

# Information Sources and Retirement Savings of Working Women

Chungwen Hsu<sup>a</sup>

*This study examined how retirement planning information search was related to retirement savings of working women. By controlling for sociodemographic variables, the study further explored factors associated with individual information sources for retirement planning. An online survey was developed to collect data from a national population, obtaining 591 valid responses. The results showed that women who learned about retirement planning through discussions with friends/relatives tended to save less in their personal retirement savings, whereas those who obtained information from financial advisors tended to save more. Personal income was positively associated with seeking information from financial advisors. The study concluded by discussing the implications for financial service providers, retirement plan marketers, financial educators, researchers, and policymakers.*

*Keywords: information sources, retirement planning, retirement savings, women*

Later in life, more women become widows (U.S. Census Bureau, 2013) who may live with chronic health conditions, thus requiring additional resources to address care and assistance needs. The population for the United States consists of a greater number of younger men and older women (Colby & Ortman, 2015). Women live longer than men (National Center for Health Statistics, 2015) because they have relatively lower risk jobs, behaviors, and activities (Harvard Men's Health Watch, 2010). Women tend to marry at younger ages than men (U.S. Census Bureau, 2015) which indicates many women marry men who are older than themselves.

Women tend to have lower pay and shorter employment histories, thus leaving them with fewer retirement savings. In 2010, it showed a 77% female-to-male earnings ratio for full-time, year-round workers aged 15 years and older (DeNavas-Walt, Proctor, & Smith, 2011). This is because of both types of jobs women have and the fact that women are more likely to move in and out of paid work when their male counterparts rise to higher positions and salaries. Women are also more likely to work part-time because of their caretaking responsibilities at different life stages (e.g., birth of a child or the chronic illness of an elder family member). To calculate benefits, furthermore, most public/private defined benefit (DB) pension plans and defined contribution (DC) pension plans use some combination of the user's average

or final salary and their years of employment. Most major companies offer their employees 401k plans and match a percentage (ranging from 25% to 100%) of their contributions of up to 6% of their salary (J. B. Clark & Block, 2012). Thus, women have fewer retirement savings from their own salaries as well as from their employers' contributions. In 2010, almost 3.5 million elderly persons lived below the poverty level (Administration on Aging, 2011), whereas in 2012, women aged 65 years and older had a higher poverty rate (11%) than did their male counterparts (6.6%; DeNavas-Walt, Proctor, & Smith, 2013).

Retirement costs are thus increasing because of longer life expectancies, increasing health care costs, lower interest rates, and higher investment risk from employees' DC plans (Prudential, 2012). Although a report from the Employee Benefit Research Institute (EBRI) showed that retired households' average earnings are only about 57% of working households, retired households also spend approximately 80% of what working households do (Banerjee, 2012). The EBRI also provided a sense of retired Americans' (aged 50 years and older) consumption patterns: Home and home-related costs proved the largest expenditures (40%–45% of budget), followed by health care costs (10% of budget for ages 50–60 years; 20% for ages 85 years and older, who require long-term care and private health insurance; Banerjee, 2012).

<sup>a</sup>917 Kentwood Dr., Blacksburg, VA 24060. E-mail: chungwen@vt.edu

Although the aforementioned evidence shows women are more vulnerable in retirement than men, women's retirement planning information-seeking behavior may play an important role in their investment decision-making process and could thus have a considerable effect on their retirement savings. As H. Kim and Kim (2010) indicated, future retirees have an increasing demand for retirement information to help them make informed retirement planning decisions. The National Research Symposium on Financial Literacy and Education also emphasized that future studies must determine both the quality and adequacy of the personal financial information that people acquire from others (Schuchardt et al., 2009). Furthermore, a need for gender-focused research in financial education was identified by a Quarter Century Project conducted by the National Endowment for Financial Education (2011). However, little is known about (a) where women should obtain information to make retirement planning decisions and (b) the characteristics that differentiate women who conduct retirement planning information from those who do not.

This study thus attempts to examine whether retirement planning information sources are associated with retirement savings of working women. By controlling for sociodemographics variables, the study further explores factors associated with information sources for retirement planning. This study will contribute to the gaps in the literature by understanding the relationship between retirement planning information search and retirement savings of women, observing the ways in which women seek retirement information. Another important contribution to the literature is the analysis of personal income to retirement savings literature. The influence of personal income on retirement savings has received little attention. The evidence could offer implications for financial service providers, retirement plan marketers, financial educators, researchers, and policymakers.

## **Literature Review and Research Questions**

### ***Conceptual Framework***

Stigler (1961) proposed the economics of information, which assumes that consumers who seek information will obtain lower prices or higher quality products than those who do not. Joo and Grable (2001) suggested that cost factors, benefit factors, and other factors (e.g., demographics) affect the decision to seek or not seek financial information. With the increase in both retirement plans and uncertainty (because of their long-term perspective), such factors

make information seeking for retirement planning unique from an economics of information perspective (H. Kim & Kim, 2010). The rich investment information available today does not guarantee seekers' ability to identify, locate, evaluate, select, and use information for successful investing (O'Connor, 2013). Retirement planning information-seeking behavior, however, may be viewed as a necessary step for retirement saving and can encourage consumers to save more for retirement.

### ***Retirement Planning Information Sources***

Because women are more risk averse than men when making investment decisions (Olsen & Cox, 2001), acquiring information before making financial decisions may encourage women to take action on their plans. Thirty percent of women trusted financial service advisors or consultants to give them the most accurate and reliable information, whereas 25% of women trusted information from friends and family (TIAA-CREF, 2013). The TIAA-CREF (2013) pointed out, however, that nearly half (48%) of Americans reported difficulty knowing which financial advice sources to trust.

Blinder and Krueger (2004) ranked 11 sources that consumers use to learn about economic topics from most to least frequently used: (1) television, (2) newspapers, (3) discussions with friends/relatives, (4) statements by political leaders, (5) radio, (6) statements by economists, (7) the Internet, (8) statements by business leaders, (9) statements by civic or religious leaders, (10) magazines, and (11) books. H. Kim and Kim (2010) explored financially distressed consumers' retirement planning information-seeking behaviors, grouping their information sources into five categories, ranked from most to least frequently used: (1) media (e.g., newspaper, books, magazine, radio, and TV), (2) professional service (e.g., financial planners, lawyers, accountants, lectures, and financial counselors), (3) personal (e.g., friends or family), (4) banks, and (5) the Internet. DeVaney, Sharpe, Kratzer, and Su (1998) determined what factors led to increased retirement savings among nonfarm self-employed workers by using a retirement planning index, which included the following questions: thinking about retirement, discussing retirement with spouse or close friend, attending programs or reading articles/books about retirement, using computer programs, consulting professionals, and the worker's belief that the retirement planning conducted was comparable to others of the same age. Some consumers,

however, choose not to seek and/or use external information sources (H. Kim & Kim, 2010).

### ***Factors Related to Information Search***

Consumers seek various sources to learn about financial topics or retirement planning. Knowing which factors significantly impact sources, therefore, would help financial marketers further understand both who their target consumers are and how to reach them. The factors identified in previous studies included age, household income, marital status, education, health status, and race (Joo & Grable, 2001; H. Kim & Kim, 2010).

When making retirement investment decisions, Joo and Grable (2001) found that household income was related significantly to seeking help from financial professionals. H. Kim and Kim (2010) found that married consumers were more likely than unmarried consumers to seek professional services to learn about retirement planning.

Besides financial professionals, H. Kim and Kim (2010) indicated that older consumers were less likely to use personal sources for retirement planning. Compared to consumers with household incomes less than \$20,000, those with household incomes greater than \$50,000 were more likely to seek retirement information through media (e.g., newspaper, books, magazine, radio, and TV; H. Kim & Kim, 2010). Younger consumers with household incomes greater than \$20,000 were more likely to seek retirement information on the Internet (H. Kim & Kim, 2010). Although H. Kim and Kim's study also used education, health status, and race to predict the aforementioned information, the relationships did not show statistically significant.

### ***Retirement Savings***

Control variables commonly used in the literature for retirement savings include age, household income, education, marital status, race/ethnicity, health status, and homeownership. The existing literature shows that age, income, and education have significant effects on retirement savings. DeVaney et al. (1998) found that older self-employed workers held greater amounts of retirement savings. DeVaney and Zhang (2001) further indicated that the finances in DC accounts, individual retirement account (IRA), and Keogh savings increased with age. DeVaney and Chiremba (2005) compared four cohorts, suggesting a positive relationship between cohort's age and their retirement savings.

Household income is also a strong predictor of retirement savings. EBRI (2012) showed that workers' total savings and investment positively related to household income. DeVaney, Anong, and Yang (2007), DeVaney et al. (1998), and DeVaney and Zhang (2001) also found that household income had significant, positive effects on the value of retirement accounts. There exists only limited research, however, that uses personal income as a predictor of retirement savings.

The existing research has shown education as positively related to retirement savings. Rowland and Lyons (1996) assumed that better educated people were more likely to have better retirement benefits and personal savings from their working years. The existing research showed the same conclusions: Retirement savings amounts were larger for those with higher educations (DeVaney & Chiremba, 2005; DeVaney et al., 2007; DeVaney & Zhang, 2001).

The existing literature also shows marital status, race/ethnicity, and health status to be influential factors for retirement savings. Married couples have greater retirement savings (DeVaney & Chiremba, 2005; DeVaney & Zhang, 2001). Race/ethnicity also impacts retirement saving behavior (DeVaney & Zhang, 2001; Malroux & Xiao, 1995; Springstead & Wilson, 2000; Turner, Bailey, & Scott, 1994; Yuh & DeVaney, 1996). For example, White consumers had greater total retirement accounts compared to non-White (DeVaney & Zhang, 2001). Hispanics tended to have smaller retirement savings accounts because they preferred to have short-term savings for planned purchases or education expenses (rather than long-term savings, e.g., retirement; Plath & Stevenson, 2005). People with poor health may change their saving behaviors because a shorter life expectancy often reduces the need to save for retirement (Scholz & Levine, 2003). Women in poor health were less likely to report having saved during the previous year (Fisher, 2010), which may result in fewer retirement savings.

Because a home can be an owner's major retirement asset, it may also affect retirement savings behavior (Lichtenstein, 2010) because it is difficult to accumulate wealth and afford retirement without owning a home (Dwyer, 1989). DeVaney and Chiremba (2005) as well as DeVaney and Zhang (2001) found that homeowners had greater retirement savings than renters. James and Sharpe (2007) also indicated that, compared with otherwise similar homeowners, renters nearing retirement were less likely to contribute to their retirement savings.

### ***Information Search and Retirement Savings***

The existing research has shown a positive relationship between information search and retirement savings. DeVaney et al. (1998) concluded that respondents who increased their retirement planning efforts by attending programs, consulting professionals, and engaging in other information-seeking activities were more likely to increase their level of retirement savings. DeVaney et al. (2007) also found that those who sought professional advice had greater savings in their retirement accounts. Among new workers and those nearing retirement, researcher has shown that attending retirement training sessions is good way to further understand available retirement plans. Several studies have shown that financial education in the workplace results in positive changes to one's financial behavior (Garman, Kim, Kratzer, Brunson, & Joo, 1999; Joo & Grable, 2005; J. Kim, 2007; J. Kim, Kwon, & Anderson, 2005) as well as greater retirement savings (Bernheim & Garrett, 2003). Skimmyhorn (2014) found that attending the military's Personal Financial Management Course training program doubled retirement savings. R. L. Clark and d'Ambrosio (2003) indicated that participation in 1-hour retirement seminars positively changed individual's retirement goals and saving behaviors.

Based on the conceptual framework and review of literature, two research questions were proposed: (a) What is the relationship between retirement planning information search and personal retirement savings of working women? and (b) What sociodemographic factors are associated with information search of these women's individual sources for retirement planning information-seeking behavior?

### **Method**

#### ***Data***

To define the age range of working women in this study, two definitions for the term *working age* were referred. The U.S. Census Bureau (2011) viewed 18–64 years as working age, whereas the EBRI (2009) classified 21–64 years as working age. Three million women aged 65 years or older, however, were employed in 2012 (U.S. Census Bureau, 2013). EBRI also estimated that consumers began saving for retirement by the time they were 25 years old (EBRI, 2011). This study therefore targeted women 25 years and older. According to the U.S. Census Bureau (2013), 106.5 million females were 25 years or older in 2012. Thus, the sample size required for this survey to meet a 95% confidence level is 384 (Dillman, Smyth, & Christian, 2009).

An online survey was developed to obtain data for the study. Potential survey errors that may have occurred in this study because of online data collection include coverage, sampling, nonresponse, and measurement (Tuten, 2010). Specifically, the following errors may have occurred:

1. Although 76% of women aged 18 years and older use the Internet (Pew Research Center, 2012), there is still a chance that this study did not cover members of the target population.
2. Because there is no extant list of Internet users, and no way to use random digits to select a sample, online surveys have greater sampling error limitations (Tuten, 2010).
3. Although higher response rates lead to decreased nonresponse error, the response rates for online surveys tend to be low compared to mail surveys (Tuten, 2010).
4. There is a chance that the participants' responses do not represent their true values.

To reduce these possibilities and confirm the validity and reliability of the instrument, this study employed two pilot tests to reduce biases caused by question wording, webpage language, different web browsers (e.g., Microsoft Internet Explorer, Mozilla Firefox, Google Chrome, or Apple Safari), and using different computers (as Macs and PCs may show the same page in different ways). The first pilot test implemented a convenience sample of Virginia Association of Family and Consumer Sciences members, who made valuable suggestions and pointed out flaws for revision. The second pilot test used SurveyMonkey, an online survey company, targeting members to obtain 50 completed responses. Based on the participants' suggestions and survey results, minor wording corrections were made.

In May 2012, SurveyMonkey was used to recruit a convenience sample of 500 respondents based on the study's targeting criteria from the national population (i.e., non-retired women aged 25 years or older). Based on the company's report, 4,414 invitations were sent per our request to targeted audiences, obtaining 591 valid responses resulting in a 13% response rate over 6 days. As an incentive to participate, SurveyMonkey donated \$0.50 to a participating charity of respondents' choice, who also got a chance to win a \$100 Amazon.com gift card.

### **Analysis**

Descriptive statistics were used to create a profile of participants. Multiple regressions were performed to assess the effects of a set of predictors on personal retirement savings, including sources of retirement planning information. When a retirement planning information source proved statistically significant, logistic regression was conducted to assess the factors' effects on the likelihood that respondents would report having used that individual source. For all significance tests,  $p < .05$  was considered significant.

Following the recommendation of Pallant (2010), a tolerance value less than 0.10 and a variance inflation factor (VIF) value above 10 were applied to determine the presence of multicollinearity within the multiple regression models. According to Stevens (2002), "For social science researches, about 15 subjects per predictor are needed for a reliable equation" (p. 88). Thus, if an individual predictor had fewer than 15 respondents (i.e., a frequency of less than 2.54% in this study), it was merged into another category.

### **Dependent Variable**

The following question was used to measure this study's dependent variable for personal retirement savings: "Approximately, what is the total amount of money you have saved in your personal investments and savings for retirement at this time? (e.g., IRAs, mutual funds, stocks, bonds, CDs, annuities, cash value life insurance)." There were 12 savings categories in units of \$25,000, wherein 1 began at "none," 2 was "less than \$25,000," 3 was "\$25,000–\$49,999" leading up to 12, "\$250,000 or more." This dependent variable was an interval variable because the intervals between the values were equally spaced (Xu, Lin, & Kuo, 2015).

### **Independent Variable**

Table 1 presents variable specifications. The independent variables include retirement planning information sources and control variables (i.e., age, personal income, household income, education, marital status, race/ethnicity, health status, and homeownership).

Retirement planning information source was measured by the following question: "Which of the following sources of information do you use to learn about retirement planning?" Respondents were allowed to make multiple selections of sources. To explore the influence of each information source used, all 11 sources in the study were included and were

not combined into categories. This study also used dummy variables for all sources: 1 coded as "used" (0 otherwise) for the Internet, television, newspapers, radio, magazines, books, a course, discussions with friends/relatives, information from financial advisors, training sessions provided by an employer, and seminars led by financial professionals. The study also included "not using any source," coded the same way as the other sources.

Age was analyzed in five groups similar to those used by Xiao (1996), and ages 35–64 years were further divided into three groups: 25–34 years (reference category), 35–44 years, 45–54 years, 55–64 years, and 65 years and older. The study used dummy variables for education level: high school diploma or less (reference category), some college, college degree, and master's degree or higher. Personal income was measured by using the question "Which of the following categories best describes your annual personal income before taxes?" This included 14 personal income categories divided by units of \$10,000, wherein 1 was "under \$25,000" increasing up to 14, "over \$145,000." Household income was measured by using the question "Which of the following categories best describes your total annual household income before taxes?" This included 24 household income categories divided by units of \$10,000, in which 1 was "under \$25,000" leading to 24, "over \$245,000." The intervals between the values of both personal and household income variables were equally spaced. The study used dummy variables for (a) health status: poor to fair (reference category), good, and excellent; (b) marital status: married (reference category), never married, cohabitating, separated, divorced, and widowed; (c) race/ethnicity: non-Hispanic White (reference category), non-Hispanic Black, and other; and (e) homeownership.

## **Results**

### **Sample Characteristics**

Table 1 shows participants' profiles. The typical respondent was non-Hispanic White (88.8%), had an average age of 48 years, had at least 3 years of college, was in good health, was a homeowner (69.5%), had an average annual personal income between \$45,000 and \$54,999, and had an average annual household income between \$75,000 and \$84,999. Half (50.9%) were married. The average amount of personal retirement savings ranged between \$25,000 and \$49,999. The information sources women used for retirement planning were, from most to least frequently used: discussions with

**TABLE 1. Measurement and Sample Characteristics (N = 591)**

	Coding	N	M (SD) or %
<b>Dependent Variable</b>			
Personal retirement savings	Continuous	591	3.57 (3.20)
<b>Independent Variable</b>			
Retirement planning information sources			
The Internet	1 = used, 0 = otherwise	304	51.4
Television	1 = used, 0 = otherwise	109	18.4
Newspapers	1 = used, 0 = otherwise	120	20.3
Radio	1 = used, 0 = otherwise	58	9.8
Magazines	1 = used, 0 = otherwise	132	22.3
Books	1 = used, 0 = otherwise	112	19.0
A course	1 = used, 0 = otherwise	55	9.3
Discussions with friends/relatives	1 = used, 0 = otherwise	314	53.1
Information from financial advisors	1 = used, 0 = otherwise	235	39.8
Training sessions provided by employer	1 = used, 0 = otherwise	145	24.5
Seminars led by financial professionals	1 = used, 0 = otherwise	107	18.1
Not using any source	1 = used, 0 = otherwise	96	16.2
Age	Continuous	591	47.91 (11.55)
25–34 years	1 = yes, 0 = otherwise	91	15.4
35–44 years	1 = yes, 0 = otherwise	131	22.2
45–54 years	1 = yes, 0 = otherwise	166	28.1
55–64 years	1 = yes, 0 = otherwise	171	28.9
65 years and older	1 = yes, 0 = otherwise	32	5.4
Personal income	Continuous	591	4.19 (3.24)
Household income	Continuous	591	7.16 (5.36)
Education	Continuous	591	16.46 (1.69)
High school diploma or less	1 = yes, 0 = otherwise	54	9.1
Some college	1 = yes, 0 = otherwise	140	23.7
College degree	1 = yes, 0 = otherwise	223	37.7
Graduate degree	1 = yes, 0 = otherwise	174	29.4
Marital status			
Married	1 = yes, 0 = otherwise	301	50.9
Never married	1 = yes, 0 = otherwise	96	16.2
Cohabiting	1 = yes, 0 = otherwise	52	8.8
Separated	1 = yes, 0 = otherwise	15	2.5
Divorced	1 = yes, 0 = otherwise	105	17.8
Widowed	1 = yes, 0 = otherwise	22	3.7

*(Continued)*

**TABLE 1. Measurement and Sample Characteristics (N = 591) (Continued)**

	Coding	N	M (SD) or %
Race/ethnicity			
Non-Hispanic White	1 = yes, 0 = otherwise	525	88.8
Non-Hispanic Black	1 = yes, 0 = otherwise	28	4.7
Other (Hispanic/Latino, Asian, and others)	1 = yes, 0 = otherwise	38	6.4
Health status	Continuous	591	3.12 (0.68)
Poor to fair	1 = yes, 0 = otherwise	84	14.2
Good	1 = yes, 0 = otherwise	343	58.0
Excellent	1 = yes, 0 = otherwise	164	27.7
Homeowner	1 = yes, 0 = otherwise	411	69.5

friends and/or relatives (53.1%), the Internet (51.4%), information from financial advisors (39.8%), training sessions provided by employer (24.5%), magazines (22.3%), newspapers (20.3%), books (19.0%), television (18.4%), seminars led by financial professionals (18.1%), radio (9.8%), and either a credit or noncredit course (9.3%). About 16.2% of respondents reported that they did not use any source.

#### ***Factors Associated With Retirement Savings***

Table 2 presents the results of the multiple regression. The independent variables accounted for approximately 40.9% of the total variance in “personal retirement savings,”  $R^2 = .409$ ,  $F(31, 591) = 12.457$ ,  $p < .001$ . Based on each variable’s standardized regression coefficient, the effects of discussions with friends/relatives, information from financial advisors, age, household income, race/ethnicity, and homeownership all had statistically significant relationships with personal retirement savings.

Women who discussed retirement planning with friends/relatives were less likely to have greater personal retirement savings. In contrast, women who had obtained retirement planning information from financial advisors were more likely to have greater personal retirement savings. Compared to women aged 25–34 years, those aged 45 years or older were more likely to have greater personal retirement savings. Compared to non-Hispanic White women, women classified as “other” (i.e., Hispanic/Latino, Asian, and others) were more likely to have greater personal retirement savings. Women who had higher household incomes and were homeowners were more likely to have greater personal retirement savings.

#### ***Factors Associated With Discussion With Friends/Relatives***

Table 3 presents the results of the logistic regression. Because two retirement planning information sources, “discussion with friends/relatives” and “information from financial advisors,” were statistically significant, the characteristics of those who used these two sources were further explored. The model for “discussion with friends/relatives,” which contained 19 predictors, were statistically significant,  $\chi^2(19, N = 591) = 33.23$ ,  $p = .023$ , thus indicating that the model could distinguish between respondents who did and did not report discussing their retirement planning with friends/relatives. The model as a whole classified 60.7% of cases correctly. The likelihood of discussing retirement planning with friends/relatives to obtain information was significantly related to both age and homeownership. Compared to women aged 25–34 years, women aged 35 years or older were less likely to have discussions with friends/relatives as a source of retirement planning information (controlling for other factors in the model). Compared to nonhomeowners, homeowners were 1.8 times more likely to have discussions with friends/relatives as a source of retirement planning information (controlling for other factors in the model).

#### ***Factors Associated With Information From Financial Advisors***

The model for “information from financial advisors,” which contained 19 predictors, was also statistically significant,  $\chi^2(19, N = 591) = 71.06$ ,  $p < .001$ , indicating that the model could distinguish between respondents who did and did not report obtaining retirement planning information from their financial advisors (Table 3). The model as a whole classified 66.0% of cases correctly. The probability

**TABLE 2. Results of the Multiple Regression on Women's Personal Retirement Savings (N = 591)**

Variable	$\beta$
Retirement planning information sources	
The Internet	-.002
Television	-.051
Newspapers	-.009
Radio	.032
Magazines	.073
Books	.050
A course	-.023
Discussions with friends/relatives	-.081*
Information from financial advisors	.248***
Training sessions provided by employer	-.047
Seminars led by financial professionals	-.002
Not using any source	-.060
Age: 25–34 years (reference group)	
35–44 years	.021
45–54 years	.131*
55–64 years	.248***
65 years and older	.179***
Personal income	.054
Household income	.289***
Education: high school diploma or less (reference group)	
Some college	-.028
College degree	.014
Master's degree or higher	.066
Marital status: married (reference group)	
Never married	.023
Cohabiting	-.019
Separated	.050
Divorced	.022
Widowed	.018
Race/ethnicity: non-Hispanic White (reference group)	
Non-Hispanic Black	.006
Other (Hispanic/Latino, Asian, and others)	.068*
Health status: poor to fair (reference group)	
Good	-.004
Excellent	.016
Homeowner	.091*

\* $p < .05$ . \*\*\* $p < .001$ .

of using financial advisors to learn about retirement planning was significantly related to personal income, education, and homeownership. Women who had higher personal incomes were more likely to report learning about retirement planning from financial advisors (controlling for other factors in the model). Compared to those who held a high school diploma or less, those who had a college degree were 2.8 times more likely to report learning about retirement planning from financial advisors, whereas those with a master's degree or higher were 3.5 times more likely to report learning about retirement planning from financial advisors (controlling for other factors in the model). Homeowners, in turn, were 1.7 times more likely than nonhomeowners to report learning about retirement planning from financial advisors (controlling for other factors in the model).

### Discussion

The results of this study contribute to understanding of the relationship between retirement planning information search and retirement savings of women as well as sociodemographic factors associated with information sources of women. An online survey was developed to collect data from a national population, obtaining 591 valid responses.

From these findings, women with greater personal retirement savings were those who (a) aged 45 years and older compared to aged 25–34 years; (b) had higher household incomes; (c) belonged to Hispanic/Latino, Asian, and other races/ethnicities compared to non-Hispanic White; and (d) were homeowners. Regarding relationships between retirement planning information sources and personal retirement savings, women who learned via discussions with friends/relatives tended to save less, whereas those who obtained information from financial advisors saved more. Participants aged 35 years or older were less likely to report using discussions with friends/relatives as a source to learn about retirement planning, whereas those who owned a home were more likely to discuss with friends/relatives about retirement planning. Those who had higher personal incomes, held a college degree or higher, and were homeowners were more likely to report obtaining retirement planning information from financial advisors.

Age was a statistically significant predictor for both women's personal retirement savings and seeking retirement planning information via discussions with friends/relatives. Consistent with the results of previous studies (DeVaney &

**TABLE 3. Results of the Logistic Regression on Discussions With Friends/Relatives and Information From Financial Advisors as Retirement Planning Information Sources (N = 591)**

Variable	Friends/Relatives		Financial Advisors	
	B	Odds Ratio	B	Odds Ratio
Age: 25–34 years (reference group)				
35–44 years	–.938**	.391	–.599	.549
45–54 years	–1.137***	.321	–.461	.630
55–64 years	–1.007**	.365	–.224	.799
65 years and older	–1.510**	.221	.303	1.354
Personal income	–.035	.966	.100*	1.105
Household income	–.004	.996	.006	1.006
Education: high school diploma or less (reference group)				
Some college	–.121	.886	.680	1.973
College degree	.072	1.075	1.030**	2.801
Master’s degree or higher	.214	1.239	1.254**	3.505
Marital status: married (reference group)				
Never married	–.175	.839	–.046	.955
Cohabiting	.181	1.198	–.130	.878
Separated	–.399	.671	–.187	.829
Divorced	.041	1.042	–.488	.614
Widowed	–.382	.682	–.300	.741
Race/ethnicity: non-Hispanic White (reference group)				
Non-Hispanic Black	–.031	.969	–.767	.464
Other (Hispanic/Latino, Asian, and others)	–.309	.734	–.535	.585
Health status: poor to fair (reference group)				
Good	.184	1.202	.248	1.282
Excellent	.412	1.510	.076	1.079
Homeowner	.596**	1.815	.507*	1.660
$\chi^2$	33.233		71.055	

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

Chiremba, 2005; DeVaney et al., 1998; DeVaney & Zhang, 2001; H. Kim & Kim, 2010), older women were more likely to have greater personal retirement savings but less likely to discuss retirement planning with friends/relatives. As H. Kim and Kim (2010) indicated, older consumers have accumulated knowledge and experience of retirement plans over time; however, they might overestimate that knowledge.

Consistent with the results of previous studies (DeVaney et al., 2007; DeVaney et al., 1998; DeVaney & Zhang, 2001; EBRI, 2012), this study showed that participants with greater household incomes saved more, suggesting that these

women benefit from sharing their partners’ investments, savings, and/or save money from sharing their living expenses. Although household income does not seem to affect their source choice, women with higher personal incomes are more likely to seek retirement planning information from financial advisors. Personal rather than household income may thus play a more important role in women seeking professional financial services. Although neither personal nor household income, however, were statistically significant predictors for choosing to discuss with friends/relatives about retirement planning, both incomes did negatively affect discussing retirement planning with friends/relatives.

Education had no effect on women's personal retirement savings, a result inconsistent with previous research (DeVaney & Chiremba, 2005; DeVaney et al., 2007; DeVaney & Zhang, 2001; Rowland & Lyons, 1996). Women with higher education, however, are more likely to seek retirement planning information from financial advisors, thus saving more in their personal retirement savings.

Marital status was not a statistically significant predictor for both women's personal retirement savings as well as seeking retirement planning information via discussions with friends/relatives and financial advisors. These results are different from previous studies on both retirement savings (DeVaney & Chiremba, 2005; DeVaney & Zhang, 2001) and retirement planning information seeking through professional services (H. Kim & Kim, 2010). Because this study examined women's personal retirement savings without including their partner's individual or mutual accounts, this may account for why married women did not show statistically significant for saving more than unmarried women.

Compared to non-Hispanic Whites, women of other races/ethnicities (i.e., Hispanic/Latino, Asian, and other) saved more in personal retirement savings. This result is inconsistent with previous research (Wider Opportunities for Women, 2012), which found that a greater number of older Hispanic and Asian women lived below the needed income level to make ends meet than did White women aged 65 years or older.

Health status was not a statistically significant predictor in this study. The results are inconsistent with previous studies (Fisher, 2010; Scholz & Levine, 2003) on personal retirement savings. However, both this study and H. Kim and Kim's (2010) study showed that health had no significant impact on obtaining retirement planning information from relatives/friends and financial advisors.

This study demonstrated homeownership as a strong predictor for women's personal retirement savings and their retirement planning information-seeking behaviors (particularly for discussions with friends/relatives and with financial advisors). Consistent with previous research (DeVaney & Chiremba, 2005; DeVaney & Zhang, 2001; James & Sharpe, 2007), homeowners proved to have greater retirement savings. When purchasing a home, consumers may ask for advice from financial advisors, friends, and relatives. It thus makes sense that homeowners are more likely to discuss

retirement planning and other financial issues with their friends and relatives in addition to financial advisors.

### ***Limitations and Future Research***

As a possible limitation, the women in this study were older than the average population in 2012, according to the U.S. Bureau of Labor Statistics (2014). This result, however, may be because of survey pertains to retirement savings, a topic younger women are less likely to be interest in (and thus choose not to participate). The majority of respondents in this study are non-Hispanic White women (88.8%), which limits the ability to generalize the results to the entire U.S. working female population. Also, because there were fewer than 15 Asian or other race/ethnicity women who participated in this study, they were merged with Hispanic/Latino into an "other" category to meet statistical reliability standard. When applying this study's findings to other races/ethnicities, researchers should bear this issue in mind.

Future research can (a) further explore the differences among retirement planning information-seeking behaviors and personal retirement savings between Whites and ethnic minorities other than Black Americans, (b) focus on what differences exist between female homeowners who obtained retirement planning information from friends/relatives as opposed to financial professionals, (c) include personal income as a predictor while examining how gender affects personal retirement savings, and (d) use the years spent in retirement rather than health status as a predictor in retirement savings topics because measuring by a subject's years spent in retirement provides implications for one's planned retirement age and life expectancy and help survey participants become more sensitive about their current retirement savings and future savings needs by calculating the years spent in retirement.

### ***Implications***

Women between 25 and 44 years old are more likely to have less personal retirement savings, and women aged 25–34 years are more likely to seek retirement planning information from friends/relatives. The findings that younger women are (a) more likely to seek retirement planning information by discussing with friends/relatives and thus (b) have less retirement savings can help retirement planning professionals determine how best to reach and communicate with younger female clientele. Rather than using the same messages and services to target all women, financial service providers should offer a wider array of

products. To reach a younger female demographic, retirement plan marketers should target women first entering the job market, offering them incentives for attending referral programs based on their current savings priorities and life circumstances. Some younger women have little idea of how to manage their personal finances: The only savings method they know of is depositing the money into a savings account. Such a method, however, will neither help their savings beat inflation nor grow because of current low interest rates. Financial educators and service providers may therefore need to provide this group a detailed, step-by-step introduction to investing: where to open a retirement account and how to find a financial professional. To promote saving for retirement as early as possible (so as to increase compound interest), policymakers should consider providing tax deductions for women younger than 30 years (e.g., women who open a retirement account and continue saving for 3–5 years), thus encouraging participation in retirement program.

This study's findings indicate that women with lower personal and/or household income are more likely to discuss retirement planning with friends/relatives, which may therefore result in fewer retirement savings. Policymakers should thus consider making retirement planning services more accessible for women with lower incomes. Retirement plan marketers, furthermore, must emphasize to consumers that investing for retirement can cost as little as \$25 a month, for example, IRA accounts. Marketers also need to provide incentives that both encourage enrollment and tell consumers that, rather than copying other people's saving or investment styles, their retirement plan must tailor to their life and financial circumstances.

Women with higher education are more likely to seek retirement planning information from financial advisors, thus saving more in their personal retirement savings. Financial educators must therefore include retirement planning in school curricula in mandatory education for those who do not plan to go to college.

Because married women share their husband's retirement savings and related benefits, financial advisors need to encourage unmarried women save even more than they would need to if they were married for retirement. Although marital status had no significant impact on obtaining retirement planning information from financial advisors, the negative results indicate that all currently unmarried women were

less likely to seek such an information source compared to married women. Financial marketers and retirement information providers should target unmarried women to emphasize the importance of retirement saving when women are doing so alone.

As Plath and Stevenson (2005) indicated, Hispanics prefer to have short-term savings. Women of other races/ethnicities in this study might therefore view all of their investments and savings as retirement savings and thus do not have specific accounts exclusively for retirement savings. Financial advisors should thus encourage Hispanic/Latino and Asian female clients to open IRAs to manage their retirement savings and investments.

In reality, healthier consumers live longer and thus have longer years spent in retirement, resulting in the need for greater financial savings. Unhealthy consumers, in contrast, may have greater health care needs which also demands greater financial resources. Regardless of consumers' health statuses, saving for retirement is not an option but a necessity. Because one's health status can remain uncertain, it may cause considerable financial strain. As H. Kim and Lyons (2008) note, such unexpected events as health problems may accelerate the depletion of one's savings. Thus, financial educators and providers of retirement information must stress the aforementioned messages to consumers.

A home purchase and mortgage application include several financial processes which allow consumers to review their financial statements. Such a process, in turn, influences retirement savings and may lead families to make retirement saving a priority. Financial service providers can seek partnerships with mortgage lenders so as to provide better retirement planning advice to new homeowners, who tend to have a stable monthly income and may thus wish to learn more about personal retirement investments.

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