

2020

## Financial Education and Demand for Debt Counseling Advice

Nilton Porto

*University of Rhode Island, nilton\_porto@uri.edu*

Jing Jian Xiao

*University of Rhode Island, jjxiao@uri.edu*

Follow this and additional works at: [https://digitalcommons.uri.edu/hdf\\_facpubs](https://digitalcommons.uri.edu/hdf_facpubs)

**The University of Rhode Island Faculty have made this article openly available.**  
**Please let us know how Open Access to this research benefits you.**

This is a pre-publication author manuscript of the final, published article.

### Terms of Use

This article is made available under the terms and conditions applicable towards Open Access Policy Articles, as set forth in our [Terms of Use](#).

### Citation/Publisher Attribution

Porto, Nilton, M.B.A., PhD., & Xiao, J. J., PhD. (2019). Financial education and demand for debt counseling advice. *Journal of Personal Finance*, 18(2), 25-38. Retrieved from <http://uri.idm.oclc.org/login?url=https://search.proquest.com/docview/2298150379?accountid=28991>

This Article is brought to you for free and open access by the Human Development and Family Studies at DigitalCommons@URI. It has been accepted for inclusion in Human Development and Family Studies Faculty Publications by an authorized administrator of DigitalCommons@URI. For more information, please contact [digitalcommons@etal.uri.edu](mailto:digitalcommons@etal.uri.edu).

---

## **Financial Education and Demand for Debt Counseling Advice**

Nilton Porto, MBA/PhD<sup>1</sup> and Jing Jian Xiao, PhD<sup>2</sup>

University of Rhode Island

JEL Classification: D14

*Keywords:* Financial planning, financial education, advice

---

<sup>1</sup> **Corresponding Author:** Nilton Porto, Assistant Professor of Consumer Finance, Department of Human Development and Family Studies, University of Rhode Island • Transition Center #212, 2 Lower College Road, Kingston, RI 02881 • Ph: (401) 874-7135, Fax: (401) 874-4020 • email: [nilton\\_porto@uri.edu](mailto:nilton_porto@uri.edu)

<sup>2</sup> Jing Jiao Xiao, Professor of Consumer Finance, Department of Human Development and Family Studies, University of Rhode Island • Transition Center # 202, 2 Lower College Road, Kingston RI 02881 • Ph: (401) 874-2547. Fax: (401) 874-4020 • email: [xiao@uri.edu](mailto:xiao@uri.edu)

# **Financial Education and Demand for Debt Counseling Advice**

## **Abstract**

The purpose of this study is to examine potential effects of consumer financial education on demand for debt counseling advice using a large and representative national dataset. Previous research has examined demographic, financial, and financial capability related factors on demand for debt counseling advice. After controlling for these variables and eliminating the effect of bankruptcy, financial education, a variable not examined in previous research, is positively associated with demand for debt counseling advice. Education attainment is similarly associated with debt counseling. Together, we have evidence of the complementary nature of financial education where more knowledgeable consumers are more likely to seek this type of financial advice.

## **Introduction**

The interplay between financial education and financial advice is a growing area of interest in personal finance and consumer economics research. Similarly to acquiring financial education, professional and unbiased financial advice might afford consumers necessary tools to make better financial decisions. Financial literacy, defined as “peoples’ ability to process economic information and make informed decisions about financial planning, wealth accumulation, debt, and pensions” (Lusardi and Mitchell 2014, page 2), is the likely common factor for both financial education and financial advice. Consumers may choose between seeking financial advice or acquiring financial knowledge based on financial issues they are

facing. Financial literacy has been shown to act as a complement to all-purpose financial advice (Collins 2012). Financial education is a possible source of financial literacy while financial advice might substitute or complement financial literacy as well. The present study examines the relationship between financial education and the demand for debt counseling advice, a type of advice most likely sought by consumers at times of financial distress. A key component to our analysis is to determine if financial education performs as complement or a substitute in the demand for debt counseling advice.

While the broad category of financial advice deserves research attention, this category is comprised of advice for different facets of personal finance. For instance, a consumer seeking investment advice might be very different from one seeking debt counseling; the former has funds available to invest while the latter is most likely experiencing financial stress.

Unlike previous research that covers five topics of financial advice, this study focuses on debt counseling advice only. Researching a single topic of financial advice may provide specific implications for financial professionals and policymakers. Among various topics of financial advice, debt counseling advice usage has been shown to be the least prevalent among American households (Collins 2012; Robb et al. 2012). However, debt counseling advice is remedial following an event of financial distress.

This study examines potential effects of a new relevant variable, financial education, which, to the best of our knowledge, has not yet been directly examined in previous research as a potential determinant of debt counseling advice. We hope findings of this research focusing on debt counseling advice may generate helpful information for financial service professionals who provide advice for consumers with debt problems.

## **Previous Research and Hypothesis**

Previous research has studied financial advice from a number of perspectives: financial literacy (e.g. Calcagno and Monticone 2015), issues of older adults (Cummings and James 2014), payment schemes (Finke, Huston and Winchester, 2011), wealth volatility (Grable and Chatterjee 2014), risk tolerance (Hanna 2011), and portfolio diversification (Von Gaudecker 2015).

In recent years, researchers have used data from the National Financial Capability Study (NFCS) to examine factors associated with financial advice and their potential effects on consumer financial wellbeing. Several studies used data from the 2009 NFCS to study determinants of financial advice usage such as trust (Lachance & Tang 2012), financial literacy and capability (Collins 2012; Robb et al. 2012), and income (Tang & Lachance 2012). Two other recent articles used the 2012 wave of the NFCS to study the demand for financial advice. Porto & Xiao (2016) explore whether financial literacy overconfidence (a miss calibration between objective and subjective financial knowledge) is associated with five types of financial advice while Xiao and Porto (2016) examine the relationship between financial advice and financial satisfaction.

The abovementioned studies show the breadth and complexity involved in the utilization of financial advice and a few themes emerge. First, demographic, financial, and financial literacy/capability factors are correlated to the demand for financial advice. Secondly, financial literacy may play an important role in people's seeking financial advice. While the functional form of this relationship is not yet fully understood, it appears that a certain level of financial literacy is essential for consumers to be aware of their need for financial advice. At higher levels of financial literacy, the need for financial advice might weaken; e. g., tax advisors have the

expertise to file their own taxes. In other words, the relationship between financial literacy and financial advice is most likely an inverted u-shape where the demand for advice increases with more knowledge but then diminishes for those with very high financial knowledge.

The literature regarding debt counseling (sometimes referred to as debt advice) is more limited but a few relevant studies have been published in recent years. Collins (2012) used the 2009 NFCS national data set with 1,468 observations to find that difficulty paying bills and a large drop in income are positively associated with debt counseling. Robb et al. (2012) used the 2009 NFCS state level data with 28,146 observations to find that higher levels of financial knowledge, financial satisfaction and financial confidence all have a negative association with the demand for debt counseling. Using the same dataset, Tang and Lachance (2012) conducted discriminant analyses to reveal that the five top contributors to the demand for debt counseling are bankruptcy, checking account overdrawals, having high cost loans, difficulty paying bills, and financial satisfaction (with an opposite sign). These studies seem indicative of the remedial nature of debt counseling where its demand increases due to financial stress or a detrimental financial event.

Financial education in this study refers to any education program delivered at work or at an educational institution teaching a curriculum of money management knowledge and skills to nonfinancial professionals. Research shows that consumer education contributes to consumer financial capability and wellbeing (Xiao & O'Neill 2016; Xiao & Porto 2017). In the literature, financial literacy and financial capability are often used in an interchangeable way (Lusardi & Mitchell 2010) but just as often comingled with financial knowledge (Huston 2010). In this study, we follow the broad definition of financial capability as the ability to apply basic financial

knowledge and engage in desirable financial behavior to achieve financial wellbeing (Xiao, Chen, & Chen 2014).

Financial education may have unique contributions to the demand for debt counseling advice even after controlling for financial capability factors. Debt counseling, similar to other types of findings on the use of financial advice, may improve counselling clients' behaviors and their financial wellbeing (Agarwal et al. 2010; Disney et al. 2015; Elliehausen et al. 2007; Moulton et al. 2015; Roll and Moulton 2016; Xiao and Wu 2008).

Consumers with a higher financial literacy level are also more likely to engage in desirable financial behaviors such as financial advice seeking (Porto and Xiao 2016). Financial education may benefit consumers in multiple ways that include knowledge acquisition, confidence enhancement, and action encouragement (Xiao and O'Neill, 2016), all significant aspects in improving financial wellbeing. In this study, we test the following hypothesis:

H: Consumers who have received financial education are more likely to seek debt counseling advice.

## **Methods**

### **Data**

This study used data from the 2012 National Financial Capability Study (NFCS) funded by the Financial Industry Regulatory Authority Investor Education Foundation (FINRA IEF). The NFCS was an online survey of over 25,000 American adults from all states and the District of Columbia. FINRA IEF conducted the study to better understand the concept of financial capability and its key components. The sample is representative of the American population (for more information about this data set, see FINRA IEF, 2013).

### **Variables**

*Debt Counseling Advice.* One item of the survey asked: “In the last five years, have you asked for any advice from a financial professional about any of the following?” where debt counseling was one of the options. The possible answer was yes or no. Respondents that answered “I don’t know” or “Prefer not to say” to the debt counseling question were dropped from our analysis, reducing our sample size to 24,932.

*Financial education.* Financial education was measured in the study in a two-step process. Respondents were first asked if they have ever been offered financial education in the past. Conditional to being offered and participated in financial education, respondents were next asked if the education was offered at high school, college, or from an employer. Roughly 23% of respondents had received financial education from one of these sources.

*Financial capability.* We used four variables to measure financial capability. Objective financial knowledge is the score of the five financial knowledge questions included in the survey, questions that have come to be known as the “Big Five” (Lusardi & Mitchell, 2010). Subjective financial knowledge is a self-assessment of financial knowledge with the wording “On a scale from 1 to 7, where 1 means very low and 7 means very high, how would you assess your overall financial knowledge?” Perceived financial capability is taken from the survey item asking respondents to rate the following statement using a Likert-type 1-7 scale: “I am good at dealing with day-to-day financial matters, such as checking accounts, credit and debit cards, and tracking expenses.” The financial behavior variable is the sum of three dummy variables: spending less than income, having emergency funds for 3 months of expenses, and having obtained a copy of credit report in the last 12 months.

*Other control variables.* Following previous research (see the previous section), this study also included a number of demographic and financial variables to better understand the demand for debt counseling. These included gender, race, age, education, income, and number of dependent children. We also included being a homeowner, difficulty paying bills, and experienced a drop in income in our analyses to capture household wealth and potential financial stressors. Willingness to take financial risks was measured by a survey 1-10 scale where 1 represents “Not at all willing” while 10 represents “Very willing.”

## **Data Analyses**

We used probit regression models reporting average marginal effects (AME) with corrections for heteroskedastic errors in our analyses. In our models, debt counseling advice is a function of demographic and financial, financial capability, and financial education variables. We also controlled for regional economic variation by including the four Census regions listed in the survey as fixed effects. Hierarchical models were conducted by adding different sets of independent variables to show their unique contributions. A separate set of analyses is performed splitting our sample into those that have and have not filed for bankruptcy in the last 12 months since credit counseling is required during the bankruptcy process.

## **Results**

### **Descriptive Statistics**

Table 1 presents descriptive statistics of the sample. A total of 9% of households reported using debt counseling advice in the last five years. Among the respondents, 10% reported having received financial education in high school, 11% did so in college and 8% in workplace. On average, respondents were able to correctly answer less than three financial knowledge questions

while scoring themselves relatively high in both subjective financial knowledge and perceived financial capability (5.18/7 and 5.68/7, respectively). Respondents affirmed to have performed slightly more than one positive financial behavior while other descriptive statistics are similar to those reported in previous research (e.g. FINRA IEF 2013).

Table 2 compares those that received debt counseling versus those that did not. Demand for debt counseling is associated with having received any form of financial education in the past. Those who seek debt counseling are also more likely to have received financial advice in any of the other four categories, perhaps an indication that some people are advice seekers while others are not.

As expected, the existence of financial stressors such as difficulty paying bills, drop of income, or a recent bankruptcy filing are also related to debt counseling. However, those who have carried out positive financial behaviors are not significantly different between debt counseling advice users and non-users.

Debt counseling advice users score lower in objective financial knowledge or subjective financial capability while have no difference in subjective financial knowledge, compared to non-users. Respondents who used debt counseling are more likely to attend all sources of financial education, an indication of the potential complementary nature of this type of advice.

### **Regression Analyses**

Table 3 presents results of the probit regression reporting marginal effects at the mean. We used three hierarchical models. Model 1 included only demographic and financial stressor indicators, in model 2 financial capability variables were entered, and in model 3, the variable of interest, financial education variables, were included. Each new set of variables when they were entered to a later model showed unique contributions. Comparing results of these models, we

observe several interesting findings. First, financial education variables are entered into the model last, still high school and workplace financial education variables show significant associations with debt counseling usage. Second, all four financial capability variables make unique contributions to the demand for debt counseling. Higher scores in the objective financial knowledge or perceived ability to manage their own finances (subjective financial capability) are negatively associated with debt counseling usage. Subjective financial knowledge is positively associated with debt counseling, a possible indication of overconfidence as shown in previous research (Porto & Xiao, 2016). Performing more desirable financial behaviors is also positively associated with debt counseling, a rather surprising result. A possible explanation is the fact that part of debt counseling involves a review of credit report, one of the beneficial behaviors included in this variable. This finding might indicate reverse causality where those that seek debt advice are asked to pull their credit report during one of the counseling meetings.

Third, education attainment has a positive relationship with debt counseling while the existence of financial stressors, as expected, is predictive of this type of advice. Taken as whole, these results point out to the complementary nature of debt counseling: knowledgeable individuals are more likely to seek advisors as observed by Collins (2012).

We also found that people demand for debt counseling diminishes with age and that African-Americans are more likely to seek debt counseling than Whites. Demand for debt counseling advice rises with the number of dependent children, a variable often indicating financial stress in previous research.

By magnitude of coefficients, bankruptcy is by far the strongest indicator of debt counseling. The federal mandate of credit counseling during the bankruptcy process renders this regressor a unique one in this analysis since most of other explanatory variables are

endogenously determined. People who file a bankruptcy and those who do not may be different in debt counseling seeking. In order to explore this assumption, we conducted additional analyses by dividing our sample between those that have or have not filed for bankruptcy in the last 12 months (Table 4).

In addition to identifying differences between the bankruptcy and non-bankruptcy groups, Table 4 also helps distinguish endogenous factors that have explanatory impacts on the demand for debt counseling as opposed to those that were forced into seeking this type of advice due to a bankruptcy. Comparing the two groups, a number of variables are significant for those without a bankruptcy in their record but not so for those who have filed bankruptcy recently. For instance, financial education received in high school or from an employer is associated with debt counseling in the first column but the association disappeared when bankruptcy is present. We also see a similar pattern in education attainment. Only among consumers who have not filed bankruptcy, those with more knowledgeable are more likely to seek this type of advice.

### **Robustness Check**

From the initial sample, 32.79% of respondents have a high school diploma or an equivalent certification, or are high school dropouts. This group of respondents can only obtain financial education from either the workplace or during their high school years. The outputs in Table 5 are from the subsample of 8,495 respondents that attended college or graduate school. We find that the pattern of associations between our variables of interest remain unchanged from the main sample, supporting the initial claim of a positive relationship between financial education and the demand for debt counseling.

The models in Table 6 use a different specification to examine the impact of each financial stressor variable independently. Demographics and financial capability factors are also

included in those regressions. All financial stressors are positively correlated to debt counseling when entered in the model separately. The last column of this table includes three interaction terms between attending financial education and each financial stressor. Since the interaction terms are not significant, we speculate that the demand for debt counseling, can be driven by financial stress or financial education independently but not together. Respondents that received financial education and faced recent financial stress are rather rare in the sample (percentages are included in Table 6).

### **Discussion**

The purpose of this study is to examine potential effects of financial education on the demand for debt counseling. Based on a large national dataset, results show that consumers who participated in financial education at work or in high school are more likely to seek debt counseling advice. This pattern holds even after controlling for demographic and financial variables, and after disentangling the effect of a recent bankruptcy where debt counseling is mandated. Our results provide evidence that debt counseling complements financial education. Financial education aims to, among other objectives, increase people's financial knowledge. As such, knowledgeable consumer might be more able to identify when outside advice is needed to solve their financial issues.

Financial stressors play an important role in the process of seeking and receiving debt counseling and its interplay with financial education is of great importance to policymakers, financial educators, and financial counselors. In the sample, respondents who participated in financial education and were faced with a stressful financial event are somewhat rare. In fact, less than one percent of those who filed for bankruptcy had attended financial education

previously. This suggests another channel where financial education can help consumers improve their financial wellbeing.

## References

- Agarwal, S., Amromin, G., Ben-David, I., Chomsisengphet, S., & Evanoff, D. D. (2010). Learning to cope: Voluntary financial education and loan performance during a housing crisis. *American Economic Review*, *100*(2), 495–500.
- Calcagno, R., & Monticone, C. (2015). Financial literacy and the demand for financial advice. *Journal of Banking & Finance*, *50*, 363-380.
- Collins, J. M. (2012). Financial advice: A substitute for financial literacy?. *Financial Services Review*, *21*(4), 307.
- Cummings, B. F., & James III, R. N. (2014). Factors associated with getting and dropping financial advisors among older adults: Evidence from longitudinal data. *Journal of Financial Counseling and Planning*, *25*(2), 129.
- Disney, R., Gathergood, J., & Weber, J. (2015). Credit counseling: A substitute for consumer financial literacy? *Journal of Pension Economics and Finance*, *14*(4), 466–491.
- Elliehausen, G., Lundquist, E., & Staten, M. E. (2007). The impact of credit counseling on subsequent borrower behavior. *Journal of Consumer Affairs*, *41*(1), 1–28.
- Finke, M. S., Huston, S., & Winchester, D. (2011). "Financial Advice: Who Pays." *Journal of Financial Counseling and Planning* *22* (1): 18-26.
- FINRA IEF. 2013. "Financial Capability in the United States: Report of Findings from the 2012 National Financial Capability Study." Washington, DC: FINRA Investor Education Foundation.
- Grable, J. E., & Chatterjee, S. (2014). Reducing wealth volatility: The value of financial advice as measured by zeta. *Journal of Financial Planning*, *27*(8), 45-51.
- Hanna, S. D. (2011). "The Demand For Financial Planning Services." *Journal of Personal Finance*, *10* (1): 36-62.

Huston, S. J. (2010). Measuring financial literacy. *Journal of Consumer Affairs*, 44(2), 296-316.

Lachance, M. E., & Tang, N. (2012). Financial advice and trust. *Financial Services Review*, 21(3), 209.

Lusardi, A., & Mitchell, O. S. (2010). How ordinary consumers make complex economic decisions: Financial literacy and retirement readiness, *CFS Working Paper*, No. 2010/11

Lusardi, A., & Mitchell, O. S. (2014). The economic importance of financial literacy: Theory and evidence. *Journal of Economic Literature*, 52(1), 5-44.

Moulton, S., Collins, J. M., Loibl, C., & Samek, A. (2015). Effects of monitoring on mortgage delinquency: Evidence from a randomized field study. *Journal of Policy Analysis and Management*, 34(1), 184-207.

Porto, N., & Xiao, J. J. (2016). Financial Literacy Overconfidence and Financial Advice Seeking. *Journal of Financial Service Professionals*, 70(4), 78-88.

Robb, C. A., Babiarz, P., & Woodyard, A. (2012). The demand for financial professionals' advice: The role of financial knowledge, satisfaction, and confidence. *Financial Services Review*, 21(4), 291.

Roll, S., & Moulton, S. (2016). The impact of credit counseling on consumer outcomes: Evidence from a National Demonstration Program. Working paper. Ohio State University.

Tang, N., & Lachance, M. E. (2012). Financial advice: What about low-income consumers?. *Journal of Personal Finance*, 11(2), 121.

Von Gaudecker, H. 2015. "How does household portfolio diversification vary with financial literacy and financial advice?" *Journal of Finance* 70 (2): 489-507.

- Xiao, J. J., & Wu, J. (2008). Completing debt management program in credit counseling: An application of the theory of planned behavior. *Financial Counseling and Planning*, 19(2), 29-45.
- Xiao, J. J., Chen, C., & Chen, F. (2014). Consumer financial capability and financial satisfaction. *Social Indicators Research*, 118(1), 415-432.
- Xiao, J. J., & O'Neill, B. (2016). Consumer financial education and financial capability. *International Journal of Consumer Studies*, 40(6), 712-721.
- Xiao, J. J., & Porto, N. (2016). Which financial advice topics are positively associated with financial satisfaction? *Journal of Financial Planning*, 29(7), 52-60.
- Xiao, J. J., & Porto, N. (2017). Financial education and financial satisfaction: Financial literacy, behavior, and capability as mediators. *International Journal of Bank Marketing*, 35(5), 805-817.

Table 1 – Summary Statistics

	mean	sd	min	max
<b>DV: Debt Advice</b>	0.09	0.28	0	1
<i>Financial Education</i>				
High School Fin. Education	0.10	0.31	0	1
College Fin. Education	0.11	0.32	0	1
Workplace Fin. Education	0.08	0.28	0	1
<i>Financial Capability Index</i>				
Objective Financial Knowledge	2.94	1.45	0	5
Subjective Financial Knowledge	5.18	1.28	1	7
Perceived Financial Capability	5.68	1.57	1	7
Financial Behaviors	1.21	0.97	0	3
<i>Controls/Demographics</i>				
Female=1	0.51	0.50	0	1
# of Children	0.72	1.08	0	4
Homeowner	0.59	0.49	0	1
Married=1	0.55	0.50	0	1
<i>Income</i>				
\$25,000-50,000	0.26	0.44	0	1
\$50,000-100,000	0.30	0.46	0	1
Over \$100,000	0.18	0.38	0	1
<i>Financial Stressors Indicators</i>				
Difficulty Paying Bills	0.57	0.49	0	1
Income Drop Last Year	0.30	0.46	0	1
Bankruptcy last 12 months	0.04	0.19	0	1
<i>Age</i>				
35-50	0.36	0.48	0	1
Over 50	0.34	0.47	0	1
<i>Race/Ethnicity</i>				
White	0.75	0.43	0	1
African American	0.12	0.32	0	1
Hispanic	0.13	0.34	0	1
Asian	0.05	0.21	0	1
Other Race	0.02	0.14	0	1
<i>Education Attainment</i>				
High School Diploma or GED	0.28	0.45	0	1
Some College	0.36	0.48	0	1
College Graduate	0.26	0.44	0	1
Observations	24932			

Source: 2012 National Financial Capability Study

Table 2 – Comparison by Whether Respondent Received Debt Counseling

	No Counseling		Counseling		Test Stat.
	mean	sd	mean	sd	p-value
Financial Education	0.20	0.40	0.28	0.45	0.000
High School Fin. Education	0.11	0.31	0.15	0.36	0.000
College Fin. Education	0.12	0.33	0.17	0.37	0.000
Workplace Fin. Education	0.086	0.28	0.13	0.34	0.000
Difficulty Paying Bills	0.55	0.50	0.76	0.43	0.000
Income Drop Last Year	0.27	0.44	0.48	0.50	0.000
Bankruptcy	0.02	0.13	0.18	0.38	0.000
Willing to take risks	4.69	2.57	5.27	2.89	0.000
Objective Financial Knowledge	3.05	1.44	2.82	1.36	0.000
Subjective Financial Knowledge	5.19	1.26	5.21	1.36	0.424
Perceived Financial Capability	5.75	1.55	5.42	1.67	0.000
Financial Behaviors	1.23	0.97	1.24	0.91	0.900
Savings/Investment Advice	0.29	0.45	0.52	0.50	0.000
Mortgage/Loan Advice	0.19	0.40	0.46	0.50	0.000
Insurance Advice	0.30	0.46	0.62	0.49	0.000
Tax Planning Advice	0.17	0.38	0.39	0.49	0.000
Observations	22761		2171		

Source: 2012 National Financial Capability Study

Table 3 - Debt Counseling Advice, Probit reporting AME

	(1) Debt Counseling Advice b/se	(2) Debt Counseling Advice b/se	(3) Debt Counseling Advice b/se
<i>Age (ref: under 35)</i>			
35 to 50	-0.022*** (0.005)	-0.017*** (0.005)	-0.016*** (0.005)
Over 50	-0.035*** (0.005)	-0.030*** (0.005)	-0.028*** (0.005)
Female=1	-0.007* (0.003)	-0.007 (0.003)	-0.006 (0.003)
Married=1	-0.004 (0.004)	-0.003 (0.004)	-0.002 (0.004)
# of Children	0.012*** (0.002)	0.011*** (0.002)	0.011*** (0.002)
Homeowner	-0.002 (0.004)	-0.005 (0.004)	-0.005 (0.004)
<i>Race/Ethnicity (ref: White)</i>			
African American	0.039*** (0.005)	0.035*** (0.005)	0.035*** (0.005)
Hispanic	0.010 (0.006)	0.007 (0.006)	0.007 (0.006)
Asian	-0.009 (0.008)	-0.011 (0.008)	-0.011 (0.008)
Other Race	0.010 (0.009)	0.011 (0.009)	0.010 (0.009)
<i>Educational Attainment (ref: no H.S.)</i>			
High School or GED	0.018** (0.006)	0.019** (0.006)	0.018** (0.006)
Incomplete College	0.028*** (0.006)	0.030*** (0.006)	0.028*** (0.006)
Graduate College	0.049*** (0.006)	0.050*** (0.007)	0.047*** (0.007)
<i>Income (ref: under \$25,000)</i>			
\$25,000-\$49,999	0.025*** (0.005)	0.025*** (0.005)	0.025*** (0.005)
\$50,000-\$99,999	0.025*** (0.005)	0.025*** (0.005)	0.024*** (0.005)
Over \$100,000	0.022*** (0.007)	0.019** (0.007)	0.017** (0.007)
<i>Financial Stressors Indicators</i>			
Difficulty Paying Bills	0.050*** (0.004)	0.056*** (0.004)	0.056*** (0.004)
Income Drop Last Year	0.041*** (0.004)	0.039*** (0.004)	0.038*** (0.004)
Bankruptcy	0.181*** (0.007)	0.177*** (0.007)	0.176*** (0.007)
<i>Financial Capability Indicators</i>			
Objective Financial Knowledge		-0.003*	-0.004**

		(0.001)	(0.001)
Subjective Financial Knowledge		0.005***	0.004**
		(0.002)	(0.002)
Perceived Financial Capability		-0.006***	-0.006***
		(0.001)	(0.001)
Financial Behaviors		0.011***	0.010***
		(0.002)	(0.002)
<i>Financial Education</i>			
High School Fin. Education			0.013*
			(0.006)
College Fin. Education			0.007
			(0.006)
Workplace Fin. Education			0.023***
			(0.006)
Census Region FE	Yes	Yes	Yes
N	24,932	24,932	24,932

Source: 2012 National Financial Capability Study

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

Table 4 - Non-Bankruptcy versus Bankruptcy, Probit reporting AME

	(1) Debt Counseling Advice - No Bankruptcy b/se	(2) Debt Counseling Advice - Bankruptcy b/se
<i>Age (ref: under 35)</i>		
35 to 50 years old	-0.01** (0.00)	-0.05 (0.04)
Over 50	-0.02*** (0.01)	-0.06 (0.05)
Female=1	-0.00 (0.00)	0.04 (0.04)
Married=1	-0.00 (0.00)	0.03 (0.05)
# of Children	0.01*** (0.00)	0.01 (0.02)
Homeowner	-0.01 (0.00)	0.13*** (0.04)
<i>Race/Ethnicity (ref: White)</i>		
Hispanic	0.01 (0.01)	0.01 (0.05)
Asian	-0.02 (0.01)	0.08 (0.08)
Other Race	0.01 (0.01)	-0.03 (0.10)
<i>Educational Attainment (ref: no H.S.)</i>		
High School or GED	0.03** (0.01)	0.06 (0.07)
Incomplete College	0.04*** (0.01)	0.05 (0.07)
College Graduate	0.05*** (0.01)	0.13 (0.07)
<i>Income (ref: under \$25,000)</i>		
\$25,000-\$49,999	0.03*** (0.00)	-0.02 (0.05)
\$50,000-\$99,999	0.03*** (0.01)	-0.04 (0.06)
Over \$100,000	0.02* (0.01)	0.08 (0.07)
<i>Financial Stressors</i>		
Difficulty Paying Bills	0.06*** (0.00)	-0.00 (0.04)
Income Drop Last Year	0.03*** (0.00)	0.11** (0.04)
Risk Taking	0.00*** (0.00)	-0.00 (0.01)
<i>Financial Capability Indicators</i>		
Objective Financial Knowledge	-0.01*** (0.00)	0.05*** (0.01)
Subjective Financial Knowledge	0.00	-0.01

	(0.00)	(0.01)
Perceived Financial Capability	-0.01***	-0.00
	(0.00)	(0.01)
Financial Behaviors	0.01***	0.04*
	(0.00)	(0.02)
<i>Financial Education</i>		
High School Fin. Education	0.01*	0.12
	(0.01)	(0.06)
College Fin. Education	0.00	0.03
	(0.01)	(0.07)
Workplace Fin. Education	0.02***	0.08
	(0.01)	(0.06)
Census Region FE	Yes	Yes
Observations	24142	790

Source: 2012 National Financial Capability Study

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

Table 5: Debt Counseling Advice Average Marginal Effects, High School or less

	(1) Debt Counseling Advice b/se	(2) Debt Counseling Advice b/se	(3) Debt Counseling Advice b/se
<i>Age (ref: under 35)</i>			
35 to 50 years old	-0.034*** (0.009)	-0.025** (0.008)	-0.025** (0.008)
Over 50	-0.050*** (0.009)	-0.039*** (0.009)	-0.039*** (0.009)
Female=1	-0.005 (0.006)	-0.006 (0.006)	-0.005 (0.006)
Married=1	-0.004 (0.007)	-0.005 (0.007)	-0.004 (0.007)
# of Children	0.019*** (0.003)	0.019*** (0.003)	0.018*** (0.003)
Homeowner	-0.017* (0.008)	-0.019* (0.008)	-0.019* (0.008)
<i>Race/Ethnicity (ref: White)</i>			
Hispanic	0.011 (0.010)	0.004 (0.010)	0.004 (0.010)
Asian	-0.021 (0.012)	-0.024* (0.012)	-0.024* (0.012)
Other Race	0.017 (0.017)	0.017 (0.017)	0.015 (0.017)
<i>Income (ref: under \$25,000)</i>			
\$25,000-\$49,999	0.018 (0.010)	0.018 (0.010)	0.018 (0.010)
\$50,000-\$99,999	0.020* (0.010)	0.024* (0.010)	0.024* (0.010)
Over \$100,000	0.012 (0.011)	0.015 (0.012)	0.014 (0.012)
<i>Financial Stressors</i>			
Difficulty Paying Bills	0.059*** (0.007)	0.060*** (0.007)	0.060*** (0.007)
Income Drop Last Year	0.052*** (0.007)	0.049*** (0.007)	0.048*** (0.007)
Bankruptcy	0.203*** (0.013)	0.191*** (0.013)	0.190*** (0.013)
<i>Financial Capability Indicators</i>			
Objective Financial Literacy		-0.010*** (0.002)	-0.011*** (0.002)
Subjective Financial Literacy		0.010*** (0.003)	0.008** (0.003)
Perceived Financial Capability		-0.010*** (0.002)	-0.010*** (0.002)
Financial Behaviors		0.006 (0.004)	0.005 (0.004)
<i>Financial Education</i>			
High School Fin. Education			0.0058 (0.009)

Workplace Fin. Education			0.026*
			(0.009)
Census Region FE	Yes	Yes	Yes
N	8,495	8,495	8,495

Source: 2012 National Financial Capability Study

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

Table 6: Debt Counseling Advice with Interaction Terms, Average Marginal Effects

	(1) Debt Counseling Advice b/se	(2) Debt Counseling Advice b/se	(3) Debt Counseling Advice b/se	(4) Debt Counseling Advice b/se
<i>Demographic Controls</i>	Yes	Yes	Yes	Yes
<i>Financial Capability Indicators</i>	Yes	Yes	Yes	Yes
<i>Financial Stressors</i>				
Difficulty Paying Bills	0.078*** (0.004)			0.054*** (0.005)
Income Drop Last Year		0.064*** (0.004)		0.037*** (0.004)
Bankruptcy			0.194*** (0.007)	0.173*** (0.008)
<i>Interactions (% full sample)</i>				
Financial Education and Difficulty Paying Bills (10.4%)				0.007 (0.008)
Financial Education and Income Drop Last Year (5.8%)				0.007 (0.008)
Financial Education and Bankruptcy (0.06 %)				0.016 (0.017)
Census Region FE	Yes	Yes	Yes	Yes
N	24,932	24,932	24,932	24,932

Source: 2012 National Financial Capability Study

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$