.05	(1.60)	1.28	(2.80)
Adult care (n=694)	3.64	(1.33)	0.93	(1.50)	0.90	(1.47)
	Tiredness		Stress		Meaning	
Activity	Mean	SD	Mean	SD	Mean	SD
Personal care	2.53	(3.40)	1.62	(2.85)	4.49	(7.20)
Leisure	2.78	(4.62)	1.38	(3.27)	4.05	(7.10)
Market work	2.61	(2.21)	2.65	(2.78)	4.40	(5.37)
Housework	2.53	(2.92)	1.67	(2.83)	4.41	(6.75)
Childcare	2.93	(3.58)	1.95	(1.75)	5.19	(5.48)
Study	3.18	(1.69)	2.71	(3.35)	4.12	(1.80)
Financial activities	2.46	(1.84)	2.46	(4.97)	4.91	(8.49)
Adult care	2.68	(4.21)	1.88	(1.84)	4.89	(9.17)

Notes: Standard deviations in parentheses. All statistics are weighted using the individual diary weights provided in the dataset. The sample comprises individuals who reported well-being for at least one episode in the 2010, 2012, 2013, or 2021 waves of the ATUS Well-being Module. The table presents average values for six affective states—happiness, sadness, pain, tiredness, stress, and meaningfulness—measured during daily activities. Each feeling is recorded on a 0–6 scale, where 0 denotes the absence of the feeling and 6 indicates its maximum intensity. The analytic sample consists of 66,947 time-use episodes from 27,238 respondents with valid well-being data.

Table 3: Time in Financial Activities (minutes per day)

	(1)		(2)
Socio-Demographics		*Family income*	(2)
Male	-1.79***	$5,000 to $7,499	-0.35
	(0.20)		(0.86)
Age	0.16***	$7,500 to $9,999	-0.24
	(0.04)		(0.74)
Age squared	-0.10**	$10,000 to $12,499	-0.94
	(0.04)		(0.68)
Working full-time	-3.54***	$12,500 to $14,999	-0.66
	(0.26)		(0.70)
Secondary education	1.96***	$15,000 to $19,999	0.29
	(0.28)		(0.67)
University education	4.94***	$20,000 to $24,999	0.32
	(0.28)		(0.61)
Hispanic	-1.38***	$25,000 to $29,999	1.02
	(0.26)		(0.63)
Married	0.19	$30,000 to $34,999	1.76***
	(0.23)		(0.62)
White	4.91***	$35,000 to $39,999	1.12*
	(1.20)		(0.63)
Black	2.34*	$40,000 to $49,999	1.96***
	(1.22)		(0.62)
Indian	2.77**	$50,000 to $59,999	2.17***
	(1.33)		(0.63)
Asian	0.49	$60,000 to $74,999	2.29***
	(1.23)		(0.60)
Pacific	1.41	$75,000 to $99,999	3.04***
	(1.95)		(0.59)
Other races	6.04***	$100,000 to $149,999	3.21***
	(1.57)		(0.62)
Retired	-0.03***	$150,000 and over	3.74***
	(0.01)		(0.67)
Household size	-0.52***	–	–
	(0.12)		
# Children <18 in household	0.55***	–	–
	(0.15)		
Age of youngest child	-0.02	–	–
	(0.02)		
Constant		-0.08	
		(1.66)	
Year Fixed Effects		Yes	
State Fixed Effects		Yes	
Observations		191,038	
R-squared		0.017	

Notes: Robust standard errors in parentheses. All statistics are weighted using the individual diary weights provided in the dataset. The sample comprises individuals who are the household heads in the 2003-2023 ATUS. The time devoted to daily activities is measured in hours per day, and is computed by dividing by 7 the original minutes per day reported by the individuals. * p<0.1, ** p<0.05, *** p<0.01

Table 4: Feelings during financial activities

	(1) Happiness	(2) Sadness	(3) Pain	(4) Tiredness	(5) Stress	(6) Meaning
Episode Characteristics						
Personal care	0.27***	0.22***	0.21**	0.17*	-0.39**	0.17
	(0.054)	(0.072)	(0.081)	(0.088)	(0.159)	(0.282)
Housework	0.19***	-0.08	0.01	0.06	-0.49***	-0.09
	(0.053)	(0.058)	(0.073)	(0.083)	(0.157)	(0.277)
Childcare	0.33***	0.00	-0.09	0.47***	-0.28*	0.86***
	(0.059)	(0.073)	(0.079)	(0.117)	(0.159)	(0.324)
Adult care	0.07	0.01	-0.02	0.61**	-0.31*	-0.10
	(0.087)	(0.099)	(0.103)	(0.280)	(0.181)	(0.420)
Market work	0.10*	0.11	0.06	0.29***	0.12	0.07
	(0.058)	(0.071)	(0.078)	(0.102)	(0.163)	(0.302)
Study	-0.17**	0.05	-0.14	0.64***	0.59**	0.11
	(0.080)	(0.079)	(0.100)	(0.123)	(0.228)	(0.300)
Leisure	0.33***	0.08	0.00	0.23***	-0.64***	-0.21
	(0.053)	(0.062)	(0.073)	(0.083)	(0.157)	(0.280)
Duration	-0.02***	0.03***	0.05***	0.02	0.09***	0.09**
	(0.006)	(0.009)	(0.010)	(0.016)	(0.011)	(0.040)
Socio-Demographic characteristics						
Male	-0.04**	-0.16***	-0.14***	-0.42***	-0.34***	-0.21***
	(0.015)	(0.027)	(0.024)	(0.038)	(0.029)	(0.069)
Age	-0.02***	0.06***	0.08***	0.01	0.06***	0.03*
	(0.003)	(0.006)	(0.005)	(0.008)	(0.005)	(0.014)
Age squared	0.02***	-0.05***	-0.07***	-0.01	-0.05***	0.01
	(0.003)	(0.007)	(0.005)	(0.009)	(0.006)	(0.017)
Working full-time	0.08***	-0.22***	-0.36***	0.19***	-0.17***	0.12
	(0.018)	(0.037)	(0.031)	(0.042)	(0.033)	(0.084)
Secondary education	0.07**	-0.33***	-0.37***	-0.30***	-0.26***	0.07
	(0.030)	(0.075)	(0.054)	(0.096)	(0.077)	(0.148)
University education	0.18***	-0.44***	-0.58***	-0.42***	-0.24***	-0.17
	(0.028)	(0.069)	(0.051)	(0.088)	(0.072)	(0.131)
Hispanic	-0.01	0.25***	0.04	0.01	0.07	0.75***
	(0.026)	(0.054)	(0.040)	(0.066)	(0.057)	(0.136)
Married	0.14***	-0.12***	-0.13***	-0.06	-0.19***	0.01
	(0.019)	(0.034)	(0.031)	(0.050)	(0.039)	(0.089)
White	0.69*	0.01	-0.10	-0.38	0.54	-0.44
	(0.389)	(0.369)	(0.311)	(0.291)	(0.328)	(0.298)
Black	0.57	0.17	-0.03	-0.47	0.51	-0.10
	(0.389)	(0.373)	(0.313)	(0.293)	(0.333)	(0.304)
Indian	0.46	-0.20	-0.26	-0.67**	0.40	-0.62
	(0.401)	(0.379)	(0.327)	(0.315)	(0.355)	(0.412)
Asian	0.63	0.16	-0.14	-0.64**	0.52	0.03
	(0.390)	(0.370)	(0.313)	(0.296)	(0.333)	(0.335)
Pacific	0.72*	-0.32	-0.29	-0.62*	0.53	-0.63*
	(0.412)	(0.389)	(0.375)	(0.351)	(0.397)	(0.364)

Notes: Robust standard errors in parentheses. All statistics are weighted using the weights provided in the dataset. The sample comprises episodes from individuals who reported well-being for at least one episode in the 2010, 2012, 2013, or 2021 waves of the ATUS Well-being Module. The analytic sample consists of 27,238 respondents with valid well-being data. * p<0.1, ** p<0.05, *** p<0.01

Table 4 cont´: Feelings during financial activities

	(1) Happiness	(2) Sadness	(3) Pain	(4) Tiredness	(5) Stress	(6) Meaning
Other races	0.59	0.28	0.16	-0.28	0.60*	-0.41
	(0.393)	(0.413)	(0.325)	(0.328)	(0.337)	(0.318)
Retired	0.00	0.00***	0.00***	0.00**	0.00***	0.00
	(0.000)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)
Household size	0.01	0.02*	0.03**	0.07***	0.02	0.01
	(0.010)	(0.015)	(0.012)	(0.021)	(0.018)	(0.036)
Number of children <18	0.00	-0.04**	-0.06***	-0.05**	0.03	0.09
	(0.012)	(0.018)	(0.016)	(0.027)	(0.026)	(0.055)
Age of youngest child	-0.00	-0.01***	-0.01***	-0.00	-0.01**	-0.01
	(0.002)	(0.002)	(0.002)	(0.004)	(0.003)	(0.007)
Family income						
$5,000 to $7,499	-0.13	0.48	0.47***	-0.08	0.15	0.17
	(0.083)	(0.349)	(0.154)	(0.269)	(0.156)	(0.316)
$7,500 to $9,999	-0.08	0.21	0.27*	-0.08	0.08	0.13
	(0.077)	(0.249)	(0.141)	(0.263)	(0.138)	(0.303)
$10,000 to $12,499	-0.10	0.05	0.26*	-0.11	0.13	0.10
	(0.073)	(0.198)	(0.137)	(0.243)	(0.126)	(0.274)
$12,500 to $14,999	-0.09	-0.12	0.15	-0.13	0.10	0.03
	(0.073)	(0.166)	(0.131)	(0.236)	(0.124)	(0.263)
$15,000 to $19,999	-0.10	-0.15	0.07	-0.17	0.13	0.01
	(0.071)	(0.147)	(0.126)	(0.219)	(0.122)	(0.245)
$20,000 to $24,999	-0.06	-0.18	0.03	-0.18	0.08	-0.01
	(0.066)	(0.129)	(0.117)	(0.204)	(0.113)	(0.225)
$25,000 to $29,999	-0.04	-0.22*	0.00	-0.23	0.08	-0.03
	(0.062)	(0.120)	(0.109)	(0.192)	(0.108)	(0.210)
$30,000 to $34,999	-0.02	-0.24**	-0.03	-0.26	0.06	-0.04
	(0.059)	(0.117)	(0.105)	(0.183)	(0.102)	(0.199)
$35,000 to $39,999	-0.01	-0.26**	-0.06	-0.30	0.04	-0.05
	(0.057)	(0.114)	(0.102)	(0.177)	(0.100)	(0.191)
$40,000 to $49,999	0.03	-0.29**	-0.11	-0.36*	0.00	-0.07
	(0.053)	(0.111)	(0.096)	(0.161)	(0.095)	(0.181)
$50,000 to $59,999	0.07	-0.34***	-0.20*	-0.41**	-0.03	-0.08
	(0.051)	(0.111)	(0.097)	(0.161)	(0.096)	(0.181)
$60,000 to $74,999	0.09*	-0.38***	-0.25**	-0.45**	-0.08	-0.11
	(0.048)	(0.110)	(0.095)	(0.157)	(0.093)	(0.176)
$75,000 to $99,999	0.14***	-0.42***	-0.34***	-0.48***	-0.19**	-0.12
	(0.046)	(0.108)	(0.092)	(0.154)	(0.090)	(0.170)
$100,000 to $149,999	0.18***	-0.46***	-0.42***	-0.50***	-0.29***	-0.15
	(0.044)	(0.107)	(0.090)	(0.151)	(0.089)	(0.168)
$150,000 and over	0.21***	-0.50**	-0.52***	-0.51**	-0.39***	-0.17
	(0.062)	(0.219)	(0.103)	(0.243)	(0.112)	(0.176)
Constant	2.69***	-0.01	-0.20	3.36***	0.55	2.73***
	(0.404)	(0.456)	(0.359)	(0.441)	(0.403)	(0.579)
Year FE	yes	yes	yes	yes	yes	yes
State FE	yes	yes	yes	yes	yes	yes
Location FE	yes	yes	yes	yes	yes	yes
With whom FE	yes	yes	yes	yes	yes	yes
Observations	66,947	66,947	66,947	66,947	66,947	66,947
R-squared	0.043	0.022	0.053	0.014	0.032	0.016

Notes: Robust standard errors in parentheses. All statistics are weighted using the weights provided in the dataset. The sample comprises episodes from individuals who reported well-being for at least one episode in the 2010, 2012, 2013, or 2021 waves of the ATUS Well-being Module. The analytic sample consists of 27,238 respondents with valid well-being data. * p<0.1, ** p<0.05, *** p<0.01

A Appendix

Table A1: Time use variables and activity codes

Time-use variable	**Activity codes**
Personal care:	10101, 10102, 10199, 10201, 10299, 10301, 10399, 10401, 10499, 10501, 10599, 19999, 80401, 80402, 80403, 80499, 80501, 80502, 80599, 110101, 110201, 110299, 119999, 180101, 180199, 180804, 180805, 180899, 181101, 181199
Housework:	20101, 20102, 20103, 20104, 20199, 20201, 20202, 20203, 20299, 20301, 20302, 20303, 20399, 20401, 20402, 20499, 20501, 20502, 20599, 20601, 20602, 20603, 20699, 20701, 20799, 20801, 20899, 20903, 20904, 20905, 20999, 29999, 40501, 40502, 40503, 40504, 40505, 40506, 40507, 40508, 40599, 49999, 70101, 70102, 70103, 70104, 70105, 70199, 70201, 70299, 70301, 70399, 79999, 80301, 80302, 80399, 80601, 80602, 80699, 80701, 80702, 80799, 80801, 89999, 90101, 90102, 90103, 90104, 90199, 90201, 90202, 90299, 90301, 90302, 90399, 90401, 90402, 90499, 90501, 90502, 90599, 99999, 100101, 100102, 100199, 100201, 100299, 100303, 100304, 100399, 100401, 100499, 109999, 180201, 180202, 180203, 180204, 180205, 180206, 180207, 180208, 180209, 180299, 180701, 180702, 180703, 180704, 180705, 180799, 180801, 180803, 180806, 180807, 180901, 180902, 180903, 180904, 180905, 180999, 181001, 181002, 181099
Financial activities:	20901, 20902, 80201, 80202, 80203, 80299, 100103, 180802
Childcare:	30101, 30102, 30103, 30104, 30105, 30106, 30107, 30108, 30109, 30110, 30111, 30112, 30199, 30201, 30202, 30203, 30204, 30299, 30301, 30302, 30303, 30399, 30401, 30402, 30403, 30404, 30405, 30499, 40101, 40102, 40103, 40104, 40105, 40106, 40107, 40108, 40109, 40110, 40111, 40112, 40199, 40201, 40202, 40203, 40204, 40299, 40301, 40302, 40303, 40399, 80101, 80102, 80199, 180301, 180302, 180303, 180304, 180401, 180402, 180403, 180404
Adult care:	30501, 30502, 30503, 30504, 30599, 39999, 40401, 40402, 40403, 40404, 40405, 40499, 180305, 180306, 180307, 180399, 180405, 180406, 180407, 180499
Market work:	50101, 50102, 50103, 50104, 50199, 50201, 50202, 50203, 50204, 50205, 50299, 50301, 50302, 50303, 50304, 50305, 50399, 50401, 50403, 50404, 50405, 50499, 59999, 180501, 180502, 180503, 180504, 180599
Study:	60101, 60102, 60103, 60104, 60199, 60201, 60202, 60203, 60204, 60299, 60301, 60302, 60303, 60399, 60401, 60402, 60403, 60499, 69999, 180601, 180602, 180603, 180604, 180605, 180699
Leisure:	120101, 120199, 120201, 120202, 120299, 120301, 120302, 120303, 120304, 120305, 120306, 120307, 120308, 120309, 120310, 120311, 120312, 120313, 120399, 120401, 120402, 120403, 120404, 120405, 120499, 120501, 120502, 120503, 120504, 120599, 129999, 130101, 130102, 130103, 130104, 130105, 130106, 130107, 130108, 130109, 130110, 130111, 130112, 130113, 130114, 130115, 130116, 130117, 130118, 130119, 130120, 130121, 130122, 130123, 130124, 130125, 130126, 130127, 130128, 130129, 130130, 130131, 130132, 130133, 130134, 130135, 130136, 130199, 130201, 130202, 130203, 130204, 130205, 130206, 130207, 130209, 130210, 130211, 130212, 130213, 130214, 130215, 130216, 130217, 130218, 130219, 130220, 130221, 130222, 130223, 130224, 130225, 130226, 130227, 130229, 130230, 130231, 130232, 130299, 130301, 130302, 130399, 130401, 130402, 139999, 140101, 140102, 140103, 140104, 140105, 149999, 150101, 150102, 150103, 150104, 150105, 150106, 150199, 150201, 150202, 150203, 150204, 150299, 150301, 150302, 150399, 150401, 150402, 150499, 150501, 150599, 150601, 150602, 150699, 150701, 150799, 150801, 150899, 159999, 160101, 160102, 160103, 160104, 160105, 160106, 160107, 160108, 160199, 160201, 160299, 169999, 181201, 181202, 181203, 181204, 181205, 181206, 181299, 181301, 181302, 181399, 181401, 181499, 181501, 181599, 181601, 181699, 181801, 181899, 189999

Notes: See www.atusdata.org for a description of the activity codes.

Table A2: Descriptive statistics

	Mean	**SD**
Socio-demographic characteristics		
Male	0.50	(0.50)
Age	44.83	(18.56)
Working full-time	0.50	(0.50)
Retired	84.38	(34.91)
Primary education	0.17	(0.37)
Secondary education	0.29	(0.45)
Tertiary education	0.54	(0.50)
Hispanic	0.16	(0.36)
Married	0.52	(0.50)
White	0.81	(0.39)
Black	0.12	(0.33)
Indian	0.01	(0.09)
Asian	0.04	(0.21)
Pacific	0.00	(0.05)
Other races	0.01	(0.12)
Household size	2.98	(1.56)
# children <18 in household	0.73	(1.12)
Age of youngest child in household	3.15	(5.27)
Family income		
Less than $5,000	0.02	(0.14)
$5,000 to $7,499	0.01	(0.12)
$7,500 to $9,999	0.02	(0.13)
$10,000 to $12,499	0.03	(0.16)
$12,500 to $14,999	0.02	(0.15)
$15,000 to $19,999	0.04	(0.20)
$20,000 to $24,999	0.05	(0.22)
$25,000 to $29,999	0.05	(0.22)
$30,000 to $34,999	0.06	(0.23)
$35,000 to $39,999	0.05	(0.23)
$40,000 to $49,999	0.08	(0.28)
$50,000 to $59,999	0.09	(0.28)
$60,000 to $74,999	0.11	(0.31)
$75,000 to $99,999	0.14	(0.34)
$100,000 to $149,999	0.12	(0.33)
$150,000 and over	0.11	(0.31)
Number of observations	191,038	

Notes: Standard deviations in parentheses. All statistics are weighted using the individual diary weights provided in the dataset. The sample comprises individuals who are the household heads in the 2003-2023 ATUS.

Table A3: Summary Statistics

Variable	**Mean**	**SD**
Male	0.50	(0.50)
Age	44.00	(18.36)
Working full-time	0.49	(0.50)
Retired	85.79	(33.47)
Primary education	0.15	(0.36)
Secondary education	0.27	(0.44)
Tertiary education	0.57	(0.49)
Hispanic	0.14	(0.35)
Married	0.50	(0.50)
White	0.82	(0.38)
Black	0.11	(0.31)
Indian	0.01	(0.08)
Asian	0.05	(0.21)
Pacific	0.00	(0.04)
Other races	0.01	(0.11)
Household size	2.99	(1.57)
Number of children ¡18 in household	0.72	(1.12)
Age of youngest child in household	3.23	(5.38)
Family income		
Less than $5,000	0.02	(0.14)
$5,000 to $7,499	0.01	(0.12)
$7,500 to $9,999	0.02	(0.13)
$10,000 to $12,499	0.02	(0.16)
$12,500 to $14,999	0.02	(0.16)
$15,000 to $19,999	0.04	(0.20)
$20,000 to $24,999	0.05	(0.21)
$25,000 to $29,999	0.05	(0.22)
$30,000 to $34,999	0.05	(0.23)
$35,000 to $39,999	0.05	(0.22)
$40,000 to $49,999	0.09	(0.28)
$50,000 to $59,999	0.08	(0.28)
$60,000 to $74,999	0.11	(0.31)
$75,000 to $99,999	0.13	(0.34)
$100,000 to $149,999	0.13	(0.34)
$150,000 and over	0.11	(0.31)
Number of observations	27,328	

Notes: Standard deviations in parentheses. The sample comprises individuals who reported well-being for at least one episode in the 2010, 2012, 2013, or 2021 waves of the ATUS Well-being Module. The analytic sample consists of 27,238 respondents with valid well-being data The unit of analysis is the respondent, with each respondent contributing, on average, approximately three episodes. All statistics are weighted using the individual diary weights provided in the dataset.