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Financial Advice to Financial Well-being: The Mediating Role of Financial Self-Efficacy

Daniel Fernandes
Catolica-Lisbon School of Business and Economics
Catholic University of Portugal
Palma de Cima, 1649-023 Lisboa, Portugal
315 217 270 250
daniel.fernandes@ucp.pt

Richard G. Netemeyer
McIntire School of Commerce
University of Virginia
Charlottesville VA, 29204
434 924-3388
rgn3p@virginia.edu

Dee Warmath
College of Family & Consumer Sciences
University of Georgia
Athens, GA 30602
262 312 0606
warmath@uga.edu

Corresponding Author: Richard Netemeyer, rgn3p@virginia.edu

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Financial Advice to Financial Well-being: The Mediating Role of Financial Self-Efficacy**Abstract**

A central goal in consumer financial decision-making is to understand the factors that promote financial well-being. Previous studies show that interventions aimed at improving consumer objective knowledge of personal finance to affect financial well-being have only minor effect-sizes, and that the effects are weaker for individuals in a state of financial vulnerability. In this research, we examine the effects of financial advice on consumer financial self-efficacy, and downstream influence on perceived financial well-being. We present five studies that examine when, how, and why financial advice improves financial well-being via a financial advice → financial self-efficacy → financial well-being chain of effects. Our two correlational studies show that receiving finance advice is positively related to financial self-efficacy, which is strongly related to financial well-being. Our three experimental studies look at the effects of simple vs. more complex general advice from popular authors, the effect of “just-in-time” actionable financial advice, and the effect of advice tailored to a financially vulnerable population. In totality, our findings show that financial advice can foster financial self-efficacy when simple, actionable and tailored to a specific financial need or population, thereby improving financial well-being. The results have implications for research and policymaking.

Keywords

Financial decision-making, financial advice, financial self-efficacy, financial well-being.

Financial decisions have become increasingly more difficult for consumers in the past few decades. The number and complexity of financial products that consumers face have increased, such as multiple forms of credit (e.g., credit cards, credit lines, personal loans, payday loans; Sharma, Tully, and Cryder, 2021), mortgage options (e.g., fixed or adjustable-rate mortgages, interest-only and negative-amortization mortgages; Amromin et al., 2018), and retirement savings plans (e.g., 401(k), IRA, annuities; Gervais and Thanassoulis, 2025; Wang, Zhai, and Lynch, 2023). In addition, the financial environment has become more unstable in recent years with inflation and the rising cost of debt. Consumers therefore face unprecedented complex financial decisions such as how to budget, how to pay-off debt, how to save, how much to save, when to save and spend, and where to invest.

Unsurprisingly, many consumers feel stressed about their financial situation. In a survey conducted by the American Psychological Association (2022), 72% of Americans reported feeling stressed about money at some time in the prior month, and 65% stated money worries are a significant source of decreased well-being. A recent survey by Northwestern Mutual (2025) reported that 7 in 10 U.S. consumers stated that financial uncertainty has led them to feelings of anxiety and depression. Netemeyer et al. (2018, Study 3a) found that 96% of respondents report feeling stressed about their current finances at least once in the past three months. Such current money worries have also been shown to negatively affect consumer perceptions of their future financial well-being (Aubrey et al., 2022; Bruggen et al., 2017; Salisbury et al., 2023). Recent statistics regarding the financial situation of many Americans further highlight these struggles.

As of the first quarter of 2025, the average credit card debt per borrower was \$6,371 (TransUnion, 2025) or \$1.18 trillion in total (FRBNY, 2025). As of March 2025, 42.7 million U.S. citizens owed a total of \$1.78 trillion in federal student loan debt, averaging \$38,375 per borrower (Hanson, 2025). Only 46% of U.S. adults say they have enough emergency savings to

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cover at least three months' worth of expenses (Bankrate, 2025), and by one estimate the median household retirement savings of Baby Boomers is \$185,000 - \$200,000 (NerdWallet, 2025).

Many have argued that low financial literacy, assessed as explicit objective knowledge of financial concepts and calculations, is a cause of these struggles in a complex financial world (Elkins, 2017; Lusardi and Mitchell, 2014). However, this objective knowledge form of financial literacy has only limited effects on financial outcomes (Fernandes, Lynch, and Netemeyer, 2014; Salisbury et al., 2023). Recent work has called for an expanded view of financial literacy to include a more perceptual component (Anderson et al., 2017; Atlas, 2019; Bruggen et al., 2017; Warmath and Zimmerman, 2019). In this research, we look at this perceptual component, termed financial self-efficacy, how it can be affected by financial advice, the type of advice, and the flow-through of that advice on two dimensions of perceived financial well-being – current money management stress (CMMS) and expected future financial security (EFFS).

Conceptual Background

Financial Literacy

Much research treats financial literacy as objective knowledge, most often measured as the percentage of correct answers on a personal finance test or quiz (Allgood and Walstad, 2016; Houts and Knoll, 2020; Lusardi and Mitchell, 2014). Recently, finance, consumer, and public policy researchers have been examining a more perceptual aspect of financial literacy, termed *financial self-efficacy*, which we define as the consumer's subjective knowledge of personal finance issues and their belief that they will be successful in managing their finances if they act (Amagir et al. 2022; Anderson et al., 2017; Bruggen et al., 2017; Chin and Williams, 2020; Warmath and Zimmerman, 2019). Consistent with approaches that describe financial literacy as domain-specific expertise with both objective and subjective components (Alba and Hutchinson,

1987; Mende and van Doorn, 2015; Remund, 2010), we conceptualize and measure financial literacy as two separate constructs: *objective financial knowledge* and *financial self-efficacy*.

Financial Advice

Consumers seek financial advice for decision-making in a dynamic and complex market (Choi, 2022; Tang and Hu, 2019), and the market for financial advice is large. A recent Gallup poll (2025) shows that 43% of U.S. households seek advice from family/friends; 41% use a professional financial advisor/planner; 32% rely on institutions such as banks and credit unions for personal finance advice; and 20% use popular advice from TV, radio, podcasts, and social media influencers. Further, it is estimated that \$145 trillion in consumer assets are partially managed by financial advisors of some type (Gervais and Thannssoulis, 2025). Though implications are pronounced, the evidence for the effectiveness of financial advice on financial outcomes is somewhat mixed (Pilote, Boulianne, and Magnan, 2024). For example, Fernandes et al. (2014) found the effect-size of financial counselling on financial behavior to be $r = 0.04$.

The studies that find only limited effects of financial advice suggest that consumers often see little benefit from it (Eskreis-Winkler, Fishbach, and Duckworth, 2018), or would rather avoid it all together (Bhattacharya et al., 2012). Many consumers distrust financial advisors, as misconduct and fraud are common (Egan, Matvos, and Seru, 2019; Gervais and Thannssoulis, 2025), and some consumers fear exploitation from advisers without a strong fiduciary duty (Chater et al., 2010; Inderst and Ottaviani, 2012; Pilote et al., 2024). As a result, financial advice is often ignored or followed only to a limited extent (Bhattacharya et al., 2012; Kramer, 2016). Further, consumers in a state of financial vulnerability, who need advice the most, often fail to follow an advisor's recommendations (Stolper and Walter, 2017).

Other research does show that financial advice can be effective if properly administered (Mende and van Doorn, 2015; Schmeiser and Hogarth, 2013). Professional financial advice can

help individuals to overcome biases or limitations (e.g., self-control; loss aversion; lack of knowledge) that might limit their ability to make effective financial decisions (Liu et al., 2019). Consumers often rely on an advisor's financial expertise (e.g., declarative and procedural knowledge) to affect financial decision making in the form of devising personalized action plans for the consumer (Collins, Olive, and O'Rourke, 2013; Pilote et al., 2024). This is especially the case when advisor and advisee work together to solve a financial problem (Mende and van Doorn, 2015) and trust each other (Georgarakos and Inderst, 2011; Pilote et al., 2024). The notion of trust is a key factor. In the realm of consumer financial decision making, trust theory posits that for advice from a professional to be acted upon, the consumer must trust that the advisor is acting in the consumer's best interest (Lachance and Tang, 2012; Pilote et al. 2024).

The mixed results of professional financial advice noted above most often examined wealth accumulation or a tangible financial outcome (e.g., financial resources like income and liquid savings) as the focus of study (Gervais and Thanassoulis, 2025; Pilote et al., 2024). Still, research has yet to examine the role of such advice to systematically improve a consumer's financial self-efficacy and perceived financial well-being.

Financial Well-being

While existing studies have considered numerous outcomes of financial advice, little consideration has been given to perceived financial well-being – “*the ultimate outcome of financial education*” (CFPB, 2015, p. 4). We conceptualize perceived financial well-being as having two dimensions: ***current money management stress (CMMS)*** and ***expected future financial security (EFFS)***. CMMS encompasses feelings of being stressed / worried about one's current financial situation, being unable to manage money effectively today to meet financial obligations and live the life one wants to live. EFFS encompasses perceptions of creating and having a financially secure future and meeting future financial goals.

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This current and future dimensions approach has quite a bit of support. Zyphur et al. (2015, p. 1) summarize financial well-being as “*one’s financial situation, including... perceived financial strain, perceived manageability of finances, and perceived financial prospects.*” Chou, Palmer, and Galinsky (2016) suggest that consumers derive a sense of economic security from “*both their current economic situation and their perception of their future economic well-being*” (p. 444). Ruberton, Gladstone, and Lyubomirsky (2016) support a current money management stress and expected future financial security distinction. They note that building up wealth in retirement may give financial peace of mind regarding long-term future goals but may not relieve the short-term financial strain of paying bills on time. Bruggen et al. (2017) view financial well-being as “*the perception of being able to sustain current and anticipated desired living standards and financial freedom.*” Finally, Netemeyer et al. (2018) proposed and validated a two-factor perceived financial well-being measure comprising CMMS and EFFT dimensions.

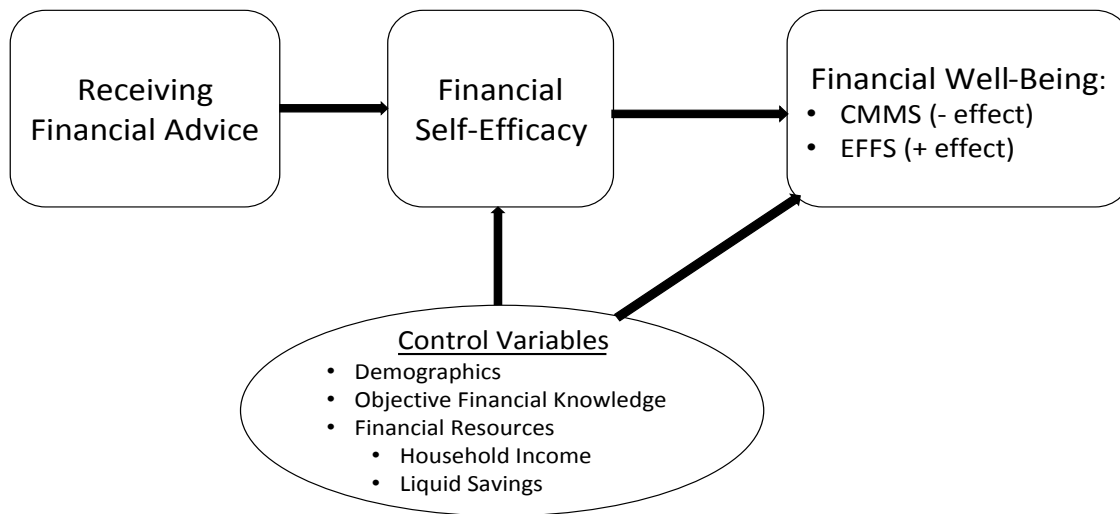
Research Framework, Hypotheses, & Overview of Studies

Framework & Hypotheses

Figure 1 shows the framework that guides our studies. We posit a mediated chain of effects in which receiving professional financial advice has a direct effect on financial self-efficacy (**H1**), which in turn has direct effects on the two dimensions of consumer financial well-being: negative for CMMS; positive for EFFT (**H2**). The effect of receiving professional financial advice on consumer financial well-being is indirect – mediated by financial self-efficacy (**H3**). Given prior research suggests that consumer demographics, objective financial knowledge, and the financial resources of household income and liquid savings are related to financial self-efficacy and financial well-being (Aubrey et al., 2022; Bruggen et al., 2017), we control for these variables in models predicting financial self-efficacy and financial well-being.

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Figure 1



Overview of Studies

We conduct five studies consistent with Figure 1. Study 1 data comes from the Australian Securities and Investment Commission (ASIC) Consumer Financial Decision-making Survey conducted from March 2020 to December 2020 in which we longitudinally test the effects of receiving professional financial advice at T1 on financial self-efficacy at T2, and the financial well-being dimensions of CMMS and EFFS at T3. With Study 2 we collected our own survey data using participants from the *Prolific* data panel. Here we examine the effects of receiving professional financial advice with advice from friends and family or from popular financial authors on financial self-efficacy, CMMS, and EFFS.

Studies 3, 4 and 5 are experiments that replicate and extend the findings of Studies 1 and 2 by testing when, why, and in what form financial advice improves financial self-efficacy (our **H4** explained below). Study 3 examines the effect of two types of general advice from popular authors - simple popular financial advice from the Dave Ramsey show vs. more complex popular advice of the Olen and Pollack (2016) index card approach - on financial self-efficacy and

downstream CMMS and EFFS. Study 4 shows that actionable “just-in-time” advice has an effect on financial self-efficacy, with downstream indirect effects on CMMS and EFFS. Study 5 conceptually replicates the role of actionable just-in-time financial advice for a population in a state of vulnerability - a sample of individuals who had recently lost their jobs. What follows is our rationale for **H1** to **H3** depicted in Figure 1.

Predicting Financial Self-Efficacy

Financial Knowledge & Financial Advice. Research suggests that consumers with a high level objective financial knowledge tend to have higher levels of financial self-efficacy (Lind, 2020). It has been argued that objective financial knowledge is essential for being self-confident to engage in responsible financial behavior (Hauff et al., 2020; Perry and Morris, 2005). Objective financial knowledge can be acquired through formal financial education (Kaiser et al., 2021) or experience in using financial concepts, both leading to a higher level of confidence in the realm of personal finance (Serido, Shim, and Tang, 2013). Given this evidence, we use objective financial knowledge as a control variable for the prediction of financial self-efficacy. That stated, the effects of objective financial knowledge may decay over time, and specific content knowledge may be better conveyed via just-in-time financial education tied to a particular decision (Fernandes et al., 2014). Actionable just-in-time financial education is more effective due to its immediate applicability. Other research also shows that financial education using a needs driven approach adapted to a consumer’s specific financial advice issue is effective in raising consumer’s perceived financial skills (de Bruijn, Antonides, and Madern, 2022).

Therefore, perhaps a more potent predictor of financial self-efficacy, and the focus of this research, is the effect of receiving professional financial advice / counseling. This premise is consistent with both Social Cognitive Theory - SCT (Bandura, 1977) and the Theory of Trying to Consume - TOT (Bagozzi and Warshaw, 1990). Recall that we view financial self-efficacy as

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the consumer's subjective knowledge of personal finance issues *and* their belief that they will be successful in managing their finances if they act.

From a SCT point of view then, receiving professional financial advice serves as a form of social persuasion that fosters belief in one's confidence to achieve goals within the context of personal finance (Bandura, 1977). While previous research has focused almost exclusively on the explicit knowledge transfer in an encounter with a financial advisor, SCT suggests that individuals seeking advice also receive information on, and in support of, their capacity to make financial decisions. As advisors present a plan or action steps, they are also assuring individuals that they are capable of taking these steps, and that taking these steps will lead to successful outcomes. Research demonstrates that individuals form domain-specific self-efficacy through such social persuasion in encounter with experts (Nob, 2021; Ouyang et al., 2023).

Similarly, TOT focuses on the *process* of trying. Here self-efficacy is *the* key tenet that is enhanced via professional advice, increasing a consumer's willingness to try – willingness to act. Professional financial advice increases financial self-efficacy within the TOT framework by operating as a powerful source of social persuasion, boosting a consumer's belief in his/her capability to overcome obstacles and achieve specific consumption goals. Within TOT, professional advice not only increases an individual's confidence in domain-specific subjective knowledge, it also increases the volition to act on that knowledge to achieve a successful outcome. Further, both SCT and TOT suggest that self-efficacy is enhanced by personalized / professional advice that is tailored to a specific context or decision, as it shows that a specific goal is realistic and attainable (Bandura, 1977; Bagozzi and Warshaw, 1990).

Thus, receiving professional financial advice should improve financial self-efficacy by educating consumers on how to address a financial problem and achieve financial goals. We view professional financial advice as a form of financial education that can increase the

confidence consumers have in financial decisions-making (Carpena et al., 2019). Such advice is most effective when offered through a third party, such as a trusted financial planner / advisor or financial institution (Collins et al., 2013; Gervais and Thanassoulis, 2025). Research suggests that individuals who have worked with financial planners / advisors are more confident in achieving financial goals (Collins, 2012).

H1: Receiving professional financial advice is positively related to financial self-efficacy.

Predicting Financial Well-Being

Financial Self-Efficacy (FSE). We expect FSE to be a strong and proximate antecedent of financial well-being. This expectation is consistent with several models or frameworks examining perceived financial well-being as an outcome (e.g., CFPB, 2015; Serido et al., 2013; Schepen and Burger, 2022). Consumers with a high level of financial self-efficacy are confident in their ability to obtain information to make financial decisions and are disciplined with finances, resulting in lower financial anxiety (Hadar, Sood, and Fox, 2013; Kammeyer-Mueller, Judge, and Scott, 2009). Financial self-efficacy also acts as an incentive to be disciplined to achieve long-term financial outcomes (Netemeyer et al., 2018). Further, and consistent with SCT and TOT (Bandura, 1977; Bagozzi and Warshaw, 1990), high self-efficacy is positively associated with well-being. Self-efficacy in a given context reduces stress in that context. It allows individuals to view challenges as manageable tasks rather than threats, which both lowers short-term anxiety and increases long-term well-being (Bandura et al., 1999; Deci and Ryan, 2000). As such, FSE should be directly negatively related to CMMS, and directly positively related to EFFT.

H2: Financial self-efficacy is negatively related to CMMS and positively related to EFFT.

The Role of Financial Resources. Though the focus of our research is on perceived financial well-being and how financial self-efficacy might affect it, how financial resources

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affect this perception must be accounted for. Several researchers have examined financial well-being as financial resources, e.g., household income, net worth, liquid savings, etc. (Aubrey et al., 2022; Bruggen et al., 2017). As would be expected, these researchers have found that how consumers *feel* about their current- and long-term financial health is related to what they currently have in terms of financial resources. Industry surveys echo this result. An Aspen Institute (2022) study reported that people with more liquid assets (cash and savings) scored higher on the CFPB (2015) measure of perceived financial well-being, and a study by Vanguard (2025) found that consumers with a high level of liquid savings felt less stressed about short- and long-term finances. Thus, we include household income and liquid savings as control variables for the prediction of CMMS and EDFS.

What has not yet been fully addressed is the degree to which financial resources might moderate the financial self-efficacy → perceived financial well-being linkage. In our two correlational studies, we explore this potential moderating effect. We expect that when financial self-efficacy and financial resources are jointly at high levels, CMMS will be lower and EDFS will be higher. This expectation is based on recent evidence. A CFPB (2020) study found that the link between consumers' confidence in their finances and their perceived financial well-being was stronger for those with a high level of savings, and a study by Bufe et al. (2022) found that liquidity acted as a buffer against a financial shock, thus affecting the consumer financial confidence → financial well-being link

Professional Advice → Financial Well-being: FSE as Mediator. Financial advice can provide consumers with a better understanding of not only handling short-term financial challenges (i.e., CMMS), but also what increases their sense of long-term financial security (i.e., EDFS) (Newton et al., 2015; Schepen and Burger, 2022). However, we expect that such effects

of receiving professional financial advice on CMMS and EFFS will be indirect (mediated) via the effect of financial advice on financial self-efficacy. Our rationale is as follows.

As previously noted, several models or frameworks of what affects financial well-being have been advanced. These include those of Serido et al. (2013, p. 288), the CFPB (2015, p. 5), and Schepen and Burger (2022, p. 2,973). Collectively, these models posit financial self-efficacy as a proximate predictor and key mediator of the effects of receiving professional financial advice and/or other socio-economic or environmental variables on financial well-being. For example, controlling for financial self-efficacy, Schepen and Burger (2022) find that receiving financial advice maintained a small direct effect on financial well-being, suggesting partial mediation. In an experimental study of educational efforts designed to increase both objective and subjective financial knowledge, Netemeyer et al. (2024) find that these educational efforts on financial well-being were mediated by subjective financial knowledge (akin to financial self-efficacy), but not objective financial knowledge.

It has also been shown that consumers tend to adhere to advice from a service provider when the advice is timely and easy to process (Seiders et al., 2015), as it raises consumer self-efficacy during the advice-giving exchange. Others note that the effects of co-production - consumers interacting with, and taking the timely advice of, financial counselors - leads to greater consumer financial competence (self-efficacy) and flow-through to financial well-being (Mende and van Doorn, 2015; Pilote et al., 2024). Therefore, financial advice may have downstream consequences for financial well-being through influencing financial self-efficacy.

H3: FSE mediates the effects of receiving professional financial advice on CMMS and EFFS.

Study 1: Effects of Financial Advice on Financial Self-Efficacy and Financial Well-being

Study 1 Sample and Measures. Study 1 uses data from the three-wave Australian Securities and Investment Commission (ASIC) surveys in which predictors (receiving financial

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advice), mediator (financial self-efficacy), and outcomes (CMMS and EFFS) were assessed at different points in time. Wave 1 was conducted in March / April 2020 and included 3,042 participants randomly selected from the ASIC panel. Via an on-line survey, a measure of our focal independent variable was gathered at Wave 1 - two questions assessing having received financial advice in the past year from either a professional financial institution or a financial advisor/planner (1= yes; 0 = no).

Wave 1 also collected measures of household income for 2019 and liquid savings to use as control variable predictors. Household income was assessed with 10 categories ranging from less than \$15K to \$300K or more; liquid savings was assessed with 7 categories ranging from none (0) to \$75K or more (Web Appendix A shows all categories for household income and liquid savings.) We also collected several other control variables: a 5-item objective financial knowledge / financial literacy quiz, sometimes referred to as the “Big 5” (Anderson et al., 2017), scored from 0 to 5 correct answers; age; gender (1= male; 0 = female); education (1= college degree or more; 0 = less than college degree); race/ethnicity (1 = White; 0 = all other); and marital /relationship status (1 = currently yes; 0 = currently no).

At Wave 2, conducted in August 2020 with 1,760 participants, financial self-efficacy was gathered via an 8-item scale developed as part of the ASIC project (Warmath, 2022) – all items were scored on 5-point scales of “not at all true - completely true,” then summed and averaged. At Wave 3, conducted in December 2020 with 1,246 participants, the focal dependent variables of CMMS (5-item scale) and EFFS (5-item scale) (Netemeyer et al., 2018) were assessed – all items were scored on 5-point scales of “strongly disagree - strongly agree,” then summed and averaged. While a total of 1,246 participants completed all three waves, there were 211 participants who did not provide a response to the liquid savings question. There were no differences in cases with and without liquid savings by age, gender, or education. There was a

significant difference by income. Participants who did not respond to the liquid savings question had significantly higher incomes ($t = 3.786, p < .001$). This resulted in 1,009 cases to be used in our analysis. Web Appendix A shows measures, coding, summary statistics, and correlations among all measures.¹

Study 1 Analysis and Results: H1 through H3

Predicting Financial Self-Efficacy (FSE). We estimated regression models to test **H1** through **H3**. For the model predicting financial self-efficacy (FSE) ($F = 26.93, p < .001; R^2 = .195$), we find significant positive effects for the control variables of age ($b = .031, t = 2.198, p = .028$), marital status ($b = .088, t = 1.958, p = .051$), household income ($b = .027, t = 2.710, p = .007$), liquid savings ($b = .103, t = 7.944, p < .001$), and objective financial knowledge ($b = .047, t = 2.976, p = .003$). Gender ($b = -.075, t = -1.568, p = .117$), race/ethnicity ($b = .280, t = 1.654, p = .098$), and education ($b = .061, t = 1.324, p = .185$) were not significant.

We also find that receiving financial advice at Wave 1 ($b = .154, t = 3.467, p < .001$) was positively related to FSE at Wave 2, supporting **H1**. It is worth noting that liquid savings had a stronger effect on FSE (std. $B = .259$) relative to that of financial advice (std. $B = .104$).²

Predicting Current Money Management Stress (CMMS). For CMMS, we estimated two models. The first model included all control variables and hypothesized predictors. The second model added two interactions terms: 1) FSE*HH Income; and 2) FSE*liquid savings. These interaction terms were based on mean-centered FSE, HH Income, and liquid savings (Cohen et al. 2003). Table 1 shows the results.

For Model 1 predicting CMMS ($F = 51.49, p < .001; R^2 = .340$), we find significant

¹ We conducted tests of discriminant validity among FSE, CMMS, and EFFT. These tests, detailed in Web Appendix A, show that FSE, CMMS, and EFFT are correlated, yet distinct constructs.

² We did not expect household income or liquid savings to moderate the financial advice→FSE linkage. Based on the advice of reviewers, we did estimate these interactions. Both were non-significant.

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effects for age ($b = -.109, t = -6.099, p < .001$) and liquid savings ($b = -.176, t = -10.73, p < .001$) - as these two variables increased, predicted CMMS decreased. We find no effect for objective financial knowledge ($b = -.000, t = -.019, p = .985$), and no effect of receiving financial advice ($b = .066, t = 1.163, p = .245$), potentially suggesting that the effect of receiving financial advice on CMMS is indirect via financial self-efficacy. The proximate predictor of financial self-efficacy was significant ($b = -.364, t = -9.041, p < .001$) – **H2** supported. Liquid savings showed a stronger standardized effect (std. $B = -.315$) relative to FSE (std. $B = -.259$).

For Model 2 ($F_{change} = 7.82, p < .001; R^2 = .351$), we find a significant FSE*HH Income interaction ($b = -.046, t = -2.979, p = .003$) (see Web Appendix A, Figure 1 for a plot). When financial self-efficacy and household income are jointly at high levels (1 std. deviation above their means), CMMS is the lowest ($M = 3.139, p = .003$). This value was lower than the low self-efficacy / high income and the low self-efficacy / low income levels, both at a value of $M = 3.856$. Among those low in financial self-efficacy, CMMS is high regardless of income, whereas among those high in financial self-efficacy, CMMS is more strongly reduced among high-income individuals.

Predicting Expecting Future Financial Security (EFFS). Given that it has been shown that current money worries can affect perceptions of future financial security (Netemeyer et al., 2018), we used CMMS as a control variable in the model predicting EFFS. For Model 1 ($F = 106.65, p < .001; R^2 = .541$), Table 1 shows significant positive effects for education ($b = .190, t = 3.063, p < .001$), marital status ($b = .257, t = 4.965, p < .001$), household income ($b = .044, t = 3.800, p < .001$), liquid savings ($b = .088, t = 5.493, p < .001$), and a significant negative effect for age ($b = -.037, t = 2.247, p = .025$). CMMS decreased EFFS ($b = -.424, t = 14.87, p < .001$).

We find a direct effect for receiving financial advice ($b = .233, t = 4.54, p < .001$), and the hypothesized direct effect for financial self-efficacy ($b = .418, t = 11.07, p < .001$). This

result supports **H2** for EFFE. Though showing a zero-order correlation of $r = .181$, ($p = .045$)

with EFFE, the partial effect of objective financial knowledge was significant and negative.

Model 1 also shows more pronounced effects of FSE (std. $B = .276$) relative to liquid savings

(std. $B = .147$) or household income (std. $B = .094$). Model 2 for EFFE ($F_{change} = 1.744$, $p = .175$;

$R^2 = .542$) showed no significant FSE*HH Income or FSE*liquid savings interactions.³

Table 1: Study 1 Regression Results

	CMMS Model 1	CMMS Model 2	EFFE Model 1	EFFE Model 2
Control Variables:				
Gender (1 = male; 0 = female)	.000 (.061) / .000	.012 (.060) / .006	-.001 (.055) / .000	.001 (.055) / .000
Race (1 = White; 0 = other)	-.310 (.216) / -.038	-.397 (.217) / -.048	-.202 (.195) / -.023	-.183 (.197) / -.020
Age	-.109 (.018) / -.192	-.111 (.018) / -.195	-.037 (.016) / -.060	-.039 (.016) / -.063
Education (1 = College degree or more; 0 = less than college degree)	-.006 (.059) / -.003	.004 (.058) / .002	.190 (.053) / .082	.195 (.053) / .084
Marital Status (1= yes; 0 = no)	-.078 (.057) / -.038	-.088 (.057) / -.043	.257 (.051) / .115	.257 (.052) / .115
HH Income	-.024 (.013) / -.056	-.026 (.013) / -.060	.044 (.012) / .094	.041 (.012) / .089
Liquid Savings	-.176 (.017) / -.315	-.176 (.017) / -.314	.088 (.016) / .147	.091 (.016) / .150
Objective Financial Knowledge	-.000 (.020) / -.001	-.001 (.020) / -.002	-.060 (.018) / -.085	-.061 (.018) / -.086
CMMS	-----	-----	-.424 (.029) / -.393	-.427 (.029) / -.396
Hypothesized Predictors:				
Professional Financial Advice	.066 (.057) / .032	.069 (.056) / .033	.233 (.051) / .103	.234 (.051) / .104
Financial Self-Efficacy	-.364 (.040) / -.259	-.372 (.040) / -.265	.418 (.038) / .276	.419 (.038) / .276
Interaction Terms				
FSE*HH Income	-----	-.046 (.015) / -.083	-----	-.025 (.014) / -.041
FSE*Liquid Savings	-----	-.025 (.020) / -.035	-----	.024 (.018) / .031
R-Square	.340	.351	.541	.542

Notes: Unstd. regression coefficients (std. errors) / std. regression coefficients.

Bolded entries are significant at $p < .05$ or better.

H3 mediation

Using PROCESS Model 4 with all control variables including interactions (Hayes 2022),

³ With most correlational studies endogeneity (reverse causality) among predictors and outcomes can be a concern. We conducted 2SLS regressions with HH income as an instrumental variable to assess endogeneity with regard to the FSE→CMMS and FSE→EFFE linkages. These results, detailed in Web Appendix A, provide some evidence that endogeneity was not a concern in Study 1.

we tested for indirect effects of receiving professional financial advice on CMMS and EFFS via financial self-efficacy. The indirect effect of financial advice on CMMS was significant ($b = -.0570$, $SE = .0166$, $CI_{95} = -.0915$ to $-.0249$), suggesting that financial self-efficacy totally mediates the effect of receiving professional financial advice on CMMS, supporting **H3**. The indirect effect of receiving financial advice on EFFS was also significant ($b = .0652$, $SE = .0193$, $CI_{95} = .0282$ to $.1041$). Given the direct effect of receiving professional financial advice on EFFS was significant for EFFS in Table 1, financial self-efficacy only partially mediated the effect of receiving professional financial advice on EFFS.

Study 2: Advice From Professionals, Family and Friends, and Popular Authors

With Study 2 we again test **H1** to **H3**, as well as testing whether the source of financial advice influences financial self-efficacy and peerceived financial well-being. Given the recent Gallup (2025) findings that professional advice (41%), advice from family/friends (43%), and advice from popular authors via podcasts, TV, radio, and social media (20%) constitute from where most consumers seek financial advice, we examine the effects of these sources on financial self-efficacy and downstream financial well-being. Since scholars suggest that advice from professionals is likely the most effective source (Collins et al., 2013; Gervais and Thanassoulis, 2025), we expect that advice from professionals would increase financial self-efficacy more-so than advice from family/friends or popular sources.

Study 2 Sample and Measures. Five hundred-twenty seven *Prolific* panel workers responded to the following focal measures from Netemeyer et al. (2018): a 7-item financial self-efficacy scale; a 5-item CMMS scale; and a 5-item EFFS scale. Scoring procedures on all three scales were the same as those used in Study 1. We also gathered measures of from whom respondents regularly obtain financial advice from: family/friends = 49%; popular authors/internet = 34%; professional financial advisors = 26%; and no advice = 24%.

As control variables, we collected the 12-question objective financial knowledge measure of Fernandes et al. (2014). Amount of liquid savings and household income were assessed with open-ended questions.....”*What is the approximate value of all your savings in dollars?*” ($M = 54,232.01$, $SD = 178,043.58$); and.....*What is the total gross monthly income of your household? Please give us the raw dollar amount that includes all sources of income from job, bonuses, commission, tips, and government benefits and /or assistance.* ($M = 32,844.07$, $SD = 48,813.24$). We also collected measures of gender (51% female) and age ($M = 41.34$, $SD = 14.21$). Web Appendix B shows measures, coding, summary statistics, and correlations among all measures.⁴

Study 2 Analysis and Results: H1 through H3

Predicting Financial Self-Efficacy (FSE). We again estimated regression models to test **H1** through **H3**. For financial self-efficacy ($F = 17.971$, $p < .001$; $R^2 = .217$), we find significant effects for the control variables of gender ($b = -.281$, $t = -4.473$, $p < .001$), household income ($b = .002$, $t = 2.517$, $p = .012$), liquid savings ($b = .001$, $t = 3.406$, $p < .001$), and objective financial knowledge ($b = .060$, $t = 5.078$, $p < .001$). We also find that financial self-efficacy was predicted by receiving professional financial advice ($b = .365$, $t = 5.10$, $p < .001$) supporting **H1**, and financial advice from popular authors ($b = .156$, $t = 2.34$, $p = .020$). Note the standardized coefficients for income (std. $B = .099$), liquid savings (std. $B = .138$), and professional advice (std. $B = .203$) - professional advice had the strongest explanatory effect.⁵

⁴ As with Study 1, we conducted tests of discriminant validity among FSE, CMMS, and EFFE for Study 2. These tests, detailed in Web Appendix B, show that these constructs are correlated, yet distinct.

⁵ As with Study One, we did not expect HH income or liquid savings to moderate the financial advice→FSE link. We did estimate such interactions for each type of advice. Out of 6 interactions, only the professional advice*liquid savings interaction was significant ($b = .001$, $t = 2.931$, $p = .004$), increasing R^2 by less than ½ of 1%.

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Predicting Current Money Management Stress (CMMS). For predicting CMMS, we again estimated two models. For Model 1 in Table 2 ($F = 24.57, p < .001; R^2 = .300$), we find significant effects for household income ($b = -.002, t = -2.103, p = .036$) and liquid savings ($b = -.001, t = -3.449, p < .001$). We also find that the effect of receiving professional financial advice was significant ($b = -.319, t = 3.38, p < .001$). The effect of financial self-efficacy was also significant ($b = -.555, t = -9.82, p < .001$), supporting **H2** for CMMS. The effect of objective financial knowledge was not significant ($b = -.025, t = 1.60, p = .110$). Note that the standardized coefficients for income (std. $B = -.079$) and liquid savings (std. $B = -.134$) were not as pronounced relative to FSE ($B = -.409$). Model 2 for CMMS ($F_{change} = .981, p = .376; R^2 = .302$) showed no significant FSE*HH Income or FSE*liquid savings interactions.

Predicting Expecting Future Financial Security (EFFS). For EFFS Model 1 ($F = 72.45, p < .001; R^2 = .584$), age ($b = -.006, t = -2.348, p = .019$), liquid savings ($b = .001, t = 3.516, p < .001$), and CMMS ($b = -.400, t = -11.814, p = .001$) were significant predictors, as were obtaining professional financial advice ($b = .174, t = 2.36, p = .018$) and popular financial advice ($b = .142, t = 2.13, p = .034$). FSE was significant ($b = .542, t = 11.42, p < .001$), supporting **H2** for EFFS. The effect of objective financial knowledge was not significant ($b = -.004, t = -.318, p = .751$). Note the standardized coefficients for household income (std. $B = .036$, ns) and liquid savings (std. $B = .106$) were not as pronounced relative to FSE ($B = .399$). Model 2 for EFFS ($F_{change} = 1.144, p = .319; R^2 = .586$) showed no significant FSE*HH Income, or FSE*liquid savings interactions.⁶

H3 Mediation

For CMMS and EFFS, the effect of receiving professional financial advice remained

⁶ For Study 2, we also conducted 2SLS regressions with HH income as an instrumental variable to assess endogeneity with regard to the FSE→CMMS and FSE→EFFS linkages. These results, detailed in Web Appendix B, provide some evidence that endogeneity was not a concern in Study 2.

significant with financial self-efficacy in the model, suggesting only partial mediation. Using PROCESS Macro Model 4 with all control variables including interactions (Hayes 2022), we tested for indirect effects of receiving professional financial advice on CMMS and EFFT via financial self-efficacy. The indirect effect of receiving professional financial advice on CMMS was significant ($b = -.1947$, $SE = .0431$, $CI_{95} = -.5093$ to $-.1356$), and the indirect effect of receiving professional financial advice on EFFT was also significant ($b = .1132$, $SE = .0351$, $CI_{95} = .0451$ to $.1840$) - **H3** partially supported.⁷

Table 2: Study 2 Regression Results

	CMMS Model 1	CMMS Model 2	EFFT Model 1	EFFT Model 2
Control Variables:				
Gender (1 = male; 0 = female)	-.085 (.082) / -.039	-.093 (.083) / -.043	.022 (.064) / .010	.022 (.064) / .010
Age	-.002 (.003) / -.026	-.002 (.003) / -.023	-.006 (.002) / -.074	-.006 (.002) / -.079
HH Income (in thousands)	-.002 (.001) / -.079	-.002 (.001) / -.112	.001 (.001) / .036	.001 (.001) / .041
Liquid Savings (in thousands)	-.001 (.0002) / -.134	-.001 (.000) / -.142	.001 (.0002) / .106	.001 (.0002) / .146
Objective Financial Knowledge	-.025 (.016) / -.066	-.027 (.016) / -.070	-.004 (.012) / -.010	-.004 (.012) / -.011
CMMS	-----	-----	-.400 (.034) / -.401	-.400 (.034) / -.400
Hypothesized Predictors:				
Professional Advice (1=yes, 0=no)	-.319 (.094) / -.131	-.323 (.095) / -.132	.174 (.074) / .071	.163 (.074) / .067
Friends & Family Advice (1=yes, 0=no)	-.011 (.083) / -.005	-.021 (.083) / -.010	-.083 (.064) / .039	.082 (.064) / .038
Popular Advice (1=yes, 0=no)	.034 (.086) / .015	.044 (.087) / .019	.142 (.067) / .063	.141 (.067) / .062
Financial Self-Efficacy	-.555 (.056) / -.409	-.546 (.057) / -.402	.542 (.047) / .399	.538 (.048) / .396
Interaction Effects				
FSE*HH Income	-----	.002 (.001) / .061	-----	.000 (.001) / -.005
FSE*Liquid Savings	-----	.0001 (.000) / .006	-----	.0001 (.000) / -.057
R-Square	.300	.302	.584	.586

Notes: Unstd. regression coefficients (std. errors) / std. regression coefficients.

Bolded entries are significant at $p < .05$ or better.

⁷ We also ran PROCESS Model 4 for the indirect effects of popular advice and advice of family and friends on CMMS and EFFT via FSE. For CMMS, we find an indirect effect of popular advice ($b = -.0790$, $SE = .0359$, $CI_{95} = -.5093$ to $-.1356$), but not for advice of family and friends ($b = -.0388$, $SE = .0343$, $CI_{95} = -.1020$ to $.0345$). For EFFT, we find similar effects - an indirect effect of popular advice ($b = .0718$, $SE = .0320$, $CI_{95} = .0079$ to $.1340$), but not for advice of family and friends ($b = .0248$, $SE = .0314$, $CI_{95} = -.0355$ to $.0883$).

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Study 2 Summary: Professional Advice vs. Family and Friends and Popular Authors

The results of Study 2 largely replicate those of Study 1 for **H1** to **H3**. We also find that professional advice shows stronger effects on financial self-efficacy, CMMS, and EFFT relative to the advice of family and friends and popular sources. The standardized coefficients for professional advice were .203 ($p < .01$) for FSE, -.132 ($p < .01$) for CMMS Model 2, and .067 ($p < .05$) for EFFT Model 2. Corresponding coefficients for advice from family and friends were .047, -.010, and .038 (all non-significant). Though weaker than the effects of professional advice, popular advice showed the following corresponding standardized coefficients .094 ($p < .015$), .019 (ns), and .062 ($p = .045$). Given the significant effects of popular advice, a pertinent question is..... "what type of advice from popular sources might be most effective in influencing consumer financial self-efficacy and financial well-being?" We address this question in Study 3 by examining one dimension of popular advice: whether it is viewed as simple or more complex.

Study 3: Simple vs. More Complex General Popular Advice

Given its ease of access via books, TV shows, social media sites, and podcasts, there is a plethora of financial advice offered in the popular press. As noted in the 2025 Gallup poll, 20% of U.S. households rely on advice from popular press sources. While such advice may offer benefits, discerning what is dependable and easy to understand vs. what is more complex and potentially misleading can put consumer financial well-being at risk (CFP, 2025; Gallup, 2025).

Some general popular financial advice principles are very simple and revolve around the rhetoric of living a frugal life and practicing financial restraint, while others offer somewhat more complex advice that requires the understanding of financial terms and calculations. Two of the more prominent forms of general popular financial advice that reflect these two approaches are the Dave Ramsey Show (over 20 million weekly visitors) and the Index Card by Olen and Pollack (2016). In this study we test whether exposure to general forms of simple vs. more

complex popular financial advice influence financial self-efficacy and downstream financial well-being. We expect that participants will report lower financial self-efficacy and lower flow-through to financial well-being as advice becomes more complex, relative to simple advice. Our reasoning is as follows.

There is quite a bit of literature demonstrating the effects of simple vs. more complex information on consumer confidence, decision-making, and positive affect (Bettman, Johnson, and Payne, 1991). Consumers are limited in their cognitive capacity to process information, and as the information increases in complexity, decision confidence, decision quality, and positive affect tend to decrease (Broniarczyk and Griffin, 2014; Rabb, Fernbach, and Sloman, 2019). This has led to increased attention to offer consumers information in easy to understand and simplistic terms (Gruner and Souter, 2018), particularly in the realm of personal finance in which information can be confusing (Drexler, Fischer, and Schoar, 2014; Pilote et al., 2024).

For example, it has been shown that consumers tend to adhere to advice from a service provider when the advice is frequent and easy to process (Seiders et al., 2015), as it raises consumer self-efficacy during the advice-giving exchange. Others note that the effects of co-production - consumers interacting with, and taking the simple advice of, financial counselors – leads to greater consumer financial competence (self-efficacy) and flow-through to financial well-being (Mende and van Doorn, 2015; Pilote et al., 2024).

We extend these findings to simple vs. more complex general financial advice in the realm of popular media information and podcasts. We specifically examine the effects of simple advice based on the popular Dave Ramsey Show vs. more technical / complex advice from the index card approach of Olen and Pollack (2016). The Dave Ramsey Show employs narratives of frugality and restraint in very simple to understand terms. Ramsey offers seven simple rules or “Baby Steps” to follow to increase consumer financial confidence and well-being. There is some

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limited evidence that the Dave Ramsey approach positively affects consumer finances. For example, Chopra (2021) found that increased exposure to the Dave Ramsey Show: 1) decreased monthly household expenditures; and 2) changed consumer attitudes toward conspicuous consumption and taking on debt.

Olen and Pollack (2016) offer a similar approach with an index card, espousing nine behaviors to follow designed to increase consumer financial self-efficacy and well-being, but with more technical and numerical information. To our knowledge, there has been no academic research comparing the Dave Ramsey approach to the Olen and Pollack approach in affecting financial self-efficacy or well-being. Based on our above discussion of simple vs. more complex advice, we hypothesize:

H4: Exposure to more complex popular advice (Olen and Pollack approach) will result in lower financial self-efficacy and flow-through to CMMS and EFS than exposure to simple popular advice (Dave Ramsey approach) and no advice.

Method

Seven hundred-ninety two *Prolific* panel members (45% female; average age = 40.4 years) were randomly assigned to a single factor design with three levels (Dave Ramsey Simple Popular Advice vs. Olen and Pollack More Complex Popular Advice vs. No Advice). About a third of participants read and then watched a video clip of the “Baby Steps” approach from the Dave Ramsey show: https://www.youtube.com/watch?v=OO25TrVo_dU. The clip was carefully chosen to include the explanation of the seven steps: 1) *Save \$1,000 for your starter emergency fund*; 2) *Pay off all debt (except the house) using the debt snowball*; 3) *Save 3–6 months of expenses in a fully funded emergency fund*; 4) *Invest 15% of your household income in retirement*; 5) *Save for your children’s college fund*; 6) *Pay off your home early*; 7) *Build wealth and give*. The steps and the video revolve around the simplistic rhetoric of paying off debt, saving, and leading a frugal lifestyle.

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Another third of participants of participants received more complex popular advice by reading and watching a clip of the “Index Card” approach by Olen and Pollack (2016):

<https://www.youtube.com/watch?v=JdUKhgW1gOo>. Participants read the instructions of the card and then watched the video clip explaining the nine rules of the index card: *1) Max your 401(k) or equivalent employee contribution; 2) Buy inexpensive, well-diversified mutual funds; 3) Never buy or sell an individual security. The person on the other side of the table knows more than you do about this stuff; 4) Save 20% of your money; 5) Pay your credit card balance in full every month; 6) Maximize tax-advantaged savings vehicles like Roth, SEP and 529 accounts; 7) Pay attention to fees. Avoid actively managed funds; 8) Make financial advisors commit to the fiduciary standard; 9) Promote social insurance programs to help people when things go wrong.*

The index card requires an understanding of financial terms, calculations, mechanisms, and more background knowledge. Participants in the no advice control condition advanced to the next part of the survey without receiving any advice.

Next, all participants responded to the same scales and measures used in Study 2: a 7-item financial self-efficacy scale ($M = 3.13$, $SD = 0.88$); the 5-item CMMS scale ($M = 2.87$, $SD = 1.09$); the 5-item EFFT scale ($M = 3.03$, $SD = 1.13$); the 12-question objective financial knowledge scale ($M = 8.36$, $SD = 2.87$); amount of liquid savings ($M = \$58,318.18$, $SD = 253,376.58$); and household income level ($M = \$34,810.84$, $SD = 51,528.91$). Web Appendix C shows measures, summary statistics, correlations among measures.

Results

Pretest Results. We first conducted a pretest to examine if the more complex general advice was perceived as more complex relative to the simple general advice. One-hundred *Prolific* panel workers were exposed to either the simple or the more complex advice as detailed above and were asked to indicate how complex the financial advice was relative to the simple

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advice, and how much background knowledge was required to understand the advice (from 1 = not at all to 5 = very much). Participants exposed to the more complex advice indeed perceived it as more complex ($M = 2.70$, $SD = 1.09$) than those exposed to simple advice ($M = 2.12$, $SD = 0.94$; $F_{1,98} = 8.10$, $p = .005$); as well as requiring more background knowledge ($M = 2.92$, $SD = 1.01$) than those exposed to simple advice ($M = 2.52$, $SD = 0.97$; $F_{1,98} = 4.08$, $p = .046$).

Main Study Results. We first analyzed the effects of simple advice (1 = yes, no = 0) and no advice (1 = yes, no = 0) on financial self-efficacy (FSE), with the more complex advice as the reference category. More complex advice reduced FSE, relative to receiving simple advice ($F_{1,789} = 10.53$, $p < .001$) and the control condition ($F_{1,789} = 14.46$, $p < .001$). FSE of the simple advice condition, however, did not differ from that of the control condition ($p = .746$). Figure 2 shows the predicted FSE means of each condition: $M = 2.94$ ($SD = 0.83$) for complex advice; $M = 3.20$ ($SD = 0.94$) for simple advice; $M = 3.22$ ($SD = 0.84$) for the no advice control condition.

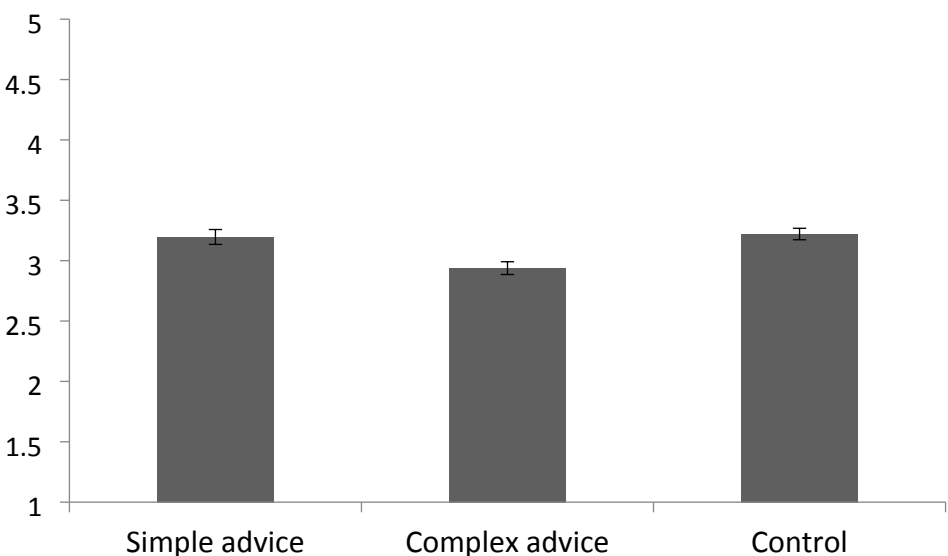
We then regressed objective knowledge, CMMS and EFFS on dummy coded complex advice (1 = yes, no = 0). Receiving complex advice had no effect on objective financial knowledge ($p = .282$). Complex advice also had no effect on CMMS ($p = .574$), but reduced EFFS ($b = -.185$, $t = -2.13$, $p = .033$).

Next, we added financial self-efficacy (FSE) and objective knowledge to regression models predicting CMMS and EFFS. FSE exerted strong effects on CMMS ($b = -.487$, $t = -11.35$, $p < .001$) and EFFS ($b = .874$, $t = 23.90$, $p < .001$), supporting **H2**. Objective financial knowledge, in turn, had no effect on EFFS ($p = .75$) and reduced CMMS ($b = -.03$, $t = -2.61$, $p < .01$), but to a much lesser extent than financial self-efficacy. Finally, via PROCESS Model 4, we observed indirect effects of manipulated complex advice through financial self-efficacy on CMMS and EFFS. The indirect effect of complex advice increased CMMS ($b = .14$, $SE = .04$,

$CI_{95\%} = .082$ to $.223$), and decreased EFFS ($b = -.24$, $SE = .06$, $CI_{95\%} = -.352$ to $-.122$). In totality, these results are consistent with both our **H3** and **H4** predictions.

Figure 2

Study 3: Financial Self-Efficacy (FSE) as a Function of Type of Advice



Note: The error bars represent the standard errors.

In summary, Study 3 shows that when general financial advice from popular authors becomes more complex, it may be detrimental to financial self-efficacy, having downstream negative consequences for financial well-being. Further, complex advice had no effect on objective financial knowledge, and all effects of complex advice on financial well-being were channeled through financial self-efficacy. Web Appendix C reports results controlling for additional covariates (liquid savings, household income, gender, and age). These results mirror those above.

These results indicate that general financial advice has little benefit relative to the control condition even when the advice is simple (such as in the case of the Dave Ramsey advice around the rhetoric of saving money and living a frugal life), and can be even detrimental when the advice increases in complexity (such as in the case of Olen and Pollack’s Index Card).

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Study 4: “Just in Time” Specific Financial Advice

As noted above, Study 3 showed that *general* complex financial advice reduces financial self-efficacy relative to *general* simple financial advice. However, the simple advice wasn't effective at increasing financial self-efficacy relative to the control condition. Study 4 aims to examine whether actionable financial advice improves financial self-efficacy. We define actionable financial advice as advice that is *specific* for a “just in time” financial decision, and one that provides the most important tools and information for a consumer decision-maker.

Much professional financial advice is timely and tailored to a *specific* financial need or decision, such as saving for retirement, paying down debt, and saving for a specific goal, where consumers may lack the confidence to act. For example, in a recent study, only 14% of surveyed adults felt confident about investment decisions for retirement, only 21% felt confident about decisions for paying off significant debt, and only 35% felt confident in saving for a specific goal in mind (NEFE, 2022). Furthermore, prior research suggests that “just in time” advice tailored to a specific financial decision may contribute to higher consumer financial self-efficacy and well-being more-so than a general financial education intervention (Netemeyer et al., 2018). Consistent with Social Cognitive Theory (Bandura, 1977) and the Theory of Trying to Consume (Bagozzi and Warshaw, 2000), financial advice may strengthen financial self-efficacy when it offers clear, actionable steps for a specific financial decision.

Thus, Study 4 tests if actionable just in time advice tailored to specific financial decisions affects decision-specific financial self-efficacy and flow through to CMMS and EFFS independent of objective financial knowledge. We expect that participants who obtain tailored financial advice in the areas they specifically request help for (e.g., Saving, Spending, Asset allocation, Stock market participation, Housing, and Retirement) will report higher financial self-efficacy and indirect flow-through to financial well-being.

Study 4 Method

We recruited 1,173 *Prolific* panel members (60% female, average age = 42.4 years) who were randomly assigned to a single factor experimental design with three levels (Specific Actionable Advice vs. General Advice vs. No advice). Participants assigned to receive specific actionable advice were offered the following topics: Saving; Spending; Asset allocation; Stock market participation; Housing; and Planning for Retirement. For each topic, we curated recommendations and websites with additional resources for more knowledge and help in the topic. These recommendations were consistent with extant research on important considerations and rules-of-thumb for positive financial outcomes in each topic (Choi, 2022). We also explained the rationale for implementing the recommendations as well as specific actions to achieve them. Web Appendix D provides a full overview of the recommendations given in each topic including their rationale, implementation, and additional resources. We briefly summarize the specific advice given in the actionable advice conditions below.

- ***Savings:*** It was recommended that increasing savings allows for better management of unexpected expenses and allocation of funds toward meaningful things, such as a good investment opportunity. Specific tips were given designed to increase savings by removing unnecessary expenses and setting a savings goal.
- ***Asset allocation:*** It was recommended to avoid “putting all eggs in one basket,” and pay down debt. It was also noted that though riskier investments may provide higher returns, they also may result in higher losses, and that a combination of stocks and bonds is preferable.
- ***Stock market participation:*** It was recommended to invest in equity mutual funds tracking an index rather than individual stocks. It was further recommended to be wary of actively managed funds, as they tend to have higher expense ratios, higher trading costs, and may provide lower returns. It was also suggested to use a long-term frame for investments, and avoid paying too much attention to weekly returns.
- ***Housing:*** It was recommended to avoid committing to a large monthly mortgage payment, as smaller monthly payments allows one to manage their budget. It was also recommended to refinance a mortgage when rates drop to obtain a better deal and lower interest payments.

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- **Spending:** It was recommended to pay-off revolving credit and pay credit card balances in full every month. This improves credit scores and allow for better loans rates. Subjects were recommended to budget and were given a link with a spreadsheet to do so.
- **Retirement:** It was recommended to try to save for their retirement, as such funds will be needed when they can no longer work and/or will be needed for some significant other, who may outlive them. We also provided links to know how much to save at each stage of their lives to smooth consumption over their life cycle.

Participants in the general advice condition received advice to: 1) Create a budget (and stick to it); 2) Save an emergency rainy day fund; 3) Pay down debt; 4) Educate themselves about finance. They were provided these recommendations without any justification or explanation for how to do it. Participants in the no advice control condition advanced to the next portion of the study without receiving any advice.

Next, all participants answered the FSE ($\alpha = .91$; $M = 3.54$, $SD = 0.81$), CMMS ($\alpha = .89$; $M = 2.81$, $SD = 1.08$), and EDFS scales ($\alpha = .93$; $M = 3.27$, $SD = 1.09$) of Study 2, and an 11-question objective financial knowledge scale of Fernandes et al. (2014) ($\alpha = .79$; $M = 8.00$, $SD = 2.52$). Web Appendix E shows measures, summary statistics, and correlations among measures.

Results

We regressed financial self-efficacy on dummy coded general advice (1 = yes, no = 0) and no advice (1 = yes, no = 0) with the specific actionable advice condition as the reference category. Receiving specific actionable advice increased financial self-efficacy relative to general advice ($F_{1, 1170} = 13.23$, $p < .001$) and the control condition ($F_{1, 1170} = 4.18$, $p = .041$). Financial self-efficacy of the general advice condition was marginally lower relative to the control condition ($p = .056$). Figure 3 displays the FSE mean results: specific actionable advice $M = 3.65$ ($SD = 0.77$); general advice $M = 3.42$ ($SD = 0.85$); no advice $M = 3.53$ ($SD = 0.80$).

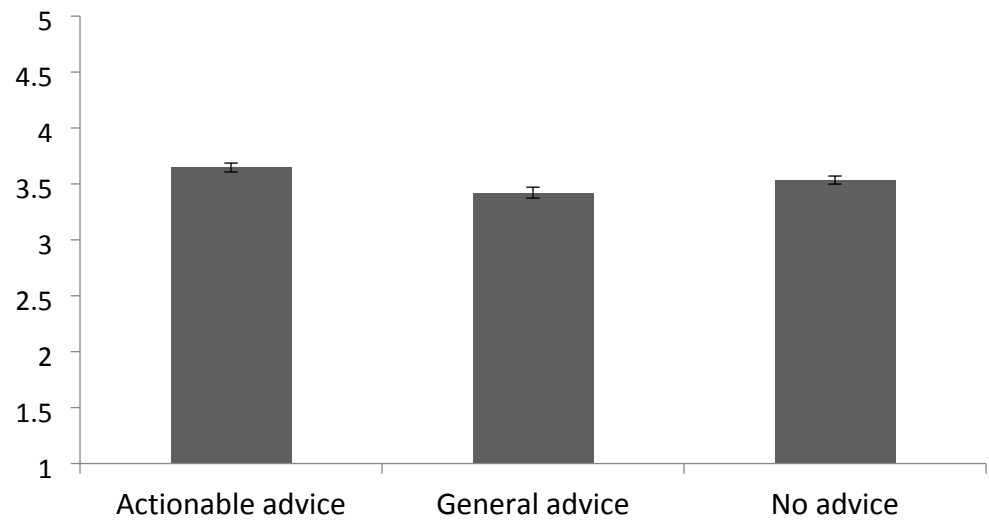
We then regressed objective knowledge, CMMS and EDFS on dummy coded specific actionable advice (1 = yes, no = 0). Receiving specific actionable advice increased objective

financial knowledge ($b = .34, t = 2.20, p = .03$), marginally reduced CMMS ($b = -.11, t = -1.69, p = .09$), and increased EFFS ($b = .16, t = 2.37, p = .02$), indicating that specific actionable advice had a direct effect on financial well-being.

Next, we added FSE and objective knowledge to the regression models predicting CMMS and EFFS. Results showed that FSE exerted strong effects on CMMS ($b = -.660, t = -18.92, p < .001$) and EFFS ($b = .818, t = 25.59, p < .001$), replicating our **H2** results. Objective financial knowledge also significantly increased on EFFS ($b = .02, t = 2.39, p = .02$), and marginally reduced CMMS ($b = -.02, t = -1.66, p = .10$). Similar to the results found in Studies 1 through 3, PROCESS Model 4 did show indirect effects of manipulated specific advice through financial self-efficacy on CMMS ($b = -.105, SE = .03, CI_{95\%} = -.172 \text{ to } -.040$) and EFFS ($b = .130, SE = .04, CI_{95\%} = .049 \text{ to } .2130$), consistent with **H3**.⁸

Figure 3

Study 4: Financial Self-Efficacy as a Function of Type of Advice



Note: The error bars represent the standard errors

⁸ The indirect effect of manipulated specific advice through objective financial knowledge was significant on CMMS ($b = -.026, SE = .012, CI_{95\%} = -.052 \text{ to } -.006$) and on EFFS ($b = .032, SE = .015, CI_{95\%} = .006 \text{ to } .064$). Cohen’s d effect-sizes for the indirect effects through financial self-efficacy were almost twice as large ($d = 0.20$ on CMMS and $d = 0.19$ on EFFS) as for the same indirect effects through objective financial knowledge ($d = 0.13$ on CMMS and $d = 0.12$ on EFFS).

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These results collectively show that specific actionable financial advice increases financial self-efficacy, objective financial knowledge, and financial well-being. Importantly, most of the effects of actionable advice on financial well-being were channeled through financial self-efficacy. In Web Appendix F, we report the results of an additional replication study in which participants received actionable financial advice only for a topic of their choice (instead of receiving advice on all topics). This study replicates the results of specific actionable financial advice on financial self-efficacy. This study shows that the positive effect of actionable financial advice extends to situations when consumers do not receive all the types of advice, but instead choose a specific topic they are most interested in. Study 5 aims to examine the effect of specific actionable advice on spending and saving for a financially vulnerable group - recently unemployed individuals.

Study 5: Financial Advice for a Financially Vulnerable Group

Financially vulnerable individuals tend to possess lower financial skills, leading them to engage in poor financial management and lower financial well-being (de Bruijn et al., 2022; Hilgert et al., 2003). Research suggests that the financially vulnerable may be better served by advising them to engage in simple financial behaviors (e.g., budgeting, spending, and saving) rather than attempting to enhance their level of objective financial knowledge (Xiao and Porto, 2021). One such vulnerable group is consumers who have involuntarily lost their job.

The effects of job loss can be devastating not only to consumer's financial health, but to their mental and physical well-being as well (Netemeyer et al., 2018; Weller, 2012). In Study 5 we examine whether receiving advice affects the financial self-efficacy and financial well-being of those who recently become involuntarily unemployed. Unemployed individuals are particularly worried about minimizing their spending and increasing their savings when possible, rather than investing in equities, buying a new house, asset allocation, etc. (Xiao and Porto,

2021). We therefore compare actionable advice tailored for unemployed people on spending and saving to a control condition without advice. We predict that such advice will affect financial self-efficacy and flow-through to financial well-being.

Study 5 Method

We first conducted a pilot study with $n = 306$ *Prolific* respondents screened for current involuntary job loss. This pilot study showed results supportive of our prediction that advice tailored to specific need for someone recently unemployed affects financial self-efficacy and flow-through to financial well-being. Pilot study results are reported in Web Appendix G. We used the same procedures with 511 *Prolific* panel also screened for current involuntary job loss for the main study.

In the main study, participants were randomly assigned to receive actionable financial advice on spending and saving. This advice was similar to that offered in Study 4 with the exception that it focused on the topics of saving and spending with a less directive style (e.g., “*Try to pay down your revolving credit balances*”). This approach was taken as unemployed people may be sensitive to imperative language and may react negatively if the advice is delivered in an authoritative manner (Xiao and Porto, 2021). The advice offered simple and useful tools for individuals to enhance their financial well-being while searching for a new job. To summarize, the advice explained that reduced spending allows consumers to have better credit scores by paying off debt, and that savings create a cushion to pay unexpected expenses and emergencies. This allows consumers to spend their money more wisely on things they really need/want and to find good investments.

In terms of how to reduce their spending and increase their savings, participants were provided with tips such as cooking at home, using cash instead of cards, and motivating themselves by setting fresh starts (“*I will save $X\%$ of my salary after my next birthday*”). We also

curated websites in the domains of spending and saving to use as a resource for financial decisions. Those websites provided simple tools and explanations for budgeting, the difference among fixed and flex spending, the 50/30/20 rule, a spreadsheet to track their expenses, and 23 tips to save money on food, housing and utilities, transportation, entertainment, and more general recommendations. Web Appendix H provides a full description of the advice provided.

Next, all participants answered the same scales used in Study 4: financial self-efficacy ($\alpha = .88$; $M = 3.15$, $SD = 0.80$); CMMS ($\alpha = .83$; $M = 3.21$, $SD = 0.98$); EFFT ($\alpha = .89$; $M = 2.66$, $SD = 0.99$); and objective financial knowledge ($\alpha = .78$; $M = 6.78$, $SD = 2.99$). Web Appendix I shows measures, summary statistics, and correlations among all measures.

Main Study Results

We contrast coded the receiving actionable financial advice condition (1) against the control (-1). We find the predicted effect on financial self-efficacy ($b = .11$, $t = 3.01$, $p = .003$), consistent with **H1**. Actionable advice also increased objective financial knowledge ($b = .33$, $t = 2.50$, $p = .01$). However, there were no direct effects of the actionable financial advice manipulation on CMMS ($b = -.04$, $t = 1.05$, $p = .29$) or EFFT ($b = .02$, $t = 0.56$, $p = .57$). In contrast to Study 4, in which financial advice exerted downstream effects on financial well-being, we find only an indirect effect on financial self-efficacy suggesting that perhaps it is more difficult to influence the financial well-being of unemployed individuals.

Next, we added FSE and objective knowledge to the regression models predicting CMMS and EFFT. Results showed that FSE exerted strong effects on CMMS ($b = -.539$, $t = -10.90$, $p < .001$) and EFFT ($b = .648$, $t = 13.47$, $p < .001$), consistent with **H2**. Objective financial knowledge had no effect on CMMS ($b = -.01$, $t = -0.86$, $p = .39$) or EFFT ($b = .00$, $t = 0.02$, $p = .99$). Via PROCESS we again observed indirect effects of manipulated advice through financial self-efficacy on CMMS ($b = -.059$, $SE = .02$, $CI_{95\%} = -.099$ to $-.022$), and EFFT ($b = .070$, $SE =$

.02, $CI_{95\%} = .025$ to .118). Via financial self-efficacy, manipulated advice flowed through to reduce CMMS and increase EFFT. These results collectively support **H3** and **H4**.

Summary of Studies 3, 4 and 5

Studies 3 through 5 offered experimental / causal evidence for the effect of financial advice. Complex advice reduced financial self-efficacy, whereas specific actionable advice, and advice specific to help a financially vulnerable group increased financial self-efficacy. In addition, across these studies, most of the downstream effects of financial advice on financial well-being are channeled through financial self-efficacy and not through objective financial knowledge.

Discussion and Implications

The present research aimed to test when, why, and in what form financial advice improves financial self-efficacy and well-being. With our correlational Studies 1 and 2, respondents who obtained professional financial advice reported higher financial self-efficacy, which influenced financial well-being. Our experimental studies showed what aspects of financial advice strengthen financial self-efficacy. In Study 3, we examined general financial advice and found that more complex general financial advice from popular authors reduced financial self-efficacy and financial well-being relative to more simple general advice from a popular author. In Study 4, we developed specific actionable “just in time” financial advice on key financial topics with positive effects on financial self-efficacy and flow through to financial well-being. Study 5 finds that actionable financial advice specific to spending and savings improves financial self-efficacy for a population of involuntarily unemployed individuals. In all studies, most of the effects of financial advice on financial well-being were channeled through financial self-efficacy.

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In general, our findings suggest that professional financial advice offers a unique form of financial education that can enhance consumer financial self-efficacy, which has downstream effects on perceived financial well-being. Previous research has documented that the effect of financial education interventions aimed to improve objective financial knowledge is small, and decays over time (Fernandes et al., 2014). Thus, general professional financial advice that is easy to understand, e.g., that avoids technical terms and calculations, and is “just-in-time” for a specific decision may be more effective in raising consumer financial self-efficacy and well-being (Pilote et al., 2024).

For example, Ward and Lynch (2019) note that people learn best when the information is simple, relevant, and applicable to a certain decision they need to make. Therefore, the time of need to make a certain financial decision is a critical moment for educational interventions to build knowledge and confidence to act. Others note that the source of the just-in-time education - those with expertise and those who have gained their client’s trust - are also key to enhancing consumer confidence and well-being. Mende and van Doorn (2015) and Pilote et al. (2024) advance the benefits of “co-production.” Such co-production works best when the information conveyed is simple for the consumer to process, engaging, relevant to a specific issue, and focused on the problem at hand. Building from these insights, we find that advice that is tailored and connected to the specific need of individuals increases their financial self-efficacy.

Potential Policy Implications

Relevant policy implications from our studies are geared at the financial advising community, as well as consumers. Despite the continued prominence of financial advice from numerous sources other than family/friends (Gallup, 2025), and the amount of money involved (\$145 trillion in consumer assets (Gervais and Thannssoulis, 2024)), consumers are still wary of most financial advisors of any kind.

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For the advising community, many point to potential regulatory steps that could involve mandated training for those seeking to become certified financial planners (CFPs), registered investment advisors (RIAs), or other professional advice givers. Training should not only include expertise (declarative and procedural knowledge) of financial products, but “softer skills” that engender consumer trust, perceived financial efficacy, and well-being (Gallup, 2025; Mende and van Doorn, 2015; Pilote et al., 2024; State Street Global Advisors, 2007). These skills include: 1) gaining an understanding of the consumer’s current needs (e.g., just-in-time personal and familial issues) and risk tolerance; 2) transparency of fees; and 3) clarity and ease of understanding information during advisor-consumer interactions. Though these skills seem obvious, research suggests a disconnect between what advisors and consumers expect. For example, though 26% of advisors feel their knowledge and expertise is the most important attribute for a successful client-consumer relationship, nearly half of all consumers feel it is still the most important reason for seeking advice. Though nearly all consumers expect it, only 61% of advisors initiated a transparent discussion of the fees associated with advice (State Street Global Advisors, 2007).

The responsibility of adhering to financial advice must be shared by the consumer (Mende and van Doorn, 2015; Pilote et al., 2024). What can consumers do to feel confident in the advice given, act upon it, and feel an enhanced level of financial self-efficacy and perceived financial well-being? A consumer can educate him/herself. Financially literate clients – those with a higher level of financial self-efficacy - are more likely to ask informed questions of advisors and more actively participate in investment decisions (Pilote et al., 2024). Both conventional wisdom and academic research point to the following due diligence actions that consumers can take (Mende and van Doorn, 2015; Pilote et al., 2024; Wealthtender, 2025):

- Check an advisor's reputation, transparency and structure of fees, services offered, and credentials and certifications - is the advisor a fiduciary, CFP, or RIA?

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- Are the online reviews from independent sources overwhelmingly positive? Before reaching out to an advisor, due diligence includes doing research on an advisor's areas of specialization and the years of experience.
- While advice is becoming increasingly digital, it remains rooted in trust, personalized guidance, and ease of understanding. Does the advisor provide tailored planning, timely guidance, and foster long-term relationships?
- Investment management remains of clear importance, but is the advisor known for customer feedback centering on relationship quality, planning advice, and emotional support?

Advice for a Financially Vulnerable Group

We feel that our findings for a vulnerable group have special relevance. Previous research finds that financial education is less effective among low-income consumers (Fernandes et al., 2014). Low-income consumers, and populations in a state of vulnerability, lack basic financial knowledge, numerical skills, or the cognitive resources to enjoy a sense of financial well-being, because poverty is cognitively taxing (Mani, Shafir, and Zhao, 2013). Further, Americans' use of various sources of financial guidance differs by household income: 54% of upper-income adults vs. 39% of middle-income earners; vs. 20% of lower-income adults, respectively, use financial advisors of some sort. Thus, those that may need advice the most, use it the least, and educational guidance from trusted professional sources may be most effective among individuals less experienced with financial products (Mende et al., 2020).

Our work shows that actionable tailored financial advice improves financial self-efficacy even for a sample of unemployed individuals, who are likely in need of feeling empowered for taking control of their finances. Unemployed respondents, who are more likely to suffer from lower financial self-efficacy and negative downstream consequences, benefit from actionable tailored financial advice.

The Roles of Financial Self-Efficacy, Objective Financial Knowledge, Financial Resources

Though not a main focus of our research, the role of financial self-efficacy vis-a-vis the role of objective financial knowledge has implications for what might be stressed in the

professional financial advisor – consumer relationship. Previous research has documented the limited effects of objective knowledge on personal financial outcomes. Objective financial knowledge alone is not a strong driver of such outcomes (Atlas et al., 2019; Bolton et al., 2011), and perhaps other forms of financial education, not so focused on objective knowledge, would be more effective. For instance, Netemeyer et al. (2024) find that an education intervention aimed to improve financial self-efficacy is more effective compared to the typical effect-size of interventions aimed to improve objective financial knowledge. Amagir et al. (2022) find that financial education is more effective when it provides actionable tools, and Carpena et al. (2019) find that financial education is more effective when coupled with personalized goal setting from a financial counseling intervention. However, these educational efforts can be time-consuming (e.g., a few months) and costly. It is therefore important to examine when, how, and why a short financial advice lesson can be effective. Such advice can be scalable to improve consumers' financial well-being.

In line with this thinking, our Studies 1-5 showed that financial self-efficacy has a stronger effect on financial well-being relative to that of objective financial knowledge. A meta-analysis of our results indicate that the *partial r* effect-size of financial self-efficacy on financial well-being is $r = -.391$ (CI_{95} : $-.422$ to $-.360$) for CMMS and $r = .510$ (CI_{95} : $.479$ to $.541$) for EFFS; much greater than the effects of objective financial knowledge on CMMS ($r = -.047$; CI_{95} : $-.077$ to $-.016$) and on EFFS ($r = -.005$; CI_{95} : $-.036$ to $.026$). In addition, in all studies, financial advice exerted an effect on financial self-efficacy controlling for objective knowledge. The totality of these results suggests that enhancing financial self-efficacy is key to enhancing financial well-being, and that a key to enhancing financial self-efficacy is simple to understand just-in-time tailored advice from a trusted personal finance professional. Simple and tailored

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financial advice is a much more efficient and cost-effective approach to improve financial well-being than increasing overall financial knowledge.

We also find very limited effects of the ability of financial resources (e.g., household income and liquid savings) to moderate the financial self-efficacy→perceived financial well-being linkages. Clearly, such resources have an effect on how consumers feel about their short- and long-term financial health – this was the main reason we included household income and liquid savings as predictors of CMMS and EFFS in our studies. Still, in Studies 1 and 2, we find only one of four possible moderating effects: household income moderated the effect of FSE on CMMS in Study 1. And, as potentially moderating the financial advice→FSE linkage, only 1 of 8 possible interactions were significant (see footnotes 2 and 5). This largely suggests that financial resources are important predictors of financial well-being, but operate in parallel with financial self-efficacy.

Further, as noted in Tables 1 and 2, the std. *Bs* of household income on CMMS were -.056 and -.079; the std. *Bs* of household income on EFFS were .094 and .036. The std. *Bs* of liquid savings on CMMS were -.315 and -.134; the std. *Bs* of liquid savings on EFFS were .247 and .106. Corresponding std. *Bs* of FSE on CMMS were -.259 and -.409; corresponding std. *Bs* of FSE on EFFS were .276 and .399. In sum, the explanatory effects of FSE on financial well-being were comparable to, in some cases stronger than, the effects of household income and liquid savings.

Limitations and Future Research

The five studies we have presented must be judged against several limitations. First, for the two correlational studies, endogeneity - potential reverse causality - among financial self-efficacy and financial well-being is of note. In Study 2, financial self-efficacy was assessed three months prior to measuring financial well-being, thus establishing a time-order-of-occurrence

between these two constructs. Further, in both Studies 1 and 2, we conducted two-stage least squares (2SLS) with an instrumental variable in an attempt to reduce an endogeneity-driven explanation. (See footnotes 3 and 6; Web Appendices A and B for detailed analyses). Still, we can't confidently infer a financial self-efficacy→financial well-being causal link.

Future research may consider the following. To best rule out endogeneity, or control for it, a longitudinal before-and-after field experiment in which financial self-efficacy is manipulated (high vs. low) is needed. For example, assessing financial well-being at time 1; at time 2, via an educational intervention, introduce a financial self-efficacy manipulation; at time 3 measure financial well-being again, and assess the difference in financial well-being from time 1 to time 3. Over-time covariates, such as changes in income or net worth, could also be employed. Such a design is similar to the “difference-in-difference” with covariates approach used by Netemeyer et al. (2024) that controls for endogeneity and strengthens causality.

Second, though Studies 3 through 5 were experiments, thus strengthening casual inference, the experimental scenarios were hypothetical, all measures were self-report (Studies 1 and 2 as well), and objective measures of actual financial behaviors were not assessed. Future studies could conduct longitudinal field experiments assessing actual / verifiable measures of positive consumer financial behaviors, such as paying-off credit card balances each period, contributing to retirement funds, and contributing to 529 college savings plans, etc. Such studies could better delineate the relationship among financial self-efficacy and perceived financial well-being, as well as the relationships among financial self-efficacy, perceived financial well-being, and positive financial behaviors.

Our findings also point to several other directions for future research. As shown in Table 3, these include: 1) extracting a set of principles for how financial advice, as a form of financial education, can maximize its effect on financial self-efficacy; 2) shifting the focus from explicit

financial knowledge transfer to financial self-efficacy in the design of programs to support greater financial well-being; and 3) assessing heterogeneity in financial self-efficacy to identify unmet needs and underserved populations.

For example, the focus of financial education has remained on the transmission of explicit financial knowledge, despite consistent evidence that this approach struggles to have a meaningful effect on desired outcomes (Fernandes et al., 2014). The studies reported here suggest that simple and actionable advice as a form of education has the greatest effect. Additional research is needed to translate these findings into a body of evidence that can support the development of effective policies and programs to encourage greater financial self-efficacy. Research could examine the interaction between the financial advisor and client to identify more specific actions in the encounter that produce financial self-efficacy. One path to greater financial self-efficacy is a mastery of experience (Nob, 2021). To what extent do encounters with financial advisors represent or support mastery experiences, and do such experiences lead to greater financial self-efficacy as a result? With such insights, financial advisors could be trained to incorporate more effective actions into their practice. It may be that the individual's financial decision-making journey and the timing of financial advice in that journey matters most. Below, we briefly offer relevant future research questions tied to our findings.

Conclusion

Our work aimed to examine the effect of financial advice on the consumer's financial self-efficacy and flow through to perceived financial well-being. We observed that professional financial advice leads an individual to develop a greater sense of self-efficacy which led to higher levels of financial well-being. We found that simple to understand advice and advice tailored to a specific financial need are effective intervention tools to build consumer confidence and financial well-being. This finding held even among unemployed individuals in need of

agency for making financial decisions. Thus, professional financial advisors who can educate advisees on financial concepts in a simple manner play an important role in building financial self-efficacy, just-in-time for a given financial decision. In sum, the present paper addresses a key challenge of financial education and delivers an effective just-in-time / easy to understand / actionable advice intervention that affects financial self-efficacy and well-being.

Table 3: Future Research Questions Tied to Our Findings

Finding	Future Research Questions
Financial advice is a form of financial education that enhances self-efficacy.	- Is it the expertise, the interaction, or a combination of both that produces self-efficacy? - What might we learn about financial decision making if we viewed it as a journey with touchpoints that can enhance or diminish financial self-efficacy? - Does the timing of the financial advice in the decision-making process matter in whether or the extent to which financial self-efficacy is produced? - In what ways does financial advice operate on financial self-efficacy differently from more traditional forms of financial education? - What is the decay of financial self-efficacy over time?
Financial self-efficacy has a stronger effect on financial well-being than objective financial knowledge.	Would a traditional financial education program aimed at financial self-efficacy produce measurably better behavioral outcomes than a traditional explicit knowledge financial education program?
The association between financial self-efficacy and financial well-being vs. the role of an individual's objective financial situation (e.g., income, liquid savings).	- What other boundary conditions might there be for the association between financial self-efficacy and financial well-being? - Is financial self-efficacy consistent across the population? If not, what is the nature of heterogeneity?
Simple and actionable "just in time" advice have greater effects, especially for vulnerable populations (e.g., the unemployed).	- What role does a sense of mastery have in producing financial self-efficacy from the financial advice experience? - Does the decision outcome from the expert advice or just the encounter matter? - Is financial self-efficacy consistent for a given individual over-time and decisions? If not, what factors are associated with the variation?

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Web Appendix

Financial Advice to Financial Well-being: The Mediating Role of Financial Self-Efficacy

Daniel Fernandes
Catolica-Lisbon School of Business and Economics
Catholic University of Portugal
Palma de Cima, 1649-023 Lisboa, Portugal
315 217 270 250
daniel.fernandes@ucp.pt

Richard G. Netemeyer
McIntire School of Commerce
University of Virginia
Charlottesville VA, 29204
434 924-3388
rgn3p@virginia.edu

Dee Warmath
College of Family & Consumer Sciences
University of Georgia
Athens, GA 30602
262 312 0606
warmath@uga.edu

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Web Appendix A: ASIC Data (March 2020 - December 2020) Study 1 Measures

Financial Self-Efficacy (summed and averaged 5-point “not at all true” - “completely true” items: coeff. alpha = .92)

1. When I make plans for my money, I can make them work.
2. When I set important financial goals for myself, I will achieve them.
3. When it comes to my finances, I do not give up easily.
4. I am capable of dealing with most financial problems that might come up in life.
5. I do not avoid learning new things about finances even when they are difficult.
6. When dealing with a new financial decision or situation, I will persist until I am successful.
7. If I cannot figure something out about my money, I keep trying until I can.
8. When unexpected financial challenges occur, I handle them well.

Objective Financial Knowledge Quiz (summed correct answers in bold; coeff. alpha = .68)

1. Imagine that the interest rate on your savings account was 1% per year and inflation was 2% per year. After 1 year, would you be able to buy:
 - a. More than today with the money in this account
 - b. Exactly the same as today with the money in this account
 - c. **Less than today with the money in this account**
 - d. Don't know
2. Do you think that the following statement is true or false? “Investment bonds are normally riskier than shares.”
 - a. True
 - b. **False**
 - c. Don't know
3. When an investor spreads their money among different assets, does the risk of losing a lot of money:
 - a. Increases
 - b. **Decreases**
 - c. Stay the same
 - d. Don't know
4. Do you think that the following statement is true or false? “If you were to invest \$1,000 in a managed fund, it would be possible to have less than \$1,000 when you withdraw your money.”
 - a. **True**
 - b. False
 - c. Don't know

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5. Suppose you owe \$3,000 on your credit card. You pay a minimum payment of \$30 each month. At an Annual Percentage Rate of 12% (or 1% per month), how long would it take to eliminate your credit card debt if you made no additional new charges/purchases and continued to pay the minimum payment?
 - a. Less than 5 years
 - b. Between 5 and 10 years
 - c. Between 10 and 15 years
 - d. Never.... you will continue to be in debt**
 - e. Don't know

Current Money Management Stress (summed and averaged 5-point “strongly disagree” - “strongly agree” items: coeff. alpha = .89)

1. Because of my money situation, I feel I will never have the things I want in life
2. I am behind with my finances
3. My finances control my life
4. Whenever I feel in control of my finances, something happens that sets me back
5. I am unable to enjoy life because I obsess too much about money

Expected Future Financial Security (summed and averaged 5-point “strongly disagree” - “strongly agree” items; coeff. alpha = .95)

1. I am becoming financially secure
2. I am securing my financial future
3. I will achieve the financial goals that I have set for myself
4. I have saved (or will be able to save) enough to last me to the end of my life
5. I will be financially secure until the end of my life

Race / Ethnicity:

- White (coded as “1”)
- All other (coded as “0”)

Gender: What was your sex recorded at birth?

- Male (coded as “1”)
- Female (coded as “0”)

Age: What is your age?

- Under 18
- 18-24
- 25-29
- 30-34
- 35-44
- 45-54

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- 55-64
- 65 to 74
- 75 or older

Education: What is the highest level of education you have received?

- Primary school
- Some secondary school
- Completed secondary school
- Certificate
- Diploma/Advanced Diploma
- Undergraduate degree
- Postgraduate degree/qualification

Coded as 0 = Less than Undergraduate Degree; 1 = Undergraduate Degree or Higher

Marital Status: Are you . . . ?

- Married (coded as “1”)
- Living with partner/significant other (coded as “1”)
- Divorced (coded as “0”)
- Separated (coded as “0”)
- Single, never married (coded as “0”)
- Widowed (coded as “0”)

HH Income: What is the approximate annual 2019 gross income (before tax) of your household, including wages, investment income, government pensions and allowances, income from superannuation, etc.?

- Less than \$15,000
- At least \$15,000 but less than \$25,000
- At least \$25,000 but less than \$35,000
- At least \$35,000 but less than \$50,000
- At least \$50,000 but less than \$75,000
- At least \$75,000 but less than \$100,000
- At least \$100,000 but less than \$150,000
- At least \$150,000 but less than \$200,000
- At least \$200,000 but less than \$300,000
- \$300,000 or more

Liquid Savings: How much money do you have in liquid savings today (in cash, transaction, offset or savings account balances)?

- \$0
- \$1-99
- \$100-999

- \$1,000-4,999
- \$5,000-19,999
- \$20,000-\$74,999
- \$75,000 or more

Web Appendix A: Study 1 Summary Statistics & Correlations Among Constructs

	Mean	SD	1	2	3	4
1) Financial Self-Efficacy	3.58	.74	1.00			
2) CMMS	2.54	1.03	-.43	1.00		
3) EFFS	3.33	1.11	.54	-.60	1.00	
4) Financial Advice	.43	.49	.21	-.11	.26	1.00
5) Gender	.54	.49	.07	-.15	.06	.06
6) Age	5.24	1.81	.15	-.30	.10	.00
7) Education (1 = college degree; no college degree)	.37	.48	.14	-.08	.22	.20
8) Income	6.97	2.38	.24	-.22	.35	.17
9) Race	.98	.12	.11	-.13	.08	.03
10) Marital Status (1 = yes; 0 = no)	.52	.50	.17	-.19	.28	.12
11) Liquid Savings	4.67	1.84	.38	-.48	.48	.21
12) Objective Financial Knowledge	2.80	1.58	.24	-.22	.18	.20

Note: In general, correlations $\geq .08$ in absolute value were significant at $p < .05$.

Assessing Discriminant Validity Among Financial Self-Efficacy (FSE), Current Money Management Stress (CMMS), and Expected Future Financial Security (EFFS)

For Study 1, we estimated a 3-factor confirmatory model of FSE, CMMS, and EFFS as separate, but correlated, constructs consistent with our hypothesized conceptualization. This 3-factor model fit the data well ($\chi^2 = 931.12$; $df = 132$, CFI = .954, TLI = .947, RMSEA = .070) (Anderson and Gerbing, 1988; Bagozzi and Yi, 2012; Fornell and Larcker, 1981). Dis-attenuated correlations among the constructs were -.64 CMMS-EFFS; -.45 CMMS-FSE; and .56 EFFS -FSE. Average variance extracted estimates for the items in these scales ranged from .51 to .71. Each of these estimates was greater than the shared variance between constructs, supporting discriminant validity. We also estimated a series of 2-factor models that constrained the items of 2 of the constructs to load on a single factor, leaving the third construct's items to load on its intended factored. The best fit of any 2-factor model was the model that constrained CMMS and EFFS items onto one factor ($\chi^2 = 2812.69$; $df = 134$, CFI = .847, TLI = .825, RMSEA = .127). As is evident, this model was fitted much worse than the hypothesized 3-factor model. Further, the χ^2 difference in fit between this best fitting 2-factor model compared to the hypothesized 3-

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factor model was significant $(2,812.69 - 931.12) = 1,878.57$; 2 df, $p < .001$. In sum, evidence of discriminant was found in Study 1.

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Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18 (1), 39–50.

Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, 103 (3), 411–423.

Assessing Endogeneity Among Financial Self-Efficacy (FSE), Current Money Management Stress (CMMS), and Expected Future Financial Security (EFFS)

To help alleviate concerns of reverse causality (endogeneity), we used two stage least squares (2SLS) regressions of effects of FSE on CMMS and EFFS with an instrumental variable in an attempt to control for endogeneity among predictors and outcomes (Angrist and Krueger, 2001; Larcker and Rusticus, 2010). A properly chosen instrument should satisfy several criteria:

- the instrument should be correlated with the endogenous predictor of interest, and the instrument should be correlated with the DV;
- the partial effect of the instrument on the DV should be weakened or nonsignificant controlling for the endogenous predictor;
- the effect of the instrument on the endogenous predictor controlling for all other predictors should be significant;
- the F-value for the instrument as a sole predictor of the endogenous variable of interest should exceed 10 (Stock, Wright, and Yogo, 2002).
- the instrument should have some practical relevance to the predictor and DV
- the error term for the prediction of the DV should be uncorrelated with the instrument.

We chose annual income as the instrument, as it met the above criteria.

Study One:

- The annual income – FSE, CMMS, and EFFS correlations were $r = .226$, ($p < .001$); $r = -.214$ ($p < .001$); and $r = .335$ ($p < .001$), respectively.
- The partial effect of income (the instrument) on CMMS was $B = -.024$, ($t = 1.92$, $p = .066$ (ns) when FSE was in the model; the partial effect of income on EFFS was $B = .044$ ($t = 3.80$, $p < .001$) when FSE was in the model. When FSE was not in the model, the partial effect of income was stronger $B = .052$ ($t = 4.28$, $p < .001$).
- The effect of annual income on FSE controlling for all other predictors in the model was significant ($B = .027$, $t = 2.70$, $p = .003$).
- The F-value for annual income as the sole predictor of FSE was $F = 60.71$, ($p < .001$).
- Income clearly has practical relevance to all three financial perceptions.

- The error terms for the prediction of CMMS and EFFE were uncorrelated with income ($r = -.049, p = .117$ for CMMS; $r = -.044, p = .166$ for EFFE).

After meeting these criteria, we estimated 2SLS models with all other control variables in the model for predicting CMMS and EFFE. For CMMS, the effect of FSE remained significant ($B = -1.269, (t = 2.210, p = .028)$). For EFFE, the effect of FSE remained significant ($B = 2.626, t = 2.164, p = .031$). These results offer support that endogeneity is unlikely to confound our FSE → perceived financial well-being flow of effects in Study 1.

Angrist, J. D. & Krueger, A. B. (2001). Instrumental variables and the search for identification. *Journal of Economic Perspectives*, 15 (4), 69 -86.

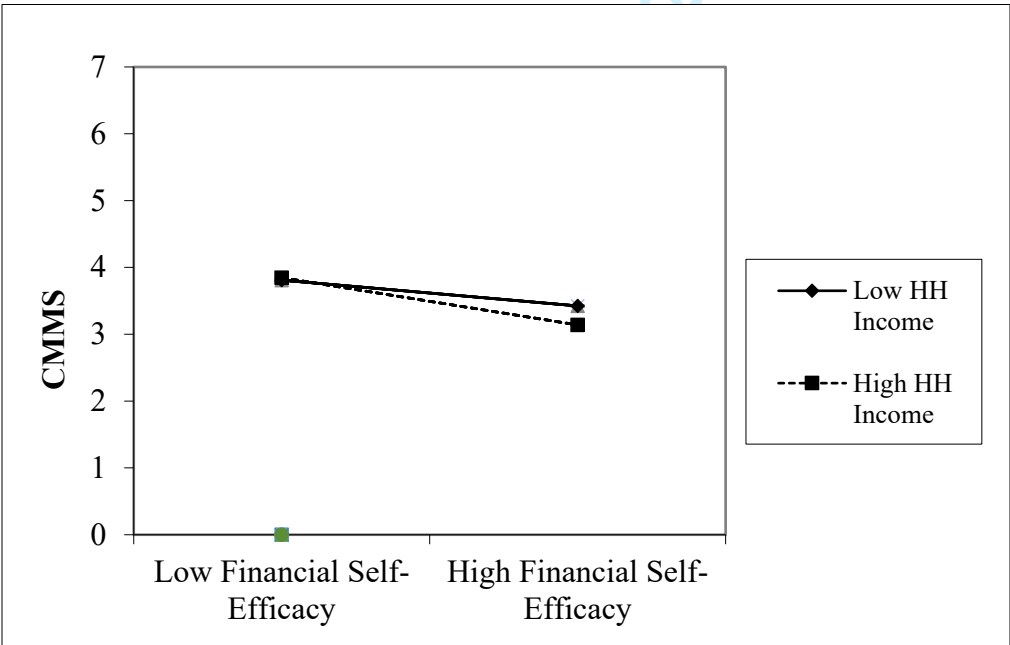
Larcker, David F., and Tjonne O. Rusticus. "On the use of instrumental variables in accounting research." *Journal of accounting and economics*, 49 (3), 186-205.

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Figure 1 Interaction Plot Between HH Income*FSE on CMMS

Figure 1WB shows the interaction between income and financial self-efficacy (FSE) on CMMS. Among those low in financial self-efficacy, CMMS is high regardless of income. Among those high in financial self-efficacy, CMMS is more strongly reduced among high-income individuals.

Figure 1: FSE*HH Income Interaction on CMMS



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Web Appendix B: Study 2 Measures

Financial Self-Efficacy (5-point items summed and averaged “not at all true” - “completely true”; coeff. alpha = .90)

1. I know how to make wise financial decisions.
2. I have the knowledge to make complex financial decisions.
3. I am able to make good financial decisions that are new to me.
4. I know how to make myself save.
5. I am able to recognize a good financial investment.
6. I have quite a bit of expertise when it comes to stocks, bonds, and mutual funds.
7. I have the necessary knowledge to make good financial decisions.

Current Money Management Stress (same as in Study 1; coeff. alpha = .88)

Expected Future Financial Security (same as in Study 1; coeff. alpha = .93)

Objective Financial Knowledge (correct response in italics; coeff. alpha = .80):

1) Imagine that the interest rate on your savings account was 1% per year and inflation was 2% per year. After 1 year, would you be able to buy:

- ☐ more than today with the money in this account
- ☐ exactly the same as today with the money in this account
- ☐ *less than today with the money in this account*
- ☐ Don't know
- ☐ Refuse to answer

2) Do you think that the following statement is true or false? “Bonds are normally riskier than stocks.”

- ☐ True
- ☐ *False*
- ☐ Don't know
- ☐ Refuse to answer

3) Considering a long time period (for example 10 or 20 years), which asset described below normally gives the highest return?

- ☐ savings accounts
- ☐ *stocks*
- ☐ bonds
- ☐ Don't know
- ☐ Refuse to answer

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4) Normally, which asset described below displays the highest fluctuations over time?

- ☐ savings accounts
- ☐ *stocks*
- ☐ bonds
- ☐ Don't know
- ☐ Refuse to answer

5) When an investor spreads his money among different assets, does the risk of losing a lot of money:

- ☐ increase
- ☐ *decrease*
- ☐ stay the same
- ☐ Don't know
- ☐ Refuse to answer

6) Do you think that the following statement is true or false? "If you were to invest \$1000 in a stock mutual fund, it would be possible to have less than \$1000 when you withdraw your money."

- ☐ *True*
- ☐ False
- ☐ Don't know
- ☐ Refuse to answer

7) Do you think that the following statement is true or false? "A stock mutual fund combines the money of many investors to buy a variety of stocks."

- ☐ *True*
- ☐ False
- ☐ Don't know
- ☐ Refuse to answer

8) Do you think that the following statement is true or false? "A 15-year mortgage typically requires higher monthly payments than a 30-year mortgage, but the total interest paid over the life of the loan will be less."

- ☐ *True*
- ☐ False
- ☐ Don't know
- ☐ Refuse to answer

9) Suppose you had \$100 in a savings account and the interest rate is 20% per year and you never withdraw money or interest payments. After 5 years, how much would you have on this account in total?

- ☐ *More than \$200*
- ☐ Exactly \$200
- ☐ Less than \$200
- ☐ Don't know
- ☐ Refuse to answer

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10) Which of the following statements is correct?

- ☐ Once one invests in a mutual fund, one cannot withdraw the money in the first year
- ☐ *Mutual funds can invest in several assets, for example invest in both stocks and bonds*
- ☐ Mutual funds pay a guaranteed rate of return which depends on their past performance
- ☐ None of the above
- ☐ Don't know
- ☐ Refuse to answer

11) Which of the following statements is correct? If somebody buys a bond of firm B:

- ☐ He owns a part of firm B
- ☐ *He has lent money to firm B*
- ☐ He is liable for firm B's debts
- ☐ None of the above
- ☐ Don't know
- ☐ Refuse to answer

12) Suppose you owe \$3,000 on your credit card. You pay a minimum payment of \$30 each month. At an Annual Percentage Rate of 12% (or 1% per month), how many years would it take to eliminate your credit card debt if you made no additional new charges?

- ☐ less than 5 years
- ☐ between 5 and 10 years
- ☐ between 10 and 15 years
- ☐ *never*
- ☐ Don't know
- ☐ Refuse to answer

HH Income: What is the total gross monthly income of your household? Please give us the raw Dollar amount that includes **all sources of income** from job, bonuses, commission, tips, and government benefits and /or assistance (\$ per month).

Liquid savings: What is the approximate value of your savings (in dollars)?

Financial advice: With whom do you get financial advice?

1. family
2. friends
3. popular finance books
4. youtube videos
5. professional financial advisors
6. I don't get financial advice from anyone
7. Other, please specify:

Web Appendix B: Study 2 Summary Statistics & Correlations Among Constructs

	Mean	SD	1	2	3	4
1) Financial Self-Efficacy	3.02	0.79	1.00			
2) CMMS	2.82	1.07	-.49	1.00		
3) EFFS	3.09	1.07	.64	-.64	1.00	
4) Professional Advice (1 = yes, 0 = no)	0.26	0.44	.26	-.28	.30	1.00
5) Advice of Friends and Family (1 = yes, 0 = no)	0.50	0.50	.07	-.03	.10	.05
6) Popular Advice (1 = yes, 0 = no)	0.34	0.48	.16	-.07	.17	.01
7) Age	41.34	14.22	.07	-.12	.02	.09
8) Gender (1 = female)	.51	.50	-.22	.06	-.11	-.02
9) Income	32,844.4	48,813.2	.14	-.17	.18	.13
10) Liquid Savings	54,232.0	178,043.6	.20	-.26	.29	.15
11) Objective Financial Knowledge	8.38	2.81	.29	-.22	.20	.10

Note: In general, correlations $\geq .09$ in absolute value were significant at $p < .05$.

Assessing Discriminant Validity Among Financial Self-Efficacy (FSE), Current Money Management Stress (CMMS), and Expected Future Financial Security (EFFS)

The hypothesized 3-factor model adequately fit the data ($\chi^2 = 773.38$; $df = 132$, CFI = .910, TLI = .901, RMSEA = .096). Dis-attenuated correlations among constructs were -.71 CMMS-EFFS; -.53 CMMS-FSE; and .69 EFFS -FSE. Average variance extracted estimate for the items in these scales ranged from .56 to .59. Each of these estimates was greater than the shared variance between constructs. The best fit of any 2-factor model was again the model that constrained CMMS and EFFS items onto one factor ($\chi^2 = 1298.64$; $df = 134$, CFI = .830, TLI = .810, RMSEA = .129). The χ^2 difference in fit between this best fitting 2-factor model compared to the hypothesized 3-factor model was again significant, 525.26, 2 df , $p < .001$. In sum, evidence of discriminant was found in Study 2.

Assessing Endogeneity Among Financial Self-Efficacy (FSE), Current Money Management Stress (CMMS), and Expected Future Financial Security (EFFS)

Study Two....again using annual income as the instrumental variable:

- The annual income – FSE, CMMS, and EFFS correlations were $r = .143$, ($p < .001$); $r = -.170$ ($p < .001$); and $r = .181$ ($p < .001$), respectively.
- The partial effect of income (the instrument) on CMMS was $B = -.002$, ($t = 2.10$, $p = .036$ when FSE was in the model; When FSE was not in the model, the partial effect of income was stronger $B = -.004$ ($t = 2.94$, $p < .001$). The partial effect of income on EFFS was $B = .001$ ($t = 1.24$, $p = .216$) when FSE was in the model.

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- The effect of annual income on FSE controlling for all other predictors in the model was significant ($B = .002$, $t = 2.51$ $p = .012$).
- The F-value for annual income as the sole predictor of FSE was $F = 10.98$, ($p < .001$).
- Income clearly has practical relevance to all three financial perceptions.
- The error terms for the prediction of CMMS and EFFE were uncorrelated with income ($r = -.049$, $p = .262$ for CMMS; and $-.082$, $p = .060$).

After meeting these criteria, we estimated 2SLS models with all other control variables in the model for predicting CMMS and EFFE. For CMMS, the effect of FSE remained significant ($B = -1.636$, ($t = 2.541$, $p = .015$)). For EFFE, the effect of FSE remained significant ($B = 1.690$, $t = 2.935$, $p = .003$). These results offer support that endogeneity is unlikely to confound our FSE → perceived financial well-being flow of effects in Study 2.

Web Appendix C: Study 3 Measures

- Financial Self-Efficacy (same as in Study 2; coeff. alpha = .92)
- Current Money Management Stress (same as in Study 2; coeff. alpha = .88)
- Expected Future Financial Secuity (same as in Study 2; coeff. alpha = .94)
- Objective Financial Knowledge (same as in Study 2; coeff. alpha = .81)
- HH Income (same as in Study 2)
- Liquid savings (same as in Study 2)

Web Appendix C: Study 3 Summary Statistics & Correlations Among Constructs

	Mean	SD	1	2	3	4	5	6
1) Financial Self-Efficacy	3.13	0.88	1.00					
2) CMMS	2.87	1.09	-.42	1.00				
3) EFFS	3.03	1.13	.67	-.58	1.00			
4) Gender (1 = female)	.45	.50	-.22	.08	-.14	1.00		
5) Income	34,810.8	51,528.9	.15	-.16	.22	-.05	1.00	
6) Liquid Savings	58,318.2	253,376.6	.24	-.21	.24	-.02	.15	1.00
7) Objective Financial Knowledge	8.36	2.87	.35	-.23	.23	-.19	.05	.17

Note: In general, correlations $\geq .09$ in absolute value were significant at $p < .05$.

Additional Regression Results Controlling for all Covariates

We also conducted the analysis predicting financial self-efficacy, and downstream effects on CMMS and EFFS with all other control variables in the model. We first regressed financial self-efficacy on dummy coded complex advice (1 = yes, no = 0) and the control variables. The Table below shows the results. Financial self-efficacy was influenced by the control variables of gender, age, household income, liquid savings, and objective financial knowledge. Importantly,

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receiving more complex financial advice reduced financial self-efficacy ($b = -.238, t = -3.93, p < .001$).

CMMS was predicted by the controls of household income and liquid savings, while EFFS was predicted by age, household income and CMMS. Importantly, financial self-efficacy exerted strong effects on CMMS ($b = -.455, t = 10.28, p < .001$) and EFFS ($b = .665, t = 18.49, p < .001$), supporting **H2**. These results replicate our findings reported in the main text of adding additional covariates.

Table: Study 3 Regression Results

	Financial Self-Efficacy	CMMS	EFFS
Control Variables:			
Gender (1 = female; 0 = male)	-.270 (.058) / -.153	-.017 (.073) / -.008	.026 (.056) / .011
Age	-.003 (.002) / -.046	-.005 (.003) / -.063	-.004 (.002) / -.054
Household Income (in thousands)	.002 (.001) / .093	-.002 (.001) / -.091	.002 (.001) / .086
Liquid Savings (in thousands)	.001 (.0001) / .176	-.0004 (.0001) / -.088	.0002 (.0001) / .040
Objective Financial Knowledge	.090 (.010) / .294	-.025 (.013) / -.067	-.012 (.010) / -.030
CMMS	----	----	-.370 (.027) / -.356
Hypothesized Predictors			
Complex advice	-.238 (.060) / -.125	-.101 (.076) / -.043	.023 (.058) / .009
Financial Self-Efficacy	----	-.455 (.044) / -.368	.665 (.036) / .516
R-Square	.204	.200	.570

Notes: Unstd. regression coefficients (std. errors) / std. regression coefficients.

Bolded entries are significant at $p < .05$ or better.

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Web Appendix D: Study 4 Financial Advice Manipulation

Specific Advice Condition: Participants assigned to receive specific financial advice obtained advice on the following topics: Saving; Spending; Asset allocation; Stock market participation; Housing; and Planning for Retirement. For each topic, we curated recommendations and websites with additional resources for more knowledge and help in the topic. The manipulation was as follows:

In the next pages, we offer simple and useful financial advice for individuals to improve their financial well-being. The advice was designed to explain in a simple way the core tasks people should do and why in order to secure their finances and make good financial decisions. For each topic, we curated a website for people to use as a resource for good financial decisions in the future. You can save the links to consult later by the time you have to make those financial decisions. Please select the area(s) in which you would like to obtain financial advice:

1. Saving
2. Spending
3. Asset allocation
4. Stock market participation
5. Housing
6. Retirement

Saving

Try to save for emergencies and unexpected expenditures (a rainy day). Savings will allow you to manage those unexpected expenses more cheaply, without having to use expensive loans. Savings will also allow you to spend money on important things in the future such as holidays or a car. Savings will also increase your chances to find a good investment opportunity.

A few tips to increase your savings are:

- 1) try to remove any unnecessary spending. For instance, cook at home instead ordering from a restaurant.
- 2) use cash more often. It is easier to spend on a card.
- 3) motivate yourself by using meaningful dates such as your birthday or a new month to set a savings goal (for instance, I will save 10% of your income after my next birthday).

This link provides more useful tips to save more money:

<https://www.ramseysolutions.com/budgeting/the-secret-to-saving-money>

Asset allocation

Don't put all your eggs in one basket. Some investments are riskier than others. Riskier investments may provide larger returns, but also larger losses. Specifically, don't invest all your

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money in stocks. A combination of bonds and stocks is better.

If you've expensive debt, it always pays to clear it before saving.

This link provides the historical returns of different balanced portfolios:

<https://investor.vanguard.com/investor-resources-education/education/model-portfolio-allocation>

Stock market participation

Don't invest in specific companies. It is best to invest in equity funds that reward the average return of the market. Don't invest in actively managed funds. Those are expensive, have larger trading costs, and typically give lower returns than passive funds.

If you decide to invest in stocks, be mindful that you can have negative returns in some weeks. But the return is positive over a longer time frame. The main problem of the stock market is that people are loss averse, and end up selling at a large loss and trading more than they should.

This link provides a perspective for why waiting is best in the stock market:

<https://investor.vanguard.com/investor-resources-education/article/the-secret-to-financial-freedom-persist-when-others-quit>

Housing

When you buy a house, don't commit to a large monthly mortgage payment. Be mindful that a small monthly mortgage payment will allow you to manage your monthly budget more easily. It is relatively easy to cut spending on unnecessary things. But you cannot easily stop paying your mortgage.

You may consider a variable interest rate mortgage given that interest rates are at a historically high and fixed rates are typically more expensive. Try to refinance your mortgage and talk to the bank if you are having a hard time to repay or think you can have a better deal.

If you don't know whether you should buy or rent, think of a rent as a mortgage that you pay only interest. Financially, it is better to rent if the rent is lower than the monthly interest only of a mortgage for a similar house amounting the price of that house.

This link provides a more detailed explanation for when renting is financially better than buying:

<https://www.khanacademy.org/economics-finance-domain/core-finance/housing>

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Spending

Pay down your revolving credit balances. If you have the funds to pay more than your minimum payment each month, you should do so. This will improve your credit score and allow you to get better loans. It is also good to make a budget and to track your expenses.

These links provide useful tips and tools for budgeting:

<https://www.tiaa.org/public/learn/personal-finance-101/how-to-make-a-budget>

https://www.tiaa.org/public/pdf/r/retirement_expense-income_worksheets.pdf

Retirement

Try to save for retirement. Consider also that you may have a significant other that may live longer than you. Save for that person as well.

This link provides a good tips for how much to save for retirement and where to invest at different stages of life:

<https://www.troweprice.com/personal-investing/resources/insights/retirement-savings-by-age-what-to-do-with-your-portfolio.html>

This link provides specific information about when to apply for retirement benefits:

<https://www.ssa.gov/prepare/plan-retirement>

General Advice Condition: Participants assigned to receive general financial advice obtained the following advice without any actionable guidance. The manipulation was as follows:

Please consider the following four tips for boosting financial wellness:

- 1) Create a budget (and stick to it).
- 2) Save an emergency rainy day fund.
- 3) Pay down your debt.
- 4) Educate yourself about finance.

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Web Appendix E: Study 4 Measures

Financial Self-Efficacy (Same as in Study 2; coeff. alpha = .91)

Current Money Management Stress: (Same as in Studies 1 and 2; coeff. alpha = .89)

Expected Future Financial Security: (Same as in Studies 1 and 2; coeff. alpha = .93)

Objective Financial Knowledge: (Same as in Study 2; coeff. alpha = .79)

Income: (Same as in Study 2)

Web Appendix F: Study 4 Summary Statistics & Correlations Among Constructs

	Mean	SD	1	2	3	4	5	6
1) Financial Self-Efficacy	3.54	0.81	1.00					
2) CMMS	2.81	1.08	-.51	1.00				
3) EDFS	3.27	1.09	.62	-.66	1.00			
4) Age	42.38	13.39	.06	-.07	-.02	1.00		
5) Gender (1 = female)	.60	.49	-.15	.07	-.06	.006	1.00	
6) Income	40,719	57,953	.10	-.11	.16	.02	-.02	1.00
7) Objective Financial Knowledge	8.00	2.52	.27	-.18	.22	.17	-.25	.03

Note: In general, correlations $\geq .05$ in absolute value were significant at $p < .05$.

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Web Appendix F: Replication Study of Actionable Advice Choice

Method

We recruited 506 *Prolific* panel members. They were randomly assigned to a single factor experimental design with two levels (On-demand Specific Advice vs. No Advice). Instead of obtaining the advice on all topics as in Study 4 in the main text, participants assigned to receive on-demand specific financial advice could choose among the topics from which they would like to obtain advice (Saving; Spending; Asset allocation; Stock market participation; Housing; and Planning for Retirement).

Next, all participants answered the 7-item financial self-efficacy scale ($\alpha = .89$; $M = 3.34$, $SD = 0.78$), the CMMS scale ($\alpha = .89$; $M = 2.88$, $SD = 1.05$), the EFFS scale ($\alpha = .93$; $M = 3.15$, $SD = 1.03$) (Netemeyer et al., 2018), and the 12 question objective financial knowledge scale of Fernandes et al. (2014) ($\alpha = .75$; $M = 8.14$, $SD = 2.63$).

Study Results

We contrast coded the conditions of actionable financial advice (1) against the control (-1). There was an effect of the manipulation on financial self-efficacy ($b = .07$, $t = 2.03$, $p = .043$). This supports the prediction that advice to a certain need affects financial self-efficacy. This result is also consistent with **H1**. Next, and as expected, regressions showed that financial self-efficacy exerted strong effects on CMMS ($b = -.67$, $t = 12.60$, $p < .001$) and EFFS ($b = .88$, $t = 19.89$, $p < .001$) replicating our **H2** results. Objective financial knowledge exerted no influence on EFFS ($b = -.02$, $t = 1.42$, $p = .15$), but did have an effect on CMMS ($b = -.03$, $t = 2.12$, $p = .03$). There were no direct effects of manipulated financial advice on CMMS ($b = .06$, $t = 1.31$, $p = .19$) or EFFS ($b = .02$, $t = 0.39$, $p = .70$). Similar to the results found in Studies 1 through 3 though, PROCESS (Hayes 2022) did show indirect effects of manipulated specific advice through financial self-efficacy on CMMS ($b = -.05$, $SE = .02$, $CI_{95\%} = -.097$ to $-.004$) and EFFS

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($b = .06$, $SE = .03$, $CI_{95\%} = .002$ to $.121$), consistent with **H3**. These results show that the positive effect of actionable financial advice extends to situations in which participants receive advice only on the topics they are willing to know more about instead of all the topics.

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Web Appendix G: Study 5 Pilot Study – Vulnerable Population

Method

Three hundred-six *Prolific* panel members were randomly assigned to a single factor design with two levels (Advice vs. No Advice). The procedures were the same as main Study 5. Participants were screened based on current involuntary job loss and were assigned to receive financial advice obtained on both spending and saving (see Web Appendix H). Next, all participants answered the same scales used in Study 4: 7 items for financial self-efficacy ($M = 3.09$, $SD = 0.83$); the 5-item CMMS scale ($M = 3.30$, $SD = 1.00$); and the 5-item EFFS scale ($M = 2.45$, $SD = 1.02$).

Results

Effects of Manipulated Financial Advice. We contrast coded the financial advice condition (1) against the control (-1). There was an effect on financial self-efficacy ($b = .11$, $t = 2.00$, $p = .046$). As expected, financial self-efficacy exerted strong effects on EFFS ($b = .58$, $t = 12.49$, $p < .001$) and CMMS ($b = -.43$, $t = 8.21$, $p < .001$). There were no significant effects of the manipulation on CMMS ($b = -.05$, $t = 0.94$, $p = .35$) or EFFS ($b = .08$, $t = 1.37$, $p = .17$). Via PROCESS (Hayes 2022) though, we again observed indirect effects of manipulated advice through financial self-efficacy on CMMS ($b = -.053$, $SE = .02$, $CI_{95\%} = -.102$ to $-.002$), and EFFS ($b = .07$, $SE = .03$, $CI_{95\%} = .006$ to $.140$).

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Web Appendix H: Study 5 Advice Scenarios - Vulnerable Population

Participants assigned to receive financial advice obtained recommendations on both spending and saving. The advice offered simple and useful tools for individuals to enhance their financial well-being while searching for a new job. The advice explained the core financial tasks people should do, and why, to better secure their finances and make good financial decisions (See Figure 1). We also curated a few websites in the domains of spending and saving to use as a resource for financial decisions in the future. The actual manipulation was as follows:

Spending

Try to pay down your revolving credit balances. If you have the funds to pay more than your minimum payment each month, you should do so. This will improve your credit score and allow you to get better loans. It is also good to make a budget and to track your expenses. These links provide useful tips and tools for budgeting:

<https://www.tiaa.org/public/learn/personal-finance-101/how-to-make-a-budget>

https://www.tiaa.org/public/pdf/r/retirement_expense-income_worksheets.pdf

Saving

Try to save for emergencies and unexpected expenditures (a rainy day). Savings will allow you to manage those unexpected expenses more cheaply, without having to use expensive loans. Savings will also allow you to spend money on important things in the future such as holidays or a car. Savings will also increase your chances to find a good investment opportunity.

A few tips to increase your savings are:

- 1) try to remove any unnecessary spending. For instance, cook at home instead of a restaurant.
- 2) use cash more often. It is easier to spend on a card.
- 3) motivate yourself by using meaningful dates such as your birthday or a new month to set a savings goal (for instance, I will save 10% of your income after my next birthday).

This link provides more useful tips to save more money:

<https://www.ramseysolutions.com/budgeting/the-secret-to-saving-money>

Web Appendix I: Study 5 measures

- Financial Self-Efficacy:** (Same as in Study 4; coeff. alpha = .88)
- Current Money Management Stress:** (Same as in Study 4; coeff. alpha = .83)
- Expected Future Financial Secuity:** (Same as in Study 4; coeff. alpha = .89)
- Objective Financial Knowledge:** (Same as in Study 4; coeff. alpha = .78)
- Income:** (Same as in Studies 3 and 4)

Web Appendix I: Study 5 Summary Statistics & Correlations Among Constructs

	Mean	SD	1	2	3	4
1) Financial Self-Efficacy	3.15	0.80	1.00			
2) CMMS	3.21	0.98	-.45	1.00		
3) EFFS	2.66	0.99	.52	-.57	1.00	
4) Financial Advice (1 = yes; -1 = no)	0.00	1.00	.13	-.05	.02	1.00
8) Age	33.28	12.07	.04	.01	-.08	-.02
9) Gender (1 = female; 0 = male)	.62	.49	-.10	.03	.07	.07
10) Income	34,089	47,860	-.03	-.07	.09	.02
12) Objective Financial Knowledge	6.78	2.99	.20	-.13	.11	.11

Note: In general, correlations $\geq .09$ in absolute value were significant at $p < .05$.