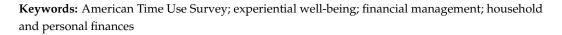*Article*

Managing Household Finances: How Engaging in Financial Management Activities Relates to the Experiential Well-Being of Americans

Thomas Korankye [1,*] and Blain Pearson [2]

1   Personal and Family Financial Planning Program, University of Arizona, Tucson, AZ 85721, USA
2   Department of Finance and Economics, Coastal Carolina University, Conway, SC 29526, USA
*   Correspondence: korankye@arizona.edu

Abstract: This study examines how engagement in financial management activities influences well-being using nationally representative data (N = approximately 30,000) from the U.S. Bureau of Labor Statistics' American Time Use Survey and its associated Well-Being Modules. The current study estimates ordered probit models for several measures of experiential well-being, which consider how meaningful an activity is for a household and how happy, sad, tired, in pain, and stressed respondents felt during the activity. Controlling for a standard set of demographic and socioeconomic factors, the econometric results indicate that households report lower utility gains (lower happiness, greater sadness, and higher stress) when engaging in financial management activities relative to other activities. Furthermore, the results suggest increases in household time allocated toward performing financial management activities is associated with a lower (higher) likelihood of being very happy (very stressed) compared to other activities. The findings strongly indicate that households perceive financial management activities as vexing, reinforcing the need for financial stewardship support to promote household well-being.

Keywords: American Time Use Survey; experiential well-being; financial management; household and personal finances

1. Introduction

Time is one of the essential inputs in a household's production function. The United States Bureau of Labor Statistics (2021) reports that 71.1% (86.2%) of men (women) allocated time for household production activities in 2021. Given that time is constrained, it requires judicious allocation across an array of diverse production activities to maximize utility. Households perform these functions, such as financial management, because they are considered essential to their well-being. Among the household activities that may be performed, the present study focuses on financial management activities. Specifically, this study aims to examine the nexus between engagement in financial management activities, relative to other activities, and experienced well-being using the American Time Use Survey (ATUS).

Scholars involved in time-use studies concentrate on the effects of time allocation on subjective well-being (Krueger et al. 2009). In the United States, time-use researchers have primarily used the ATUS and Well-Being Modules (WBM) and the Panel Study of Income Dynamics' Disability and Use of Time Supplement to examine a variety of activities and experiential well-being. The different types of activities studied include job search (Krueger and Mueller 2012), mundane chores (Krueger 2007), pet care (Kalenkoski and Korankye 2021), and caregiving (Kalenkoski 2017; Kalenkoski and Oumtrakool 2017; Kalenkoski et al. 2021). Although studies have shed light on time use and its association with well-being, time-use data has yet to explore the connection between well-being gains and household finances. Moreover, while many researchers use evaluative well-being (Stone et al. 2018),

this study focuses on experiential well-being measures. Evaluative well-being (e.g., life satisfaction) and experiential well-being measures are two aspects of subjective well-being. However, measures of experiential well-being are concerned with the joys, miseries, pains, and emotions felt during everyday activities (Stone et al. 2018). These measures "capture affective reactions soon after they occur" (Lucas et al. 2019, p. 1), and, comparably, is distinct from other subjective well-being evaluations.

The current study differs from Pearson et al. (2021), which examined the relationship between household financial specialization and utility, as measured by financial, income, and life satisfaction. This study also differs from Baryła-Matejczuk et al. (2020) which examined the association among financial management behaviors, life satisfaction, and relationship quality. Rather than focusing on the utility gained by the household through financial specialization or management behaviors, the current study examines the meaning-fulness, happiness, tiredness, stress, sadness, and pain experienced by a household while performing financial management activities compared to other activities, such as childcare, volunteering, and paid work. This study utilizes a similar methodology as Kalenkoski and Korankye (2021) and Kalenkoski et al. (2021), which concluded experiential well-being is associated with performing varying household activities. However, both studies do not examine financial management, making them distinct from the current study.

Studies have concluded that the complexities and breadth of the household financial landscape is one of the major challenges confronting households (Hastings et al. 2013; Pearson and Lee 2022). Exacerbating this challenge is the widespread nature of financial illiteracy (Lusardi 2008). A key underpinning of these findings has been the recommen-dation for increased financial education to empower households to navigate the financial environment successfully (Barua et al. 2018; Mitchell and Lusardi 2015; Pearson 2020). Others have also suggested intervention strategies, such as household members specializ-ing in activities in which they have comparative advantage and outsourcing other goods and services from the market for financial advice (Pearson et al. 2021). However, not all households are willing to seek, or are capable of seeking, financial advice, even when the engagement is beneficial (Finke 2013; Pearson 2022). The significance of the current study is to provide empirical evidence on the emotional and psychological effects households experience when performing financial management activities. In addition, implications for policymakers, financial educators, and organizations interested in household finances and consumer well-being are discussed.

The next two sections of the paper provide the research methods, the respective theo-retical motivation, and the statistical results. The final two sections present the discussion and conclusion of the paper.

2. Methods and Theoretical Motivation

2.1. Data

This study utilizes pooled cross-sectional datasets from the 2010, 2012, and 2013 Amer-ican Time Use Survey (ATUS) and its associated Well-Being Modules (WBM) to examine the association between engaging in financial management activity and experiential well-being. We use the aforementioned waves because these waves are the only waves that contain the variables of interest at the time of writing the paper. As a nationally representative dataset, the ATUS is administered by the U.S. Census Bureau with sponsorship from the U.S. Bureau of Labor Statistics. The survey collects data on the amount of time each randomly selected person, aged 15 and over, spends performing various activities during a 24-h period. The ATUS requires study participants to report on each activity, and for how long, from 4 a.m. on the day prior to 4 a.m. on the interview day.

The WBM randomly selects three reported activities and asks participants to respond to a series of questions that aim at measuring their experiential well-being with each activity. Thus, the unit of observation for this study is activity episode.

The analysis uses a sample size of 90,879 activity episodes obtained from 30,915 participants. As suggested by Fay and Train (1995), the study applies activity weights

using the successive difference replicates method (SDR) to account for the multiple activity episodes per person and obtains a representative sample of all activity episodes.

2.2. Dependent Variable

Experiential well-being, as defined in the WBM, serves as the dependent variable. We measure this variable using six reported indicators comprising of meaning, happy, tired, stress, sad, and pain. The response to each well-being measure is ordered, ranging from 0 to 6. A "0" response indicates a person experienced no meaningfulness, happiness, tiredness, stress, sadness, and pain when performing the activity. In contrast, a 6 response suggests the person felt the performed activity was very meaningful. It also means the person felt very happy, tired, stressed, sad, or in pain when performing the activity.

2.3. Main Explanatory Variables

Engagement in financial management activity is the key explanatory variable. We measure this variable in two ways. The first is an indicator variable for whether the reported activity is coded as a financial management activity. The second is the amount of time a participant spends engaging in financial management activity. If the activity is not a financial management activity, 0 min are recorded. Examples of financial management activities recorded in the survey dataset include making a budget, checking receipts against bank statements, trading stocks, and researching investments.

2.4. Other Explanatory Variables

We include standard controls measures, comprising age, gender, education, family income, number of children, number of household members, marital status, race, health status, Hispanic ethnicity, labor-force status, and year dummies. These variables account for preferences, opportunities, constraints, and macroeconomic conditions. Prior time-use studies, such as Kalenkoski and Korankye (2021) and Kalenkoski et al. (2021), also included these variables in their econometric models.

2.5. Test of Multicollinearity

We did not find multicollinearity to be a concern among the explanatory variables after computing variance inflation factors (VIFs). The VIFs for all the non-categorical variables fell below 5, while those of the categorical variables with more than two categories did not exceed 7.

2.6. Model

We estimated 12 ordered probit models for each of the measures of experiential well-being (meaning, happiness, sadness, tiredness, stress, and pain) and financial management activity (financial management dummy variable and minutes spent in performing financial management function variable) as follows:

$$WBM_i^* = \beta_0 + \beta_1 FinMgtActivity_j + \beta_x X + e$$

$$WBM_i = \begin{cases} 0 \: if \: WBM_i^* \leq u_0 \, (Not \: at \: all) \\ 1 \: if \: u_0 < WBM_i^* \leq u_1 \\ 2 \: if \: u_1 < WBM_i^* \leq u_2 \\ 3 \: if \: u_2 < WBM_i^* \leq u_3 \\ 4 \: if \: u_3 < WBM_i^* \leq u_4 \\ 5 \: if \: u_4 < WBM_i^* \leq u_5 \\ 6 \: if \: WBM_i^* > u_5 \, (Very) \end{cases}$$

where *i* refers to the particular well-being measure (*i* = happiness, meaning, pain, sadness, stress, and tiredness); *j* refers to the financial management activity measure (*j* = financial management activity dummy variable; minutes spent on financial management activity variable); WBM_i^* and WBM_i represent the latent measure and observed report of well-

being of type *i*, respectively; *FinMgtActivity$_j$* is the key financial management explanatory variable; *X* is the matrix of control variables; B_0 and B_1 are scalar parameters to be estimated; B_X is a vector of parameters to be estimated. The error term, *e*, is assumed to follow the standard normal distribution. We computed average marginal effects to indicate the associations of the financial management activity and control variables with the observed dependent variables.

2.7. Additional Analyses

The study performed additional analyses using multiple linear regressions through ordinary least square (OLS) estimations for robustness checks. The additional analyses included subsample analyses for different groups (example, married households).

2.8. Theoretical Motivation

Standard economic theory suggests that households optimize time allocation to perform activities, such as paid work, leisure, and household production. Specific to household production, the household production model suggests that households produce optimal goods and services, given their unique budget, time, and other resource constraints (Becker 1965; Michael and Becker 1973). The goods and services produced provide household utility. Thus, the household chooses the appropriate amounts of time and resources to spend in producing them to optimize this utility, subject to the associated constraints.

Financial management is a commodity that can be produced at home, outsourced to financial professionals, or both. The household production model suggests that engagement in financial management is done with the intent of increasing the well-being of the household. As suggested by Pearson et al. (2021), the resulting increase in well-being can take many forms, such as increases in financial organization, ensuring on time bill payment, increases in asset returns, and better retirement preparation. This paper tests the hypothesis that engagement in financial management activities is associated positively with experiential well-being compared to other activities.

2.9. Methodological Limitations

The study does not use dyadic data. It includes time-use data on only one household member. Important explanatory variables, such as financial knowledge, financial education, and financial advice seeking behavior, are not available for inclusion in the model. Finally, the analyses suggest association rather than causation.

3. Results

3.1. Descriptive Statistics

Table 1 reveals the descriptive statistics of the dependent variables. The table indicates the utility generated from performing the activity episodes based on meaning, happy, pain, sad, stress, and tired well-being measures. Specifically, Table 1 reveals that 38.51% of activity episodes are very meaningful to the doer, while 29.62% of activity episodes make the doer very happy. The activity episodes which make the doer report not at all meaningful and happy are 7.32% and 4.49%, respectively. Few activity episodes make the doer report very painful (2.64%), sad (1.55%), stressed (3.67%), and tired (6.12%). On the contrary, many activity episodes make the doer report not at all painful (68%), sad (76.47%), stressed (49.72%), and tired (29.55).

Table 2 shows the descriptive statistics for the main and other explanatory variables. Of the randomly selected activities, 0.23% are financial management activities. The average number of minutes spent on these financial management activities amounts to 0.31 min when activity episodes with zero minutes are included. Excluding activity episodes with zero minutes, the statistics show that a large amount of 135.49 min is spent on financial management activities. For persons performing the activity episodes, the average age is 44 years. The distributions of the activity episodes include 51% performed by married people, 52% performed by females, 30% performed by individuals with a college degree

or more, 81% performed by Whites, 15% performed by Hispanics, 59% performed by employed persons, 48% performed by those with family income below $50,000, and 83% performed by people reporting health status to be at least good.

Table 1. Means of Activities Rated at Different Levels of Meaning, Happiness, Pain, Sadness, Stress, and Tiredness.

	0 (Not at All)	1	2	3	4	5	6 (Very)
Meaning	0.0732 (0.0017)	0.0319 (0.0012)	0.0617 (0.0016)	0.1346 (0.0024)	0.1381 (0.0023)	0.1755 (0.0026)	0.3851 (0.0036)
Happy	0.0449 (0.0015)	0.0214 (0.0010)	0.0559 (0.0017)	0.1577 (0.0024)	0.1883 (0.0028)	0.2357 (0.0034)	0.2962 (0.0035)
Pain	0.6800 (0.0032)	0.0667 (0.0018)	0.0730 (0.0018)	0.0674 (0.0019)	0.0520 (0.0015)	0.0345 (0.0013)	0.0264 (0.0012)
Sad	0.7647 (0.0033)	0.0703 (0.0019)	0.0575 (0.0018)	0.0465 (0.0013)	0.0275 (0.0010)	0.0180 (0.0010)	0.0155 (0.0009)
Stress	0.4972 (0.0043)	0.1085 (0.0023)	0.1213 (0.0024)	0.1077 (0.0023)	0.0778 (0.0019)	0.0508 (0.0020)	0.0367 (0.0015)
Tired	0.2955 (0.0035)	0.0929 (0.0021)	0.1486 (0.0025)	0.1697 (0.0028)	0.1382 (0.0024)	0.0939 (0.0020)	0.0612 (0.0016)

Notes: Data source is the 2010, 2012, & 2013 ATUS & WBM. The means are shown above the standard errors which are in parentheses. Survey replicate weights are applied at the activity level. N = 30,915 activities.

Table 2. Means and Standard Errors for the Explanatory Variables.

	Mean	Standard Error
Activity indicator variable		
Financial management	0.0023	0.0003
Activity time-use variable		
Time spent on financial management (in minutes)	0.3086 [a]	0.0796
Age	44.3141	0.0881
Age top coded indicator variable	0.0335	0.0011
Number of household members	2.9908	0.0135
Marital status indicator variables		
Married	0.5143	0.0037
Widowed	0.0533	0.0014
Divorced	0.0968	0.0020
Separated	0.0199	0.0010
Never married	0.3156	0.0032
Female (=1 if yes)	0.5197	0.0025
Highest education completed indicator variables		
Less than high school	0.1652	0.0030
High school	0.2860	0.0033
Some college	0.2527	0.0031
Bachelor's degree	0.1883	0.0034
Postgraduate degree	0.1078	0.0024
White race (=1 if yes)	0.8126	0.0028

Table 2. *Cont.*

	Mean	Standard Error
Hispanic ethnicity (=1 if yes)	0.1472	0.0017
Labor force status indicator variables		
Unemployed	0.0671	0.0024
Employed	0.5855	0.0040
Not in labor force	0.3233	0.0037
Number of children under 18	0.7642	0.0085
Family income category indicator variables		
Less than $50,000	0.4791	0.0045
$50,000 to less than $100,000	0.3184	0.0044
$100,000 and over	0.2026	0.0036
Health status		
Excellent	0.1875	0.0036
Very good	0.3364	0.0036
Good	0.3063	0.0039
Fair	0.1302	0.0025
Poor	0.0396	0.0017

Notes: Data source is the 2010, 2012, & 2013 ATUS & WBM. Survey weights at the activity level are applied. N = 30,915 activities. [a] The average time spent on financial management for those who engage in financial management activity on the diary day is 135.49 min.

3.2. Empirical Results

Tables 3 and 4 provide the estimated average marginal effects from the ordered probit model regression on the relationship between households' involvement in financial management activities and experiential well-being. While Table 3 contains the results for the incidence of financial management activities, Table 4 contains the results for the time spent engaging in financial management activities.

Table 3. Ordered Probit Marginal Effects of the Incidence of Financial Management Activity on Experiential Well-being—Full Sample.

	Meaning	Happy	Pain	Sad	Stress	Tired
Not at all 0	−0.0014 (0.0147)	0.0761 *** (0.0200)	−0.0265 (0.0378)	−0.1334 ** (0.0394)	−0.2444 *** (0.0412)	0.0467 (0.0387)
1	−0.0004 (0.0045)	0.02081 *** (0.0045)	0.0028 (0.0037)	0.0205 *** (0.0045)	−0.0129 * (0.0065)	0.0042 (0.0028)
2	−0.0007 (0.0072)	0.0404 *** (0.0078)	0.0043 (0.0060)	0.0246 *** (0.0063)	0.0093 ** (0.0037)	0.0004 (0.0007)
3	−0.0010 (0.0106)	0.0573 *** (0.0075)	0.0054 (0.0076)	0.0274 ** (0.0079)	0.0378 *** (0.0028)	−0.0083 (0.0076)
4	−0.0005 (0.0051)	0.0078 * (0.0035)	0.0053 (0.0076)	0.0212 ** (0.0066)	0.0559 *** (0.0087)	−0.0141 (0.0116)
5	0.0001 (0.0010)	−0.0514 *** (0.0135)	0.0043 (0.0063)	0.0176 ** (0.0059)	0.0620 *** (0.0131)	−0.0147 (0.0114)
Very 6	0.0010 (0.0409)	−0.1510 *** (0.0226)	0.0044 (0.0067)	0.0222 ** (0.0084)	0.0924 ** (0.0272)	−0.0143 (0.0104)

Notes: Data source is the 2010, 2012, & 2013 ATUS & WBM. The marginal effects are above the standard errors which are in parentheses. Survey replicate weights are applied at the activity level. * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$. Each model includes the following continuous variables: age, number of household members, and number of children. In addition to the continuous variables, each model includes these indicator variables: female, education, family income, marital status, education, white race, Hispanic ethnicity, labor force status, health status, and year dummies as standard controls. For brevity, the results for these controls are not shown. N = 30,915.

Table 4. Ordered Probit Marginal Effects of Minutes Spent on Financial Management Activity on Experiential Well-being—Full Sample.

	Meaning	Happy	Pain	Sad	Stress	Tired
Not at all 0	−0.0002 (0.0001)	0.0002 * (0.0001)	0.0000 (0.0002)	−0.0004 (0.0003)	−0.0012 ** (0.0004)	0.0003 (0.0003)
1	−0.0000 (0.0000)	0.0001 * (0.0000)	−0.0000 (0.0000)	0.0001 (0.0001)	0.0000 ** (0.0000)	0.0000 (0.0000)
2	−0.0001 (0.0001)	0.0001 * (0.0001)	−0.0000 (0.0000)	0.0001 (0.0001)	0.0002 ** (0.0001)	0.0000 (0.0000)
3	−0.0001 (0.0001)	0.0003 * (0.0001)	−0.0000 (0.0001)	0.0001 (0.0001)	0.0003 ** (0.0001)	−0.0000 (0.0001)
4	−0.0001 (0.0000)	0.0001 * (0.0000)	−0.0000 (0.0000)	0.0001 (0.0001)	0.0003 ** (0.0001)	−0.0001 (0.0001)
5	0.0000 (0.0000)	−0.0001 * (0.0000)	−0.0000 (0.0000)	0.0000 (0.0000)	0.0002 ** (0.0001)	−0.0001 (0.0001)
Very 6	0.0004 (0.0003)	−0.0007 * (0.0003)	−0.0000 (0.0000)	0.0000 (0.0000)	0.0003 ** (0.0001)	−0.0001 (0.0001)

Notes: Data source is the 2010, 2012, & 2013 ATUS & WBM. The marginal effects are above the standard errors which are in parentheses. Survey replicate weights are applied at the activity level. * $p < 0.05$; ** $p < 0.01$. Each model includes the following continuous variables: age, number of household members, and number of children. In addition to the continuous variables, each model includes these indicator variables: female, education, family income, marital status, education, white race, Hispanic ethnicity, labor force status, health status, and year dummies as standard controls. For brevity, the results for these controls are not shown. N = 30,915.

Table 3 shows that the incidence of financial management activity is associated with a 0.15 ($p < 0.001$) lower probability of being in the highest happiness category and a 0.05 ($p < 0.001$) lower probability of being in the second highest happiness category, compared to other activities. Conversely, it is associated with higher probabilities of being in the four lowest categories on the happiness scale. Relative to other activities, the incidence of financial management activity is also associated with higher probabilities of being in the five highest categories of sadness and a 0.13 ($p < 0.01$) lower probability of being not at all sad (that is, a score of 0 on the sadness scale). Compared to other activities, the decision to engage in financial management activities are associated with 0.24 ($p < 0.001$) and 0.01 ($p < 0.05$) lower probabilities of being in the two lowest categories of stress (that is, scores of 0 and 1 on the stress scale, respectively). The decision to engage in financial management activities, however, is associated with higher probabilities of being in the five highest categories of stress. For instance, it is associated with a 0.09 ($p < 0.01$) higher probability of being very stressed (that is, a score of 6 on the stress scale) relative to other activities.

Table 4 shows that the amount of time spent on financial management activities has statistically significant relationships with the well-being measures of happiness and stress. For instance, increasing the minutes spent on financial management activities by 100 is associated with a 0.07 ($p < 0.05$) lower probability of being very happy (that is, a score of 6 on the happiness scale). In addition, increasing the minutes spent on financial management activities by 100 is associated with a 0.12 ($p < 0.01$) lower probability of being not at all stressed (that is, a score of 0 on the stress scale).

3.3. Sensitivity Analysis for Married Households

Married households could benefit from increased output through specialization. Pearson et al. (2021) show that a household that selects a member to specialize in financial management functions experiences increased utility. This notwithstanding, Pearson et al.'s (2021) study observes that only 7% of married households engage in financial specialization at the highest level. The findings from Pearson et al. (2021) suggest that many households do not practice financial specialization. Thus, the current study performs sensitivity analysis for a sample of married households to find out whether

the findings on financial management and experiential well-being for the full sample are similar to the sample for married households. We postulate that married households also experience negative well-being from performing financial management functions relative to other activity episodes because they are not immune from the complexities in the financial environment, especially given their low levels of financial specialization.

Tables 5 and 6 contain the empirical results for the incidence of financial management activity and the amount of time spent engaging in financial management functions, respectively. Table 5 shows that the incidence of financial management activity is associated with a 0.20 ($p < 0.001$) lower probability of reporting very happy and a 0.11 ($p < 0.001$) higher probability of reporting not at all happy, compared to other activities. The results also show that married households engaging in financial management activity have a 0.02 ($p < 0.05$) and 0.10 ($p < 0.01$) higher probabilities of reporting very sad and stressed, respectively. They are also less likely to report not at all sad (marginal effect of -0.14, $p < 0.01$) and stressed (marginal effect of -0.27, $p < 0.001$). Unlike the results for the full sample, the results for married households show that the incidence of financial management activity is associated with a 0.03 ($p < 0.05$) lower probability of feeling very tired.

Table 5. Ordered Probit Marginal Effects of the Incidence of Financial Management Activity on Experiential Well-being—Married Sample.

	Meaning	Happy	Pain	Sad	Stress	Tired
Not at all 0	−0.0007 (0.0194)	0.1103 *** (0.0255)	−0.0173 (0.0580)	−0.1449 ** (0.0534)	−0.2721 *** (0.0520)	0.0910 † (0.0543)
1	−0.0002 (0.0066)	0.0274 *** (0.0050)	0.0019 (0.0060)	0.0224 *** (0.0061)	−0.0189 † (0.0104)	0.0078 ** (0.0028)
2	−0.0004 (0.0110)	0.0534 *** (0.0081)	0.0030 (0.0097)	0.0260 *** (0.0083)	0.0073 (0.0069)	−0.0006 (0.0029)
3	−0.0007 (0.0182)	0.0764 *** (0.0061)	0.0037 (0.0123)	0.0313 ** (0.0111)	0.0417 *** (0.0027)	−0.0172 (0.0119)
4	−0.0004 (0.0100)	0.0043 (0.0067)	0.0034 (0.0116)	0.0227 * (0.0088)	0.0623 *** (0.0107)	−0.0270 † (0.0157)
5	0.0000 (0.0000)	−0.0757 *** (0.0163)	0.0028 (0.0095)	0.0196 * (0.0084)	0.0717 *** (0.0179)	−0.0285 † (0.0149)
Very 6	0.0025 (0.0652)	−0.1961 *** (0.0207)	0.0026 (0.0089)	0.0229 * (0.0112)	0.1080 ** (0.0395)	−0.0255 * (0.0117)

Notes: Data source is the 2010, 2012, & 2013 ATUS & WBM. The marginal effects are above the standard errors which are in parentheses. Survey replicate weights are applied at the activity level. † $p < 0.10$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$. Each model includes the following continuous variables: age, number of household members, and number of children. In addition to the continuous variables, each model includes these indicator variables: female, education, family income, education, white race, Hispanic ethnicity, labor force status, health status, and year dummies as standard controls. For brevity, the results for these controls are not shown. N = 15,066.

Table 6 shows that the amount of time spent engaging in financial management activity is associated positively (negatively) with reporting very stressed (tired). Specifically, a 100-min increase in the amount of time a married household spends engaging in financial management activity is associated with a 0.02 ($p < 0.05$) higher probability of feeling very stressed and a 0.03 ($p < 0.01$) lower probability of reporting very tired. The results for married households are similar to that of the full sample, except that married households feel less tired when performing financial management activities than other activities.

Table 6. Ordered Probit Marginal Effects of Minutes Spent on Financial Management Activity on Experiential Well-being—Married Sample.

	Meaning	Happy	Pain	Sad	Stress	Tired
Not at all 0	−0.0002 (0.0001)	0.0002 (0.0001)	0.0004 (0.0004)	−0.0002 (0.0005)	−0.0012 * (0.0005)	0.0010 ** (0.0003)
1	−0.0001 (0.0000)	0.0001 (0.0000)	−0.0000 (0.0000)	0.0000 (0.0001)	0.0000 * (0.0000)	0.0001 ** (0.0000)
2	−0.0001 (0.0001)	0.0001 (0.0001)	−0.0001 (0.0001)	0.0000 (0.0001)	0.0002 * (0.0001)	0.0000 ** (0.0000)
3	−0.0002 (0.0001)	0.0003 (0.0002)	−0.0001 (0.0001)	0.0001 (0.0001)	0.0003 * (0.0001)	−0.0001 ** (0.0000)
4	−0.0001 (0.0001)	0.0001 (0.0001)	−0.0001 (0.0001)	0.0000 (0.0001)	0.0003 * (0.0001)	−0.0003 ** (0.0001)
5	0.0000 (0.0000)	−0.0001 (0.0001)	−0.0001 (0.0001)	0.0000 (0.0001)	0.0002 * (0.0001)	−0.0003 ** (0.0001)
Very 6	0.0007 (0.0005)	−0.0007 (0.0005)	−0.0001 (0.0001)	0.0000 (0.0001)	0.0002 * (0.0001)	−0.0003 ** (0.0001)

Notes: Data source is the 2010, 2012, & 2013 ATUS & WBM. The marginal effects are above the standard errors which are in parentheses. Survey replicate weights are applied at the activity level. * $p < 0.05$; ** $p < 0.01$. Each model includes the following continuous variables: age, number of household members, and number of children. In addition to the continuous variables, each model includes these indicator variables: female, education, family income, education, white race, Hispanic ethnicity, labor force status, health status, and year dummies as standard controls. For brevity, the results for these controls are not shown. N = 15,066.

3.4. Sensitivity Analysis through Linear Regression

Given that the experiential well-being variables take on values ranging from 0 (not at all) to 6 (very), the study performs sensitivity analyses using linear regression. We estimate the coefficients through ordinary least squares and show the results in Table 7 for the full sample and married subsample. We include additional subsample analyses for gender (male and female subsamples) and family income. The income sample comprises income 1 (income less than $50,000), income 2 (income from $50,000 to less than $100,000), and income 3 (income from $100,000 and over).

Table 7. Linear Regression of Experiential Well-being on Financial Management Activity (Incidence and Minutes Spent)—Sensitivity Analysis through Linear Regression.

	Meaning	Happy	Pain	Sad	Stress	Tired
Full sample: (N = 30,915)						
Indicator for financial management activity	−0.0057 (0.1777)	−0.8357 *** (0.1654)	0.1255 (0.1601)	0.4521 ** (0.1634)	1.1375 *** (0.2486)	−0.2144 (0.1856)
Time spent on financial management activity	0.0013 (0.0009)	−0.0031 * (0.0014)	−0.0002 (0.0010)	0.0018 (0.0017)	0.0058 *** (0.0017)	−0.0013 (0.0015)
Married sub-sample: (N = 15,066)						
Indicator for financial management activity	−0.0454 (0.2789)	−1.1298 *** (0.1865)	0.0908 (0.2416)	0.5084 * (0.2303)	1.3012 *** (0.3409)	−0.4155 † (0.2389)
Time spent on financial management activity	0.0020 (0.0012)	−0.0032 (0.0025)	−0.0012 (0.0011)	0.0010 (0.0022)	0.0054 * (0.0024)	−0.0035 *** (0.0009)

Table 7. *Cont.*

	Meaning	Happy	Pain	Sad	Stress	Tired
Female sub-sample: (N = 17,231)						
Indicator for financial management activity	0.0579 (0.2482)	−1.0288 *** (0.2306)	0.0604 (0.2049)	0.4455 ** (0.2049)	1.7154 *** (0.3272)	−0.0627 (0.2659)
Time spent on financial management activity	0.0025 *** (0.0006)	−0.0033 (0.0025)	−0.0012 (0.0009)	0.0003 (0.0015)	0.0070 † (0.0036)	−0.0017 (0.0019)
Male sub-sample: (N = 13,684)						
Indicator for financial management activity	−0.0990 (0.2468)	−0.5807 ** (0.1974)	0.2288 (0.2623)	0.4873 † (0.2773)	0.3484 (0.2148)	−0.3870 (0.2822)
Time spent on financial management activity	−0.0006 (0.0016)	−0.0027 ** (0.0010)	0.0020 (0.0014)	0.0046 * (0.0018)	0.0040 ** (0.0015)	−0.0004 (0.0022)
Income sub-sample						
Income 1: (N = 15,766)						
Indicator for financial management activity	0.1667 (0.2337)	−0.9544 ** (0.3038)	0.0251 (0.1741)	0.3702 † (0.2146)	1.3181 ** (0.4992)	0.0266 (0.3101)
Time spent on financial management activity	0.0009 (0.0013)	−0.0044 ** (0.0014)	0.0008 (0.0008)	0.0029 † (0.0017)	0.0079 ** (0.0023)	0.0012 (0.0020)
Income 2: (N = 9348)						
Indicator for financial management activity	−0.2153 (0.3767)	−0.2446 (0.2323)	0.4122 (0.3857)	0.7363 * (0.2982)	1.1188 ** (0.3460)	0.1137 (0.2985)
Time spent on financial management activity	0.0006 (0.0031)	−0.0008 (0.0026)	0.0040 (0.0049)	0.0063 (0.0038)	0.0115 * (0.0047)	−0.0001 (0.0029)
Income 3: (N = 5801)						
Indicator for financial management activity	−0.1081 (0.3873)	−1.1828 *** (0.3021)	0.1167 (0.3307)	0.3647 (0.3657)	0.9706 *** (0.2328)	−0.7971 * (0.3226)
Time spent on financial management activity	0.0016 (0.0015)	−0.0022 (0.0024)	−0.0011 (0.0011)	0.0005 (0.0023)	0.0036 ** (0.0012)	−0.0036 *** (0.0007)

Notes: Data source is the 2010, 2012, & 2013 ATUS & WBM. The ordinary least squares coefficient estimates are shown above the standard errors which are in parentheses. Survey replicate weights are applied at the activity level. † $p < 0.10$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$. Each model includes the following continuous variables: age, number of household members, and number of children. In addition to the continuous variables, each model includes these indicator variables as applicable: female, education, family income, education, white race, Hispanic ethnicity, labor force status, health status, and year dummies as standard controls. For brevity, the results for the control variables and the R-squared values for each equation are not shown. The income subsamples comprise income 1 (income less than $50,000), income 2 (income from $50,000 to less than $100,000), and income 3 (income from $100,000 and over).

The results for the full sample show that engaging in financial management activities is associated with feelings of lower happiness, much sadness, and more stress relative to other activities. For the married sample, the results show that the incidence of financial management activities is associated with feelings of lower happiness, much sadness, and more stress. The amount of time spent is, however, associated with less tiredness. For the male and female samples, the results for the incidence of financial management activities are similar. Compared to other activities, participating in financial management activities is associated with diminished happiness, increased sadness, and higher reported stress levels for males and females. When the amount of time spent engaging in financial management activities is considered, males are likely to report feelings of more sadness and stress. In contrast, females are likely to report the activity episode to be meaningful.

Considering the results for the income sample, Table 7 shows that the incidence of financial management activities is associated with more stress for all the income samples compared to other activity episodes. Relative to other activities, participating in financial management activities is related to diminished happiness for income 1 and 3 samples.

Only the income 2 sample report that participation in financial management activities is associated with more sadness than other activities. Considering the time spent, all the income samples report that the amount of time spent engaging in financial management activities is associated with more stress. For the income 3 sample, engaging in financial management functions is associated with less tiredness.

Overall, the sensitivity analyses using linear regression produced similar results as those obtained through the ordered probit models for the full sample and married subsample. The additional analyses performed for gender and income samples also showed similar results, except that females tended to feel that spending time performing financial management activities is meaningful.

4. Discussion

Using nationally representative datasets from 2010, 2012, and 2013 American Time Use Survey (ATUS) and the associated Well-Being Modules (WBM), this study examined experiential well-being as measured by how meaningful, happy, pain, sad, stressed, and tired households feel while engaging in financial management activities relative to other activities. The current study estimated ordered probit models that include controls for standard demographic and economic factors. Overall, the findings suggest an association between engagement in financial management activities and lower happiness, greater sadness, and higher stress compared to other daily activity episodes. The findings reveal that spending more time engaging in financial management activities is associated with lower happiness than other activity episodes. Similarly, the results indicate that increases in time spent undertaking household financial management activities is associated with higher sadness compared to other daily activities. Cumulatively, the findings suggest that households experience disutility from engaging in financial management activities relative to other daily activities.

The findings contrast with the findings from Kalenkoski and Korankye (2021), which examined the relationship between pet care and experiential well-being and find that people derive utility gains from engaging in activities relating to pet care compared to other activities. Furthermore, while a household with one member specializing in financial management experiences utility gains (Pearson et al. 2021), the findings from the current study suggest that households engaging in financial management activities feel worse off compared to other daily activities.

The findings also do not support the study's hypothesis that performing financial management functions at the household level relate more positively to experiential well-being than other activity episodes. Although the household production model suggests that households allocate time to perform financial management functions to enhance their utility, the findings from the current study show otherwise. Time is a scarce commodity that needs to be judiciously utilized. Thus, spending it on activities that produce feelings of diminished well-being cannot be described as utility maximizing.

5. Conclusions

Due to the complexities associated with investment decision-making and the challenges of navigating the financial environment, especially for the less financially savvy, the findings suggest the need for households to engage with financial advisors and planners to minimize their burden. Households are encouraged to seek help in carrying out financial management functions, particularly for activities such as budgeting, trading stocks, and researching investments that may require specialized knowledge that could best be purchased from the financial advice market. The findings also suggest that financial education programs and activities that assist individuals in their financial management activities could contribute to enhancing their well-being. Specifically, the experience of disutility from engaging in financial management functions suggests that households need more empowerment through financial education.

Although our empirical methods do not suggest causation, the findings provide useful information to support the marketing efforts of financial practitioners. The contents of the marketing campaigns could be enriched if planners and advisors provide information from our empirical study, suggesting that the public could be better off using their time to engage in more meaningful household activities and outsourcing their financial management functions from the financial advice market. Consumers who are more susceptible to financial mistakes may be more persuaded if they are provided with empirical evidence of the disutility experienced from household financial management engagement.

One of the inputs to the household production of financial management is likely linked to financial knowledge. Although our model controls for educational attainment, it is common knowledge that financial knowledge and educational attainment are not perfect substitutes. We acknowledge this unintentional omission as a limitation to properly examine the household production model's postulation that engagement in financial management should increase utility. Nonetheless, we are generally aware of the current complexity of the financial environment and its associated rapid advancement, and the low levels of financial illiteracy among the population (Lusardi 2008). It is likely that these factors could potentially explain the disutility experienced by households while engaging in financial management activities relative to other activity episodes.

References

Barua, Rashmi, Benedict Koh, and Olivia S. Mitchell. 2018. Does financial education enhance financial preparedness? Evidence from a natural experiment in Singapore. *Journal of Pension Economics & Finance* 17: 254–77. [CrossRef]

Baryła-Matejczuk, Monika, V. Skvarciany, A. Cwynar, W. Poleszak, and W. Cwynar. 2020. Link between financial management behaviours and quality of relationship and overall life satisfaction among married and cohabiting couples: Insights from application of artificial neural networks. *International Journal of Environmental Research and Public Health* 17: 1190. [CrossRef] [PubMed]

Becker, Gary S. 1965. A theory of the allocation of time. *The Economic Journal* 75: 493–517. [CrossRef]

Fay, Robert E., and George F. Train. 1995. Aspects of survey and model-based postcensal estimation of income and poverty characteristics for states and counties. In *Proceedings of the Section on Government Statistics*. Alexandria: American Statistical Association, pp. 154–59.

Finke, Michael. 2013. Financial advice: Does it make a difference? In *The Market for Retirement Financial Advice*. Oxford: Oxford University Press, pp. 229–48. [CrossRef]

Hastings, Justine S., Brigitte C. Madrian, and William L. Skimmyhorn. 2013. Financial literacy, financial education, and economic outcomes. *Annual Review of Economics* 5: 347–73. [CrossRef] [PubMed]

Kalenkoski, Charlene M. 2017. Caregiving by older adults: Gender differences in well-being. In *Gender and Time Use in a Global Context: The Economics of Employment and Unpaid Labor*. Edited by Rachel Connelly and Ebru Kongar. New York: Palgrave Macmillan, pp. 271–82.

Kalenkoski, Charlene M., and Eakamon Oumtrakool. 2017. The caregiving responsibilities of retirees: What are they and how do they affect retirees' well-being? *Applied Economics* 49: 1298–310. [CrossRef]

Kalenkoski, Charlene M., and Thomas Korankye. 2021. Enriching lives: How spending time with pets is related to the experiential well-being of older Americans. *Applied Research in Quality of Life*, 1–22. [CrossRef]

Kalenkoski, Charlene M., Mónika López-Anuarbe, and Thomas Korankye. 2021. Differences in the Experiential Well-being of Hispanics and Non-Hispanics Engaged in Elder Care. *Journal of Family and Economic Issues* 43: 128–37. [CrossRef]

Krueger, Alan B. 2007. Are we having more fun yet? Categorizing and evaluating changes in time allocation. *Brookings Papers on Economic Activity* 2007: 193–215. [CrossRef]

Krueger, Alan B., and Andreas I. Mueller. 2012. The lot of the unemployed: A time use perspective. *Journal of the European Economic Association* 10: 765–94. [CrossRef]

Krueger, Alan B., Daniel Kahneman, Claude Fischler, David Schkade, Norbert Schwarz, and Arthur A. Stone. 2009. Time use and subjective well-being in France and the U.S. *Social Indicators Research* 93: 7–18. [CrossRef]

Lucas, Richard E., Vicki A. Freedman, and Deborah Carr. 2019. Measuring experiential well-being among older adults. *The Journal of Positive Psychology* 14: 538–47. [CrossRef] [PubMed]

Lusardi, Annamaria. 2008. *Financial Literacy: An Essential Tool for Informed Consumer Choice?* (No. w14084). Cambridge: National Bureau of Economic Research. [CrossRef]

Michael, Robert T., and Gary S. Becker. 1973. On the new theory of consumer behavior. *The Swedish Journal of Economics* 75: 378–96. [CrossRef]

Mitchell, Olivia S., and Annamaria Lusardi. 2015. Financial literacy and economic outcomes: Evidence and policy implications. *The Journal of Retirement* 3: 107–14. [CrossRef] [PubMed]

Pearson, Blain. 2020. Demographic variations in the perception of the investment services offered by financial advisors. *Journal of Accounting and Finance* 20: 127–39. [CrossRef]

Pearson, Blain. 2022. The role of personal financial salience: Part II. *Journal of Financial Planning* 35: 60–69.

Pearson, Blain, and Jae M. Lee. 2022. Student debt and healthcare service usage. *Journal of Financial Counseling and Planning* 33: 183–93. [CrossRef]

Pearson, Blain, Thomas Korankye, and Hossein Salehi. 2021. Comparative advantage in the household: Should one person specialize in a household's financial matters? *Journal of Family and Economic Issues*, 1–11. [CrossRef]

Stone, Arthur A., Stefan Schneider, Alan Krueger, Joseph E. Schwartz, and Angus Deaton. 2018. Experiential well-being data from the American Time Use Survey: Comparisons with other methods and analytic illustrations with age and income. *Social Indicators Research* 136: 359–378. [CrossRef] [PubMed]

United States Bureau of Labor Statistics. 2021. Economic News Release. Available online: https://www.bls.gov/news.release/atus.t01.htm (accessed on 25 January 2023).