Financial Executive Orientation, Information Source, and Financial Satisfaction of Young Adults

Yingxia Cao[a] and Jeanny Liu[b]

*Social media play a role in the lives of young adults (18–25 years old), but motivators and influences of this and similar sources on their money handling are not well-understood. This study examined their personal finance information source choices using a non-random online survey (*N = *229). Results of structural equation modeling suggested that four personal financial execution antecedent factors (i.e., impulse control, financial planning, financial motivation, and financial organization) may influence their selection of information source and such choice may affect financial satisfaction. Young adults who sought social media and online sources for personal financial decisions belonged to a distinct group, whereas their choices were associated with financial satisfaction. This study suggests that financial institutions and financial advisors targeting young adults should consider their financial executive orientations and connect with them through effective information sources, including social media.*

Keywords: executive orientation, information source, personal finance, social media

Because more Americans are concerned about savings and retirement than ever before, the situation may become worse for young adults commonly known as the millennials—the children of baby boomers and later generations (Morin & Fry, 2012). It is reported that young adults are not saving for retirement and they face many challenges. For example, they do not participate in retirement planning as much when compared to previous generations (Steiner, 2009). Analysis from a brokerage firm suggests that younger and lower income clients hold poorly diversified portfolios and demonstrate lack of investor sophistication (Goetzmann & Kumar, 2008), and their financial positions are more fragile than analysts expected (Steiner, 2015). The Fidelity Investment firm reports that young adults are most at-risk of being unable to afford retirement expenses in comparison to other generations (Hicken, 2013).

Nevertheless, these young adults have unique characteristics that the financial industry should have a better understanding to design an effective communication plan to help them overcome related challenges. This generation includes approximately 80 million individuals born between 1981 and 2001. Some were born to parents of Generation X, and others were born to parents of baby boomers. These young adults behave and see the world differently than their parents or baby boomers do; they do not conform to older generations' expectations regarding investing and represent the first generation in history to communicate everyday largely through digital platforms such as instant messaging, texting, Twitter, and Facebook (Pew Research Center, 2014).

This research aims to understand young adults' unique information source choices and to identify effective ways to communicate with them. In existing literature, few studies suggested effective methods to connect with them and limited research examined young adults' reliance on information from peers related to personal finances (de Bassa Scheresberg, Lusardi, & Yakoboski, 2014). Borrowing from the Spinella, Yang, and Lester's (2007) Executive Personal Financial Scale, this study examines the relationships between young adults' information source preferences

[a]*Associate Professor of Decision Sciences, Department of Applied Business Sciences and Economics, College of Business and Public Management, University of La Verne, 1950 3rd St., La Verne, CA 91750. E-mail: ycao@laverne.edu*
[b]*Associate Professor of Marketing, Department of Marketing and Law, College of Business and Public Management, University of La Verne, 1950 3rd St., La Verne, CA 91750. E-mail: jliu@laverne.edu*

http://dx.doi.org/10.1891/1052-3073.28.1.5

and their financial satisfaction. We hope to fill an important void in the literature through finding better or new ways to educate young adults on financial literacy using online and social media resources with and to which young adults are familiar and have access to and providing important insights to help financial institutions connect better with young adults and help them take control of their finances and plan for retirement and other major life events.

Research Framework and Hypotheses

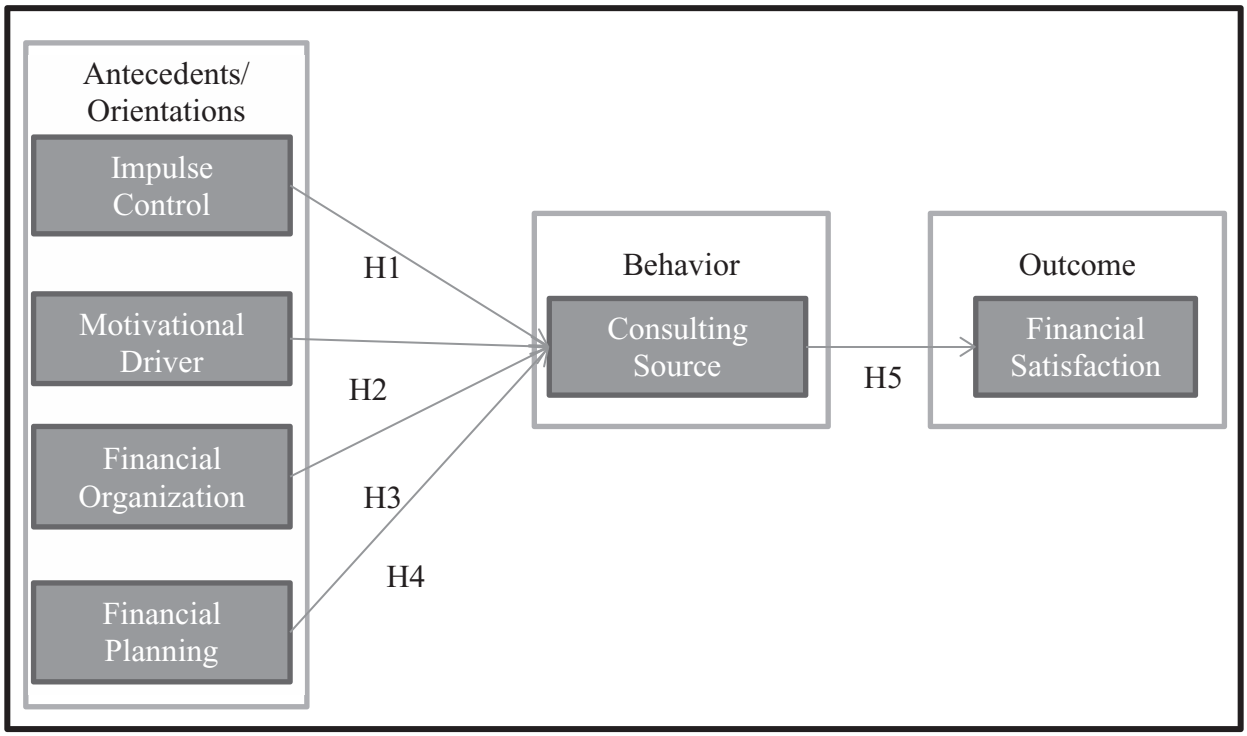
To address the research need, this study establishes a conceptual research model, as shown in Figure 1. This section describes the model and hypotheses based on the model.

Consulting Information Sources and Personal Finance

The research model in this study examines individual behaviors regarding individual choices of consulting information when making financial and investment decisions. Reports and publications suggest that people use various information sources. Literature reveals several major and popular types of consulting information sources with which people have varying degrees of preferences (Helman & Paladino, 2004; Loibl & Hira, 2006). Adults have preferences regarding delivery of personal, financial information (Rhine & Toussaint-Comeau, 2002), and the influence of peer-based advice is increasing, whereas traditional sources are decreasing (Aarkstore Enterprise, 2011). We thus hypothesize that young adults rely on both online and offline sources when seeking financial advice.

Source 1—Family. Managing personal finances for most young adults is a new task. Young adults know very little about managing personal finances or have limited experience concerning how to make wise investment decisions. From a normative perspective, their peer groups, parents, and social surroundings play a role in how they make financial decisions. Families generally were identified as the most influential source on young adults' financial attitudes and beliefs as well as financial knowledge and practices (Hira, 1997; Mimura, Koonce, Plunkett, & Pleskus, 2015). Students report that they learn about credit card use largely from parents (Pinto, Parente, & Mansfield, 2005; Xiao, Tang, Serido, & Shim, 2011).

Figure 1. Personal finance orientation and consulting sources model.



Note. H1 = hypothesis 1; H2 = hypothesis 2; H3 = hypothesis 3; H4 = hypothesis 4; H5 = hypothesis 5.

Source 2—Peers. As young adults move away from parents and begin independent lives, their social environment shapes a new set of skills, knowledge, attitudes, consumptions, and financial management (Cohen & Xiao, 1992; Danes & Yang, 1994; Hira, 1997; Moschis & Churchill, 1978; Ward, 1974). Based on social learning theory, much consumption behavior is learned through the influence of those they socialize (Moschis & Churchill, 1978; Moschis & Moore, 1979). Regarding how to spend money and manage finances, we argue that a large portion of young adults gain social acceptance and gravitate toward advice from peers, including influence from their colleagues and employers (Loibl & Hira, 2005).

Source 3—Financial Advisors. It is common for investors to rely on professional financial advisors when making investment decisions. Heckman and Hanna (2015) found that households with a professional advisor are more likely to save than households without a professional advisor. However, the Internet brought many changes to investing behaviors, marking a new technological era that empowered investors. It changed information delivery and spurred the growth of overconfident investors who relied on Internet information (Barber & Odean, 2001). The cost of investing is lower for many investors, bypassing the need for a financial advisor and allowing investors to be in control of placing trades with the push of a button anywhere. The accessibility of digital information also shifted power into the hands of young adults, enabling them to be in control of making financial decisions.

Source 4—Online and Social Media. Electronic word-of-mouth (eWOM) gained popularity among young adults, and it is efficient and convenient at transmitting information from one or many users, synchronously or asynchronously. Communication over social media platforms is ubiquitous among youths and is also popular among adults (Pew Research Center, 2014). Research shows that consumers use social media that offer peer-to-peer advice and read product reviews prior to making a purchasing decision (Hazari & Richards, 2011) and teenagers' spending plan is associated with their use of media and Internet (Lewis, Mimura, Mauldin, Rupured, & Jordan, 2008). More than one-third of affluent investors use social media for finance and investing, and nearly 70% reallocated investments and build relationships with opinion leaders based on contents found through Facebook, LinkedIn, Twitter, YouTube, and blogs (Cogent Research, 2012).

Source 5—Mass Media/Magazines. People also gain financial/investment information by reading brochures, newsletters, magazines, and viewing other mass media sources (Helman & Paladino, 2004).

Individual Financial Styles and Choice of Information Sources

Research suggests that individual financial behaviors such as choices of information sources might be influenced by personal factors, especially personal financial orientations. Investors' financial investment decisions are subject to attitudes, beliefs, preferences (Kalra Sahli & Pratap Arora, 2012), personality traits (Durand, Newby, & Sanghani, 2008), and social experiences (Hira & Brinkman, 1992). Traditionally, financial and economic researchers assume people are rational and make investment choices based on net utility gains that maximize desired outcomes (Markowitz, 1952). A rational investor begins with beliefs about future performances and chooses the right investment, attempting to maximize anticipated returns. However, behavioral researchers argue that an investor's decisions are seemingly irrational, guided by a complex decision-making process and subjective perceptions (Simon, 1955). Thus, additional alternatives and influences must be considered when assessing investment decisions.

In recent years, the influence of human emotions and personality traits when predicting investors' decisions attracted the attention of many scholars (Durand et al., 2008; Shiv, Loewenstein, & Bechara, 2005; Shiv, Loewenstein, Bechara, Damasio, & Damasio, 2005). A popular personality inventory that is used when understanding investor behaviors such as how individuals trade (Camgoz, Karan, & Ergeneli, 2012) is Norman's (1963) Big Five personality traits (extraversion, agreeableness, conscientiousness, emotional stability, and culture). Financial behaviorists use these dimensions broadly to understand how individuals trade (Camgoz et al., 2012). Similarly, the Myers–Briggs Type Indicator (Myers, McCaulley, & Most, 1985) was also recommended by financial professionals to understand investors (Gregory, 2014; Yook, 2014).

Marketing literature suggests that consumers' personalities affect financial behaviors (Endler & Rosenstein, 1997; Mowen, 1999; Sujan, 2001). For example, narcissism associates positively with compulsive consumption (Rose, 2007). Impulsivity is a predictor of additive behaviors

(Acton, 2003; Miller & Brown, 1991) in which impulsive young adults tend to carry higher credit card balances (Mansfield, Pinto, & Parente, 2003) because of poor self-regulation. College students who are emotionally unstable, introverted, materialistic, and require constant stimulation are more likely to exhibit impulsive spending and misuse credit cards (Pirog & Roberts, 2007). The central message is that investment preferences that guide an investor are complex and might be influenced by various factors such as personality, emotional state, cognitive ability, risk tolerance, attitudes, and knowledge with investments and peer groups, among other variables. We thus argue that the ability to manage personal finances includes both internal and external drivers. For this study, we focused on young adults' cognitive (e.g., planning and organizing) and emotional factors (e.g., anxiety and impulsive spending), adapted from Spinella et al. (2007). Based on evidence about the role of prefrontal systems in personal financial management and with supports from studies about clinical populations, functional neuroimaging, and both subjective and objective neuropsychological measures, Spinella et al. (2007) establish the Executive Personal Finance Scale with data on its correlations with income, credit card debt, and investments. The Scale includes four factors, impulse control (IC), organization (ORG), planning (PL), and motivational driver (MD; see Table 1 for the included items by this study). They suggest that the factors correlate with financial attitudes and behaviors and use of various forms of financial investments. Therefore, we propose following hypotheses:

H1. Young adults' perceived impulse control influences preferences when seeking information sources to make personal financial decisions.

H2. Young adults' perceived money-making motivation influences preferences when seeking information sources to make personal financial decisions.

TABLE 1. Survey Constructs, Items, and Summary of Factor Outer Loading—Consulting Friends/ Classmates/Colleagues as an Example

Construct Name	Items	OL: Outer Loadings	OL: Standard Error	OL: *t* Values
Consulting sources	When I have to make a financial decision, I prefer to consult social media.[a]	—	—	—
Impulse control	1. I tend to spend more when I know that I am already over my limit.[b]	0.944	0.013	75.829
	2. I spend more money than I can afford to spend.	0.892	0.031	29.289
Motivational driver	1. I work hard at making money.	0.799	0.113	7.102
	2. I am enthusiastic when it comes to making money.	0.913	0.075	12.117
Financial organization	1. I am organized at balancing my checkbook.	0.920	0.228	4.029
	2. I tend to spend more when I know that I am already over my limit.	0.944	0.013	75.829
Financial planning	1. I put money into savings on a regular basis and leave it there.	0.874	0.029	29.893
	2. I save money for the future.	0.926	0.016	59.745
	3. I set aside money for emergencies.	0.876	0.030	28.831
Financial satisfaction	1. I am happy with my current state of financial situation.	0.964	0.104	9.237
	2. I am satisfied with my financial situation.	0.949	0.103	9.202

[a]Social media is used as an example. Other sources have similar loadings.

[b]This item is not significant for financial professionals.

H3. Young adults' perceived financial organizational skills influence preferences when seeking information sources to make personal financial decisions.

H4. Young adults' perceived financial planning attitudes influence preferences when seeking information sources to make personal financial decisions.

Financial Outcomes and Choice of Consulting Information Sources

The model uses financial satisfaction as an indicator of financial outcomes. The literature on personal finance suggests that various types of information preferences in personal financial decisions relate to real and behavioral financial outcomes, which in turn lead to and are reflected by personal financial satisfaction (Davis & Helmick, 1985; Joo & Grable, 2004). First, mass media have always influenced individual personal financial/consuming decisions and financial outcomes for youths and others (Davidson, 2012; Roberts, 1998). Similar to other financial information sources, mass media provide financial advice that can indirectly or directly change financial knowledge and behaviors (Joo & Grable, 2004). Second, it is reported that students learned most about credit card use from parents and relatives (Pinto et al., 2005). Information obtained from parents, media, and schools, but not peers, relate to decreased credit card debt (Pinto et al., 2005). Third, a large portion of young adults attempt to garner social acceptance and gravitate toward advice from peers on how to spend their money and manage finances. Empirical evidence suggests that individual financial and economic outcomes of youth consumers (Shim, Barber, Card, Xiao, & Serido, 2010) are related to their social interactions with peers and other social structures. Fourth, people seek help from financial advisors for financial outcomes. A Rand study suggests that individuals who solicit advice improve performance (Hung & Yoong, 2010), although other research conflicts with this finding. For example, Marsden, Zick, and Mayer (2011) use retirement planning data, comparing people who have and have not met with a financial advisor. They find that working with an advisor relates to important financial planning (i.e., goal setting, calculation of retirement needs, retirement account diversification, etc.) but does not relate to self-reported retirement savings or short-term growth in retirement account asset values.

In addition, social media is found to influence how individuals learn and build financial literacy (Way & Wong, 2010). Research suggests that social media have become increasingly important to individuals learning about financial matters that are essential to building financial competency and individuals follow opinion leaders through blogs and social sites regarding personal financial topics on savings, retirement planning, investment selection, and so forth (Way, Wong, & Gibbons, 2011). Chen, De, Hu, and Hwang (2012) find that advice from social media such as Seeking Alpha associates strongly with contemporaneous and subsequent stock returns and helps predict earnings surprises. Consequently, we argue that social media is an important method of communication and information-seeking for young adults. Young adults are becoming more self-directed and might base investment decisions on content found through social media. They might also conduct information searches across multiple platforms, both online and offline, seeking financial advice.

Moreover, personal finance outcomes such as family income, net worth, household resources, household debt-to-income ratio, perceived changes to financial conditions over time, and financial aspirations influence financial satisfaction (Davis & Helmick, 1985). Financial behaviors, stress, knowledge, solvency, and risk tolerance can affect financial satisfaction. Because the literature suggests that information sources relate to various outcome indicators, although it is beyond the scope of this study to examine them all, the model examined in this study uses financial satisfaction as an overarching outcome indicator of individual financial information preferences.

H5. Young adults perceive greater satisfaction with their current financial statuses when they use various information sources (e.g., family/spouse, friends/colleagues, financials/bankers, social media/online, magazines/mass media) more.

Method

Constructs and Instrument

A survey was designed with items adapted from extant research (Cogent Research, 2012; Spinella et al., 2007). The questions in the survey focused on demographics, four antecedent constructs about personal financial execution orientation, one behavior construct about individual choices of using consulting information sources, and one outcome variable about individual satisfaction with personal finance status (Cogent Research, 2012). The four personal financial

execution orientation factors (i.e., impulse control, organization, planning, and motivational driver) are adapted from the Executive Personal Finance Scale (Spinella et al., 2007). Consulting information sources include family and relatives, friends, professional advisors and bankers, social and online media, and mass media such as magazines and newspapers. Table 1 shows the constructs, along with items for each and outer loadings for all items in the model. All constructs were measured with two items, except preferred consulting sources, which had one, and financial planning, which had three. Regarding social media and online resources, the one question used for each of the five consulting sources read, "To what extent do you agree with the statement that 'when I have to make a financial decision, I prefer to consult social media'?" A Likert-type scale was used for all items, ranging from 1 (*strongly disagree*) to 5 (*strongly agree*).

The Sample

The survey was conducted online through Snap Survey from April 15 to May 1, 2013. The study used a combination of convenience and stratified sampling. A link to the survey was sent to about 750 individuals who were friends, relatives, and coworkers of 50 undergraduate business students in Southern California. The students were asked to stratify targeted people whom they had access to according to age, gender, race, and occupation, and then approached 15 of the stratified contacts with the survey.

Respondent Characteristics

Four hundred eighty adults responded to the survey, respondents who were outside the age range were dropped. Our final sample included 229 respondents who were between the ages of 18 and 25 years old. Of the 229 young consumer respondents, males and females were represented nearly equally in the sample. About 5% ($N = 11$) were married. In terms of education, 58.08% ($N = 133$) had high school diplomas, 17.47% associate's degrees ($N = 40$), 20.52% bachelor's degrees, and 3.07% ($N = 7$) masters' degrees or higher. About 30.57% ($N = 70$) were Asian or Pacific Islander, 26.64% ($N = 61$) Hispanic or Latino, 24.89% ($N = 57$) White, and 6.55% ($N = 15$) American Indian and Alaskan Native.

Analytic Procedures

Structural equation modeling was used to test the model, exploring sequential relationships among variables concerning personal financial orientation, satisfaction, and consultation choices of information sources.

Results

Results suggest that young adults demonstrate preferences for information sources for their personal financial decisions. Young adults prefer to consult with spouses and family relatives, and 41.5% moderately or strongly agreed that their preference was this information source (excluding N/A; $M = 3.10$). The second most preferred information source was peers and colleagues (36.2% moderately or strongly agreed; $M = 2.93$), followed by mass media such as magazines, television, newspapers, and so forth (31.9% moderately or strongly agreed; $M = 2.91$). They prefer to consult with online and social media sources (30.1% moderately or strongly agreed; $M = 2.80$) and financial professionals such as accountants, bankers, and advisers (29.3% moderately or strongly agreed; $M = 2.79$).

A structural analysis was used to explore how personal financial execution factors relate to young adults' preferences for information sources regarding personal finance decisions and how information sources influence individual satisfaction with their financial situations. The analysis examined the strength of a measurement model using factor outer loadings. Initial results suggested that two items of impulse control, two of financial organization, and two of financial planning loaded well on designated variables but others did not. As a common practice, we eliminated nonsignificant items from the model (Gefen & Straub, 2005).

Measurement Model Results

The factor outer loadings and *t* values of the remaining items are shown in Table 1. The remaining items' factor outer loadings were above the threshold of .70. Shown in Table 2, the model with the remaining items was largely robust, and cross-loadings were minimal. The measures had sound convergent validity, discriminant validity, and internal consistency. Average variance extracted (AVE) ranged from 0.74 to 0.92, which exceeded the recommended minimum of 0.5 (Gefen & Straub, 2005). The square roots of the AVEs were higher than the cross-construct correlations, which demonstrate acceptable convergent and discriminant validity. Cronbach's alpha coefficients exceeded .7 (except for motivation, which was close to .7), and the composite reliability of all constructs exceeded 0.7, indicating adequate internal consistency.

TABLE 2. Descriptive Statistics, Correlations, and Model Fit Indicators

	Consulting Source (CS)	Impulse Control (IC)	Motivational (MV)	Organizatinal (OG)	Planning (PL)	Satisfaction (SA)
1. CS	—					
2. CS	.391	—				
3. MV	−.189	−.114	—			
4. OG	.063	−.146	.44	—		
5. PL	.074	−.095	.357	.505	—	
6. SA	.172	−.029	−.02	.231	.175	—
Mean	—	2.687	3.658	3.365	3.373	3.154
Standard deviation	—	0.847	0.856	0.878	1.017	1.006
Composite reliability	—	.915	.847	.897	.905	.956
Cronbach's alpha	—	.819	.652	.771	.846	.907
AVE	—	0.844	0.736	0.813	0.761	0.915
SQRT (AVE)	—	0.919	0.858	0.901	0.872	0.957

Note. SQRT = square root; AVE = average variance extracted.

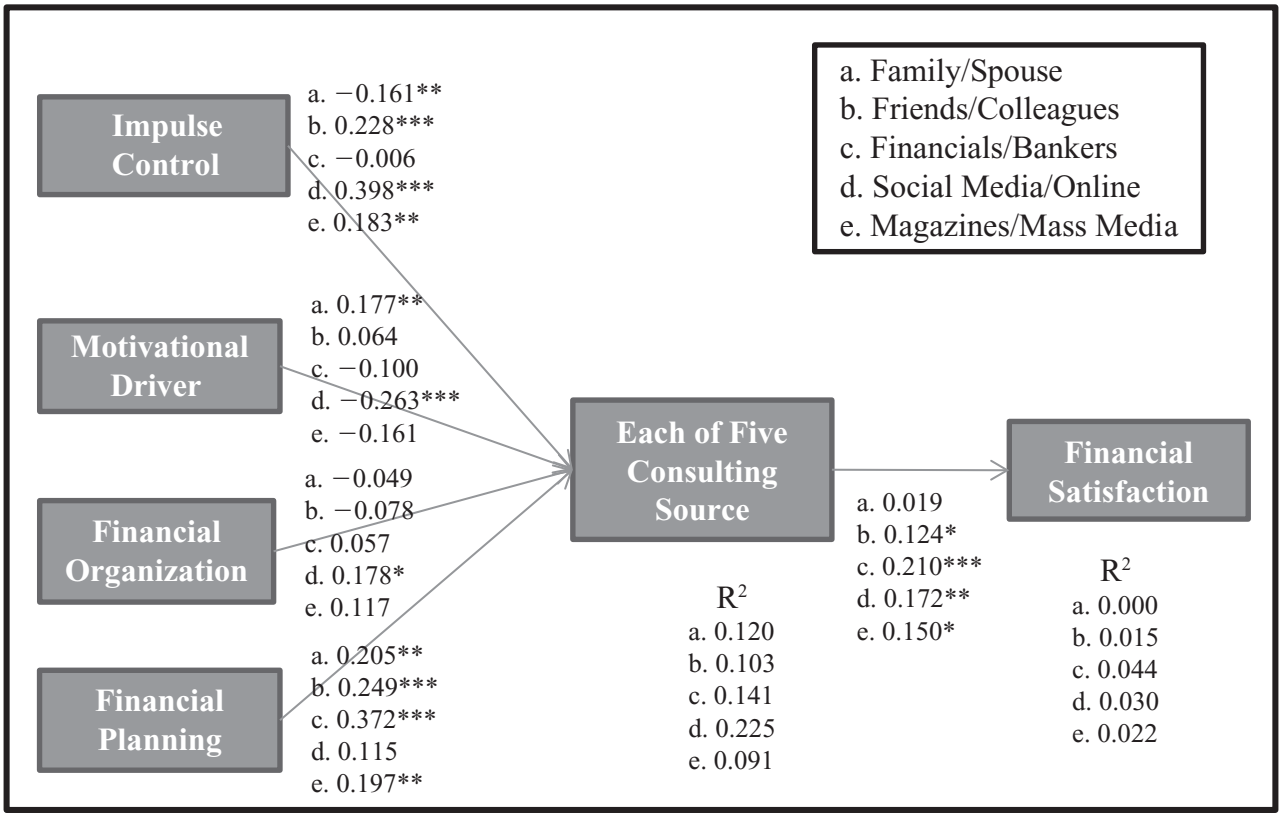
Overall Structural Equation Modeling Results

We used SmartPLS to test hypotheses. SmartPLS fits the needs of a predictive-causal analysis (Chin & Newsted, 1995; Wold, 1982), and it requires fewer data specification constraints because this study borrowed measurements from other studies. Standardized regression coefficients of the path analysis for the structural model are shown in Figure 2. Results demonstrate that four factors (e.g., impulse control, motivational driver, financial planning, and organization) predict preference for information sources to some extent. Impulse control ($-.161, p < .01$), motivational driver ($.177, p < .01$), and financial planning ($.205, p < .001$) accounted for 12% of the variance in personal financial consultation decisions to ask spouses and/or family members. Impulse control ($.228, p < .001$) and financial planning ($.249, p < .001$) accounted for 10% of young adults' preferences for friends and/or colleagues. Financial planning ($.372, p < .001$) accounted for 14% of young adult's preferences for professional financial advisers such as bankers, accountants, and others. Impulse control ($.398, p < .001$), motivational driver ($-.263, p < 0.001$), and financial organization ($.178, p < .05$) accounted for 23% of young adults' preferences for online and social media. Impulse control ($.183, p < .01$) and financial planning ($.197, p < .001$) accounted for 9% of young adults' preferences for magazines, newspapers, and other mass media. Results also suggest that preferences for information sources explain some variance in satisfaction with current personal financial status: 0% choosing family, 1.5% for friends, 4% for financial professionals, 3% for social media, and 1% for mass media.

Results on the Associations of Information Sources With Financial Executive Orientation and Financial Satisfaction

Family/Spouse. Among information sources, young adults consult family members the most. The extent to which people prefer to consult with family members and/or spouses related negatively to an inability of impulse control (coefficient = $-.161$, $p < .01$) and related positively to motivational drivers (coefficient = $.177$, $p < .01$) and financial planning (coefficient = $.205, p < .01$). The extent did not relate to financial organization skills. Thus, young adults who prefer to consult with family members have good financial execution abilities; they are more likely to control impulsive spending and work hard to earn money. They are also more likely to have good financial planning skills. In terms of satisfaction with financial outcomes, consulting with family members and spouses did not correlate with current financial satisfaction ($R^2 = 0.0\%$, $B = .019, p > .05$). This study corroborates similar literature, suggesting parents (Pinto et al., 2005) and other family members (Hira, 1997) influence financial decisions and investing behaviors of young adults most strongly. This finding suggests that financial advice from family members and/or spouses does not necessarily increase satisfaction with a financial situation. Thus, H1, H2,

Figure 2. Structural equation analysis results—personal financial orientation and choice of consulting sources.



*$p < .1$. **$p < .05$. ***$p < .001$.

and H4 were supported, and H3 and H5 were not, for subjects who preferred to consult with family members.

Friends/Colleagues. Results also indicate that consulting with friends and colleagues relates positively with financial planning (coefficient = .249, $p < .001$) and inability of impulse control (coefficient = .228, $p < .001$) but is unrelated to other orientation factors such as motivational driver and financial organization. Young adults who lack the ability to control impulsive spending but are good at financial planning tend to ask friends and colleagues for personal financial advice. Young adults are more satisfied with their financial situations when they consult with friends and colleagues (R^2=1.5%, $B = .124$, $p < .05$). Because young adults learn financial skills from friends and similar social interactions outside of the family (Cohen & Xiao, 1992), and they are influenced by those with whom they socialize (Moschis & Churchill, 1978; Moschis & Moore, 1979), this finding corroborates a positive impact of peer social connections regarding financial advice, if young adults can find friends with whom they can consult. Thus, H1, H4, and H5 were supported, and H2 and H3 were not, for subjects who preferred to consult with friends and colleagues.

Financial Professionals/Bankers. Analyses suggest that financial professionals are also a preferred information source for young adults. The extent to which people prefer to consult with financial professionals such as bankers, advisers, and accountants relates positively with financial planning (coefficient = .372, $p < .001$) but is unrelated to the other orientation factors such as impulse control, motivational driver, and financial organization. In comparison to other financial-advising sources, the more likely young adults to receive advice from financial advisers and bankers, the more likely they are satisfied ($R^2 = 4.4\%$, $B = .210$, $p < .001$) with their financial situations. Thus, H4 and H5 were supported, and H1, H2, and H3 were not, for subjects who preferred to consult with financial professionals.

Social Media/Online Sources. This study finds that getting financial information from social media and online resources might emerge (Barber & Odean, 2001), but it is still sought less by young adults. Results suggest that the extent to which people prefer consulting with social media and online resources relates positively with impulse control inability (coefficient = .398, $p < .001$) and financial organization (coefficient = .178, $p < .05$), but relates negatively with motivational driver (coefficient = −.263, $p < .001$), and is unrelated to financial planning. Thus, except being good at or engaging often in financial organization, young adults' consumers who consult with social media and online sources have distinct personal financial orientations; they are more likely to engage in impulsive spending and are unmotivated to make money. These undesirable traits do not appear to matter because another finding suggests that young adults who seek financial information through social media and online sources are satisfied with their financial situations, second only to professional advisors (R^2=3.0%, $B = 0.172$, $p < .01$). Thus, as technology-savvy, young adults rely increasingly on the Internet for investment and financial information (Barber & Odean, 2001), social media and the Internet appear to function as complements or alternatives to financial professionals for those who are good at financial organization but with undesirable financial orientations regarding impulsiveness and motivation. Therefore, H1, H2, H3, and H5 were supported, but H4 was not, for subjects who prefer to consult with social media and online sources.

Magazines/Mass Media. Results demonstrate that the extent to which people prefer to consult with magazines, newspapers, and other mass media relates positively to impulse control inability (coefficient = .183, $p < .01$) and financial planning (coefficient = .197, $p < .01$) but is unrelated to financial organization and motivational drivers. Those who consult with magazines and mass media are satisfied with their financial situations (R^2 = 2.2%, $B = .150$, $p < .05$). Thus, H1, H4, and H5 were supported, but H2 and H3 were not, for subjects who prefer to consult with magazines and mass media.

Discussion

As social media and other online sources become prevalent, people have more ways to access information to aid personal financial decisions. It is important to understand why people prefer certain information sources and the consequences their choices may have. Although information source has been included in personal finance studies as preferences, tastes, and behaviors (Hogarth, Hilgert, & Schuchardt, 2002), it is seldom the focus, nor has it been investigated while including both antecedents and outcomes. This study fills this void, examining individual preferences for information sources for personal financial decisions and the outcomes of such preferences. Findings generally support suggestions that information selections are influenced by financial orientations and affect satisfactory outcomes.

We find that young adults have preferences for information sources upon making personal financial decisions. They are most likely to consult with spouses and family members (about 41%), followed by peers such as friends and colleagues (about 36%), and mass media (about 31%). Findings accord with other research that suggests young adults (Loibl & Hira, 2006) and the general population (Hogarth et al., 2002) prefer to consult with family and peers. Nevertheless, this may relate to the fact that many might be unmarried, and parents might still have strong control of their lives. They might also be supported financially by parents regardless of their marriage status during financial difficulties (Fingerman, Miller, Birditt, & Zarit, 2009; Mottola, 2014). Only a small percentage of young adults (24%) exhibit high degrees of financial literacy (Mottola, 2014), and they naturally seek help from people they know (e.g., relatives and peers) for personal financial decisions. An interesting discovery is that nearly 30% of this group prefers to use online and social media, a percentage similar to preferences for financial professionals. This finding has two implications. First, young adults prefer to become self-directed with online and social media sources throughout their lives when coping with the amount and variety of information available to them regarding personal finance (Loibl & Hira, 2006). Second, it is important for financial institutions to understand such preferences and to design financial products that cater to young adults on the right platforms, including online and social media sources.

We find that financial execution orientations influence young adults' preferences for consultation sources. This finding enriches the literature regarding implications for neurological, individual, financial executive orientations (Spinella et al., 2007). We find that two factors have the most prominent influence: financial planning, which influences all consulting source preferences except online and

social media, and impulse control, which influences all consulting sources except financial professionals, and it relates negatively to preferences for consulting with family and spouses. Motivational drivers relate positively to choosing family and relatives as financial consultation sources, although negatively with social media. Individual financial organizations influence only those who prefer online and social media for information. These findings accord with suggestions from other studies on the importance of financial planning (Lei & Yao, 2014), compulsive control during financial decisions (Spinella, Lester, & Yang, 2014), the relationship between motivation and retaining financial literacy (Mandell & Klein, 2007), and behavioral benefits of financial organizations (Advani, 2013). The primary implication of these findings is that individual financial behaviors are influenced by antecedents regarding individual financial attitudes and habits (Spinella et al., 2014), and any work to improve financial behavior must consider such antecedents.

Findings about the relationship between financial executive orientations and young consumers' preferences for information consultation suggest that such orientations distinguish people into various information consultation preference groups. This finding contributes to personal finance literature on individual financial behaviors about young adults' preferences for information sources and various antecedents. It also indicates the usefulness of Spinella and colleagues' (2007) Executive Personal Finance Scale in explaining such preferences. This study suggests that those who prefer to consult with spouses and family members are good at impulse control and tend to work hard for money and plan financially. Those who prefer to consult with peers and/or mass media are poor at impulse control but do plan financially. Those who prefer to consult with financial professionals are devoted to financial planning. Regarding the new group of people who prefer to consult with online and social media, this study suggests that such young adults are a special group—they are good at organizing finances, but cannot control impulse financial behaviors, and are not motivated to make money by working hard. Some of these findings corroborate extant studies. For example, seeking financial advice about retirement from professional advisors relates to financial planning, including goal setting, positive responses to economic crises, and confidence in retirement (Marsden et al., 2011). Practically, these findings help practitioners and scholars understand that people differ when seeking help from information sources regarding personal finances and have insights concerning why they are different.

We find that personal financial orientations influence information source preferences disparately, and information source preferences have differing degrees of influence on individual satisfaction with personal financial situations. Not all information sources have relationships with individual satisfaction with personal financial situations. Consulting with financial professionals ($B = .210$, $p < .001$), online and social media ($B = .172$, $p < .01$), mass media ($B = .150$, $p < .05$), and friends and colleagues ($B = .124$, $p < .05$) might be related such satisfactions and consulting with spouses and family members might not. Findings regarding financial professionals, mass media, and colleagues accord with other studies (Hogarth et al., 2002; Marsden et al., 2011). The implication to financial institutions, policymakers, and financial educators is that multiple information sources can be related to positive outcomes, and they should all be used to reach young adults.

Although the finding regarding disconnect between consulting with spouses and family members with financial satisfaction in young adults is alarming because so many people prefer this information source, it is common. For example, Hogarth et al. (2002) suggest that a higher portion of those confused and poor at personal money management report that friends and families were the most important sources of financial information. One explanation is that this information source is limited and might be unreliable. This finding alerts policymakers and educators of personal finance that they must enrich family-based personal finance information sources and to intervene inherited cycles of being poor for generations.

However, another new and interesting finding is about the strong association between preference for online and social media sources and financial satisfaction, the strength of which is second only to financial professionals, who are often compensated directly or indirectly for their services. Although no explanation exists, other studies provide directions to understanding the finding. For example, Hogarth et al. (2002) report that people who are proactive (vs. reactive) when obtaining financial literacy from various sources have a 46% chance (vs. 30%) to be good at, and an 8% chance (vs. 29%) to be confused with, money management.

Those who prefer to learn in a group are more likely to be good at, and less likely to be confused with, money management than those who prefer to learn individually. Online and social media have characteristics that Hogarth et al. mention—being a proactive source for individuals who want to become literate with managing their finances. Its contents are member-generated and often group-oriented. Although online and social media are not necessarily more reliable than other sources, the information is more likely to be experience-based, guided by financial professionals, and verifiable against reliable evidence. The source can be on-demand and individually focused. Consumers have access to information on their time, not on others' schedules, and they can access the right information when needed (Hogarth et al., 2002). Consumers, policymakers, financial educators, and institutions should examine the potential of online and social media when accessing personal financial information and managing personal finances.

Conclusion

Conclusions and Contributions

As for the young adults, this study suggests that two financial executive orientations—impulse control and financial planning—influence young adults' information choices for financial decisions. The two orientations differentiate people regarding preferences for consulting sources. Young adults lacking impulse control are more likely to consult with online, mass media, and social media sources but are less likely to consult with family members and spouses. Those reporting an orientation of financial planning tend to use a range of information sources other than online and social media. This study also finds that motivation and financial organization orientations influence information choices. Young adults are motivated to make money are more likely to consult with family members and relatives, and are more likely to consult with online and social media if they are good at financial organization but unmotivated to make money. This study suggests that choices of financial information sources influence satisfaction with financial statuses. Those who consult information sources other than family members and spouses are more likely to be satisfied with their financial situations. Among various information sources, young adults are most likely to be satisfied with their finances when information is derived from financial professionals, then by social media and online sources, and then by magazines/mass media and friends/colleagues.

This study contributes to extant literature by revealing characteristics of those young adults who use social media and the Internet as information sources for financial decision. Young adults who seek online sources and social media for investment decisions belong to a group; they are less financially planned than others are but represent the only group that is more likely to be financially organized, although they lack control when spending and are unmotivated to make money. Although less satisfied than those who consult with financial advisers and bankers, they are more likely to be satisfied with their financial situations than those seeking information from sources such as family and spouses, friends and colleagues, and magazines and mass media.

Limitations and Future Research

One limitation of this study relates to the research instrument. This study uses personal financial orientation and execution traits as predictors of personal financial information source choice. Other studies suggest that personality traits can also be adapted to examine financial and retirement planning decision (Gregory, 2014; Yook, 2014); instruments such as the Myers–Briggs Type Indicator (Myers et al., 1985) might be more appropriate for such studies. Future research should be conducted using other instruments. This study also limits its scope to one population—young adults. Future research on other populations, with comparisons, would prevent common method bias and further validate the research instrument. In addition, this study limits its scope to one outcome factor and several general financial information choices without explaining the specifics about these information sources, especially for those who use social media and online sources. Future research should assess details concerning information sources and other predictors and outcomes of information source choices. Finally, data collection was through a network of young adults in Southern California and was thus limited in scope and generalization. Future research should use random, scientific sampling to obtain data throughout regions of the United States and other countries.

Practical Implications

This study contributes to personal finance literature with findings from a research model, which offers important implications for young adults, financial institutions, professional advisors, and policymakers. For young adults,

this study suggests they should seek financial advice from sources other than family members alone. Financial institutions and professional advisors should serve young adults through existing methods because they remain the best ways to achieve financial satisfaction. They should also broaden services to include other sources such as social media and the Internet because young adults are engaged with those sources. Policymakers should evaluate the sources they design to reach various groups in the population and design programs that consider the effectiveness of such sources and the preferences of those groups. Findings from this study provide insights on building the best information source for young adults, particularly, and the population, generally—a professionals-led, social-media platform from which families and peers, as groups, can obtain information, improve financial literacy, access advice, and make decisions. In the near future, more individuals might strive to achieve personal-finance excellence through such platforms, regardless of financial executive orientations.

References

Aarkstore Enterprise. (2011). *Social media in financial services: The customer as the advisor*. Retrieved from http://articles.pubarticles.com/aarkstore-enterprise-social-media-in-financial-services-the-customer-as-the-advisor-1312199273,272759.html

Acton, G. S. (2003). Measurement of impulsivity in a hierarchical model of personality traits: Implications for substance use. *Substance Use & Misuse*, *38*(1), 67–83.

Advani, R. (2013). Financial Feng Shui—get organized! In *Financial Freedom* (pp. 23–28). New York, NY: Springer. Retrieved from http://link.springer.com/chapter/10.1007/978-1-4302-4540-7_4

Barber, B. M., & Odean, T. (2001). The internet and the investor. *Journal of Economic Perspectives*, *15*(1), 41–54.

Camgoz, S. M., Karan, M. B., & Ergeneli, A. (2012). Relationship between the Big-Five personality and the financial performance of fund managers. *Diversity, Conflict, and Leadership*, *1*, 137–152.

Chen, H., De, P., Hu, Y. J., & Hwang, B. H. (2012). *Customers as advisors: The role of social media in financial markets*. Retrieved from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1807265

Chin, W. W., & Newsted, P. R. (1995). The importance of specification in causal modeling: The case of end-user computing satisfaction. *Information Systems Research*, *6*(1), 73–81.

Cogent Research. (2012). *Social media's impact on personal finance & investing ™*. Retrieved from http://www.cogentresearch.com/products/syndicated-reports/Social_Media_2012.pdf

Cohen, S., & Xiao, J.-J. (1992). For parents particularly: Consumer socialization—children and money. *Childhood Education*, *69*(1), 43–44.

Danes, S. M., & Yang, Y. (2014). *Assessment of the use of theories within the Journal of Financial Counseling and Planning and the contribution of the family financial socialization conceptual model* (SSRN Scholarly Paper No. ID 2466560). Rochester, NY: Social Science Research Network.

Davidson, R. (2012). The emergence of popular personal finance magazines and the risk shift in American society. *Media, Culture & Society*, *34*(1), 3–20.

Davis, E. P., & Helmick, S. A. (1985). Family financial satisfaction: The impact of reference points. *Home Economics Research Journal*, *14*(1), 123–131. http://dx.doi.org/10.1177/1077727X8501400112

de Bassa Scheresberg, C., Lusardi, A., & Yakoboski, P. J. (2014). *College-educated millennials: An overview of their personal finances*. Retrieved from http://www.worldpensionsummit.com/Portals/6/GFLEC%20Report%20-%20College%20Educated%20Gen%20Y.pdf

Durand, R. B., Newby, R., & Sanghani, J. (2008). An intimate portrait of the individual investor. *The Journal of Behavioral Finance*, *9*(4), 193–208.

Endler, N. S., & Rosenstein, A. J. (1997). Evolution of the personality construct in marketing and its applicability to contemporary personality research. *Journal of Consumer Psychology*, *6*(1), 55–66.

Fingerman, K., Miller, L., Birditt, K., & Zarit, S. (2009). Giving to the good and the needy: Parental support of grown children. *Journal of Marriage and Family*, *71*(5), 1220–1233.

Gefen, D., & Straub, D. (2005). A practical guide to factorial validity using PLS-Graph: Tutorial and annotated example. *Communications of the Association for Information Systems*, *16*, 90–109.

Goetzmann, W. N., & Kumar, A. (2008). Equity portfolio diversification. *Review of Finance*, *12*(3), 433–463.

Gregory, D. W. (2014). *Unmasking financial psychopaths: Inside the minds of investors in the twenty-first century*. New York, NY: Palgrave Macmillan.

Hazari, S., & Richards, A. R. A. (2011, March). *A qualitative study of adoption of social media for personal finance investing*. Paper presented at the Proceedings of the Southern Association for Information Systems Conference, Atlanta, GA. Retrieved from http://sais.aisnet.org/2011/HazariRichards.pdf

Heckman, S. J., & Hanna, S. D. (2015). Individual and institutional factors related to low-income household saving behavior. *Journal of Financial Counseling and Planning*, *26*(2), 187–199.

Helman, R., & Paladino, V. (2004, April). *Will Americans ever become savers? The 14th Retirement Confidence Survey, 2004* (EBRI Issue Brief No. 268). Retrieved from http://papers.ssrn.com/sol3/Papers.cfm?abstract_id=536242

Hicken, M. (2013). *Millennials may not be able to afford retirement essentials*. Retrieved from http://money.cnn.com/2013/12/04/retirement/millennial-retirement-savings/index.html

Hira, T. K. (1997). Financial attitudes, beliefs and behaviors: Differences by age. *Journal of Consumer Studies & Home Economics*, *21*(3), 271–290.

Hira, T. K., & Brinkman, C. S. (1992). Factors influencing the size of student debt. *Journal of Student Financial Aid*, *22*(2), 33–50.

Hogarth, J. M., Hilgert, M. A., & Schuchardt, J. (2002, November). *Money managers: The good, the bad, and the lost* (pp. 12–23). Paper presented at the Proceedings of the Association For Financial Counseling and Planning Education, Scottsdale, AZ. Retrieved from http://pfeef.org/wp-content/uploads/2015/01/Money-Managers-The-Good-the-Bad-and-the-Lost.pdf

Hung, A., & Yoong, J. (2010). *Asking for help: Survey and experimental evidence on financial advice and behavior change* (SSRN Scholarly Paper No. ID 1532993). Rochester, NY: Social Science Research Network. Retrieved from http://papers.ssrn.com/abstract=1532993

Joo, S., & Grable, J. E. (2004). An exploratory framework of the determinants of financial satisfaction. *Journal of Family and Economic Issues*, *25*(1), 25–50. http://dx.doi.org/10.1023/B:JEEI.0000016722.37994.9f

Kalra Sahli, S., & Pratap Arora, A. (2012). Individual investor biases: A segmentation analysis. *Qualitative Research in Financial Markets*, *4*(1), 6–25.

Lei, S., & Yao, R. (2014, November). *The impact of financial planning on portfolio performance*. Paper presented at the 2014 Association for Financial Counseling, Planning and Education Symposium, Bellevue, WA. Retrieved from http://www.afcpe.org/wp-content/uploads/2014/05/2014-AFCPE-Symposium-Proceedings-QTY-30.pdf#page=35

Lewis, J. K., Mimura, Y., Mauldin, T., Rupured, M., & Jordan, J. (2008). Financial information: Is it related to savings and investing knowledge and financial behavior of teenagers? *Journal of Financial Counseling and Planning*, *19*(2), 19–28.

Loibl, C., & Hira, T. K. (2005). Self-directed financial learning and financial satisfaction. *Journal of Financial Counseling and Planning*, *16*(1), 11–21.

Loibl, C., & Hira, T. K. (2006). A workplace and gender-related perspective on financial planning information sources and knowledge outcomes. *Financial Services Review*, *15*(1), 21–42.

Mandell, L., & Klein, L. S. (2007). Motivation and financial literacy. *Financial Services Review*, *16*(2), 105–116.

Mansfield, P. M., Pinto, M. B., & Parente, D. H. (2003). Self-control and credit-card use among college students. *Psychological Reports*, *92*(3c), 1067–1078.

Markowitz, H. (1952). Harry M. Markowitz. *Portfolio Selection, Journal of Finance*, *7*(1), 77–91.

Marsden, M., Zick, C. D., & Mayer, R. N. (2011). The value of seeking financial advice. *Journal of Family and Economic Issues*, *32*(4), 625–643.

Miller, W. R., & Brown, J. M. (1991). Self-regulation as a conceptual basis for the prevention and treatment of addictive behaviours. In N. Heather, W. R. Miller, & J. Greely (Eds.), *Self-control and the addictive behaviours* (pp. 3–79). Sydney, Australia: Maxwell Macmillan.

Mimura, Y., Koonce, J., Plunkett, S. W., & Pleskus, L. (2015). Financial information source, knowledge, and practices of college students from diverse backgrounds. *Journal of Financial Counseling and Planning*, *26*(1), 63–78.

Morin, R., & Fry, R. (2012). *More Americans worry about financing retirement: Adults in their late 30s most concerned, pew research center social &*

demographic trends. Retrieved from http://www.pewsocialtrends.org/2012/10/22/more-americans-worry-about-financing-retirement/

Moschis, G. P., & Churchill, G. A., Jr. (1978). Consumer socialization: A theoretical and empirical analysis. *Journal of Marketing Research*, *15*(4), 599–609.

Moschis, G. P., & Moore, R. L. (1979). Decision making among the young: A socialization perspective. *Journal of Consumer Research*, *6*(2), 101–112.

Mottola, G. R. (2014). *The financial capability of young adults—a generational view*. Washington, DC: FINRA Investor Education Foundation. Retrieved from https://www.finrafoundation.org/web/groups/sai/@sai/documents/sai_original_content/p457507.pdf

Mowen, J. C. (1999). *The 3M model of motivation and personality: Theory and empirical applications to consumer behavior*. Norwell, MA: Kluwer Academic Publishers.

Myers, I. B., McCaulley, M. H., & Most, R. (1985). *Manual: A guide to the development and use of the Myers-Briggs type indicator*. Palo Alto, CA: Consulting Psychologists Press.

Norman, W. T. (1963). Toward an adequate taxonomy of personality attributes: Replicated factor structure in peer nomination personality ratings. *The Journal of Abnormal and Social Psychology*, *66*(6), 574–583.

Pew Research Center. (2014). *Social networking fact sheet*. Retrieved from http://www.pewinternet.org/fact-sheets/social-networking-fact-sheet/

Pinto, M. B., Parente, D. H., & Mansfield, P. M. (2005). Information learned from socialization agents: Its relationship to credit card use. *Family and Consumer Sciences Research Journal*, *33*(4), 357–367.

Pirog, S. F., & Roberts, J. A. (2007). Personality and credit card misuse among college students: The mediating role of impulsiveness. *The Journal of Marketing Theory and Practice*, *15*(1), 65–77.

Rhine, S. L., & Toussaint-Comeau, M. (2002). Adult preferences for the delivery of personal finance information. *Journal of Financial Counseling and Planning*, *13*(2), 11–25.

Roberts, J. A. (1998). Compulsive buying among college students: An investigation of its antecedents, consequences, and implications for public policy. *The Journal of Consumer Affairs*, *32*(2), 295–319.

Rose, P. (2007). Mediators of the association between narcissism and compulsive buying: The roles of materialism and impulse control. *Psychology of Addictive Behaviors*, *21*(4), 576–581.

Shim, S., Barber, B. L., Card, N. A., Xiao, J. J., & Serido, J. (2010). Financial socialization of first-year college students: The roles of parents, work, and education. *Journal of Youth and Adolescence*, *39*(12), 1457–1470.

Shiv, B., Loewenstein, G., & Bechara, A. (2005). The dark side of emotion in decision-making: When individuals with decreased emotional reactions make more advantageous decisions. *Brain Research. Cognitive Brain Research*, *23*(1), 85–92.

Shiv, B., Loewenstein, G., Bechara, A., Damasio, H., & Damasio, A. R. (2005). Investment behavior and the negative side of emotion. *Psychological Science*, *16*(6), 435–439.

Simon, H. A. (1955). A behavioral model of rational choice. *The Quarterly Journal of Economics*, *69*, 99–118.

Spinella, M., Lester, D., & Yang, B. (2014). Compulsive buying tendencies and personal finances. *Psychological Reports*, *115*(3), 670–674.

Spinella, M., Yang, B., & Lester, D. (2007). Development of the Executive Personal Finance Scale. *International Journal of Neuroscience*, *117*(3), 301–313.

Steiner, S. (2009). *Americans plan to work through retirement*. Retrieved from http://www.bankrate.com/finance/financial-literacy/americans-plan-to-work-through-retirement-1.aspx

Steiner, S. (2015). *Why can't millennials save for retirement?* Retrieved from https://www.fidelity.com/insights/retirement/millennial-retirement-savings

Sujan, H. (2001). The 3M model of motivation and personality: Theory and empirical applications to consumer behavior. *Journal of Marketing Research*, *38*(3), 396–398.

Ward, S. (1974). Consumer socialization. *Journal of Consumer Research*, *1*(2), 1–14.

Way, W. L., & Wong, N. (2010, November). *Harnessing the power of technology to enhance financial literacy education and personal financial well-being: A review of the literature, proposed model, and action agenda.* Retrieved from https://cfs.wisc.edu/2010/09/10/harnessing-the-power-of-technology-to-enhance-financial-literacy-education-and-personal-financial-well-being/

Way, W. L., Wong, N., & Gibbons, D. (2011). Online talk about money: An investigation of interactions around personal finance in social media. Madison, WI: Center for Financial Security.

Wold, H. (1982). Soft modeling: The basic design and some extensions. In K. G. Jöreskog & H. Wold (Eds.), *Systems under indirect observation, Part II* (pp. 36–37). Amsterdam: The Netherlands.

Xiao, J. J., Tang, C., Serido, J., & Shim, S. (2011). Antecedents and consequences of risky credit behavior among college students: Application and extension of the theory of planned behavior. *Journal of Public Policy & Marketing*, *30*(2), 239–245.

Yook, M. (2014). *A holistic approach to understanding retirement preparedness* (Doctoral dissertation). Retrieved from http://krex.k-state.edu/dspace/handle/2097/18136

Acknowledgments. The authors would like to express our thanks to our colleague, Dr. Adham Chehab, and the anonymous reviewers for their comments and suggestions.