

# Planning and Financial Literacy: How Do Women Fare?

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# **“Planning and Financial Literacy: How Do Women Fare?”**

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## **Regents of the University of Michigan**

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# **Planning and Financial Literacy: How Do Women Fare?**

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## **Abstract**

This study uses data from the module on planning and financial literacy devised for the Health and Retirement Study in 2004. It finds that women display much lower levels of literacy than respondents in the total sample. Lack of literacy has implications for planning: women who are less financially literate are less likely to plan for retirement and be successful planners. These findings have important implications for policy and for programs aimed at fostering financial security. Because financial illiteracy is widespread among women, a one-time financial education seminar is unlikely to sufficiently influence planning and saving decisions. Similarly, education programs targeted specifically at women may be better suited to addressing large differences in preferences, savings needs, and financial knowledge.

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## **RESEARCH QUESTION AND POLICY RELEVANCE**

Many households in the US have done little or no planning for retirement. Using data from the 1992 Health and Retirement Study (HRS), Lusardi (1999) shows that as many as one in three respondents have given no thought to retirement, even when they are only five to ten years away from retirement. Lack of planning has important consequences for savings and portfolio choice; those who do not plan accumulate much less wealth than those who plan, and are less likely to invest in stocks and tax-favored assets (Lusardi, 2003). Women represent a large share of non-planners and there is much concern about how female-headed households will fare after retirement (Weir and Willis (2000)). There is still very little understanding of the reasons that people do not plan for retirement and the roles planning and information costs play in affecting planning and saving decisions.

To gain a better insight into these issues, Olivia Mitchell and I devised and fielded a new module for the 2004 HRS on planning and financial literacy (Lusardi and Mitchell, 2005). In this module, we inserted several questions to assess how respondents plan and save for retirement. For example, we asked respondents about the tools they use and the sources of information they rely on for making saving decisions. Moreover, we inserted questions to measure basic levels of financial literacy. These questions can be of enormous help in understanding the behavior of women.

The findings of this paper have important public policy implications. Since the early 1990s, there has been an explosion of products and programs for personal financial planning. The government has instituted several programs to foster financial education and employers have increasingly offered retirement seminars to their workers. But researchers have argued that these

programs have only minimal effects on savings.<sup>1</sup> This could simply be due to the fact that these programs cannot be expected to address lack of savings among different groups in the population. For example if, as shown in this paper, financial illiteracy is disproportionately widespread among women, a one-time financial education seminar is unlikely to sufficiently influence planning and saving decisions. Similarly, educational programs targeted specifically at women may be better suited to addressing fundamental differences in their preferences, saving needs, and financial knowledge.

## **PREVIOUS WORK**

Following the work of Lusardi (1999), several studies confirm that many workers in the U.S. have done little or no planning for retirement (Ameriks et al. 2003, Hurst, 2003). Moreover, workers do not seem well-informed about two of their major sources of retirement income: Social Security benefits and pensions (Gustman and Steinmeier, 2004). Many people report they will be eligible for full Social Security benefits sooner than the rules state (e.g. prior to age 65), and many do not know what benefits are associated with their pensions. In fact, a large set of employees do not even know what type of pension they have. Other researchers have argued that workers are ill-equipped to make saving decisions, as they display little financial literacy (Bernheim, 1995 and 1998). For example, a survey from the Employee Benefits Research Institute (EBRI) in 1996 showed that only 55 percent of workers knew that, on average, U.S. government bonds provided a lower rate of return over the past 20 years than the U.S. stock market.

Many employers, particularly larger ones, have begun to express concern about their employees' lack of retirement preparedness. To remedy these shortfalls, some have sought to

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<sup>1</sup> See Lusardi (2004) for a review of the literature.

improve financial literacy by offering retirement seminars and other educational programs for their workers (Bernheim and Garrett, 2003; Lusardi, 2004). To date, the evidence regarding the effectiveness of financial education is very mixed.

In this project, I use new data from the HRS to examine the saving behavior of women, who represent one of the most vulnerable groups in the population (Weir and Willis, 2000). The analysis of how women plan for retirement, which tools and sources of information they use for planning, and their level of financial literacy provides a basis for building better models of saving and portfolio choice and for designing financial education programs better suited to addressing women's saving needs.

## **RESEARCH DATA AND METHODOLOGY**

The decision of how much to save is certainly a complex one. It requires collecting information on a large set of variables – Social Security and pensions, inflation, and interest rates to name just a few - and making predictions about these variables in the future. It requires understanding how compound interest works, the effects of inflation, the working of financial markets and so on. Very little research has been done to assess how households make saving decisions, how they overcome all the difficulties of making those decisions, and whether they possess the financial literacy necessary to make the decisions. These topics are of paramount importance, in particular at a time when households are increasingly in charge of choosing and allocating not only their private wealth but also part - or all - of their pension wealth.

To gain insight into how households make saving decisions, Olivia Mitchell and I devised a module on planning and financial literacy for the 2004 HRS.<sup>2</sup> The module included three questions on **financial literacy**, as follows:

- 1) *Suppose you had \$100 in a savings account and the interest rate was 2% per year. After 5 years, how much do you think you would have in the account if you left the money to grow: more than \$102, exactly \$102, less than \$102?*
- 2) *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, exactly the same as, or less than today with the money in this account?*
- 3) *Do you think that the following statement is true or false? “Buying a single company stock usually provides a safer return than a stock mutual fund.”*

The first two questions, which I refer to as “Compound Interest” and “Inflation,” help evaluate whether respondents display knowledge of fundamental economic concepts and basic numeracy. The third question, which I dub “Stock Risk,” evaluates respondents’ knowledge of risk diversification, a crucial element of an informed investment decision.<sup>3</sup>

The module also asked respondents how they have calculated their retirement saving needs. Other surveys, including those devised by EBRI in its Retirement Confidence Survey (RCS) and questionnaires developed by TIAA-CREF, have previously asked respondents whether they plan for retirement.<sup>4</sup> However, it is not only whether respondents attempted to plan

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<sup>2</sup> The Health and Retirement Study (HRS), a nationally representative longitudinal dataset of Americans over the age of 50, collects information about health, assets, liabilities, and patterns of wellbeing in older households. Beginning in 1992, a 90-minute core questionnaire has been administered every two years to age-eligible respondents and their spouses. In addition, a random sample of respondents has also been subjected to very short experimental modules in each wave, aimed at helping researchers assess additional topics of substantive interest.

<sup>3</sup> For a description and detailed analysis of the data in this module, see Lusardi and Mitchell (2005).

<sup>4</sup> See Ameriks et al. (2003), and the RCS questionnaire.

for retirement that is important; the outcome of such a plan is crucial.<sup>5</sup> The questions about **retirement planning calculations** we devised for the module are as follows:

- *Have you ever tried to figure out how much your household would need to save for retirement?*
- *Did you develop a plan for retirement saving?*
- *How often were you able to stick to this plan: Would you say always, mostly, rarely, or never?*

Finally, to gain insight into the planning process we devised questions to assess what **planning tools** people rely on to devise and carry out their retirement saving plans. Specifically, we inquired whether respondents contacted friends, relatives, or experts, and whether they used retirement calculators. The specific question phrasing is as follows:

*Tell me about the ways you tried to figure out how much your household would need.*

- *Did you talk to family and relatives?*
- *Did you talk to co-workers or friends?*
- *Did you attend retirement seminars?*
- *Did you use calculators or worksheets that are computer or Internet-based?*
- *Did you consult a financial planner or advisor or an accountant?*

In what follows, I tabulate the prevalence of financial literacy, retirement calculations, and retirement planning tools in the total sample and among women. In addition, I evaluate whether women who lack insight into simple economic facts also have particular difficulty devising and carrying out plans. The idea is to evaluate whether those who are more financially literate are also more likely to plan and be successful planners.

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<sup>5</sup> See also Venti and Wise (2001).

## FINANCIAL LITERACY

In this section I present findings from the financial literacy module in the 2004 HRS. After deleting a handful of observations with missing data about the variables of interest, I have a sample of 1,264 respondents of which 60% are women. Respondents are mostly 50 years old or older (the average age is 66), 64% are married, 13.7% are Blacks and 8.3% are Hispanics.

Results about financial literacy for all respondents in the module are presented in Table 1 (Panel A). The compound interest question has a 67% correct response rate; this is an easy question and it is rather astounding that one-third of the sample cannot respond correctly, particularly because the sample includes older respondents who have most likely dealt with interest rate calculations.<sup>6</sup> The inflation question has a higher correct response rate, with three-quarters (75%) answering correctly that they would be able to buy less after a year if the interest rate were 1% and inflation were 2%. By contrast, only 52% of the respondents understood that holding a single company stock implies a riskier investment than a stock mutual fund.<sup>7</sup> Findings worsen when considering women only (Table 1, Panel B). On all questions the fraction of correct answers is lower among women: only 62% respond correctly to the question about interest compounding and 70% respond correctly to the question about inflation. Less than half of the sample of women respondents (47%) knows about risk diversification. Differences are as high as 5 percentage points and are statistically significant.

I further distinguish between those offering correct answers and those giving an incorrect answer or responding “don’t know” (abbreviated DK). The proportion of incorrect or DK responses varies according to the question. For example, regarding interest compounding, only

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<sup>6</sup> See also the findings about knowledge of compound interest in the experimental saving module in the 1996 HRS (Venti and Wise, 2001).

<sup>7</sup> Similar findings about general lack of financial literacy are also reported by Lusardi and Mitchell (2006), which examine an alternative set of financial literacy questions asked to Early Baby Boomers only (aged 51 to 56 in 2004).

9% did not know but over one-fifth (22%) gave an incorrect answer. On the inflation question, 10% did not know, while 13% gave a wrong answer. The question about stock risk elicited the most DKs: 34% of the sample did not know, while a smaller fraction (13%) gave a wrong answer. The fraction of “Do not know” increases significantly when I consider the sample of women only. For example, close to 13% of women respondents do not know the effects of inflation and close to 40% do not know about risk diversification. As it will be shown later, those DKs are those who display the lowest level of knowledge, and lack of knowledge does affect behavior.

I also calculate how many respondents answer all of these questions correctly. Only slightly over half (56%) of the total sample get both the questions about interest compounding and inflation right. This is a remarkably low figure if we contemplate the complex financial calculations that households on the verge of retirement have most likely engaged in over their lifetimes. Also disturbing is the fact that only one-third (34%) of respondents correctly answer all three questions. The proportion among women is even smaller: fewer than 50% answer correctly the two questions about interest compounding and inflation and only 28.5% answer all three questions correctly. Another relevant finding is that the “DK” responses are highly correlated: that is, financial illiteracy is systemic across examined area. For instance, there is a 70% correlation between those who reply “DK” to both the interest compounding question and the inflation question in both the total sample and in the sample of women only. Erroneous answers are more scattered, with mistakes having a correlation of only 10% (the highest correlation among incorrect responses).

These results reinforce survey findings about financial literacy from Bernheim (1995, 1998), Hogarth and Hilgerth (2002), and Moore (2003), who report that most respondents do not

understand basic financial concepts, particularly those relating to bonds, stocks, mutual funds, and the working of compound interest; they also report that people often fail to understand loans and, particularly, mortgages.<sup>8</sup> Such findings extend beyond the U.S.: for instance, Miles (2004) shows that UK borrowers display poor understanding of mortgages and interest rates. Christelis, Jappelli, and Padula (2005) use SHARE surveys conducted in several European countries to show that respondents there also score low on financial numeracy and literacy scales.<sup>9</sup> In 2005, the National Council on Economic Education (NCEE) conducted a study of high school students and working-age adults, and found a general lack of knowledge of fundamental economic concepts, confirming the results of several studies from the Jump\$tart Coalition for Personal Financial Literacy, which surveys U.S. high school students (Mandell, 2004).

## **RETIREMENT PLANNING**

I now turn to evaluating the extent of retirement planning in the total sample and among women only (Table 2 and 3). Fewer than one-third of the total sample respondents (31.3%) indicated that they actually attempted to do a retirement saving calculation. The fraction of women who plan is slightly lower at 30.9%; these respondents are called *Simple Planners*. The small size of this group confirms Lusardi's analysis (1999, 2002, 2003) of previous HRS waves, Lusardi and Beeler's findings (2006) using the 2004 HRS, and Venti and Wise's findings (2001) using data from two experimental saving modules in the 1996 HRS. This also confirms findings from the Retirement Confidence Survey and TIAA-CREF, which indicated that few undertake retirement planning, even among the educated (Yakobosky and Dickempers, 1997; Ameriks et

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<sup>8</sup> Other surveys also find similar results, in particular concerning knowledge regarding properties of bonds, stocks, and mutual funds (Agnew and Szykman, 2005)

<sup>9</sup> I have also inserted the module questions into a survey of Dutch households to permit a direct comparison of American and Dutch respondents in the near future.

al., 2003). It is also consistent with the work of Mitchell (1988) and Gustman and Steinmeier (2004), who found that workers display little knowledge about their Social Security and pension benefits, two of the most important components of retirement wealth. In fact, close to half of workers in the HRS sample analyzed by Gustman and Steinmeier (2004) could not name their type of pension plan, and an even larger percentage were ignorant of future Social Security benefits.<sup>10</sup>

A key advantage of the module, compared to previous core HRS questions and other surveys, was that I could probe respondents further to inquire about the outcomes of their calculations. Pursuant to those follow-up questions, Panel A of Tables 2 and 3 shows that only 58% of those who tried to figure out how much they need to save for retirement did develop a plan, both in the total sample and among women only, while another handful “more or less” developed a plan (9% in the total sample and 7% among women). Both of these I refer to below as the *Serious Planners*. The high failure rate, so far as developing a plan is concerned, underscores the difficulty of developing retirement projections. Furthermore, of the subset of serious planners, only one-third (38%) were always able to stick to the plan and the fraction is even lower among women (31.8%). Close to half of the serious planners were “mostly” able to stick to their plans (50% in the total sample and 53.9% among women only). The respondents who were “always” or “mostly” able to stick to a plan are called *Committed Planners*. In the sample as a whole, this represents a meager 18.6% overall rate of successful planning, which decreases to 17.4% when we consider women only. Of course, households may face unexpected shocks that make them deviate from plans, but the fact remains that few respondents do what the

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<sup>10</sup> There is also mounting evidence that knowledge about pensions and Social Security affects retirement decisions (Chan and Huff Stevens, 2003; Mastrobuoni, 2005).

economic models suggest that they should. In other words, planning for retirement is difficult, few do it, and fewer still think they get it right.

Planning has important consequences for savings and portfolio choice. Those who do not plan are less likely to accumulate wealth (Lusardi, 1999, 2002, 2003; Lusardi and Mitchell 2006; Lusardi and Beeler, 2006; Ameriks et al., 2003) and are less likely to invest in stocks (Lusardi, 2003).

## **PLANNING TOOLS**

To further evaluate what planning means and what people actually do when planning for retirement, we asked respondents to indicate which tools they use in this process. To the extent that they use crude or inaccurate tools, this may explain the low planning success rates in the population. Panel A of Table 4 shows that respondents in the total sample use a wide variety of tools to calculate their retirement needs (note that these questions are asked only of the 31.3% who reported that they attempted a retirement saving calculations). The results show that between one-quarter and one-fifth of respondents talked to family/relatives or co-workers/friends, while one-third or more used formal means such as retirement calculators, retirement seminars, or financial experts. *Committed Planners* were more likely to use formal means (over 40%), whereas *Simple Planners* – some of whom tried and failed – tended to rely on less formal approaches. The list of tools does not exhaust what people might do; in fact, as many as one quarter of the self-reported planners indicated that they did not use any of the listed tools.

Results are similar in the sample of women only (Table 4, Panel B), even though women tended to consult more often with both family and friends and with financial planners. The correlation between formal methods of planning and success at planning is even stronger; for

example, women who consult a financial planner are more likely to be committed planners and so are those who attended a retirement seminar. On the contrary, only a very small fraction of committed planners have used informal tools, such as talking to family and relatives or friends and co-workers.

## **PLANNING AND FINANCIAL LITERACY**

One reason people fail to plan for retirement, or do so unsuccessfully, may be because not only do they use informal planning tools but they are also financially illiterate. In this case, they may fail to appreciate the role of (or have a hard time solving problems with) compound interest, inflation, and risk. Tables 5 and 6 report a multivariate analysis to shed some light on the importance of financial literacy and the relationship with planning in the total sample and among women only.<sup>11</sup> The three dependent variables show who was a planner, who developed a plan, and who was able to stick to the plan. Column I in each case takes on a value of 1 if the respondent was correct regarding the literacy variables (else, = 0); column II adds an indicator equal to 1 if the respondent indicated he did not know the answer to the question (else, = 0); and column III has the same dependent variable but adds controls for demographics and specifically age, and dummies for race, sex, educational attainment, marital status, being born in the US, and being a Baby Boomer. I use a Probit analysis as the outcomes are qualitative (0,1) variables, and I report marginal effects.

The regression estimates suggest several interesting findings. First, financial literacy is strongly and positively associated with planning, and the results are statistically significant at conventional levels. That is, planners of all types are much more likely to give a correct answer

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<sup>11</sup> Clearly, the causality may also go the other way: that is, those who plan also develop financial literacy and an ability to do retirement calculations. I will address causality more formally in future versions of the paper.

to the basic questions about financial literacy (Columns I). Estimates of the effects of literacy are similar when considering the sample of women only. In particular, those who understand risk diversification are much more likely to plan. Second, knowledge about risk diversification best differentiates between sophisticated and unsophisticated respondents. Not only does it have a much larger estimated marginal effect than being able to correctly answer the interest and the inflation questions, but it also remains statistically significant even after accounting for the demographic characteristics of the respondent. Third, lack of knowledge also matters. Even with respect to those answering incorrectly, those who cannot answer the questions are much less likely to plan and to succeed in their planning effort (Columns II). The effect is somewhat larger in the sample of women only. What appears most crucial is a lack of knowledge about interest compounding, which makes sense since basic numeracy is crucial for doing calculations about retirement savings.

Column III in Tables 5 and 6 reports the estimates when we account for demographic characteristics. Some indicators of financial literacy remain statistically significant even after we account for many demographic characteristics. This means, for example, that financial literacy affects planning above and beyond the effect of education. This is particularly important for women; women in this sample are less likely to have higher education and many are unmarried (widowed, divorced or separated). The information provided in the financial literacy variables may prove very useful in explaining the differences we observe among households in their behavior toward retirement savings.

## **IMPLICATIONS AND CONCLUSIONS**

As an increasingly large group of the U.S. population moves into retirement, it is crucial to learn whether families know how to plan for retirement and whether they can execute these plans effectively. How people react when confronted with this challenge – that is, whether individuals have the knowledge of and the capability to develop and implement complex planning tasks – is a topic of substantial current interest. Moreover, it is particularly important to study the literacy and planning behavior of women, as they live longer than men and have shorter work careers and lower earnings.

The findings in this paper show that women display very little financial literacy; less than 50% of women respondents correctly answer simple questions regarding interest compounding and inflation, and an even smaller fraction (28.5%) correctly answer these two questions and a question about risk diversification. In other words, financial illiteracy is widespread among older Americans and women in particular. Second, I evaluate whether people tried to figure out how much they need to save for retirement, whether they devised a plan, and whether they succeeded at the plan. I find that retirement calculations are not an easy task for respondents in general and for women in particular: only approximately a third of women had ever tried to devise a retirement plan, and only two thirds of these succeeded. Among female respondents, only a little more than 17% engaged in successful retirement planning. Third, I evaluate the planning tools people use. Women are much more likely to rely on both family and friends and on the advice of financial experts. Those who consult experts are more likely to be successful planners. Fourth, I find that financial knowledge and planning are clearly interrelated: women who display higher financial literacy are more likely to plan and be successful planners.

To respond to the question addressed in the title of this paper, financial literacy is so limited among women as to raise concerns about their ability to make sound saving and investment decisions. In an environment where workers are increasingly in charge of making decisions about their financial wellbeing after retirement, it is essential to equip them with an important tool for retirement planning: financial literacy.

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**Table 1. Financial Literacy Patterns**  
(HRS 2004, Module 8)

**Panel A: Distribution of Responses to Financial Literacy Questions in the Total Sample (N = 1,264)**

	<i>Responses</i>			
	<i>Correct</i>	<i>Incorrect</i>	<i>DK</i>	<i>Refuse</i>
Compound Interest	67.0%	22.2%	9.4%	1.4%
Inflation	75.2%	13.3%	10.0%	1.5%
Stock Risk	52.3%	13.1%	33.7%	0.9%

**Panel B: Distribution of Responses to Financial Literacy Questions Among Women Only (N = 785)**

	<i>Responses</i>			
	<i>Correct</i>	<i>Incorrect</i>	<i>DK</i>	<i>Refuse</i>
Compound Interest	61.9%	24.7%	11.6%	1.8%
Inflation	70.6%	14.5%	12.8%	2.1%
Stock Risk	47.6%	12.0%	39.6%	0.8%

**Table 2. Prevalence of Retirement Planning Calculations (Total Sample)**  
*(HRS 2004, Module 8)*

**Panel A. Proportion of Planners in Respective Sub-Groups (N = 1,264)**

<i>Did you try to figure out how much to save for retirement?</i>				
<i>Yes</i> 31.3%			<i>No</i> 67.7%	<i>Refuse/DK</i> 1.0%
<i>Did you develop a plan?</i>				
<i>Yes</i> 58.8%		<i>More or Less</i> 9.1%		<i>No</i> 31.6%
				<i>Refuse/DK</i> 0.5%
<i>Were you able to stick to the plan?</i>				
<i>Always</i> 37.9%	<i>Mostly</i> 49.8%	<i>Rarely</i> 8.2%	<i>Never</i> 2.6%	<i>Refuse/DK</i> 1.5%

**Panel B. Proportion of Planners in the Sample**

<i>Question</i>	<i>Proportion of Sample</i>
<b>Simple Planners</b> Yes to “tried to figure out how much to save for retirement”	31.3%
<b>Serious Planners</b> Replied Yes/More or less to “developed a plan”	21.3%
<b>Committed Planners</b> Replied Always/Mostly to “able to stick to the plan”	18.7%

**Table 3. Prevalence of Retirement Planning Calculations (Women Only)**  
(HRS 2004, Module 8)

**Panel A. Proportion of Planners in Respective Sub-Groups (N = 785)**

<i>Did you try to figure out how much to save for retirement?</i>				
<i>Yes</i> 30.9%			<i>No</i> 68.2%	<i>Refuse/DK</i> 0.9%
<i>Did you develop a plan?</i>				
<i>Yes</i> 58.5%	<i>More or Less</i> 7.3%		<i>No</i> 34.2%	<i>Refuse/DK</i> 0.0%
<i>Were you able to stick to the plan?</i>				
<i>Always</i> 31.8%	<i>Mostly</i> 53.9%	<i>Rarely</i> 9.1%	<i>Never</i> 3.2%	<i>Refuse/DK</i> 2.0%

**Panel B. Proportion of Planners in the Sample**

<i>Question</i>	<i>Proportion of Sample</i>
<b>Simple Planners</b> Yes to “tried to figure out how much to save for retirement”	30.9%
<b>Serious Planners</b> Replied Yes/More or less to “developed a plan”	20.3%
<b>Committed Planners</b> Replied Always/Mostly to “able to stick to the plan”	17.4%

**Table 4. Planning Tools**  
(HRS 2004, Module 8)

**Panel A: Planning Tools (Total Sample)**

<i>Tools</i>	<i>Simple Planners</i> N = 396	<i>Committed Planners</i> N = 236
Talk to family/friends	21.1% (.409)	17.4% (.380)
Talk to coworkers/friends	24.7% (.432)	21.2% (.410)
Attend retirement seminars	35.3% (.479)	40.7% (.492)
Use calculators/worksheets	37.8% (.485)	43.6% (.497)
Consult a financial planner/advisor	39.1% (.488)	49.6% (.501)

**Panel B: Planning Tools (Women Only)**

<i>Tools</i>	<i>Simple Planners</i> N = 234	<i>Committed Planners</i> N = 132
Talk to family/friends	23.5% (.425)	18.2% (.387)
Talk to coworkers/friends	24.8% (.432)	19.7% (.399)
Attend retirement seminars	35.9% (.481)	43.9% (.498)
Use calculators/worksheets	37.6% (.485)	42.4% (.496)
Consult financial planner/advisor	45.3% (.499)	59.8% (.492)

**Table 5. The Relationship between Planning and Literacy (Total Sample)**  
*Probit Analysis, Marginal effects reported (HRS 2004, Module 8)*

	<i>Simple Planners</i> N = 1,264			<i>Serious Planners</i> N = 1,264			<i>Committed Planners</i> N = 1,264		
	<b>I</b>	<b>II</b>	<b>III</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>I</b>	<b>II</b>	<b>III</b>
Correct on Compound Interest	.068** (.028)	.032 (.031)	-.007 (.032)	.064** (.024)	.039 (.026)	.002 (.027)	.062** (.022)	.038 (.024)	.004 (.024)
Correct on Inflation	.103*** (.03)	.077** (.035)	.052 (.037)	.073*** (.026)	.057* (.030)	.038 (.030)	.072*** (.024)	.062** (.027)	.043 (.027)
Correct on Stock Risk	.163*** (.026)	.106*** (.038)	.093** (.039)	.156*** (.022)	.101*** (.032)	.087*** (.032)	.138*** (.021)	.088*** (.031)	.069** (.029)
DK Compound Interest		-.172** (.056)	-.162*** (.056)		-.138** (.042)	-.127** (.040)		-.130** (.036)	-.118** (.032)
DK Inflation		.022 (.080)	.032 (.081)		.034 (.077)	.047 (.078)		.056 (.078)	.068 (.079)
DK Stock Risk		-.073* (.042)	-.041 (.043)		-.071* (.035)	-.043 (.036)		-.064* (.033)	-.037 (.033)
Demographics	no	no	yes	no	no	yes	No	no	yes
Pseudo R <sup>2</sup>	.047	.056	.104	.061	.070	.131	.061	.069	.139

Note: Demographics include age and dummies for sex, race, marital status, education, born in the US, and baby boomer cohort. \* estimated coefficient significant at the 10% level; \*\* estimated coefficient significant at the 5% level; \*\*\* estimated coefficient significant at the 1% level.

**Table 6. The Relationship between Planning and Literacy (Women Only)**  
*Probit Analysis, Marginal effects reported (HRS 2004, Module 8)*

	<i>Simple Planners</i> N = 758			<i>Serious Planners</i> N = 758			<i>Committed Planners</i> N = 758		
	<b>I</b>	<b>II</b>	<b>III</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>I</b>	<b>II</b>	<b>III</b>
Correct on Compound Interest	.068* (.036)	.023 (.038)	.014 (.042)	.060* (.030)	.028 (.031)	.003 (.032)	.051** (.028)	.025 (.029)	-.001 (.029)
Correct on Inflation	.112*** (.037)	.084* (.044)	.065 (.045)	.068** (.032)	.044 (.037)	.029 (.036)	.058* (.029)	.044 (.034)	.028 (.032)
Correct on Stock Risk	.180*** (.034)	.113** (.052)	.095* (.052)	.161*** (.029)	.103** (.044)	.093** (.042)	.139*** (.027)	.082** (.041)	.061* (.038)
DK Compound Interest		-.194** (.060)	-.182** (.056)		-.135** (.047)	-.122* (.043)		-.113* (.043)	-.100* (.038)
DK Inflation		.042 (.092)	.054 (.094)		.005 (.079)	.021 (.078)		.035 (.079)	.050 (.079)
DK Stock Risk		-.081 (.054)	-.056 (.055)		-.067 (.045)	-.037 (.045)		-.068 (.042)	-.045 (.040)
Demographics	no	no	yes	no	no	yes	no	no	yes
Pseudo R <sup>2</sup>	.058	.069	.123	.066	.077	.139	.060	.071	.144

Note: Demographics include age and dummies for sex, race, marital status, education, born in the US, and baby boomer cohort. \* estimated coefficient significant at the 10% level; \*\* estimated coefficient significant at the 5% level; \*\*\* estimated coefficient significant at the 1% level.