Self-Efficacy, Financial Stress, and the Decision to
Seek Professional Financial Planning Help

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<u>Abstract</u>

Canadian survey data is used to establish how financial self-efficacy and financial stress affect one's tendency to seek professional financial planning help. Self-efficacy is the belief in one's own ability to succeed at a task. It is related to other behavioral characteristics such as self-confidence, motivation, optimism, and the belief that one can cope with a variety of life's challenges (Bandura 1997, 2006). We find in this study that one's sense of financial self-efficacy positively predicts the likelihood to seek professional financial help after controlling for age, income, education, assets and debt, and employment.

<u>Background</u>

What are the benefits of professional financial planning help?

Professional financial planning is an important option for overall financial well-being. Financial planners have tools and expertise lacking in the general population. As financial circumstances become more complicated, financial planners can help individuals and households decide which financial decisions are in their best interest. As part of understanding financial help-seeking behavior, we need to clarify the goals of financial planning. If those results can be quantified in dollar terms, then cost-benefit analyses are possible. That is, we may be able to determine under what circumstances individuals will get results that exceed the fees paid to the financial planner.

The potential benefits of professional financial planning help may vary across the components of financial planning. Altfest (2004) notes six broad areas: tax planning, cash flow planning, investments, risk management, retirement planning, and estate planning. The first area, tax planning, may offer the simplest opportunity for assessing the value of financial planning. If a planner charges someone $5000 for advice that produces an immediate $10,000 reduction in income taxes, then that individual may view this as a clear gain. However, as described below, many complexities are encountered in assessing other areas

of planning.

Hanna and Lindamood (2010) use an expected utility approach to study issues in three of Altfest's six areas. Their theoretical method avoids some crucial problems posed by survey data or other empirical methods. For example, in the 2007 Survey of Consumer Finances, the median net worth was $275,700 for households using financial planners, compared to $87,500 for households not using financial planners. But Hanna and Lindamood caution against concluding that the financial planners were responsible for the tripling of net worth, since the people who chose to use planners may have done so because they already had higher income and net worth.

The first area considered by Hanna and Lindamood is risk management. They construct two simple examples, one involving a 0.1% chance of losing 80% of wealth, and the other with a higher probability (1%) of a more modest loss (20% of wealth). The household's net worth is assumed to be $2.5 million. In the first scenario, for plausible levels of risk aversion, certainty equivalent wealth (CEW) increases by more than $200,000 if they purchase insurance against the loss. In the second scenario, CEW increases by only a few thousand dollars. If the household did not otherwise know to purchase insurance, the CEW increase is the value of that advice from the financial planner.

The second area examined by Hanna and Lindamood is investments. If the household would otherwise choose only risk-free investments, what is the value of advice to choose a riskier portfolio with a higher expected return? Again, the answer is provided by comparing CEWs. Interestingly, the increases in CEW are quite modest, and are negative for highly risk-averse households. Comparing the results from these two areas, Hanna and Lindamood conclude that "most people would place relatively high values on risk reduction strategies and relatively low values on wealth increasing strategies." (p. 121)

The final area studied by Hanna and Lindamood is consumption smoothing, which falls under Altfest's retirement planning category. The assumption is a household income stream which steadily rises from age 25 to 65, and then plunges to a modest constant pension in retirement. If a household does not save and therefore consumes 100% of income each year, then consumption similarly plunges at retirement. Utility is increased by an optimal consumption path, which requires savings during the

working years in order to augment income during retirement. In each of the three examples constructed by Hanna and Lindamood, the value of advice to follow an optimal savings plan exceeds $400,000.

Marsden, Zick, and Mayer (2011) take a different approach. Although their study is titled "The Value of Seeking Financial Advice," they do not give dollar values for the benefits. They use a propensity score method to create a matched sample of those who met with financial advisors, and those who did not. The key element of the matching process is a logit model to estimate probabilities of meeting with an advisor. After controlling for self-selection, they found statistically significant results in several areas. Respondents who had met with a financial advisor were more likely to subsequently establish long-term goals; calculate their retirement needs; establish retirement accounts and emergency funds; display appropriate investment responses to a recession; and have greater retirement confidence.

Cummings (2013) shows that individuals with financial advisors are more likely to have Roth IRAs, and to start them at an earlier age. He also demonstrates long-run benefits, both financial and non-financial, among older respondents. Further findings about older adults are presented by Cummings and James (2014) in an analysis of decisions to either get or drop financial advisors. The most significant factors in getting a financial advisor included becoming a new widow(er), asking family members for assistance with financial decisions, seeking help for emotional problems, and positive changes in income and net worth. Similarly, new widow(er)s and people with increased net worth were less likely to drop their financial advisors.

Who is likely to seek financial help?

The decision to seek help is relevant across multiple domains, including medicine, mental health, and personal finance. Health and finances are two big stressors in modern day life. As such, research has focused on whether people, when faced with financial or medical problems, decide to seek help for those problems. Research in health fields has been more prolific than research in the financial field, but financial planning is gaining traction. Some of the first researchers to consider help-seeking in a financial content were Grable and Joo (1999). Grable and Joo conceptualized help-seeking behavior as a coping strategy to deal with financial troubles. They developed a framework consisting of five

stages including the recognition and evaluation of one's own financial behaviors to the process of seeking professional help when they recognized problems with which they needed help. Other theories and frameworks have been used to better understand help-seeking behaviors including Stigler's (1961) model of the economics of information and the Transtheoretical Model of Behavior Change (Prochaska and Velicer, 1997).

Grable and Joo (2001) examine the choice between obtaining financial advice from professionals versus non-professionals. They find that financial risk tolerance and financial satisfaction are the key variables which differentiate between individuals who seek help from a professional source, and those who turn to family, friends, and work colleagues for advice. Individuals with lower income and lower self-esteem tend to seek help from non-professionals; this was confirmed in a medical setting by Banerjee and Suparana (1998), and by duPlessis, Lawton, and Corney (2010) who find that barriers to financial help-seeking included shame and embarrassment, as well as lack of knowledge about professional sources. Dearden *et al.* (2010) demonstrate gender differences in help-seeking for debt problems.

Hanna (2011) uses four separate waves of the Survey of Consumer Finances, from 1998 to 2007, to analyze the likelihood of using a financial planner. In the first three waves, reported use of financial planners was roughly constant at 21.1% to 22.0% percent of households. In the 2007 wave, usage was significantly higher at 25.2%. However, there were large differences across a variety of independent variables. Descriptive statistics show greater usage of financial planners among people with above average risk tolerance, post-bachelor degree education, higher household income, and higher net worth. A logistic relation shows how each independent variable affects the likelihood of using a financial planner when all other variables are set at the sample means. One methodological advance is to specify net worth as a piecewise log variable, in order to test separately for negative net worth which was reported by 7% of the households.

Self-Efficacy

There has been a strong push towards improving financial literacy of consumers, with the argument being that more financially literate consumers will be able to navigate the complex financial systems and make decisions in their own best interest. Researchers, however, have been unable to identify effective ways at improving financial literacy and there is a lack of evidence that even those with more financial knowledge make better decisions (Willis, 2008). What has arisen from the research is the theory that better consumer financial decision making stems from financial self-efficacy (Remund, 2010) – a belief that one can effectively manage their personal financial affairs. Confirming this link between knowledge and self-efficacy, Heckman and Grable (2011) found that college students' financial knowledge was positively associated with financial self-efficacy.

It is reasonable to expect that there is a connection between financial self-efficacy and the tendency to seek financial planning help. In the cognitive theory of stress and coping, self-efficacy acts as a mediator of stress and stress-related adaptive behaviors (Folkman, 1984; Folkman, Schaefer, & Lazarus, 1979). Those with a high sense of financial self-efficacy believe they have the ability to handle their financial affairs and are likely able to identify what they can manage and when they need help. Those low in financial self-efficacy are less able to manage their financial affairs and are therefore unable to determine when they need help. In a recent study, Lim *et al.* (2014) found that college students with high levels of financial stress were generally less likely to seek financial help, but that effect was moderated for those high in self-efficacy.

Self-efficacy is particularly important in the context of financial decisions and help-seeking because it influences individuals' behavioral changes (Bandura, 1977; Gecas, 1989). Research in the health and exercise fields has demonstrated that self-efficacy can be boosted to encourage health promoting behaviors (Grembowski *et al.*, 1993). Individuals with high levels of self-efficacy have been shown to be more successful than those with low self-efficacy in coping with adversity (Park & Folkman, 1997). Findings from a study by Engleberg (2007) revealed correlations between economic self-efficacy and the notion of adhering to saving plans and better self-control of emotions. Lapp (2010)

found higher financial self-efficacy was associated with lower debt, fewer financial problems, lower financial stress, higher savings and greater financial happiness. In studies examining self-efficacy, risk tolerance, age, and education have been found to be positively correlated with self-efficacy (Lown, 2011).

Engelberg (2007) found that respondents with a high sense of self-efficacy were less likely to perceive themselves being at risk for disrupted income, unforeseen expenses, and unsuccessful investments, as compared to those with low self-efficacy. Those with high self-efficacy also reported a sense of financial control, less attachment to the importance of money, better economic knowledge, a more optimistic view of their financial situation and less distrust in money matters. Lacking a sense of economic self-efficacy has been associated with feelings of stress, negative emotion, and in more extreme cases, depression (e.g. Burgogne, 1990; Krause and Baker, 1992; Mates and Allison, 1992; Ennis *et al.*, 2000).

Measuring Financial Self-Efficacy

Self-efficacy is domain specific (Badura 1997, 2006; Lown, 2011), meaning that it is not universal across all aspects of one's life. Badura's research (2006) differentiates between general self-efficacy and domain-specific self-efficacy and states that it is necessary to include items that relate to the particular concept being measured. For example, the belief in one's ability to complete a triathlon does not necessarily mean they are able to manage their money with the same sense of confidence.

A number of measures of financial self-efficacy have been developed and deployed for use in research. Dietz, Carrozza, and Ritchey (2003) developed a financial self-efficacy scale to analyze retirement saving strategies. Three items in the scale include: (1) I have little control over financial things that happen to me, (2) I often feel helpless in dealing with the money problems of life, and (3) There is little I can do to change many of the important money issues in my life. Danes and Haberman (2007) used financial self-efficacy to evaluate the effects a high school financial planning curriculum.

The two items measuring financial self-efficacy were: (1) I believe the way I manage my money will affect my future, and (2) I feel confident about making decisions that deal with money. Lapp (2010) measured financial self-efficacy with three items: (1) I was good at planning for my financial future, (2) I was satisfied with my financial situation, and (3) I was able to save money.

Lown (2011) created a financial self-efficacy measure after recognizing both the importance of self-efficacy in financial decisions, and also the lack of a concrete measure. Lown's work began with a 10-item General Self-Efficacy Scale (GSES) developed by Schwarzer and Jerusalem (1995) and validated in 30 countries. The GSES is a general measure that does not assess specific behavior; therefore, Lown incorporated measures of financial behaviors to focus the measure specifically on financial self-efficacy. The following six questions were asked: (1) It is hard to stick to my spending plan when unexpected expenses arise, (2) It is challenging to make progress toward my financial goals, (3) When unexpected expenses occur I usually have to use credit (4), When faced with a financial challenge, I have a hard time figuring out a solution, (5) I lack confidence in my ability to manage my finances, and (6) I worry about running out of money in retirement.

Engelberg (2007) used a measure of economic self-efficacy. To quantify the measure, the survey included 23 items measuring economic risk perception and then asked the respondents the extent to which themselves at risk of experiences each of the risks. A sample of the risks listed include unemployment, financial assets decreasing in value, and paying more in interest on a loan than originally planned. The respondents then rated the same 23 items to assess what they thought of their ability to take precaution against each of the economic risks.

Theoretical Foundation

The Transtheoretical Model of Behavior Change (TTM) (Prochaska and Velicer, 1997) is the theoretical model underlying the analysis presented in this paper. The TTM assesses an individual's willingness or ability to change a behavior and outlines processes to help guide individuals through the

stages. TTM has been used in studies to explain how people stop unhealthy behaviors and develop healthy ones (Xiao et al., 2004) and extended to explain and predict positive changes in financial behaviors based on participation in financial education programs (Shockey and Seiling, 2004). The TTM outlines five stages that individuals go through when changing behaviors: pre-contemplation (not ready), contemplation (getting ready), preparation (ready), action and maintenance. In order to progress through those stages, individuals need awareness that the advantages of the change outweigh the disadvantages, confidence they can make and maintain the changes (self-efficacy), and strategies to help them maintain their new behaviors.

The theory is adapted slightly, focusing on the stages of habit formation (pre-contemplation, contemplation, preparation, action and maintenance) rather than focusing on "bad behaviors", and incorporating an aspect of help-seeking. Separating the stages of positive habit formation may help explain the precise reasons why people with low financial self-efficacy or high financial stress may resist getting financial planning help. There are many ways to change and improve behaviors; this study will focus primarily on the help-seeking aspect. Financial help-seeking will be considered as a positive habit that can be developed to deal with financial stress.

Our hypothesis is that financial stress is the main trigger in the "pre-contemplation" and "contemplation" stages of the TTM, while high financial self-efficacy is the trigger that leads to the "preparation" stage. We also hypothesize that the "action" stage of the TTM is when financial planning help is sought, and the "maintenance" stage is when the results of the help-seeking are realized. This study is focused on the first four stages as our data does not allow us to test the maintenance phase. This study does not attempt to test causality, but rather whether there is a correlation between financial stress, financial self-efficacy and the decision to seek help.

Data

Data for this study come from a three-year longitudinal survey commissioned by the Financial Planning Standards Council (FPSC) in Canada. The survey was conducted among the general English-speaking population of Canada. Quebec was excluded due to the assumption that financial planning is subject to a specific provincial regulatory regime, which significantly differs in Quebec in comparison to the other provinces.

The survey was repeated in three waves. In the first wave, 7,383 surveys were completed between August 2009 and January 2010. In the second wave, 2,471 surveys were completed during February 2011 to July 2011; these respondents had also completed the first wave surveys. The third wave, from April to August 2012, included 1,045 respondents from Waves 1 and 2, along with 7,501 new panelists. Wave 2 is excluded from the analysis because the interim data collection (Wave 2) was not conducted in the same manner as Wave 1 and Wave 3 (for example, not all variables were collected and the sample size was about 75% smaller than in the other two waves). Data from Waves 1 and 3 are combined to create a dataset containing 14,793 observations. A categorical variable was created to control for the survey year (Wave 1). This ensures that the results presented in the paper are not time-dependent.

The survey was designed to target households likely to seek help from a financial planner, with quota minimums based on the type of financial advice received (Comprehensive/Integrated Planning, Limited Planning); credentials of the advisors (Certified planners vs. Non-certified advisors); and those using or not using an advisor. Therefore, the sample is not nationally representative. While this is certainly a limitation of the dataset, we do not believe it introduces sufficient bias as to make the results unreliable. As such, the results will not be generalizable to the greater population of Canada, only for the subset seeking financial help.

The FPSC published some initial results of the survey in their document titled *The Value of Financial Planning.* Findings indicate that on average, persons who seek professional financial-planning help will experience greater financial and emotional well-being. The survey is much wider in scope than just those topics published in the initial report, as this study utilizes the data along with a theoretical foundation to delve deeper into the question of what affects the decision to use a financial planner.

The demographic variables include age (categorical variables), gender, marital status (married or not currently married), educational attainment (no college degree, did not finish college, have a university degree), employment status (unemployed, employed, or retired) and whether or not they have children or supported extended family members. These variables likely affect help seeking tendencies, but they are not our primary concern. They must be included to remove their effect before we can determine the significance of our hypotheses. Financial variables (for example, assets, debt, income, and homeowner status) will also be included in the model, as they are likely to affect the likelihood to seek financial help. Finally, the effects of financial stress and financial self-efficacy will be analyzed.

A series of questions on financial well-being were included in the survey. Principle component factor analysis was conducted on a subset of these questions to construct measures of financial stress and financial self-efficacy. The resulting constructs were built based on the analysis as well as findings supported by related research.

Financial stress measure is constructed on the assumption that stress represents the pre-contemplation and contemplation stages of the TTM, where a respondent realizes there is a financial problem but may not be ready to deal with it. The resulting construct has a Cronbach's alpha of 0.809, indicating good internal consistency of this measure. The following three questions are used to construct this measure:

- I worry a lot about my financial situation

- I feel I barely get by every month

- My finances are out of control

The questions measuring financial self-efficacy were selected based on existing research, as described in an earlier section, as well as the theoretical framework of the paper - that financial self-efficacy represents the preparation stage of the TTM. As such, the following seven questions were selected:

- I could do a much better job managing my finances (reverse coded)

- I feel that I am prepared to manage through tough economic times

- Over the last 5 years, I have improved my ability to save

- I don't know what to do to improve my financial situation (reverse coded)

- I feel prepared in the event of an unexpected financial emergency

- I am on the right track in terms of financial affairs

- I am successful at sticking to my budget

The combined measure for financial self-efficacy has a Cronbach's alpha of 0.623, which indicates an acceptable level of internal consistency of this measure.

In addition to using these two measures as possible predictors of the respondents' help seeking tendencies, the analysis also focuses on determining what factors determine one's level of stress and self-efficacy in order to explain help-seeking tendencies more insightfully.

Analysis

This study utilizes a number of analytical techniques in order to test the hypothesis that the tendency to seek financial help is affected by one's level of financial stress, which represents one's ability to realize the existence of a financial issue, and financial self-efficacy, which illustrates one's readiness to deal with that issue. Together, these two triggers lead to the arrival at the "action" stage of the TTM, where the decision whether or not to seek financial help is made. A two-step process is utilized to analyze this hypothesis.

A logistic regression is used to establish the main predictors of one's help-seeking tendencies. In general terms, this model has the following form:

Financial help-seeking = f(financial stress, financial self-efficacy, control variables)

As this model uses a logistic regression, the relationship between the predictor and response variables is not a linear function; instead a logit transformation is used to arrive at the following relationship:

$$logit[\theta(x)] = log\left[\frac{\theta(x)}{1-\theta(x)}\right] = \alpha + \beta_1 x_1 + \beta_2 x_2 \dots + \beta_k x_k + e_i \, .$$

Such a form is justified as the predictor, financial help-seeking, is a dichotomous variable and either equals one, if help was sought in the last 5 years, or zero, if it was not. In order to test the hypothesis three different types of response variables are introduced in stages, resulting in three different models. The first stage analyzes the effect of demographic and financial variables on help-seeking and establishes some basic correlations. The second stage introduces financial stress into the model. Finally, one's readiness to deal with that problematic situation is examined utilizing the financial self-efficacy variable as well as the relationship between one's stress and self-efficacy when it comes to help-seeking decisions.

Building on the results from the logistic regression, two separate Generalized Linear Models (GLM) are used to analyze the predictors of financial self-efficacy and financial stress. A GLM is used to analyze these two variables in lieu of OLS as the data used in the analysis are not normally distributed. In addition to the demographic and financial variables used in the logistic regression, the self-efficacy and financial stress models also analyze the effects of life-cycle variables such as one's health condition, job security and the degree of financial responsibility. Establishing correlations between all these variables and stress and self-efficacy helps to better analyze the paper's main hypothesis. Based on the TTM framework, explaining the conditions during both "contemplation" and "preparation" stages should help predict the results of the "action" stage of the process and thus, provide a more detailed explanation for financial help-seeking tendencies.

Results

Descriptive Analysis

As the main aim of the paper is to investigate the characteristics determining one's tendency to seek financial help, it is important to establish key demographic characteristics of help-seekers for the sample used in the analysis. Out of the total sample studied 58% are female, over 65% are married and approximately 90% are at least 30 years of age. While approximately 80% of the sample went to college, only 25% of non-help-seekers finished university, in comparison to 40% of help-seekers. Therefore, one's education level might be a possible predictor. Over 60% of the overall sample have kids, with help-seekers more likely to be parents than non-help-seekers. So we can expect that having children

might also affect help-seeking tendencies. Owning a house might be another factor effecting help-seeking as 79% of help-seekers own a house instead of renting it, while only 56% of non-help-seekers do so. The amount of assets and debts differ slightly between help-seekers and non-seekers, with the former having higher amounts of both. Thus, one's financial situation might also affect his or her tendency to seek help. Finally, generally, help seekers have higher levels of financial self-efficacy but lower levels of financial stress compared to those who have not sought help. Table 1 illustrates these and other characteristics in greater detail.

[Insert Table 1 about here]

Effect of Demographic and Financial Variables on Financial Help-Seeking

Based on the demographic statistics, it makes sense to assume that one's age, level of education, marital status, financial situation and stage in the lifecycle (i.e., whether they have children, own their house or plan to retire within the next five years) might have bearing on his or her tendency to seek help. Model 1, presented in the first column of Table 2, examines these assumptions using a logistic regression.

[Insert Table 2 about here]

Due to the existence of missing values in a few of the variables used, the sample size drops to 13,747. Model 1 illustrates that the above assumption is justified. It is clear that there is a correlation between demographic variables and help-seeking tendencies. Age is a predictor of help-seeking tendencies as respondents ages 50 to 64 have higher odds of seeking help. Unmarried people have1.13 times the odds of seeking help compared to their married counterparts. The level of education has a clear effect on help-seeking as the odds for respondents who did not go to college are 30% less than those who did. On the other hand, those respondents who have a university degree have odds of seeking help that are 1.4 times greater than those who do not. Finally, employment status is clearly correlated with help-

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seeking. Compared to those who are employed, unemployed respondents have odds that are 20% lower and those who were retired at the time of the survey have odds 1.2 times higher .

Financial and lifecycle variables also seem to have a bearing on help-seeking. The model shows that higher incomes and higher assets increase the odds of seeking help, while higher debt decreases those odds. In addition, we see that the odds are higher for those respondents who own a house, have children, support extended family or plan to retire within the next 5 years. Model 1 gives a decent insight into help-seeking tendencies during the pre-contemplation stage of the TTM before either stress or self-efficacy is introduced. This model is an important benchmark that will help us draw conclusions about the effects of stress and self-efficacy once they are introduced into the model.

Effects of Financial Stress on Financial Help-Seeking

Before examining the hypothesis that one's financial stress and financial self-efficacy affect one's tendency to seek financial help, it is important to discuss these two variables in greater detail. Table 3 below summarizes the mean scores for each of the items comprising the financial stress measure used in this paper along with the mean financial stress scores for the entire sample, the help-seeking group, and the non-help-seeking group.

[Insert Table 3 about here]

Each of the items used to measure financial stress, and presented in Table 3, was based on a 9-point scale, where 1 stands for strongly disagree, 5 stands for neither agree nor disagree, and 9 stands for strongly agree. When comparing the two groups, we see that those who seek help feel less stress in the three measured areas when compared to those who have not sought help. Based on this analysis, it is reasonable to assume that there may be a negative correlation between financial stress and the decision to seek help. This assumption is tested in Model 2 (the results are in the second column of Table 2), which examines the effects of financial stress as well as the descriptive variables, used in the first model, on one's help-seeking tendencies.

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In Model 2 the increase in the pseudo-R^2 measure indicates that the new variable (financial stress) adds some explanatory power, which might indicate that the existence of the financial stress implies that the respondent is in the contemplation stage of the TTM, specifically that he or she realizes that there is a financial problem that needs to be addressed. Unfortunately, our conjecture about a positive correlation between stress and help-seeking is not supported by Model 2 results. In fact, we see that there is a negative correlation between the two variables, with a one standard deviation increase in stress level decreasing the odds of seeking help by 15%. This result does not support the supposition that the respondents measured by this model are in the "contemplation" stage as the findings indicate that those feeling stress are less likely to seek help. We will not completely rule out support for the hypothesis at this stage, as those who seek help still report feeling stress.

Effects of Financial Self-Efficacy on Financial Help-Seeking

The questions used to construct the financial self-efficacy measure were based on the same 9-point scale as described for financial stress. Response means for each question along with the mean comparison between groups are presented in Table 4. Some of the items were reverse coded and that is noted in the table. Respondents who have sought help report higher scores on all measures of financial self-efficacy and have a higher mean score than those who did not seek help. Table 4 summarizes the financial self-efficacy construct.

[Insert Table 4 about here]

From these statistics a positive correlation can be expected to exist between financial self-efficacy and help-seeking. Model 3 (third column in Table 2) tests this assumption by adding financial self-efficacy as well as a variable representing the interaction term between stress and efficacy to Model 2. This model attempts to show that adding self-efficacy, in addition to stress, pushes the person out of "contemplation" stage (just stress) into the "preparation" stage where the respondent is ready to start

fixing the problem (seek financial help). The interaction term is included to further explore the relationship between financial stress and financial self-efficacy in the help-seeking model.

[Insert Graph 1 about here]

Adding both the measure for financial self-efficacy and the interaction term to Model 3 increases the pseudo-R^2 measure significantly. In addition to highlighting the positive relationship between efficacy and stress, Model 3 also helps verify the hypothesis that higher financial self-efficacy increases the odds of seeking financial help. In Model 3 the coefficient for financial stress becomes positive and significant. This relationship is explored using the interaction term and will be explained at the end of this section. This change in sign once again illustrates that with the addition of efficacy, financial stress becomes a driving force towards the "action" stage of TTM, leading to the tendency to seek financial help. Therefore, Model 3 supports our main hypothesis that financial stress and financial self-efficacy are two of the key predictors of the tendency to seek financial help.

Aside from employment status, the significance of demographic variables in the model does not change. As one might expect, the likelihood of seeking help is higher for those between the ages of 50 and 64, homeowners, those with a university degree and/or children, and those planning to retire in the next five years. The likelihood increases with income and assets.

In Model 2, we see that financial stress is negative and significant, but in Model 3 it becomes positive and significant once self-efficacy is added. This indicates a relationship among stress, self-efficacy and help-seeking and the interaction is included to better understand that relationship. The idea behind the interaction term between the two variables is that stress alone is not enough to get the respondent to the "action" stage (seeking help) instead, he or she needs to both realize that there is a problem (stress in contemplation stage) and feel ready to fix it (self-efficacy in preparation stage). This relationship has been graphically depicted and is illustrated in Figure 1. The figure shows that for those with low self-efficacy, the likelihood of seeking help is not affected by level of stress. However, for those

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with high self-efficacy, higher stress leads to a higher likelihood of seeking financial help. This finding provides some support for our hypotheses. Self-efficacy is an important trait that helps people struggling with financial stress to identify the problem and seek help.

Predictors of Financial Stress

The GLM, used to analyze the predictors of the financial stress construct, examines the relationship between the stress and three types of variables (demographic, financial, and lifecycle variables) in order to better understand what underlying forces might be influencing stress and thus, its relationship with help-seeking decision. Demographic and financial variables are the same variables used in the logistic regression described above: however, there are a few new lifecycle variables added to this model. One of the most interesting variables is the degree of financial responsibility placed on the respondent, whether he or she is the primary decision maker or whether financial responsibilities are shared with other members of the household. The assumption here is that sharing responsibilities should lower financial stress as the respondent has another person to help him or her with the problematic financial situation. Another additional variable looks at one's job security. It is a dichotomous variable indicating whether the respondent thinks that he or she might lose their job in the near future. The final additional variable is also dichotomous and indicates whether the respondent's health is worse than five years ago. Both job security and perception of one's health might place extra stress on the respondent and thus, possibly affect help-seeking tendencies. Table 5 shows the full results from the GLM analysis.

[Insert Table 5 about here]

There are several interesting results that come out of the analysis. First, there is a clear year effect; respondents surveyed in W1 reported less stress than those in W3. Second, the conjecture that sharing responsibility lowers stress is supported by the significant negative correlation between the variables. This

outcome might have both positive and negative effects. The positive effect is due to financial stress being a negative feeling and thus, its decline is better for the well-being of the respondent. However, as we established when discussing Model 3, stress, when coupled with self-efficacy can push someone out of "contemplation" and into "preparation" in order for the respondent to be able to fix a problematic financial situation. Thus, sharing responsibilities might prevent one from seeking help in the event of financial issues. Third, low job security and deteriorating health both increase financial stress as they create obstacles when it comes to reaching financial goals. Fourth, planning to retire in the next five years or owning a house lowers financial stress as it implies a rather stable financial situation. Fifth, high income and increasing assets lower financial stress, while increasing debts increase the stress. Lastly, increasing age, higher education and being retired all lower one's level of stress.

On the whole, this model helps us verify our original results when it comes to the importance of stress pushing the respondent towards seeking financial help in case of problematic financial situation. The most interesting result from this model is the possible duality of the degree of the financial responsibility that needs to be explored in further research as it might provide valuable insights when it comes to help-seeking tendencies and financial decision making in households.

Predictors of Financial Self-Efficacy

Using the same model to analyze predictors of financial self-efficacy provides us with a mirror image of the results in the financial stress model. First, the respondents in W1 had higher financial self-efficacy than those in W3. This supports our logistic regression results as putting this together with year effect from the stress model, we can conclude that higher stress leads to higher self-efficacy. Second, job insecurity, deteriorating health and having children all decrease the level of self-efficacy according to the model. Third, we see that sharing financial responsibility has a negative effect, lowering one's level of self-efficacy. However, this result is only significant at the 10% level and thus, further investigation is required. Fourth, higher income and more assets increase self-efficacy while increasing debt lowers it. And

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finally, lower education level, unemployment and being unmarried all cause self-efficacy to decline. All other effects are shown in Table 6.

[Insert Table 6 about here]

Overall, this model supports the results found earlier in the paper and once again shows that further investigation into the question of the degree of financial responsibility is required.

Summary

Our study highlights the importance of self-efficacy in the decision to seek professional financial planning help. Although it seems like a plausible conjecture that financial stress would be a trigger for help-seeking, we find that this holds only for respondents with high self-efficacy. When self-efficacy is low, stress does not factor into the equation. These findings suggest that a society high in self-efficacy may make greater use of financial planners.

A novel finding of our research is that households sharing responsibility for financial decisions have both less stress and lower self-efficacy. Perhaps when responsibilities are shared, neither partner feels 100% secure in all aspects, lowering total self-efficacy. It might also be due to disagreements between partners regarding how to handle financial situations, reducing overall confidence in those decisions. Regardless of the explanation, this is an important finding which could motivate further research about household behavior.

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Table 1: Descriptive Statistics

Variable	Full sample N = 14,793		Help-seeker n = 9,150		Non help-seeker n = 5,643	
	n	Percentage	n	Percentage	n	Percentage
Gender						
Female	8,541	57.70%	5,179	56.60%	3,362	59.60%
Male	6,252	42.30%	3,971	43.40%	2,281	40.40%
Age						
18 - 29	1,664	11.20%	851	9.30%	813	14.40%
30 - 49	5,860	39.60%	3,473	38.00%	2,387	42.30%
50 - 64	5,365	36.30%	3,564	39.00%	1,801	31.90%
65 or older	1,904	12.90%	1,262	13.80%	642	11.40%
Marital Status						
Married	9,708	65.60%	6,309	69.00%	3,399	60.20%
Not Married	5,085	34.40%	2,841	31.00%	2,244	39.80%
Education						
Didn't Go to College	3,155	21.30%	1,527	16.70%	1,628	28.80%
College Degree/Some College	6,443	43.60%	3,887	42.50%	2,556	45.30%
University Degree	5,097	34.50%	3,686	40.30%	1,411	25.00%
Employment Status						
Unemployed	946	6.40%	425	4.60%	521	9.20%
Employed	9,041	61.10%	5,768	63.00%	3,273	58.00%
Retired	3,499	23.70%	2,374	25.90%	1,125	19.90%
Have Children	10,086	68.20%	6,452	70.50%	3,634	64.40%
Own a House	10,423	70.50%	7,236	79.10%	3,187	56.50%
Plan to Retire In the Next 5 Years	2,227	15.10%	1,593	17.40%	634	11.20%
Financial Responsibility						
Primary Decision-Maker	8,380	56.60%	5,187	56.70%	3,193	56.60%
Shares Responsibility	6,413	43.40%	3,963	43.30%	2,450	43.40%
Might Lose the Job Soon	1,769	12.00%	1,113	12.20%	656	11.60%
Health Worse Than 5 Years Ago	5,030	34.00%	3,013	32.90%	2,017	35.70%
	Mean	Median	Mean	Median	Mean	Median
Income	$77,297	$75,000	$78,979	$75,000	$76,028	$75,000
Assets	$555,4643	$274,000	$587,961	$286,000	$522,129	$252,000
Debts	$108,570	$25,000	$112,753	$28,156	$109,613	$22,000

Table 2: Results from Logistic Regression Analysis

Variable Name	Model 1			Model 2			Model 3		
	b	SE	Odds ratio	b	SE	Odds ratio	b	SE	Odds ratio
Wave 1	0.059	0.040	1.060	0.010	0.041	1.010	-0.011	0.041	0.989
Gender									
Female	0.009	0.039	1.009	0.009	0.039	1.012	0.013	0.039	1.013
Age (Reference category: Age 30-49)									
Age 18 - 29	0.068	0.065	1.081	0.045	0.066	1.046	0.000	0.066	1.000
Age50 - 64	0.158**	0.052	1.171	0.136*	0.052	1.146	0.184**	0.052	1.202
Age 65+	-0.051	0.085	0.950	-0.097	0.086	0.908	-0.045	0.086	0.956
Marital Status									
Non-married	0.120**	0.045	1.128	0.128**	0.045	1.136	0.141**	0.046	1.152
Education (Ref category: Some College)									
Less than College	-0.350***	0.049	0.705	-0.345***	0.049	0.708	-0.335***	0.049	0.715
University Degree	0.306***	0.045	1.359	0.284***	0.045	1.328	0.278***	0.046	1.320
Employment Status									
Unemployed	-0.196*	0.079	0.822	-0.163*	0.079	0.849	-0.117	0.080	0.889
Retired	0.203**	0.065	1.225	0.151*	0.066	1.163	0.098	0.066	1.103
Income Level (Ref category: < $50k)									
$50,000-$100,000	0.419***	0.047	1.520	0.382***	0.047	1.465	0.374***	0.048	1.453
More than $100,000	0.640***	0.059	1.897	0.569***	0.060	1.767	0.526***	0.060	1.693
Ln of Assets	0.133***	0.007	1.143	0.121***	0.007	1.128	0.118***	0.008	1.125
Ln of Debts	-0.009†	0.005	0.991	0.000	0.005	1.000	0.005	0.005	1.005
Own a House	0.184**	0.054	1.202	0.167**	0.054	1.182	0.131*	0.055	1.140
Have Children	0.094*	0.046	1.099	0.121**	0.046	1.128	0.109*	0.046	1.115
Support Extended Family	0.282***	0.078	1.326	0.351***	0.078	1.420	0.223**	0.079	1.250
Plan to Retire in the Next 5 Years	0.330***	0.061	1.391	0.297***	0.061	1.346	0.252***	0.061	1.287
Financial Stress				-0.162***	0.021	0.851	0.120***	0.031	1.127
Financial Self-Efficacy							0.379***	0.032	1.460

	Model 1			Model 2			Model 3		
Interaction between Financial Stress & Financial Self-Efficacy							0.084***	0.017	1.088
Constant	-1.618***	0.096	0.198	-1.517***	0.099	0.219	-1.394***	0.100	0.248
Number of Observations	13,747			13,747			13,747		
Nagelkerke R square (-2Log Likelihood)	0.173 (16405.854)			0.178 (16345.746)			0.193 (16162.132)		
Likelihood Ratio Test: χ^2 (df)	1,865.708 (*18*)***			1,925.816 (*19*)***			2,109.430 (*21*)***		

Note. ***p<.001; **p <.01; *p <.05; †p<.1

Table 3: Items Used for Financial Stress Factor

|	Full sample	Help-seeker	Non help-seeker
	N=15,806	N=9,150	N=6,656
I worry a lot about my financial situation	5.17	5.16	5.21
I feel I barely get by every month	4.51	4.47	4.61
My finances are out of control	3.54	3.53	3.62
Mean Financial Stress Factor Score	*-0.003*	*-0.156*	*0.246*

All items are on a 1 to 9 scale, 1 = strongly disagree and 9 = strongly agree

Table 4: Items Used for Financial Self-Efficacy Factor

	Full sample	Help-seeker	Non help-seeker
	(N=15,806)	(n=5,643)	(n=10,163)
I could do a much better job managing my finances (reverse coded)	4.64	4.6	4.16
I feel that I am prepared to manage through tough economic times	5.53	5.53	5.51
Over the last 5 years, I have improved my ability to save	5.53	5.56	5.49
I don't know what to do to improve my financial situation (reverse coded)	5.66	5.67	5.59
I feel prepared in the event of an unexpected financial emergency	5.06	5.08	4.99
I am on the right track in terms of financial affairs	4.79	4.85	4.72
I am successful at sticking to my budget	4.81	4.86	4.71
Mean Self-efficacy Factor Score	*0.005*	*0.188*	*-0.295*

All items are on a 1 to 9 scale, 1 = strongly disagree and 9 = strongly agree

Figure 1: Interaction between Financial Stress and Financial Self-Efficacy
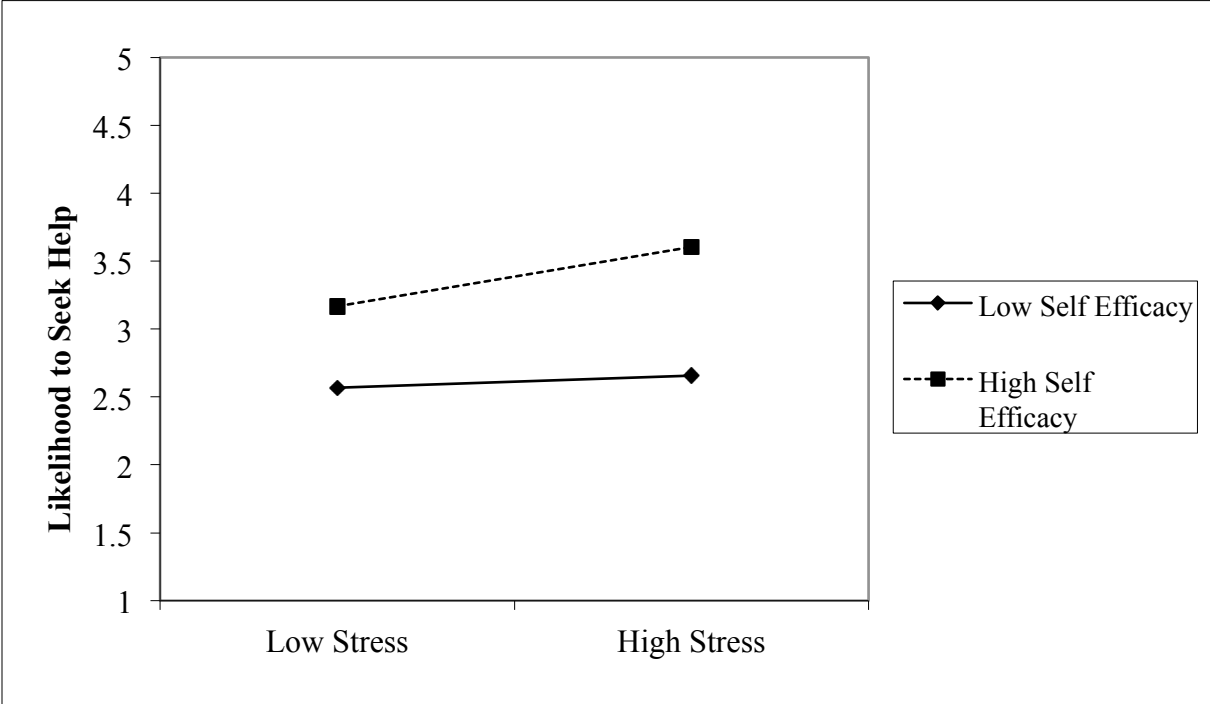
Table 5: Predictors of Financial Stress

Variable	b	SE	t value
Surveyed in 2009	-0.307***	0.016	-19.152
Female	0.028†	0.015	1.791
Age 18 - 29	-0.096***	0.026	-3.628
Age 50 - 64	-0.142***	0.020	-6.96
Age 65and older	-0.280***	0.033	-8.42
Unmarried	0.013	0.021	0.633
Less than College	0.040	0.020	1.999
University Degree	-0.142***	0.018	-8.081
Unemployed	0.258***	0.032	8.173
Retired	-0.259***	0.025	-10.285
Income Between $50k and $100k	-0.225***	0.019	-11.745
Income Higher Than $100,000	-0.439***	0.023	-18.813
Ln Assets	-0.074***	0.003	-26.424
Ln Debts	0.054***	0.002	30.445
Owning a House	-0.111***	0.022	-4.983
Having Children	0.154***	0.018	8.500
Plan to Retire in the Next 5 Years	-0.131***	0.023	-5.738
Health Worse Than 5 Years Ago	0.194***	0.016	12.285
Might Lose Their Job in the Near Future	0.377***	0.024	15.816
Share Financial Responsibility	-0.050**	0.018	-2.797
Constant	0.778***	0.040	19.679
Number of Observations	*14,084*		
Adjusted R-squared(df)	*0.293(21)*		

Note. ***p<.001; **p <.01; *p <.05; †p<.1

Table 6: Predictors of Financial Self-Efficacy

Variable	b	SE	t value
Surveyed in 2009	0.292***	0.016	18.782
Female	-0.005	0.015	-0.327
Age 18 - 29	0.159***	0.026	6.157
Age 50 - 64	0.009	0.020	0.472
Age 65 and older	0.082*	0.032	2.556
Unmarried	-0.075***	0.020	-3.767
Less than College	-0.054**	0.019	-2.787
University Degree	0.107***	0.017	6.265
Unemployed	-0.245***	0.031	-7.928
Retired	0.365***	0.024	14.956
Income Between $50k and $100k	0.189***	0.019	10.127
Income Higher Than $100,000	0.418***	0.023	18.443
Ln Assets	0.065***	0.003	23.730
Ln Debts	-0.049***	0.002	-28.703
Owning a House	0.171***	0.022	7.855
Having Children	-0.083***	0.018	-4.691
Plan to Retire in the Next 5 Years	0.191***	0.022	7.855
Health Worse Than 5 Years Ago	-0.327***	0.015	-21.317
Might Lose Their Job in Near Future	-0.160***	0.023	-6.937
Share Financial Responsibility	-0.033†	0.017	-1.896
Constant	-0.697	0.038	-18.120
Number of Observations	*13,747*		
Adjusted R-squared(df)	*0.274(20)*		

Note. ***p<.001; **p <.01; *p <.05; †p<.1