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2019 AFCPE SYMPOSIUM

NOVEMBER 19-21, 2019 PORTLAND, OREGON



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Editors' Note

Welcome to the 2019 AFCPE® *Symposium Proceedings*. The broad range of items selected by the program task forces for posters, practitioner's forums, and research papers for the 2019 Research and Training Symposium represents the expertise and commitment of our members to building the bridge from research to practice in financial counseling, planning, and education across the lifespan in a variety of venues.

We would like to thank all who submitted and reviewed papers, practitioner forums, and posters for the 2019 AFCPE® Research and Training Symposium. The *Proceedings* include the research papers, practitioner forum summaries, and poster abstracts presented at the AFCPE® Symposium in Portland, Oregon, November 19 to November 21, 2019.

We would especially like to thank Sara Martin-Fuller and Rachel DeLeon who patiently and graciously answered our many questions and provided support and design assistance during the preparation of the *Proceedings*. It has been a privilege, as well as an educational experience, to edit and format the *Proceedings* for this year's AFCPE® Symposium.

The opportunity to read each of the submissions prior to the conference has been invigorating. We look forward to attending as many of the presentations as possible. The commitment of the AFCPE® membership is reflected in their submission of quality research and presentations for this year's conference. The 2019 Symposium exemplifies AFCPE's® mission of providing "the highest level of knowledge, skill and integrity of the personal finance profession by certifying, connecting and supporting diverse and capable professionals who serve communities worldwide."

Please consider submitting your work for publication in the 2020 AFCPE® *Proceedings* and for presentation at next year's symposium. Please visit the AFCPE® website (www.afcpe.org) for symposium details and submission guidelines.

AFCPE Symposium: Engaging an Integrated and Inclusive Community of Personal Finance Professionals

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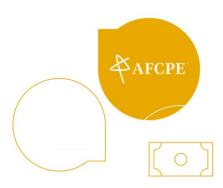
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Poster Presentations

Advancing Financial Wellness among University Students through Peer-to-Peer Mentoring

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Key words: financial wellness, peer-to-peer mentoring, Puerto Rico

Purpose and Justification

The Puerto Rican academic curricula do not include a mandatory course in personal finance at any level. Student demographics have changed as more students have greater financial responsibilities and thus must balance the demands of working with studying. Puerto Rico has been in a severe recession since before the financial crisis of 2007. The year 2016 saw the implementation of the Federal law PROMESA (Puerto Rico Oversight, Management and Economic Stability Act) that created The Financial Oversight and Management Board for Puerto Rico. Among other responsibilities, the Board is in charge of the financial decision making process which affects the budget of University of Puerto Rico. One example was doubling the cost per credit from \$58 to \$115 in just one year. In addition, changes made to the Pell Grant program reduced students' financial options. Given this environment, we recognize the need to provide critical support to students in the area of financial literacy. In 2016, the first peer-topeer mentoring centers (Student Money Solutions) were established on two campuses of the University of Puerto Rico. Since inception, the Student Money Solutions centers (SMS UPR) have been guided by two main objectives: (1) to provide financial mentoring to students in the areas of budgeting, credit management, funding participation in exchange programs, and life after college; and (2) to allow mentor students to gain entrepreneurial experience by running the centers under guidance of the faculty advisor. Our peer-to peer mentoring centers provide free, one-onone financial mentoring to university students, university employees and the surrounding communities. Our organizational structure is unique – stand-alone centers lead by volunteer students and professors who volunteer their time for training, advising and operational decision-making. The UPR provides office space for operations and access to the central e-mail system for mailing, but no financial support.

Results and Discussion

For the last three years, the centers have been providing financial mentoring to their peers as well as providing educational workshops to the university and surrounding communities. We have seen a 35% annual growth in number of mentors, 107% annual growth in people served, 104% annual growth in workshops offered, and a 49% annual growth in individual consultations. Furthermore, local financial institutions have come to recognize the skills developed by the student mentors when evaluating candidates for positions.

SMS UPR has provided workshops to high schools near the campuses in attempt to help students adequately prepare on how to face the financial responsibilities and challenges of higher education. Each center used unique approaches to serve their populations. The SMS center at Mayagüez has been providing workshops to the freshman class since 2017. The workshops reached between 34 -50% (730 to 1053 students) of the incoming class. The workshops focused on tips about how to manage their financial resources in their new academic environment. Furthermore, almost since its creation, the center at Mayagüez has developed a strong collaboration with the Office of Student



Exchange Programs while presenting to about 400 students the services regarding budgeting practices while abroad. During spring 2019, SMS UPR began collaborating with Financial Aid Offices providing informational workshops to students during the loan application process. The Office of Financial Aid at Mayagüez used this collaboration as part of the strategies to reduce student loan default rates. During October 2017, and in the aftermath of Hurricane María, mentors from SMS Río Piedras, as an initiative of their own, provided specific workshops to 447 university employees as well as individual consultations to 249 people from the surrounding communities. These numbers are not included in the growth rates cited previously because they are considered part of an extraordinary event. The Río Piedras campus won a grant from a local NGO to provide financial education workshops to 300 students in one of the towns hit hardest by Hurricane María.

Conclusions and Implications

Although we are aware that building a culture of financial literacy takes time, we believe we have established a solid foundation in our respective campuses. In addition, two other campuses had opened centers (Carolina and Ponce). We also note continuous student interest in serving as mentors, as well as increased interest in financial workshops and collaboration from the surrounding communities and institutionalized offices within the university. There is a need to be able to standardize the operations among all centers, as well as to quantify more precisely the value added to our individual clientele, and the knowledge gain for workshop's participants.

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An Examination of Debt Patterns among First Generation College Students

Jamie Lynn Byram, University of Georgia

Key words: college students, continuing generation college students, first generation college students, revolving debt, student loans

The cost of attending college continues to increase every year. Seemingly small annual increases in tuition and fees can add up over decades. Tuition and fees in public four-year universities were 3.13 times higher in 2017-2018 than in 1987-1988 (Seltzer, 2017). Because of rising costs, more students are relying on student financial aid to pay for college—particularly student loans. In the aggregate, today total student loan debt amounts to over \$800 billion, and in 2010, student loan debt overtook total credit card debt outstanding for the first time and now is only second to mortgage loans (Lewin, 2011).

The purpose of this poster is to present the findings from a study that was designed to examine the debt accumulation of two groups: first-generation college students (FGCS) and continuing-generation college students (CGCS). FGCS include students who are the first in their family to attend college. CGCS are students who have had a parent attend college before them. Analyzing data from the 2016 wave of the Survey of Consumer Finances, this study examined amounts of student loan debt for both FGCS and CGCS and revolving debt balances among both groups. With 4,233 respondents, continuing generation college students represented 31% of the sample.

It was hypothesized that after college, FGCS may have higher amounts of debt and less financial resources to service the debt, primarily because of cultural unfamiliarity with higher education funding mechanisms. Instead of using their salary to fund current consumption and savings (e.g., general savings, an emergency fund, investments), it is possible that those who are in the FGCS category are more likely to allocate household resources to the payment of liabilities associated with the accumulation of credit card and student loan debt during college. Furthermore, FGCS may also feel more pressure to accept less than optimal employment immediately after graduation in order to begin paying off debts.

Results from this study are important in the context of research and education devoted to helping families and universities as each deals with the financial well-being of a potentially vulnerable group of young adults. If evidence supports the idea that FGCS do indeed graduate from college with more debt, greater effort should be undertaken to educate both parents and students to minimize the level of debt incurred. Programming efforts could target specific monetary issues including understanding amortization schedules of loans and expectations of paying back student loans.

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Does Parenting Styles Mediate the Relationship Between Financial Socialization and Financial Management Behaviors?

Kimberly Watkins, Ph.D., University of Alabama, Kenneth White, Ph.D., Jamie Lynn Byram, M.S., AFC©, and Michael G. Thomas, Jr., Ph.D., AFC© University of Georgia

Key words: financial behaviors, financial socialization, NLSY, parenting styles

Abstract

When examining financial management behaviors, researchers often focus on the role of social networks' influence on positive or negative outcomes. One of the most, if not the most, influential group on human behavior is parents. Research has shown, parents often use either implicit or explicit financial socialization methods or a combination of both (Drever et al., 2015). Individuals whose parents monitored their financial behavior are more likely to exhibit higher levels of financial knowledge (Johnson & Sherraden, 2007), engage in desired financial management practices, accumulate more assets, report higher levels of financial confidence (Kim & Chatterjee, 2013), and engage in long-term financial planning behaviors (Pliner, Freedman, Abramovitch, & Drake,1996). Also, young adults who reported having money conversations with their parents were more confident about engaging in personal finance behaviors (Jorgensen & Savla, 2010) compared to those who only received implicit socialization.

Parenting styles have been associated with various outcomes for children. Studies have found that children who live in authoritative households have improved overall well-being, better cognitive development, and higher self-esteem (Cabrera, Tamis-LeMonda, Bradley, Hofferth, & Lamb, 2000). Maladaptive behaviors have been linked to permissive, authoritative, and neglectful parenting styles (Hughes, 2013). However, research is needed to investigate the link between parenting styles and the financial management behaviors of individuals. The purpose of this study was to examine if parenting style mediates the relationship between financial socialization and financial behaviors.

For this study, data were used from the National Longitudinal Study of Youth (NLSY) 1997 cohort. A mediation model was used to examine parenting style (m) on the relationship between financial socialization (x) and financial management behaviors (y). A simple mediation model was ran in AMOS 26. Based on the results, parenting styles of residential mothers and fathers does mediate the relationship between financial socialization and financial management outcomes such as retirement savings, cash management, and credit management.

Since research has supported that parenting styles are associated with various behaviors in childhood and adulthood, results from this study are anticipated to help personal finance stakeholders better understand the potential impact of parenting styles on financial management behaviors.

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Does Risk Aversion Influence Annuity Market Participation?

Yi Liu and Michael A. Guillemette, Texas Tech University

Key words: annuitization, risk Aversion,

Abstract

Theoretically risk-averse individuals should demand annuities as they provide a guaranteed income stream for life and hedge against longevity risk. Risk preferences should affect annuitization decisions, but few studies have empirically tested this relation. We attempt to bridge the gap empirically by investigating the effect individual risk aversion has on annuitization decisions by utilizing two different risk questions. Using data from the 2012 wave of the Health and Retirement Study, we find that individuals who are in higher risk aversion groups are more likely to have annuity income compared to those in lower risk aversion groups. Financial planning implications are provided.

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Echoes of the Past: The Impact of Early Childhood Trauma on Adult Financial Beliefs and Behaviors

D. Bruce Ross, Ph.D., University of Kentucky

Key words: attachment, childhood trauma, financial behaviors, financial beliefs, financial well-being

Introduction

Money remains a taboo topic in culture and relationships (Atwood, 2012). Pain saturated narratives center on money for many individuals, couples, and families (Ross & Coambs, 2018). When money becomes a place of chronic conflict and relational discord it decreases individual and couple overall well-being (Papp, Cummings, & Goeke-Morey, 2009). Deepening the basis of understanding financial distress serves to help inform new financial counseling, educational, and policy decisions about how to work with families and money. It is well established in the research literature that adverse childhood experiences and traumas have deleterious impacts (Felitti, 2009). Childhood traumas often interrupt individual's ability to develop and can become dysregulating (Gibson & Morgan, 2013). Moreover, children who feel rejected or neglected endorse higher materialistic values as a means of converging with perceived peer norms and fitting in with peers (Banerjee & Dittmar, 2008). This loss of social connection in childhood can lead to the development of disordered financial behaviors as a way of attempting to reestablish social relationships (Kasser, Ryan, Couchman, & Sheldon, 2004). Zhou and Gao (2008) found that in the absence of social support, money could serve as a secondary pain management mechanism.

The Current Study

The purpose of the current study is to explore the impact of early childhood traumas (e.g., abuse and violence) on self-reported measures of beliefs and behaviors associated with money and financial well-being. Additionally, the study will explore these constructs through the relational dynamics of attachment style, emotional regulation, social support, and relationship agreement and quality. Data were collected from a convenience sample of 500 participants recruited through a crowdsourcing website, Amazon Mechanical Turk (MTurk). The collection of survey data through MTurk has been empirically validated through a number of studies as more representative and more reliable (Goodman et al. 2012). Structural equation modeling (SEM) is utilized to assess the relationship between early childhood traumas and constructs of personal, relational, and financial well-being. The current study extends the existing literature by investigating how adverse traumas during early developmental periods may impact one's adult thinking and behaviors, specifically around financial beliefs and behaviors. Systemic and integrative practice implications for financial counselors are discussed to understand how trauma, relationship dynamics, and financial management behaviors may be associated with one another. Financial counselors must also understand the potential ethical and professional practice implications associated with managing traumas.

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Exploring the Effectiveness of Curriculum Training in Improving the Knowledge and Attitude towards Personal Financial Management of Non-Profit Agencies' Staff

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Key words: curriculum, financial educational outreach, non-profit, personal finance, professional training

Social service and non-profit staff are in a unique position to integrate financial education with the services they offer to clients, (Consumer Financial Protection Bureau, 2014). Survey data indicates that staff provides financial education through telephone calls, individual, and group meeting. Staff also reported needing up-to-date resources (Atkinson, Chan, Grabenstetter, & Sweedler, 2016).

Many social service jobs require that staff provide financial education services even if they have no or very limited personal finance training. This study uses survey data gathered from participants of *All My Money: Change for the Better* curriculum trainings. Participants engage in a two-day, intense, interactive training designed to help non-financial professionals teach money management to clients by (a) increasing financial knowledge of participants and (b) facilitating a positive attitude change towards personal financial management and education.

Sixty-seven participants from *All My Money: Change for the Better* training completed a pre/post evaluation based on their training experience. Participants were asked ten questions about knowledge gain, and from those answers, a knowledge score was created. Participants who rated their pre-training knowledge level for the ten questions as 3.0 or lower (scale of 1 to 5) were assigned "low financial knowledge;" those who averaged above 3.0, were assigned "high financial knowledge." The two groups were compared with the change in attitude measures.

Results show that many participants had a low financial knowledge score (about one-third) as well as a poor attitude about teaching financial management (about two-thirds) before the training. The training resulted in overall knowledge gain by participants. Of the ten knowledge questions, the participants rated their knowledge lowest in these three areas:

- The different fees charged for money services.
- How my financial choices affect my credit score.
- Different ways to track spending.

The participants saw the most gain after training in these areas too, ranging from 1.5 to 1.8 change in score.

While knowledge gain due to training is an important change, more notably, the training facilitated a change in attitude. Three questions measured attitude elements which can affect a person's comfort with teaching this curriculum: (1) attitude toward teaching financial management, (2) attitude toward managing my money, and (3) attitude toward how limited-resource people manage their money. The analysis showed that trainees with a lower than average pre-training knowledge had a significantly greater change in attitude than did those trainees with a high level of financial knowledge. Good financial knowledge, as well as a positive attitude about financial management, is important for those who teach and encourage others to change financial behaviors.

Non-profit agencies often struggle to decide who to send to professional training in an effort to balance resources such as time and dollars. Educators and non-profit supervisors should encourage social service organization staff with the least amount of financial knowledge to participate in financial education training.

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Financial Preparation for Disaster: Determining the Need for Educational Resources

Lori Hendrickson & Sara Croymans, University of Minnesota Extension

Key words: disaster, financial preparedness, focus groups

This poster will highlight the findings of the focus group study and provide guidance for educators, counselors, coaches and researchers on disaster financial preparedness.

The National Oceanic and Atmospheric Administration reports that in 2018 there were 14 weather and climate disaster events with losses exceeding \$1 billion each across the United States (Smith, 2019). Because 40% of adults are not prepared to cover an unexpected \$400 expense (Larrimore, Durante, Kreiss, Park & Sahm, 2018) and 78% of U.S. workers report living paycheck to paycheck to make ends meet (Careerbuilder, 2017) disasters can be financially devastating for those impacted.

Many organizations stress the importance of disaster preparedness, yet levels of preparedness remain extremely low nationwide (Annis, Jacoby, & DeMers, 2016). Although there is a great deal of information regarding emergency preparedness, few resources focus on financial preparedness. Preparedness is a process, not a product (Sutton & Tierney, 2006).

This poster will detail the findings of a focus group study conducted with disaster survivors, professionals and disaster volunteers to explore disaster financial preparedness needs. During fall 2018, two Extension Educators led four focus groups to determine the need for additional disaster financial preparedness resources. The twenty-seven participants provided insights on disaster financial issues survivors encounter; financial knowledge, attitudes, skills and behaviors that support financial resilience; sources of financial information and assistance; identification of current and needed financial preparation resource; as well as recommendations on what good resources look like and how to make them accessible and utilized.

This initial focus group can serve as a springboard for researchers to further study disaster financial preparedness needs and best practices for how practitioners can guide individuals and families through this process. Given the limited literature on disaster financial preparation, this poster will contribute new knowledge to the field that can support financial counselors, coaches, and educators as they work with clients on disaster financial preparedness. In addition, the findings will support the joint AFCPE/FEMA disaster financial preparedness initiative.

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Financial Transparency and Communication Privacy in Marriage. Can You Have Both?

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Key words: communication, financial infidelity, financial management, financial secrecy, financial transparency, financial trust, first marriage, marital satisfaction, privacy, self-disclosure

Abstract

To better understand the role of financial transparency as it is related to marital satisfaction, a sample of 183 married individuals in their first 5 years of their first marriage completed an online survey on Amazon Mechanical Turk measuring financial secrecy, financial trust and disclosure, and marital satisfaction. Latent profile analysis (LPA) revealed 3 distinct profiles of marital satisfaction, *high satisfied-financially transparent* class (2.8%) not likely to keep financial secrets or lie, and moderate trust, *low satisfied-financially transparent* class (16.8%), likely to keep a financial secret of lie, showed characteristics of trusting their partner, and *moderate satisfied-financially transparent* (80.4%) somewhat likely to lie or keep a secret, but highest level of trust. Implications for research and practitioners will be discussed.

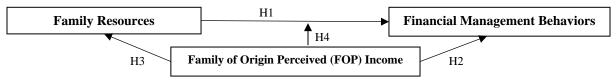
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"Give Me More!" Relationships Between Tangible and Intangible Family Resources During Adolescence and Financial Behaviors of Young Adults: An Overview

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Key words: adolescence, communication, financial behavior, income, resources, young adults

This research examines how tangible and intangible resources provided to young adults during adolescent years relate to financial behaviors during young adulthood, specifically cash management, credit management, savings & investment, and insurance. The conceptual models of "Young Adults' Financial Capability" (Serido, Shim, & Tang, 2013, p. 288) and "Family Financial Socialization Processes and Outcomes" (Gudmunson & Danes, 2011, p. 648) represent, respectively, how subjective and objective changes in financial knowledge and how the family socialization process influence financial behaviors. Both models were used to develop the conceptual model.



Data were collected by an online survey administration organization from 1,245 young adults age 18-34. Tangible resources of spending money, food, and clothing and intangible resources of time & attention, discipline, life skills & instruction, emotional support & love, and role modeling & guidance were used to measure resources provided by parents while growing up (Rindfleish, Burroughs, & Denton, 1997). Intergenerational communication was measured using the IGEN scale (Viswanathan, Childers, & Moore, 2000) to measure parents/family communication of and influence on the child of various aspects of proper consumer behavior. Family of origin perceived (FOP) income, the proposed influencing variable, was measured by asking participants to compare themselves to other kids they knew in tenth grade to what their family seemed to have (Ahuvia & Wong, 2002; Griskevicius, Tybur, Delton, & Robertson, 2011; Richins & Chaplin, 2015). Financial management behaviors were measured by Dew and Xiao's (2011) scale, comprised of cash management, credit management, savings & investment, and insurance subscales.

Results showed multiple positive relationships, specifically between each of the different types of resources and cash management, savings & investment, and insurance. Young adults from middle and upper FOP income levels indicated greater tangible, intangible, and intergenerational communication. Regression analyses for each of the four financial management behavior subscales indicated significant results for IGEN communication regardless of demographic controls except for credit management. Several noteworthy interactions involving intangible resources across the different FOP income levels were present, which may provide insightful conclusions and implications for financial counselors and educators.

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Impact of Financial Capability on Low to Moderate Income Young Adults' Saving Behavior in South Korea

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Key words: low-to-moderate income young adults, saving behavior, financial capability, asset building

Many young adults suffer from financial deficit despite their hard work in South Korea. To prevent a vicious circle of debt and poverty, the Korean central and some local governments, such as Gwangju metropolitan city, have recently implemented Individual Development Accounts (IDAs) for low to moderate income (LMI) young adults. However, due to the limited funding and resources, the IDAs have offered savings incentives (e.g., 1:1 savings match) to only a small portion of LMI young adults. A significant question, therefore, arises: what other factors can enhance LMI young adults' individual savings in addition to the savings incentives from governments? In general, high-income adults are more likely to save money (Dynan, Skinner, & Zeldes, 2004). However, recent studies of financial capability and asset-building suggest that financial literacy and inclusion may encourage people to behave and act in the best financial interests within their financial resources (Birkenmaier, Sherraden, & Curley, 2013; Sherraden, Birkenmaier, & Collins, 2018). The purpose of this study is to explore the impact of financial capability on LMI young adults' individual saving behavior in South Korea.

This study analyzed survey data collected from 2,160 LMI young adults who participated in an IDA project in Gwangju city, South Korea, in 2018. A dependent variable was participants' saving behavior, indicating whether they set aside money into any personal checking or savings account for the last three months (yes = 1; no = 0). The two characteristics of financial capability were used as independent variables: financial literacy and financial inclusion. In this study, financial literacy was defined broadly as individuals' perceived ability to act in their best financial interests, which was measured by four five-point Likert items (e.g., developing a financial plan). Financial inclusion referred to individual access to formal financial systems. It was coded 1 if they had an installment savings account that made monthly payments to the bank for a specific period of time. A logistic regression analysis was performed to achieve the study purpose after controlling for the participants' demographic, socio-economic, and financial characteristics.

The descriptive analysis showed that approximately, 65 percent of LMI young adults set aside and saved money into their personal bank accounts for the last three months. According to the logistic regression model, LMI young adults were more likely to save money when they had higher levels of financial literacy (OR = 1.59, p < .001) and financial inclusion (OR = 8.47, p < .001). Among control variables, LMI young adults' saving behavior was positively associated with being females (OR = 1.31, p < .05), monthly income (OR = 1.01, p < .01), and current assets (OR = 1.00, p < .001). In contrast, it was negatively associated with living expenses (OR = .99, p < .01).

The results of this study suggest that financial capability is critical for improving LMI young adults' saving behavior regardless of their income levels. Financial education, counseling, coaching, or mentoring programs can be effective for LMI young adults who never benefit from any IDAs. IDAs for LMI young adults need to be integrated with effective financial capability programs so that LMI young adults can promote both their assets and financial management skills simultaneously.

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Impact of Financial Education on Inmate Intent to Change Financial Behavior

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Key words: financial literacy, financial education, inmates, jail, personal finance

Literature Review

Call et al. (2013) mentioned that few studies have examined the specific financial education needs of inmates. Paul (1991) examined issues affecting learning behind bars, effects of the prison environment on learning, learner-centered approach, *advertising* the program inside, and suggestions for continuing services upon release. Richel (2013) reported that research shows that in order to reduce recidivism rates in prison financial education and other life skills should be mandatory in the prison system. Koenig (2007) described a study that involved offenders. Furthermore, Koenig indicated that existing curriculum was modified and a financial literacy course was created for offenders.

Purpose

The purpose it to examine the impact of financial education on inmate's intent to change financial behavior.

Methods

The sample included 255 inmates in four detention facilities that participated in Cooperative Extension Financial Education classes based on the five Financial Wellness Dimension. They are as follows: 1) Make choices that will increase income, 2) Make choices that will reduce debt, 3) Set financial goals, 4) Save money for emergencies, and 5) Use and manage credit responsibly. Change in financial behavior was measured by change in mean differences in the Pretest and Posttest scores. Pretest were given to participants before each class based on the Financial Wellness Dimension to assess confidence in making financial decisions. Intervention was based on Financial Wellness/Personal Finance classes. A Posttest was given to each inmate at the end of each class. Data Collection Process consisted of 255 male and female inmates. Of the 255 inmate enrollment, data 54 incomplete data was eliminated due to attrition/released from detention before the study ended. There were 201 data acceptable for analysis and 201 pre and post data analyzed in SPSS.

Results

A paired sample t test was conducted to examine if a statistical significant difference existed between the mean confidence in financial decision making before and after financial education programs. The assumptions of the paired sample t test were met. The result was significant, t (200) = 5.97, p < .05 indicating a significant increase in financial confidence (Change in financial behavior). From Pretest (M = 2.38, SD = 1.10, N = 200) to the Posttest (M = 2.99, SD = 1.18, N = 200). The mean increase was .60, with a 95% confidence interval for the difference of the means ranging from .40 to .80.

Conclusions

There is an impact of financial education on inmate intent to change behavior in financial decision-making based on increased confidence acquired after the participation of inmates in financial education classes. Although there is significance on financial education on inmates' intent to change behavior towards financial decisions, we cannot fully attribute the significance solely to financial education.

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International Students & Financial Well-Being: Implications for Education & Outreach

Andrea Pellegrini, University of Illinois System

Key words: college costs, college student, financial education, financial habits, financial literacy, financial wellness, financial well-being, food security, international students, personal finance, international students, tuition

Between March 2017 – March 2018, there were 1,201,829 international students seeking degrees in the United States (SEVP, 2018). These students pay higher tuition, navigate a complicated U.S. monetary system, face limitations on income potential due to visa status restrictions (U.S. Citizenship and Immigration Services, 2009), do not qualify for many credit-based financial tools and services, and require employer sponsorship post-graduation to qualify for the work visa lottery (U.S. Department of State, n.d.), among other substantial obstacles that can hinder their academic success.

A 36 question survey was launched in Spring 2019 including questions on financial goals, responsibilities, habits, challenges, tools, basic needs security, and educational preferences. The results of the surveys were matched with information about student account activity (financial holds, late fees, types of payments applied to student accounts, majors, and year in school) for those that agreed to data match. Survey respondents consisted of 326 students from two universities in the system; 248 of which agreed to the data match. Response rate was 3.6%, including 131 men, 110 women, 2 genderqueer/gender nonconforming, 1 other, and 82 did not want gender considered. 50 countries were represented with India (27%) and China (25%) making up the vast majority.

Research Questions

The survey was driven primarily by the following three themes:

- 1. *Challenges*: What are the unique financial challenges international students face? How do these challenges impact their spending behavior, financial choices, and persistence towards their degrees?
- 2. *Habits*: How do international students fund not only their tuition/fees but also their lifestyles? Are there trends that can be identified in their spending that could be impacted by financial education?
- 3. *Preferences/Implications:* What financial topics are international students most interested in? How do they want to receive financial education? How can universities help international students plan for and solve financial challenges to increase quality of life and maintain persistence towards their degrees?

Preliminary Results

Initial findings show that 47% of respondents are dependent/do not contribute to family finances; 55% rarely use cash, but 35% use cash daily, weekly, or monthly; 36% use a debit card daily and 42% use a credit card daily so there may be a need to provide education on the differences between each, just as there is a need to provide that education to domestic students; online videos and email were the most preferred methods of educational delivery for financial topics; only 5% would not be able to cover a \$400 surprise expense; 62% indicated currency fluctuations as an influence in spending behavior; 58% experienced at least some level of food insecurity in the 30 days prior to responding to the survey; 39% indicated encountering some type of scam or fraud while 17% were unsure if they had encountered any scams or fraud.

This survey aimed to better understand the financial well-being of international students in order to produce valuable insights on how to enhance financial education and inform institutional and/or legislative policies impacting international student finances.

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Prelude to an Estate Plan: Simplifying Your Life before You Meet with Professionals

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Extension

Key words: declutter, family conversations, final decisions, pre-planning, unprepared legacy

As Baby Boomers age, the need for financial education has grown throughout the nation (Jokela, Hendrickson, Haynes, 2013). There are many programs available for this generation that help with end-of-life planning (i.e., completing advanced medical directives, wills and trusts); however, there are very few that focus on determining and recording decisions through organizing and preparing documents for final life decision meetings. Due to this gap, the majority of Americans will die without a will (Jones, 2016). By not knowing where to start, individuals ignore these critical final decisions until it is too late. To encourage more productive meetings and conversations around end-of-life issues, learners need to know where to start and how to initiate conversations.

Our team offers a series of classes targeting specific areas of pre-planning for later-life financial conversations for retirement-aged individuals focusing on decluttering possessions, organizing financial paperwork and discussing non-titled property transfer with loved ones. These workshops are unique because they are the "prelude" and preparation for the planning meetings. By organizing before the financial estate planning meetings, individuals save time, money and frustration through reduced financial, legal and professional costs, and family member disagreements. Many stakeholders want to complete an estate plan but have no idea where to start, what documents are needed, where to find those documents, how to simplify possessions, or how to approach difficult conversations with loved ones. Our workshop, "Simplify Your Life," consists of three classes that can be taught individually or as a series. It focuses on the first steps needed before meeting with financial professionals, attorneys, estate planners, and loved ones. By outlining a plan before meeting with professionals, these meetings will be streamlined, less costly, and more effective. It also allows conversations with family about end-of-life issues to be a time of celebration with memories shared instead of being an emotionally-charged and stressful event.

In our study, 21 workshops were held statewide with some or all of the three topic areas. The average number of participants for each of the three classes was 147. Participants were given materials and resources to aid them in adopting positive behavioral changes. To evaluate program effectiveness and participant planned changes, we conducted pre- and post-evaluations during the workshop. Data collected for knowledge gained shows that this program significantly introduced participants to new information and resources to help with pre-preparation to end-of-life planning. In addition, we requested a six-month follow-up survey which reported specific actions taken. By having a "prelude to a plan," data shows that participants learned how to fill the gap between retirement and end-of-life planning that is so often overlooked.

In summary, many people "choose" to leave an unprepared legacy because they are overwhelmed by the responsibility. This program has simplified pre-planning so that meeting with professionals and creating a solid estate plan becomes a more manageable and less intimidating task. People who have been impacted by this information (i.e., participants, family members, financial professionals) all praise this workshop for making this process easy, enjoyable and organized.

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Financial Well-Being and Health Insurance Disputes

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Key words: dispute resolution, financial education, health insurance, health insurance billing

Background

The purpose of health insurance is to protect personal finances from the burden of health care costs, and to protect health by making health care accessible. Conversely, protecting health also has a financial benefit. Disputes with health insurance providers occur when there is a disruption in that financial protection and usually arise from one of two occurrences. Either a claim for insurance coverage for a health procedure is denied, or there is an unexpected out-of-pocked charge for a covered claim. Research shows that consumers struggle with health insurance decisions due to low health insurance literacy and complexity of products (Adepoju, Mask, and McLeod, 2019). Confusion about health insurance has implications for how well people shop for health insurance and whether they are choosing wisely (Levitt, 2015). More seriously, consumers with lower health insurance literacy are less likely to utilize their benefits to stay healthy, and more likely to suffer financial harm (Paez, Mallory, et.al, 2014). According to a recent study, 33% of patients received unexpected medical bills over a two year period, and 53% have tried to negotiate a medical bill (Consumer Reports, 2016).

Purpose and Justification

The purpose of this study was to determine if including health insurance dispute strategies into consumer education and counseling is an effective financial strategy to (1) reduce health insurance billing confusion, and (2) raise confidence in managing and resolving health insurance disputes. Unpaid health care claims and surprise bills can have a catastrophic effect on financial stability, and according to the CFPB, a "staggering" 52 percent of all debt on credit reports is from medical expenses (2015).

Methods

A survey was given to health insurance consumers (N=100) to determine the extent to which they have had to appeal a health insurance coverage decision or dispute a health care billing amount. They were also asked to rank their confidence in their ability to understand health care bills, appeal a health claim decision, and resolve a billing dispute. There was also an opportunity to share personal stories.

Results/Discussion

The survey indicated that 32% of the respondents have had to appeal a coverage decision, and over half have needed to dispute a health care billing amount. Less than half were confident that they understood medical bills, and approximately 75% were less than confident that they could resolve a dispute. However, the focus group had an encouraging outcome. The figures were reversed, with approximately three out of four stating after the workshop that they understood the billing process and could manage a dispute.

Conclusions/Implications

Health insurance is a vital component of a personal financial plan. However, utility is diminished when it is not fulfilling its purpose of protecting income and savings. Consumers are left financially vulnerable if they do not understand the billing process and do not have the ability to advocate for themselves. Consumer education can successfully instill the confidence to protect against and manage disputes. Therefore, education can be made more widely available and also be included in financial counseling plans.



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Student Loan Borrowers: Who figured out student loan monthly payments prior to taking out student loans?

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Keywords: borrowers, financial capability, financial education, loan payment, student loan decisions

In the first quarter of this year, the U.S. student loan debt was \$1.56 trillion in total (Federal Reserve Bank of New York, 2019). This may be due to individuals receiving little education before taking out a loan and their lack of financial capability. Financial capability refers to the ability of people to be in control of and properly manage their finances (Xiao, Chen, & Sun, 2015). In previous studies, little research has examined the association between financial capability and student loan decisions. The findings of this study can contribute to the literature because if we can understand whether or not student loan borrowers fully comprehend student loan consequences, then we can better direct financial education for student loan borrowers. By understanding to what extent the borrowers calculate their monthly payment before they took out their loans, and examining the association between financial capability and student loan decisions, this study can provide insight for financial educators, counselors, and planners.

This study employed data from the 2015 National Financial Capability Study (NFCS). The study sample includes 7,491 respondents; the sub-sample consists of three age groups, age 18-34 (n=3,847), age 35-54 (n=2,770), and age 55+ (n=874). The dependent variable was measured by a question in the NFCS data: "Before you got your most recent student loan, did you try to figure out how much your monthly payments would be?" The response to this question is: 1) Yes, 2) No, and 3) Don't know/No Answer. As independent variables, the financial capability and socioeconomic characteristics (age, gender, ethnicity, marital status, education, employment status, and income) were included in the multivariate analyses.

More than half of the borrowers did not try to figure out how much their future monthly payment would be before taking on their loans. A higher proportion of the young holders figured out their future loan payment amount. The results also show that as they had higher level of financial capability, student loan borrowers did figure out how much their monthly payments would be. Socioeconomic factors played a large role, as male loan holders were more likely to be aware of the choices they made than female loan holders. White loan holders were less likely to figure out their future payments than their non-white racial counterparts. Those student holders with lower education were more likely to figure out how much their monthly payment would before they got their student loan than those with the highest level of education. Those self-employed, working for others, and full time students were more likely to estimate the amount they will pay before taking on their loans than not-working student loan holders.

The findings of student loan borrowers' profile across age group can also provide information to target education program designed for different age groups. There are several issues among student loan borrowers, including late payments and concerns with repayments. For example, not only is the size of student loan debt reaching higher levels in a short time period (about two decades), but also many borrowers face difficulty in paying it off or are behind on payments. Thus, it is important for financial professionals to educate the potential student loan borrowers about comprehensive student loan information before they take out their loans. By profiling who comprehended the choices they made when they obtained their student loans, the findings of the study can provide valuable information for student loan counselors, advisors, educators, and policy makers.

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Successful Family Member POA Agent Implementation: Estate Planning Experiences in South Dakota

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Key words: estate planning, phenomenology, powers of attorney

Engaging in proper estate planning can be a challenge in rural areas, including South Dakota (Goetting, Danes, Knerr, Leifeld, & Bradshaw, n. d.; Laird, 2014). Powers of attorney (POA) are a frequently used estate planning tool; a family member POA agent is often appointed to make financial and/or medical decisions on behalf of the principal, usually an older adult who granted the POA. Family member POA agents have been known to use their powers to commit elder financial exploitation (Betz-Hamilton & Vincenti, 2018), but little is known about what factors contribute to a non-exploitative, or successful, family member POA agent implementation in rural areas. Using a phenomenological approach, the purpose of this study was to explore the non-exploitative (i.e., successful) experiences of older adults in South Dakota who had designated a family member POA agent and individuals serving as family member POA agents for an older relative in South Dakota in order to gain insights regarding what may help older adults avoid elder financial exploitation by a family member POA agent. Phenomenology is a qualitative approach used to explore the "common meaning for several individuals of their lived experience" (Creswell, 2013, p. 76). Because there are limited data available on the experiences of implementing a nonexploitative family member POA agent in rural areas, a qualitative approach was chosen. A qualitative design is suitable when there is limited prior published research on a topic (Patten, 2014). Six participants provided data in the form of interviews, an acceptable size for phenomenological studies (Creswell, 2013). Findings indicate observational learning, values, trust, and engaging in proactive estate planning helped foster a non-exploitative family member POA agent appointment. Financial counselors, planners, and educators can positively impact the well-being of a client as well as younger generations within the client's family via observational learning. Additionally, financial counselors and planners should discuss an older adult client's values, along with any potential POA agent's values, as non-exploitative family member agents with similar values as the older adult in this study did not engage in elder financial exploitation.

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The Determinants of Bankruptcy for US Households: Evidence from the 2010, 2013, and 2016 Survey of Consumer Finances

Guopeng Cheng, Virginia Tech and Chen Xu, University of Missouri

Key words: bankruptcy, household decision making

When affected with financial hardships, some people decide to declare bankruptcy to establish a payment plan, eliminate debts and obtain legal protection from the courts. However, bankruptcy can remain on peoples' credit reports for 7 to 10 years, depending on the type of bankruptcy they choose to file for. Depending on state laws, a bankruptcy trustee can be forced to liquidate certain assets, which could delay or disrupt the financial goals of the persons filing for bankruptcy and negatively affect their future financial well-being. The purpose of this study is to investigate the determinants of consumer bankruptcy decisions. Using data from the 2010, 2013, and 2016 Survey of Consumer Finances (SCF), our results show that individuals' age, marital status, number of children, income, and health condition are significant determinants of bankruptcy.

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The Effect of Parent's Debt Burden on Student Loan Debt

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Key words: middle-income class, parent debt burden, student loan debt, young adult

Background

Financing children's college education is a major financial goal for most middle-income families. Parental transfers significantly determine the young adults' decision to borrow student loan (Dwyer, McCloud, & Hodson, 2012). It has been argued that youths from middle-income families may have greater student loan debt than peers whose parents have lower and higher incomes because middle-income families are often unable to make the expected financial family contributions as determined by the Free Application for Federal Student Aid (FAFSA) (Houle, Jason N., 2013). However, scant research has been conducted to explain middle income families' growing inability to meet their children's financial needs for college education. To fill this gap, this study examines the effect of parent's debt burden on children's borrowing of student education loan.

Method

The analysis was based on the fourth and twelfth waves Korean Education and Employment Panel Survey (KEEPS). In the 2007 fourth wave survey, the sample of 2,000 ninth year of middle school cohort at Wave 1 became twelfth grade high school students, and the household data from the primary caregiver were also collected. The latest data available for public use is the 2015 twelfth wave KEEPS in which eight years have passed since high school graduation and the total amount of student loan during college could be identified. After omitting respondents who did not enroll college, and listwise deletion of youths without complete information on key variables, a total of 1,255 youths were available for the analyses. Information on parent's debt and asset was extracted from the household data in the fourth wave KEEPS. The parent's debt burden was measured by total debt amount divided by networth (the total asset minus total debt). Cragg's double hurdle analysis was conducted to find the effects of parent's debt burden on whether to have and how much to borrow student loan.

Results/Implications

The major results were as follows. First, about 38% of the parents had their own household debt, and more than one-third of each of income quintiles including lower, middle, and upper income classes were indebted. About 24.17 percent of the sample borrowed student loan, and the proportion was higher among the parents with higher debt burden. Second, the likelihood of borrowing student loan was significantly associated with parent's debt burden rather than parent's income. Compared to the college students with parent without debt, college students with parent having higher debt to networth ratio greater than about 0.2 were more likely to borrow student loan. However, the amount of student loan debt was not significantly associated with parent's income and parent's debt burden. The result indicated that the likelihood of borrowing student loan was significantly associated with parent's debt burden rather than parent's income, suggesting that debt management is crucial to meet the financial goal of supporting children's college education.

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Undergraduate College Spending: Mindful or Mindless? Accuracy of Student Budgeting and COA Projections

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Key words: college student budgeting, cost of attendance, cost of college, financial projections

Abstract

This study examines the accuracy of student projections of income and spending for a one-month period utilizing 217 budgets of undergraduate college students in a large urban university. This data is compared to the Department of Education required cost of attendance projections provided by the university. Students underestimated both income and expenses by an average of ten percent or more. Results indicate that students have a high level of variation in both expenses and income levels. These findings suggest that students may benefit from improving awareness of inflows and outflows of financial resources to maximize resources and minimize financial concerns.

Conceptual Background

Students were required prior to the beginning of a month to project anticipated costs, students then tracked spending daily, and compared projections with actual end of the month results. These monthly projections were compared to the required Department of Education Cost of Attendance (COA) projections provided by the University studied. Financial education, tools and awareness could serve to encourage students to increase their coping skills and longterm financial success (Xiao, Serido & Shim, 2014). The value of self-monitoring and increased awareness of spending among students may modify their discretionary spending and improve financial wellness (Palmer, Bliss, Goetz & Moorman, 2010). The literature shows that budget forecasting accuracy is generally better for shorter time periods, 6 months vs. 5 years (Du & Kamakura, 2008) and weeks vs. months (Peetz & Buehler, 2009). Additionally, inaccuracies tend not to be random but rather are biased in underestimating the growth of expenses relative to income (Berman, Tran, Lynch & Zauberman, 2016). The literature indicates that individuals are not equally accurate in estimating expenses across expense categories. Categories that are easier for individuals to define and assign expenses tend to be budgeted using a tighter watch than those are less well defined and harder to assign an expense to that category vs. another. Hence more defined categories have smaller budget variances than less defined categories (Heath & Soll, 1996). Because universities provide an estimate only, there is considerable variation in cost of attendance and living expenses even in the same locations (Kelchen, Goldrick-Rab, & Hosch, 2017). Research has shown that accurate and perceived personalized college costs may be an important factor is influencing student attendance and parental expectations regarding college enrollment (Bleemer, & Zafar, 2018). This study explores these findings of awareness, projected spending and variances then applies them to college student spending and cost of attendance projections.

Purpose

There are three distinct purposes for this analysis. First, to determine if students are aware of their income and expenditures levels by determining their ability to predict them accurately for a one month period. Secondly, if there are differentials, seeing which categories are most unpredictable and what the spending responses are due to these changes. Thirdly, to assess how these results compare to cost of attendance projections provided by the University.

Students are making college selections, employment choices, living arrangements, and loan decisions on estimates of projected college costs. This study seeks to clarify the accuracy of these projections both by universities and student awareness.

Research Questions

1. What is the accuracy of student projections of (a) income and (b) expenses?



- 2. How did results of this study compare with university projected costs of attendance?
- 3. Which categories of spending were most predictable, and which had the highest differentials?

Methodology

Students were enrolled in a ten-week college personal finance course requiring submission of projections prior to the first of the month in set categories (income: wages, tax, other income) and expenses (housing, food, clothing & personal care, transportation, recreation, medical, insurance, other expenses). The students monthly tracking system was submitted and reviewed. At the end of the month students daily tracking, actual spending and income, and the differences were compiled and analyzed. Compilation of 226 student submissions were combined and analyzed as the quantitative data for overall averages and comparison to cost of attendance projections provided by the university. To access the relative importance of each of the budget categories used in this study in predicting overall budget inaccuracy we used a stepwise regression analysis. Overall discrepancy of predicted to actual budget was regressed against budget discrepancies for each category.

Results and Discussion with Financial Counseling and Planning Implications

We found that on average students in our study underestimated both their income (10%) and their expenses (11%). Underestimates of expenses were slightly greater than the underestimates of income. The distribution of their budget discrepancies was skewed negatively so than the mean discrepancy was an average of -\$221.78 and a median discrepancy of a -\$55.00, which means an overall underestimate of expenses. We show the distribution of budget discrepancies between predicting spending and actual spending across our sample of students and found that the greatest discrepancies were in Other (52%), Clothing, (23%) and a tie between Medical and Recreation at (19%). Income was underestimated by 10% on average, with an average underestimate of \$240.70 and a median underestimate of \$17.

Cost of attendance (C.O.A.) for housing, food, personal care, transportation and supplies was projected by the university to be approximately \$1844 per month. Actual student expenses averaged \$2166 per month. The largest discrepancies found were transportation cost at 135% percent higher (average of \$261 actual, versus University COA projections \$111), and cost of housing at 26% lower (average of \$732 actual, versus \$1023 University COA projections).

The analysis of how students are spending their resources is valuable both to the students and the university system. With increasing tuition costs, increasing student debt, and the importance of financial planning for college, the accuracy and understanding of cost projections is a key factor in college selection, retention, and completion rates. Financial counselors and planners have an interest in helping students increase their awareness and overcoming barriers of access to resources (Eichelberger, Mattioli & Foxhoven, 2017), increase their financial capability (Xiao & Porto, 2019), reduce their financial distress (Archuleta, Dale & Spann, 2013), and increase their likelihood for college completion (Britt, Ammerman, Barett & Jones, 2017) they may be able to increase student success through use of financial tools (tracking) and more accurate information (cost of attendance projections). Results from this study indicate an opportunity and method for improving awareness of student income and expenditures.

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What's the Connection: Financial Attitudes and Financial Well-being of Black Americans

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Key words: financial attitudes, financial well-being

Introduction

Adult Black women's and men' financial attitudes and well-being are under-researched. In introducing the Klontz Money Scripts Inventory (KMSI), Klontz and Britt (2012) noted small-to-moderate correlations (i.e., r = 0.26 to r = 0.45) among avoidance, worship, status and vigilance – money attitudes assessed by the KMSI, but their sample did not allow a strong description of these attitudes between or among racial groups. The goal of this study was to give voice to black adults, approximately 12% of U.S. population, who are currently overlooked in the financial counseling literature. This study achieves its goal through three primary aims. First, it will document average scores on the KMSI in a sample of Black of women and men, and it delineates variation in these attitudes by gender. Finally, it determines the role of financial attitudes in shaping black men's and women's financial well-being.

Method

Sample and Procedure. The sample consists of African-Americans or blacks residing in the United States (N=437) recruited from Amazon Mechanical Turk, a crowdsourcing data collection platform. Following an IRB-approved protocol, prospective participants were given the option to participate in a study entitled "Family Financial Socialization Experiences in Black Families:" individuals selecting "yes" to consent to participate were granted access to the study survey. Participants who completed the survey were compensated \$0.75.

Measures. Financial attitudes and financial well-being are the primary focus of this analysis. Financial attitudes were measured using the 51-item Klontz Money Scripts Inventory (Klontz and Britt, 2012). Total scores were constructed for each attitude, as were clinical thresholds for each attitude. Financial well-being was assessed using the 10-item Consumer Financial Protection Bureau Financial Well-Being Scale (2017). Results: Intercorrelations among the four financial attitudes ranged from r = 0.70 to r = 0.85 among Black men, and from r = 0.44 to r = 0.71among Black women. Average scores on avoidance attitude were 51.6 (SD=13.3) and 46.7 (SD=12.3) for men and women, respectively, and average scores on money worship were 44.0 (SD=9.7) and 43.2 (SD=9.6) for men and women, respectively. Men's and women's average status scores were 47.4 (SD=13.1) and 41.8 (SD=12.4), and average vigilance scores were 46.9 (SD=9.7) and 45.2 (SD=8.5) for men and women. Greater than 93% of Black men met the clinical cut point for each financial attitude, and 87.9% of Black women met the clinical cut point for each financial attitude. More Black men than women met the clinical threshold on the avoidance and status financial attitudes. Comparable percentages of Black men and women met clinical levels of money worship and money vigilance. In regard to financial well-being, men and women had comparable financial well-being scores (M=27.21, SD=5.30; M=26.22, SD=7.78, respectively). Results from ordinary least-squared regression models indicated that all four clinical money attitudes: money avoidance, money worship, money status, and money vigilance were associated with financial well-being among men. Meeting clinical thresholds for money avoidance and money worship was associated with poorer financial well-being, while meeting clinical thresholds for money vigilance and money status were associated with better financial well-being. For women, clinical levels on financial attitudes were not associated with financial well-being.

Conclusions & Implication for Practice

The findings in this study suggest the KMSI behaves differently in Black samples: average levels of financial attitudes were elevated in this sample of Black adults, and the intercorrelation among financial attitudes was substantially stronger – especially among men. Further, 90% of the sample had scores on all the financial attitudes that "warrant further inquiry," suggestive of possible pathogenic views of money. Yet, clinical thresholds of two financial attitudes (i.e., status and vigilance) was associated with better (not worse) financial well-being among Black men, and all financial attitudes were unassociated with Black's women's financial well-being.



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Practitioner's Forum



Alternative Methods of Evaluation: Digital Tools for a Mobile World

Natasha Parks and Lisa Hamilton, AFC®, University of Florida IFAS Extension

Key words: digital methods, program evaluation, survey data

Target audience

Financial counselors, coaches, planners, and educators, extension agents, funders

Objective/Purpose

To demonstrate methods, tools, and tips for performing digital evaluations in the classroom or counseling session that can help increase the efficiency and accuracy of program evaluation.

Description

Evaluation is a critical component of effective financial education and counseling, but many practitioners find it challenging to collect, compile, aggregate, and analyze data. Implementing digital evaluation in the classroom or session can improve data collection and evaluation of outcomes. Two extension agents used Qualtrics software to administer pre-class and post-class surveys via smartphones, tablets, and laptops in financial and home buyer education programs. Participants were provided with a URL or link (via email or text) to the surveys. Surveys in the financial class received real-time scoring. Surveys in the home buyer class collected HUD-required demographic data and subject-matter knowledge gain. To date, 248 individuals from the financial programs and 116 participants in home buyer programs completed electronic pre/post surveys. Across both programs, 86% of participants completed surveys using digital devices. The remaining 14% completed paper versions of the surveys.

The agents found that digital pre-post surveys significantly reduced the amount of time required to collect, aggregate, and analyze the data. Using in-class, real-time evaluation, participants and agents were able to see evidence of knowledge gained from the program. Agents were able to edit or remove ineffective or confusing language and questions from the surveys. Scoring the post-test in the classroom is an effective tool for reinforcing learning for participants.

This forum will provide a real-time demonstration of software and surveys that can be used to collect client data and/or conduct program evaluation. Participants will receive a list of software that can be used for services via mobile devices. Participants will also receive a toolkit with sample surveys and step-by-step instructions for implementing evaluation utilizing digital devices.

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Basics of Investing: Understanding How to Invest Wisely

Alan E. Sorcher, Assistant Director Office of Investor Education and Advocacy, U.S. Securities and Exchange

Commission

Key words: bonds, investment fees, investment products, mutual funds, stocks

Target Audience

The presentation is intended for practitioners, including financial counselors, educators, and financial coaches.

The U.S. Securities and Exchange Commission's mission is to protect investors, maintain fair, orderly, and efficient markets, and facilitate capital formation. As part of its mission, the SEC oversees the key participants in the securities markets, including securities exchanges, securities brokers and dealers, investment advisers, and mutual funds. The SEC's Office of Investor Education and Advocacy advances the agency's mission of investor protection by responding to investors' complaints and inquiries, and providing educational programs and materials.

Objectives/Purpose

The purpose of the presentation is to raise practitioners' understanding of the importance of starting to save and invest early and the basics of investing, including the different kinds of investment products, the potential risks and benefits of investing and how fees can impact portfolio performance. The presentation will help practitioners be able to make a plan to get started and point clients to resources that can get them investing.

After this presentation, participants will:

- Understand the potential risks and returns of investing and the benefits of starting early
- Know the different kinds of investment products
- Be aware of how fees can affect portfolio performance
- Know the questions to ask before investing and choosing an investment professional
- Be able to identify the warning signs of investment fraud
- Be able to direct clients to free investor resources, tools, and calculators

Description

The presentation, with PowerPoint slides and videos, will provide an overview of the basics of investing and why it is important to start investing early. Whether you are a financial counselor or financial coach, or service member or older American, learning how to invest safely can mean a big difference for retirement. Topics will include stocks, bonds, mutual funds, investment risk and return, the red flags and common scams of investment fraud and questions to ask before investing. Discussion will provide an overview of the free resources on Investor.gov, the SEC's online portal for individual investors, including investor bulletins and alerts, tools to check financial professionals, sources for researching companies and savings and retirement calculators.

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Building the Capacity of Financial Counselors and Financial Coaches to Serve People with Disabilities

Michael R. Roush, MA, AFC®, Director, Real Economic Impact Network, National Disability Institute

Key words: disability, disability community, disability data, financial needs, financial coaches, financial counselors

Target audience

- Financial Counselors
- Financial Coaches

Objective/purpose

- Understand the unique financial needs of people with disabilities
- Describe key findings and recommendations from survey
- Identify tools and resources to build capacity to serve people with disabilities

Description

In 2019, National Disability Institute administered a survey to gain a better understanding of the needs of financial counselors and financial coaches to serve people with disabilities. The survey identified that counselors/coaches often don't understand who people with disabilities are, how to serve them and what programs and supports exist. This session will provide an overview of the disability community, unique financial needs and challenges, findings and recommendations from the survey and highlight tools and resources that practitioners can access to build their capacity to serve people with disabilities within their financial counseling/coaching program. This session will provide an overview of the new Financial Inclusion Essentials online course developed by National Disability Institute and AFCPE.

This session will be delivered in a lecture format with interactive questions presented to the audience.

Impact/value to the field

The disability community is one of the fastest growing demographics in the United States representing 40 to 57 million individuals currently and over 26 percent of household in the United States have a child or adult with a disability. People with disabilities are more likely to be low-income and in need of financial counseling/coaching services. The results from the survey identified the need for practitioners to have access to tools and resources to build their awareness and knowledge on how to provide guidance to people with disabilities.

Questions or implications for researchers to help further improve the program/project tool.*

 How do we close the gap and build the capacity for financial counselors and coaches to serve people with disabilities?

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Changes to Thrift Savings Plan Withdrawals

Mei Shan Josephine Kammer, Federal Retirement Thrift Investment Board

Key words: thrift savings plan, TSP, TSP Modernization Act, post-service withdrawals; traditional TSP withdrawal

Target Audience

Personal financial program managers (PFMs), educators, and counselors working in military environments.

Objectives/Purpose

The objective is to provide education for military financial program managers, counselors, and educators to serve as a foundation from which they can build their own TSP curriculum. The knowledge about the changes to the Thrift Savings Plan will enable them to relate the most up-to-date information to their clients.

Description of Content and Method

The Thrift Savings Plan (TSP) is the federal government's defined contribution plan, and it works much like a 401 (k) plan. Uniformed services members can contribute a portion of their pay to their TSP accounts and have options to decide how that money should be invested. When they reach retirement age, TSP participants decide how best to use the money that's accumulated in their accounts through contributions and earnings.

With the passage of the new law TSP Modernization Act (PL 115-84), The Thrift Savings Plan (TSP) provides opportunities to maximize the growth potential of the savings in the TSP account continuously through retirement. Beginning September 15, 2019. TSP participants will have more options for how and when they can access money from their TSP accounts. Participants will be able to choose whether their withdrawals should come from their Roth balance, their traditional balance, or a proportional mix of both. These options are available for all types of withdrawals. If participants are 591/2 or older and still working in federal civilian or uniformed service, they can take up to four in-service withdrawals each year. After participants separate from service, they can take multiple postseparation partial withdrawal. Post-service withdrawals can be taken by monthly, quarterly, or annual installment; and participants can stop, start, or make changes to their installment payments at any time. Participants can take partial withdrawals while receiving post-separation installment payments. Having taken age-based in-service withdrawals will not prevent participants from taking post-separation partial withdrawals. Participants are no longer need to make a full withdrawal election after they turn 701/2 and are separated from federal service. They will still need to receive IRS required minimum distributions (RMDs). Participants can use the enhanced online tools to help them make withdrawals in the My Account section of tsp.gov. The online tools can benefit TSP participants and beneficiaries in planning their withdrawals more efficiently. The withdrawal wizard tool will also greatly reduce the chance of errors that could cause delays, rejections, or unintended withdrawals that can't be reversed. Beneficiary participants, the spouses of deceased TSP participants who have had TSP accounts established for them, can make all the same withdrawals as separated TSP participants.

Topics covered in this session include: TSP flexible withdrawal options associated; age-based in-service withdrawals; post-service retirement income options; partial withdrawals; monthly, quarterly, and annual installments, and life annuities; tax options for withdrawals; transfers to and from the TSP and other eligible retirement plans exception to IRS early withdrawal penalty; TSP expenses; and online withdrawal tools. We will also examine how the withdrawals options will allow participants to satisfy the Inland Revenue Service's required minimum distribution.

TSP publications on tsp.gov: Fact Sheet: Questions and Answers about Changes to TSP Withdrawal Options (05/2019); Tax Notice: Important Tax Information about Payments from Your TSP Account; Publication: Withdrawing from Your TSP Account for Separated and Beneficiary Participants (09/2019).

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Conflict Resolution for Elders: Mediation as a Tool for Resolving Relationship Conflicts Related to Financial Planning for Seniors

Marcy Einhorn, Esq., Conflict Resolution for Elders

Keywords: conflict resolution, mediation, seniors

Target Audience

The target audience for this session was financial planners and coaches who serve seniors, as well as researchers interested in the complex issues seniors face who are making financial life-cycle decisions.

Objectives/Purpose

Three objectives were met in this session:

- Participants were able to identify the pressures that may trigger a conflict between seniors and their family members or support team.
- Participants were introduced to mediation as a tool for resolving conflicts that arise during financial planning and coaching sessions.
- Participants explored various methods for breaking through any potential impasse in order to move the planning process forward.

Description

The first 10 minutes of the session were devoted to a discussion of the pressures that commonly trigger conflicts for seniors engaged in life-cycle planning, including a discussion about preservation of the senior's autonomy and consideration of the senior's capacity to participate in the proceedings.

The next 5 minutes of the session introduced the attendees to the definition of mediation and the basic concepts that distinguish mediation from other conflict resolution modalities.

The next 5 minutes included an examination of methods for breaking through the parties' resistance to a resolution.

The next 10 minutes were used to conduct a role-play with the participants.

The last 5 minutes were devoted to Q and A.

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Effective Coaching Models to Structure Coaching Sessions

Lucy M. Delgadillo & Cindy Stokes, Utah State University

Key words: coaching assessment, coaching models, financial coaching, goal setting

Target Audience

Practitioners in the financial field and novice financial coaches who are interested in learning more about coaching models and coaching strategies.

Objective and Purpose

This session will provide an overview of three financial coaching models. Coaching models are structures or frameworks that hold and guide the coaching process. Using a model helps in a number of ways. It helps to provide a purpose to the financial coaching sessions and to prevent sessions from becoming a 'chat' with no clear purpose. It can also be a prompt to ensure that the session stays 'on track'. Coaching models are different from coaching skills. The latter refers to the tools a coach uses. Coaching models are particularly useful for novice financial coaches who may need guidance and support around setting a focused agenda for the session, allowing ample time to engage clients in self-discovery, and defining a clear curse of action based on clients motivation and resources. The method of choice for this practitioner forum session is Active Experimentation. Attendants will have the opportunity to practice each model by working with a partner or partners on different scenarios. This section will train them how to use these models and what kind of questions to ask in each stage. The session will conclude by motivating the participants to create their own "coaching model".

Description of Content and Method

The **A|4 model** was developed specifically for financial coaching. This model integrates concepts from behavioral economics, positive psychology, and neuroscience, and is built around four essential elements. *Alliance:* Establishing a positive relationship between the coach and the client to provide the foundation for coaching. *Agenda:* The coach assists the client in defining long-term financial goals and a focus for each coaching session. *Awareness:* In each session, the coach guides the client in exploring his or her perspectives, resources, and motivations around one aspect of the goal. *Action:* Each session ends with a well-defined plan, created by the client with the coach's support and guidance, to increase positive financial behaviors and move toward the long-term goal.

The **COACH** model stands for C = Client-driven goal setting (What is the client's goal? What does reaching your goal look like?). O = Ongoing assessment of current situation (What is the client's current situation? What does your current situation look like?). A = Action planning (What steps will the client take to get from here to there? What has to happen to reach your goal? What's the first step you could take?). CH = Checking (What will keep the client on track? What will you do by when? How will I know?).

The **GROW** model is probably the most widely known and used model outside financial coaching. Nevertheless, it is very adaptable to a financial situation. GOAL: After Establishing Rapport And Connection, Come Up With A Coaching Agreement. Remember there should be a correlation between the topic of coaching and the specific outcome. REALITY: Describe current situation. Uncover real issues. Use open-ended questions. METAPHOR: Peel away the layers of the onion: strip away assumption and judgments. OPTIONS: Explore options how to move forward. Start by asking open-ended questions – to create a baseline. What to do if the coachee feels blocked? WRAP-UP/WAY FORWARD: Once they have described their preferences, describe their reasons for their choices. Coachee arrives at one final option, and facilitates the option by breaking it down into specific action steps.

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Facilitate Financial Self-Efficacy by Linking Cash Flow Management and Life Planning Processes

Amy Mullen, CFP®, Carol Anderson, MS, Money Quotient, NP

Key words: adult development, adult education, appreciative inquiry, behavioral finance, cash flow planning, family resource management, financial coaching, financial counseling, financial education, financial life planning, financial therapy, life planning, personal financial planning,

Target Audience: financial educators, financial counselors, financial planners, academics and researchers

Objective/Purpose:

- Learn a researched-based, multi-disciplinary approach to motivating and equipping individuals to take charge of their financial lives.
- Understand the reasons why most financial educators, counselors, and planners dread initiating cash flow and life planning dialogue with their constituents, and how to overcome those concerns.
- Learn how linking cash flow management and life planning processes will facilitate effective and inspiring long-term commitment to goals-based personal finance strategies.
- Learn how to create a simple, yet powerful, decision-making framework based on the student's or client's own values and priorities.
- Nurture self-efficacy and financial capabilities in the lives of those you serve by utilizing time-tested tools and processes.

Description of Content and Method

Cash flow management and life planning processes provide immeasurable value when integrated into financial education programs, financial counseling services, and financial planning relationships. By integrating these two processes, research shows that you will be more effective in engaging your constituents and empowering them to affect positive change in their lives. Help clients and students to focus on what is truly most important to them, and provide tools that will empower them to survive and thrive at all stages of life and in all market conditions.

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Families and Money: The Money Circle Toolkit from CFPB

Susan G. Kerbel, Ph.D., Consumer Financial Protection Bureau

Key words: CFPB, families and money, financial education, financial education tools, professional development

Target Audience

Any financial educator or financial planning practitioner who is interested in a simple and effective way to support their clients in overcoming family and emotional obstacles to following through on their financial goals.

Objectives/Purpose

The Money Circle Toolkit is a set of tools developed for financial educators by the CFPB to help begin in-person conversations with clients about family influences on money decisions. The Toolkit aims to increase understanding by both educators and their clients of how family members can impact financial choices. It represents an effort on the part of the CFPB to bring some of the "soft skills" of one-on-one financial coaching to a broader range of financial educators, without requiring extensive training or time commitment. It is also an opportunity to participate in the kind of self-insight exercises requested by practitioners for the purpose of professional development.

A supplement to traditional financial education exercises, the Toolkit provides practical, engaging, hands-on exercises that can help clients overcome obstacles to staying on track for financial goals with an investment of about 20 minutes per exercise. It can help financial educators discover important parts of a client's financial story that may not come up otherwise, or may be difficult for clients to bring up. This can clear a path to insights into the origins of financial challenges, and lead to more realistic financial planning, and better client engagement and follow-through.

Description

The Toolkit is grounded in three empirical reviews on families and money commissioned by CFPB that serve as the conceptual foundations of the Toolkit (below). The practice elements embedded in the Toolkit are deeply rooted in family systems theory, and culturally competent practice. The tools are as self-explanatory as possible, so that educators can use the tools with little prior knowledge of its theoretical or research foundations.

The Toolkit underwent three stages of development, including two (2) rounds of qualitative user testing with a wide range of financial educators. Field testers reported that the Toolkit helped them to solve problems they did not know they had or did not know were solvable (as one example, hidden or unreported money relationships in the family). Moreover, clients became noticeably more engaged, gained insights on their relationship with money, and had deeper financial conversations when using the Toolkit. Educators gained a better understanding of client motivations and needs from using the Toolkit as well. In short, findings suggest that the Money Circle Toolkit can contribute to helping clients overcome obstacles to staying on track for their financial goals, as designed.

The Toolkit consists of three tools, each with an interactive client exercise, and a companion discussion guide for the educator. The package includes an Introduction to the Toolkit for the educator as well. It can be downloaded here: https://www.consumerfinance.gov/practitioner-resources/adult-financial-education/tools-and-resources/#money-motivations

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Financial Education: Make it Stick for Longer-Lasting Impact

Susan Sharkey, Senior Director, Learning and Content Development, National Endowment for Financial Education

Key words: curriculum, financial education, personal finance, teacher training

Target Audience

This workshop targets practitioners and educators who plan for and/or facilitate financial education experiences.

Objective/Purpose

In this forum, participants explore factors with the potential to boost impact for learners who take part in financial education experiences. Personal finance practitioners and educators will be armed with practical approaches to deploy when choreographing learning experiences, aimed at prolonging the benefits of financial education learning experiences.

Collectively, the field of financial educators and program designers gain an awareness of the value for intentionally planning how financial education learning experiences are packaged and executed. Engaging the field in thoughtful reflection of how interventions are carried out provides opportunities to share and scale promising practices. Individually, practitioners are challenged to routinely reflect on the impact of their own efforts to leverage what is working and adjust methods where needed to improve effectiveness.

Description

Financial educators, researchers and practitioners have learned that any type of financial education based on knowledge and literacy will fade over time — but programs that create behavior change have longer-lasting effects. Timing matters when teaching personal finance concepts. Research shows that the impact of education on behavior varies with how much education people receive and when they get it in relation to relevant decisions or behaviors.

Via presentation, discussion and reflection, this workshop focuses on reviewing the correlation between financial education framework and results as well as examining key factors that can improve the "stickiness" of financial education. Participants will leave the workshop with guidelines for planning effective learning experiences and questions to address when evaluating the impact of learning interventions.

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Financial & Legal Tools for Caregivers Facing "Double" Estate/Legacy Planning

Marsha A. Goetting, Montana State University Extension

Key words: Alzheimer's dementia, caregivers, estate planning, legacy planning

Target Audience: Caregivers

Objectives/Purpose:

Develop an educational packet for distribution to caregiver's by MSU Extension and members of the Montana Alzheimer's Workgroup. http://alzheimers.msuextension.org/

Description: According to the Alzheimer's Association Alzheimer's is the sixth leading cause of death in the United States. As a result of caregiving, thirty-five percent of family caregivers report their health has become worse. And, 18 percent of those caregivers die before their loved one. Thus, a caregiver must give priority to not only completing an estate plan for him/her self, but also for a loved one with Alzheimer's.

In 2014 a voluntary group of representatives from state agencies, care facilities, physicians, nurses, educators, caregivers—all who have been affected by Alzheimer's and who are passionate about improving dementia care—came together to develop a Montana Alzheimer's/Dementia State Plan. Town Halls were conducted to assess community needs in 11 communities across the state. One of the concerns expressed by the attendees was the lack of legal and financial information specific to Montana. Participants were also adamant that "not all families have access to computers or reliable internet service." As a result, one of the recommendations in the state plan was to "create and provide a legal and financial awareness packet for health care providers to distribute to their patients with dementia, as well as their caregivers."

Montana State University Extension, the Alzheimer's Association-Montana Chapter, AARP-Montana, and the Montana Senior and Long-Term Care Division formed a partnership to provide resources for inclusion in the packet. Grant funds from the Mary O'Neill Mini Grant from AFCPE were utilized for the printing of materials and folders. Marketing tools, for example, placemats and table tents, were created focusing on Alzheimer's facts on one side and the availability of the packet on the reverse side. These awareness tools were utilized at local Senior Centers, restaurants, and group meeting. A news release was printed in statewide newspapers.

Alzheimer's Workgroup members who presented workshops across the state utilized the table tents. MSU Extension agents featured the packet and business cards on the counters in their offices. Extension Agents also wrote personal letters to local doctors, physicians' assistants, and advanced registered nurse practitioners to inform them of the availability of the packets for distribution to their patients.

For evaluation purposes the packets contained an assessment form with a scale of 1 (low) - 5 (high) for rating usefulness of the content, how beneficial the packet was, and how likely the participant would recommend the packet to others. The participants were also asked to share any actions they have taken as a result of reading the MontGuides. A postage-paid business reply envelope was included in the packet for returning the assessment form. In September assessment forms will be summarized for sharing at the AFCPE Symposium.

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Financial Knowledge and Financial Behavior among Millennials

Yoon Lee, Alena Johnson, Cindy Stokes, Alana Stowe, Ellie Hansen, Utah State University

Key words: financial behavior, financial coaching, financial counseling, millennials

Description of Content and Method

Millennials are different from other generations. They are the largest generation in United States history; thus, their financial behavior has the potential to greatly impact the economy. Little research has examined the association between financial knowledge and behavior among millennials. Using data from the 2015 FINRA Investor Education Foundation's National Financial Capability Study (NFCS), this study examined the association between financial knowledge and financial behavior among the millennial generation and how the association differs across socio-demographic characteristics.

Purpose

The purpose of this study was to examine the relationship between financial knowledge and financial behavior among millennials. In this study, financial behavior was measured by holding emergency savings, having a revolving saving fund, having investments for long term financial goals, and having retirement accounts.

Impact/Value to the Field

The findings of this study provide some insights for financial professionals such as counselors, coaches, planners, and educators when evaluating and discussing the role of financial knowledge in millennials' making major financial decisions. The findings can also give insight as to how millennials' financial knowledge relates to implementing financial behavior.

The following discusses the findings of specific demographic characteristics such as gender, living arrangements, financial education, and employment and how financial professionals can use the findings of this study.

- 1. Financial coaches can work with women, especially young, single women, and help them implement good financial management practices. Other professionals may also find it helpful to encourage young women to take steps to improve their finances as an individual.
- 2. Financial professionals such as counselors and advisors can have discussions with parents of adult children living at home. Often, parents feel that they are helping their adult children by allowing them to live in their home; but parents can be cautioned that the adult children living in their home may not be developing good financial behavior when it is not a necessity for them. Parents with younger children can start early to teach and help instill a future attitude in their children when it comes to money management.
- 3. Financial planners can emphasize behaviors such as living within means and having liquid savings in both informal and formal financial education settings. The results of this study indicated financial education did not significantly impact such financial behaviors.
- 4. Financial educators can try to encourage desirable financial behavior while the individual is still in school. Full-time students had more education, but showed less good financial behavior. It is hopeful that those with more behavior-focused formal education will improve their financial behavior and continue the behavior after they graduate.

Implications

This study identified several groups that need attention including females, those living with parents, those with less education, full-time students, and those not working. Practitioners should be more aware of these individuals and their greater need for financial education and assistance. The study showed that millennials had above average confidence in their financial knowledge, but their behavior did not necessarily reflect that confidence or financial



knowledge. When financial professionals work with millennials as clients, accountability may well be a crucial component for sessions. Even when the clients seem to know what they need to do, following up with them to encourage the actual behavior may show important results.

Target Audience

The target audience is financial practitioners and educators who work with young adults such as millennials. The findings of this study provide a range of helpful information for practitioners to design programs for specific demographic characteristics (gender, education, marital status, employment status, etc.) that have the potential to influence millennials' financial behavior.

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Golden Nuggets and Nuisances of Credit Report Policies: Stories from the Field

Axton Betz-Hamilton, South Dakota State University; Barbara O'Neill, Rutgers University

Description of Content and Method

Many financial counselors and planners encourage clients to place a credit freeze in order to be protected from identity theft victimization. A credit freeze effectively locks an individual's credit file (e.g., credit report), limiting the opportunity for identity thieves to establish new credit, utility, and other financial accounts in his/her name. Placing a credit freeze became free for U.S. residents on September 21, 2018, per the Economic Growth, Regulatory Relief, and Consumer Protection Act (Federal Trade Commission, 2018).

While freezing one's credit report can reduce the risk of identity theft victimization, accessing one's credit report can be a means of discovering identity theft victimization (Grant, 2015). The earlier a victim discovers his/her identity has been stolen, the sooner the crime can be reported, and the identity theft recovery process can begin.

This session will be co-led by a five-time financial book author and an author of a book on identity theft victimization. It will include an overview of policies relevant to credit reporting and identity theft victimization and relevant stories. Stories are strong method for transmitting information, as "narrative information is retained for lengthier periods than factual information" (Negrete & Lartigue, 2010, p. 104). One story will focus on an individual placing a credit freeze after the 2017 Equifax hack and by doing so, not being able to open a savings account at a depository institution until the credit freeze was temporarily lifted. Another story will focus on an individual ordering a credit report after being requested to pay a security deposit for utility services and discovering she had been a victim of identity theft for nearly a decade. The presenters will then open the floor for audience members to share their stories with credit freezes and credit reports and identity theft victimization. The session will conclude with a large group brainstorming activity of how the financial counseling and planning field can assist clients who encounter these challenges and improve public policy. Helpful resources will also be shared.

Objectives/Purpose

- 1. Participants will learn about potential pitfalls of credit freezes.
- 2. Participants will learn about the role credit reports can play in discovering cases of identity theft victimization.
- 3. Participants will develop meaningful connections with other session attendees through the sharing of stories and experiences.
- 4. Participants will use the information that is presented professionally and/or personally.

Impact/Value to the Field

Given the likely increase in credit freeze participation due to the incidence of widespread hackings (e.g., Equifax, Marriott, Capital One) and it being a no-cost tool for consumers nationwide, it is important for financial counselors and planners to be aware of unintended consequences clients may experience as a result of freezing their credit. Moreover, it is important for professionals to understand that having access to a credit report may hasten the discovery of identity theft victimization, which is sometimes committed by people that that the victim knows.

Target Audience

The target audience is professionals who teach or counsel people about credit and identity theft issues and who, themselves, may encounter such issues. The workshop will provide useful background that can easily be implemented by attendees in their work practice setting.

Questions or Implications for Researchers to Help Further Improve the Program/Project Tool

Two potential research questions are: (1) What are the experiences of individuals who place a credit freeze? and (2) What are the experiences of identity theft victims who discover their victimization via their credit report?



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How to Include Emotions without Being Touchy-Feely

Syble Solomon, LifeWise Strategies / Money Habitudes; Betty Ann Falkner, AFC®, Center for Smart Financial Choices; Michael G. Thomas Jr., Ph.D., AFC®, University of Georgia

Key words: behavioral finance, communication skills, consumer confidence, financial behavioral change, financial capability, financial counseling, financial literacy, financial game, financial tool, money mindfulness, money personality, self-efficacy

Target Audience

People working with individuals, couples, classes or programs from teens to older adults related to money.

Objective/Purpose

- 1. Understand the research and practical reasons for including the emotional piece in financial education.
- 2. Gain new ideas on how to use Money Habitudes, a money personality profile, to start conversations and provide the emotional aspect of financial behavior in a variety of financial education settings.

Description

A relatively new addition to the field of financial education is research showing that financial behavior tends to be more emotional than rational. We now know that money behaviors and emotional patterns are so intertwined that teaching financial skills should logically go hand-in-hand with giving people insights into their own emotional patterns. This is especially important when there is a pattern of counterproductive behaviors. But how do we do that? Can we help others identify underlying emotional messages, triggers and reinforcers without being a therapist? Is addressing what motivates and reinforces others' financial behaviors our job? For many of us, this feels outside of our comfort zone!

We will share how a simple game-like money personality profile called Money Habitudes® is used to make it easy and rather straight-forward to bring emotional self-awareness and personal stories into different financial education settings. No counseling skills are required. No reason to fear opening pandora's box and not being able to handle it. This nonjudgmental, non-threatening activity allows people to relax and promotes self-awareness. It also provides an effective prompt to start difficult conversations about money. It even helps people become more open to new perspectives and insights about their behavior so they are able to take more control of their money and lives.

The outcome of this self-awareness alone can be eye-opening and promote changes in financial behaviors. Those changes may be spontaneous, achieved with intentional strategies or by working with a counselor to address life issues impacting financial behavior. Without that self-awareness, people are wired to continue to repeat the same behaviors which often provide immediate relief or satisfaction, but sabotage short and long-term financial goals.

Instructors at the University of Georgia utilize Money Habitudes to help students cultivate soft skills that promote higher levels of financial well-being. These soft skills are rooted in personal and social awareness as well as the ability to have productive conversations about money. Students learn to see their strengths and opportunities for growth in a balanced and practical fashion and develop strategies to avoid or overcome predictable obstacles.

At the Center for Smart Financial Choices, the discussion of financial behaviors and attitudes begins by using Money Habitudes. In an employer-sponsored program, they were contracted to work with cosmetologists who come to the class with fear and trepidation knowing that the way they have been using money has not worked for them. When their eyes are opened to their money personality, suddenly everything seems to make sense which motivates them to change their behavior. They have found similar results using Money Habitudes in programs with high school and university students, non-profit staff and clients, and previously incarcerated individuals.

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Money in Motion: Taking Positive Financial Steps Through Life Transitions

Amanda Christensen, AFC, MS, Utah State University; Alena Johnson, AFC, MS, Utah State University; Luke Erickson, AFC, Ph.D., University of Idaho; Elizabeth Vance, Utah State University

Key words: credit reports, credit scores, financial education, life transitions, online education

Description of Content and Method

When life transitions happen, even good ones, the change can be more stressful when individuals and families are not prepared financially. The Utah Money Course, an online personal finance course for the public, focuses on real-life money smarts to help with life's transitions. Available to use in counseling, coaching, or educational settings, the course includes seven modules that focus on financial essentials for those in transition, such as first-time money managers, recent college graduates, newlyweds, divorcees, etc. Modules are designed to be quick but impactful financial action plans for those "in motion." Topics include money habits and attitudes, tracking expenses, budgeting, managing debt, understanding credit, and saving. Insurance, investing, and homeownership are additional bonus modules.

This presentation will focus on the module about understanding credit. Attendees will experience the module's content, style of delivery, and will be introduced to a worksheet that helps access and analyze information on credit reports. The Credit Report Analysis Worksheet starts with instructions on how to look at a credit report on annualcreditreport.com, including tips for answering the identifying questions and choosing a credit bureau. The worksheet then walks individuals through the process of searching out content that is helping or hurting their credit score and explains what they can do about it to be better prepared for major life transitions such as homeownership.

Financial educators frequently focus on helping people understand why they should regularly pull copies of their credit reports and how to access them for free. Many individuals don't know what to look for when they examine their own credit report. Educators could be better at offering additional guidance on how to interpret a credit report to help individuals increase their credit score. Attendees will have the opportunity to evaluate the worksheet and provide feedback.

Objective/Purpose

The Utah Money Course provides the background and tools for people in financial transition to make sound money decisions. Information learned can direct users to a path of financial wellness and freedom of choice, and help prevent the path leading to increased debt burden and further financial anxiety. This presentation will share information about a new online money management course for the public and collect feedback on a worksheet from the course designed to help individuals analyze their credit report to improve their credit score.

Impact/Value to the Field

While there are certainly many great financial resources available online, few are specifically designed for those in pivotal life transitions. These modules are specifically designed to be delivered in a short amount of time, and direct participants towards meaningful actions that can make lasting positive impacts on their household's finances. The online availability of this resource makes it easy for other professionals to use in counseling, coaching, or educational settings.

Target Audience

Financial educators, counselors, coaches, Extension faculty, and parents.

Implications for Research



There may be opportunities for collaborative research with those who are interested in finances and life-transitions, a relatively under-researched topic area. The effectiveness of the credit report analysis worksheet could also be a topic for future research.

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Paying for Healthcare or Daycare? FSA, HSA, and HRAs Can Help!

Jesse Ketterman, Jr, University of Maryland Extension, Maria Pippidis, University of Delaware Cooperative Extension

Key words: flexible spending accounts, health savings accounts, health retirement accounts, tax-advantaged strategies

Target audience

Flexible Spending Accounts, Health Savings Accounts, and Heath Reimbursement Accounts are tax-advantaged strategies that you can use personally or as tools for the financial counselor in planning for health care expenses as well as budgeting.

Objectives/Purpose

(1) Understand ways to save on health care costs using tax advantage health care savings accounts. (2) Understand the differences between Flexible Spending Accounts, Health Savings Accounts, and Health Reimbursements Accounts and how to use them.

Description

What is a FSA account?

A flexible spending account is a tax-advantaged tool that can help you save for health and dependent care expenses such as medical costs, childcare, and other health services. Tax-advantaged means the money goes into the account prior to taxes being taken out. This means you save money on taxes and have money set aside for eligible healthcare and dependent care expenses. Each plan year you would need to re-enroll in your FSA. Be aware that funds generally must be used by the end of the plan year, and therefore any money left over is forfeited.

What is a HSA account?

A Health Savings Account (HSA) is a medical savings account available to you if you have a HSA-qualified, high-deductible health insurance plan (HDHP). The best way to figure if your plan qualifies is to ask your benefits office or insurance provider. If the plan is HDHP, you are able to open a HSA. This account allows you to save pre-tax dollars for qualified medical expenses. This provides the same tax reduction benefits as Health FSAs. Contributions can be made by you and/or your employer, but you are the account owner. Funds do carry over from year to year and can be transferred to your spouse's HSA. Any funds that would transfer to another beneficiary would be taxable.

What are the benefits of having a FSA or HSA account?

FSAs and HSAs put your pre-tax dollars to work. Why is this important? Pre-tax dollars means that the money is set aside before taxes (Federal, FICA, and State) are taken out of your paycheck. Setting money aside in this way, before taxes, has two benefits: (1) Setting this money aside before taxes lowers your end-of-year tax bill because it lowers your taxable income. Therefore, when taxes are calculated it is based on the lower income amount. (2) Because the money is going into the account before taxes are taken from it, you get to keep the amount that would have been taken for taxes.

What is a HRA?

A health reimbursement account is similar to the HSA expect it is owned by the employer. It can be used toward qualified medical expenses and may role over from year to year. If the employee leaves the company or loses their job, the funds remain with the employer.

For more information visit our website at https://extension.umd.edu/insure/consumer-resources.

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Play with a Purpose: Family Financial Engagement Using Stories and File-Folder Games is a Win for All

Dorothy Nuckols, University of Maryland Extension

Key words: children, family, financial literacy, learning games, literature learning, screen-free games, two-generation

Target Audience:

Counseling Practitioners and Educators who work with families, parents, and caregivers. Program is geared toward parents/caregivers and young children ages 4-9.

Objective/Purpose:

Financial illiteracy is widespread. Parents and guardians play a key role in their children's financial socialization (VanCampenhout, 2015). Parent-child programs can have the effect of educating both generations. In view of the central role of parents in the financial socialization process, family engagement in financial counseling and education is a win for all. This program teaches money skills and provides tools for parents to have continued engagement in their children's financial socialization. Best yet, money skills are learned through stories, games and crafts. There are many benefits to this approach, especially:

- Financial capability is learned in a fun, engaging setting.
- Families engage together to make imaginative, personalized games that allow them to build in their own values and customs. Screen-free activities are timely and in keeping with the World Health Organization' recommendations for children (WHO, 2019).
- Children remain at a disadvantage if the parents are not sufficiently financially literate (Collett, 2016). A family education approach can break the cycle of uninformed economic decision making and poor outcomes that is frequently passed down from parent to child.

Description:

This two generation, activity based program uses children's literature and simple, customized games to teach financial concepts to both parents and children. This parent-child program starts with a money-themed children's story. Examples include *Curious George Saves his Pennies*, *Those Shoes*, *A Chair for my Mother*, and *If You Made a Million*. After the story, there is a counselor/educator guided game session, during which the families make and play their own game together. This allows the children to build and practice skills that help them understand counting, earning, and saving money. While making the games, the counselor/educator has the opportunity discuss with the parents strategies for teaching financial skills to their children. The games are made with file folders and other basic craft materials, do not require any artistic skills, are quick to make and easily transportable, and can be played later at home to reinforce skills. Families can make additional games at home on their own as they desire.

Workshop Content:

The presentation will include the background research and relevance for this program, strategies for using this program in both counseling and workshop settings, suggestions for literature, and game ideas. Participants will also have an opportunity to make a game.

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PowerPay.org: Updated and Expanded Online Debt Elimination Program

Darlene Christensen, MS, Utah State University; Dean Miner, MS, Utah State University, Amanda Christensen, AFC®, MS, Utah State University,

Key words: debt elimination, debt reduction, personal finance, powerpay, website

Description of Content and Method

Since being introduced as a QuattroPro template during the AFCPE poster session of 1992, PowerPay has been a familiar debt elimination tool for many in the finance education community. This presentation will detail new features and changes to what is now a popular online resource available to anyone without cost. Researchers, educators and financial counselors, private and non-profit, will find this tool beneficial to their work.

For those unfamiliar with the website, PowerPay calculates the potential interest savings and debt elimination time reduction from rolling over debt payments as each is paid. After entering their debt information, users view a payment calendar that compares benefits from each of four repayment sequences and a self-directed monthly payment calendar for them to follow.

After years of the software being sold to professionals, the program was converted to a free online tool in order to better facilitate Extension educators using PowerPay to teach the principles involved but lacking a client relationship needed for specific personal impacts.

Objective/Purpose

PowerPay.org was designed for use by consumers in addition to finance professionals. Animated tutorials now support those less comfortable with finance terms and formulas. Some new features that offer benefits to both groups are as follows.

First, users can now include future student loan debt as part of a long-term debt elimination plan. Previously all debts entered required monthly payments sufficient to cover accrued interest. This feature is expected to give students considering additional student loans a better understanding of the long-term costs and associated impacts such as home loan qualification.

Second, more information is available for consumers to use when deciding which repayment sequence to follow. As seen in Table 1, a new payoff chart readily compares not only interest savings and months until debt free, but also shows the payment time for individual debts under each repayment sequence. "Highest Interest First" saves the most money, but "Lowest Balance First" eliminates individual creditors more quickly. The consumer decides if emotional benefits outweigh dollar gains.

Third, affiliated users can now brand PowerPay printouts. Institutional logos can now be added to the options comparisons and repayment calendar screens plus hard copies.

Table 1: PowerPay Payoff Chart

	Highest Interest First @		Calculate as Entered ②		Shortest Term First @		Lowest Balance First ②		Without Power Payments ②	
Savings	\$16291.94		\$15997.16		\$15997.16		\$15633.07		\$0.00	
Time to Repay Debts	Family loan	11 mo	Family loan	11 mo	Family loan	11 mo	Family loan	11 mo	Family loan	11 mo
	Credit Union	1 yr 11 mo	Store Card	11 mo	Store Card	11 mo	Store Card	11 mo	Credit Union	1 yr 11 mo
	National Card	3 yr 2 mo	Big Card	1 yr 10 mo	Big Card	1 yr 10 mo	Credit Union	1 yr 1 mo	Big Card	4 yr 3 mo
	Big Card	3 yr 4 mo	Credit Union	1 yr 11 mo	Credit Union	1 yr 11 mo	Credit Card	1 yr 9 mo	Bank Loan	4 yr 6 mo
	Credit Card	3 yr 7 mo	National Ca	3 yr 6 mo	National C	3 yr 6 mo	Bank Loan	2 yr 3 mo	Store Card	6 yr 1 mo
	Bank Loan	3 yr 8 mo	Credit Card	3 yr 8 mo	Credit Card	3 yr 8 mo	Big Card	2 yr 7 mo	Credit Card	7 yr 6 mo
	Store Card	3 yr 9 mo	Bank Loan	3 yr 9 mo	Bank Loan	3 yr 9 mo	National Card	3 yr 10 mo	National Card	15 yr 7 mo

Impact/Value to the Field



PowerPay.org is frequently recommended and used (125,000 visits annually). Added features and animated tutorials will improve resource effectiveness.

Target Audience and Research Implications

This presentation is aimed at finance professionals helping clients get out of debt. Research questions abound, addressing student loan acquisition decisions to a consumer's choice between greater interest savings versus quicker elimination of specific debts.

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Rental Crisis: Financial Implications and Educational Solutions

Lori Hendrickson and Becky Hagen Jokela, University of Minnesota Extension

Key words: housing, renting, RentWise,

Target audience

This session is for those working in community programs with clients experiencing difficulty in finding and keeping affordable and safe housing that meets the client's needs. The curriculum is uniquely designed for those who teach tenants the skills to avoid legal confrontations, stressing dual responsibilities between tenants and property managers, helping them to acquire, sustain and aspire to meet their housing goals.

Objectives/Purpose/Description

Participants in this session will:

- Discuss the rental crisis in America.
- Recognize the needs for renter education in the current economy.
- Explore a curriculum that assists renters in becoming successful.
- Examine program follow-up survey data and impact.

A tight rental market and rising monthly rental costs, coupled with declining incomes sometimes means renters are making difficult financial decisions. For these households, housing costs may take priority over expenditures on food, clothing, medications and other items. This means that spending on training and skill development that can help families move ahead are often not addressed (Coburn & Allen, 2018). These choices make households more susceptible to homelessness and other negative life circumstances.

Individuals and families have the basic human right to access and keep safe, affordable housing in order to foster life well-being. This curriculum is uniquely

Being a successful renter impacts not only the individual obtaining housing, but family members living within the unit. The curriculum, by stressing renter and property manager responsibilities and highlighting communication provides individuals the skills to become successful renters.

During 2017-18 train-the-trainer workshops, 203 human service providers, volunteers and teachers learned concepts to sustain safe, affordable housing and strategies supporting individuals to become successful renters. In turn, they taught community workshops in which 72.73% of participants indicated they learned "a lot" about being a responsible renter. This indicates participants have learned the skills to become successful in their rental experience.

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Research snapshots: Telling the research story in 3 minutes with 1 slide

Katherine S. Mielitz, Oklahoma State University, Cherie Stueve, Kansas State University, Axton Betz-Hamilton, South Dakota State University, Yoon Lee, Utah State University, NaRita Anderson, University of Central Oklahoma, Yi (Bessie) Lui, Texas Tech University, Julie Miller, MIT AgeLab, Lance Palmer, University of Georgia, Miranda Reiter, Kansas State University, Mia B. Russell, University of Maryland Eastern Shore, Julie Szendrey, Walsh University, & Michelle Wright, Western Michigan University

Key words: Research to practice, bridging the gap, public scholarship, storytelling

Target Audience: Practitioners, Educators, and Researchers

Purpose:

The purpose of this break-out session is multi-fold. First, practitioners and educators will hear the origination and findings of research in an easily-consumable format. Leaders in numerous fields use research to help guide decision-making (e.g. Petryni, n.d.; Shafer, 2016). Second, researchers will effectively communicate their work in a condensed, easy-to-understand story that non-researchers can understand. In order to make informed decisions, practitioners must be able to understand, and relate to research (Brownell, Price, & Steinman, 2013). Finally, this creative break-out session will contribute to the ongoing efforts of AFCPE® to bridge the gap between research and practice through methods.

Description:

Facilitated by the AFCPE® Bringing the Gap Task Force, this session will be a highly-coordinated, rapid succession of 8 diverse researchers presenting a snapshot of their 2018-2019 *Journal of Financial Counseling and Planning* articles and 2019 Symposium presentations. Each presentation will be only three minutes using everyday language, creative storytelling, and a single PowerPoint slide. This succinct and simplified communication style is impactful in engaging audiences and providing relevant research in a manageable format for researchers and non-researchers alike. Over 600 universities in more than 65 countries have adopted a similar format for a contest known as the "3MT" (Three-Minute Thesis), developed by The University of Queensland in 2004. The audience will have an opportunity to engage with researchers after all presentations with questions and feedback.

Accepted presenters in alphabetical order:

NaRita Anderson: Long-term care insurance: It's a lot to think about

Research Title: Do Financial Knowledge, Financial Risk Tolerance, and Uncertainty Regarding Future Long-Term Care Need Influence Long-Term Care Insurance Ownership by Baby Boomers?

Yi (Bessie) Liu: Why Won't Retirees Spend Down their Savings Like They're Supposed to? A New Explanation Research Title: The Effect of Mortality Salience on Asset Decumulation Decisions

Julie Miller: Student Loan Debt in Family Systems

Research Title: The elephant at the dinner table: How borrowers make, negotiate, and experience student loan decisions within family systems.

Lance Palmer: Mindfulness and Money, Are They Related

Research Title: Exploring the Connection Between Self-Regulation, Financial Self-Efficacy, and Financial Behaviors.

Miranda Reiter: Diversity and Recruiting in Financial Planning Majors

Research title: Efforts in Recruiting and Diversity in Financial Planning Undergraduate Programs: An Exploratory Study



Mia Russell: Tools you can use

Research Title: Hands on Banking®: A Tool to Build Financial Capability for All Ages

Julie Szendrey: Young Adults..."I Think I Can Get Ahead!"

Research Title: Szendrey, J., & Fiala, L. (2018). "I think I can get ahead!" Perceived economic mobility, income, and financial behaviors of young adults. *Journal of Financial Counseling and Planning*, 29(2), 290-303.

Michelle Wright: To College or Not to College

Research title for research presentation: "Cash 'n' Careers: Human Capital Investment"

References

Brownell, S. E., Price, J. V., & Steinman, L. (2013). Science communication to the general public: Why we need to teach undergraduate and graduate students this skill as part of their formal scientific training. *Journal of Undergraduate Neuroscience Education*, 12(1), E6–E10.

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Research to Practice: Translational Efforts of a Multi-State Research Team

Carrie L. Johnson, North Dakota State University; Cathy Bowen, Pennsylvania State University; Barbara O'Neill, Rutgers University; Elizabeth Kiss, Kansas State University; Michael Gutter, University of Florida; Yilan Xu, University of Illinois at Urbana-Champaign

Key words: outreach, practitioners, research

Target Audience

There are two primary audiences for this forum. First, practitioners can use the information presented to find recent and relevant consumer research. The research is presented in forms that are easily understandable with clear implications for practitioners. Second, other consumer researchers can benefit from viewing all of this team's research in one spot without having to search for papers in multiple locations.

Objectives/Purpose

The purpose of this practitioner forum is to introduce researchers and practitioners to the research team's outreach materials and the multiple ways they can be utilized. This project bridges consumer decision-making research and putting implications into practice adding value to the fields of financial counseling and planning education. The tools presented in this forum can inform practitioners how research findings can be used to help clients. For example, one study conducted found that younger adults tend to set consecutive goals (pay off student loans, then buy a house, then save for retirement). However, by showing clients the benefits of compounding interest they can see why starting to save earlier in life can increase retirement savings substantially. Thus, making it easier to secure their financial future because they are putting their financial resources, however small, to work for them. Other researchers can benefit by seeing how other investigators have been able to relate their research findings in a way that practitioners may find useful.

Description

A multi-state research team that has been working together for over 10 years has developed content to make research easier to understand for practitioners and consumers. This research team is unique in that the majority of those involved are also Extension specialists, whose primary job is to take research and find ways to use it to help consumers. A website has been created to showcase relevant research in consumer decision-making. This team has conducted research related to behavioral economics and consumer decision-making related to household savings, student loans, housing, retirement, and healthcare.

A variety of products have been created and will continue to be created in which research findings will be conveyed in a manner which can be used in multiple ways. Blog articles summarize published research paper findings in an easy to understand format. Infographics highlight important information from these published research papers. Podcasts allow for researchers to convey findings that are relevant to practitioners in an easily accessible format. In short, multiple methods are used to convey research findings with the intent that results will increase positive benefits to the public.

AFCPE is an organization dedicated to bridging the gap between practitioners and researchers. This session is unique in that it shows how researchers can present findings in a way that would be useful to practitioners. It demonstrates how research is not done just for the sake of research, but that results can have implications and give direction to those working in the field to help consumers make better informed decisions.

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She Leads: A Model for Women's Investment and Financial Empowerment

Don Blandin, President and CEO, Investor Protection Trust

Key words: investor education, women's financial empowerment

Target Audience

The target audience is women who want to enhance their financial confidence and fitness, with a specific focus on investor education and protection including saving and investing strategies. The program focuses on women of all ages and industries including educators, financial professionals, business leaders, nonprofit and association leaders and government officials. The pilot program started in Atlanta, GA and we are developing other She Leads programs across the country. We have already seen the workshop's impact through women in Atlanta sharing it with other women in their personal and professional networks as well as other States expressing interest in She Leads.

Objective/Purpose

The objective of the She Leads program is to raise awareness and develop additional perspectives about the issues and challenges women face in enhancing their wealth, putting their wealth to work for them, and growing their wealth. We strive to make women feel more financially confident and empowered and to assist them in articulating specific actions they can take to improve their financial well-being. The She Leads program offers investor and financial education resources including tips from speakers, materials from the *When I'm 65* program (including action guides customized by age group) and other materials from program partners such as financial counselors and financial planners.

Description of Content and Method

We would like to introduce the She Leads program series, including an overview of the pilot program held in Atlanta, GA on May 3, 2019. The She Leads workshop features expert speakers, interactive exercises, and facilitated group discussions designed to increase women's knowledge about money, their personal relationship to money, and financial issues and strategies for increasing and leveraging their wealth assets. Workshop topics include understanding relationship to money and financial trajectory, issues for different stages of life, money confidence for women (tools and strategies), saving and investment strategies for a volatile environment, financial influences and individual action planning. We will present a model of the national workshop design, key takeaways from the pilot program's speakers, results from the pilot program's post-event survey and recommendations for future She Leads workshops across the country.

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Staying on the Right Side of the State

Andrea Clark, AFC®, CFP®; Adrienne Ross, AFC®, FFC TM , CFP®, ChFC®,

Key words: compliance, financial coaching, financial counseling, financial planning, Investment Advisers Act of 1940, state registration, U.S. Securities and Exchange Commission

Target Audience

All financial counselors, planners, coaches, & educators

Objective & Purpose

- Describe and understand the Investment Advisers Act (IAA) of 1940 and why it really does matter to financial counselors, coaches, and planners
- Understand the changing state regulatory environment and the impact on financial counselors, coaches, and planners
- Provide financial professionals with concrete examples of various state registration requirements
- Explore the definitions of financial advice, planning and counseling from a regulatory perspective

The financial services industry has grown to include more avenues for consumers to access financial advice, leading to less clarity over which financial professionals must be registered in accordance with the Investment Advisers Act (IAA) of 1940. The IAA does not address the full array of modern financial services, leaving definitions open to interpretation by regulators, with each state adopting unique rules to protect their residents. The challenge to practitioners becomes staying compliant with state agencies, while connecting clients to the appropriately registered professionals who will empower them to get what they need, when they need it.

Description of Content and Method

The original intent of the federal IAA was to protect consumers who were purchasing investments and insurance. Recent changes in how each state defines investment advice and who must register is increasing the regulatory responsibilities of financial counselors, coaches, and planners in private practice. This leads to discussion of:

- (1) the role played by registered and unregistered counselors, advisors, and coaches
- (2) how best to serve clients of all income and asset levels in a way that leads to financial stability
- (3) how to remain compliant with federal and state regulatory authorities, and your certifying organization.

Modeling common counseling and planning conversations demonstrates where practitioners have the potential to exceed regulatory limits, depending on the certifications and licenses of the professional. Identifying prohibited types of advice under the IAA and state regulations helps highlight the ethical implications of incomplete or poor advice, which can be extremely detrimental to low net worth households. However, recent financial services industry changes also present opportunities for financial professionals who want to create a continuum of care that maintains a fiduciary responsibility at all times and has a positive impact on the well-being of the communities being served.

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Student Loan Counseling Realities

Becky Thelen, Samantha Colyn, Boulder County Housing & Human Services Personal Finance Program

Key words: coaching, forgiveness programs, income-driven repayment, personal finance counseling, student loan debt

Target Audience

The target audience for this session are counselors, coaches, educators, and other professionals who work with individuals who have student loan debt.

Objective/Purpose

Student loan debt impacts the financial wellness of individuals, households, and the larger economy. One in four student loan borrowers are behind on their payments (Student Borrower Protection Center) and student loan debt accounts for 10.7% of total U.S. consumer debt (Holwell.) Payments extend for 10 to 30 years, often doubling the original loan balance. Some borrowers face payments that compete with mortgages, rent and other basic needs. Reducing student loan payments can even out budget demands, reduce stress, and create more affordable housing options.

Description

To the consumer, student loan repayment is typically an overwhelming, complex puzzle of loan types, interest rates, payment schedules, default resolution options, forgiveness programs, and advertisements by private loan companies and scammers. We are one of a few in our region that provides no-cost, tailored student loan debt counseling to clarify payer options and help effectively implement their choices. By sharing our experience, we hope to encourage others to incorporate student loan topics into their services.

This session will present a general process for conducting student loan appointments; where to find loan details; and how to help the borrower understand options and make and implement decisions to improve their financial situation.

One appointment can be very impactful as we can immediately get loans out of default status, reduce monthly payments, or align loans for forgiveness programs. Clients repeatedly express finding relief from high payment or collection agency pressure and, along with it, new hope for future financial goals.

Questions or implications for researchers to help further improve the topic area

How does not completing a degree program impact a borrower's ability to repay student loans? What supports do vulnerable populations need to finish degrees and make repayments? What will be the impacts of student loan forgiveness, including income tax burdens?

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The Path to Certification for HUD Housing Counselors

Rita W. Green, Ed.D., AFC, The University of Memphis and Charlestien Harris, AFC, Southern Bancorp Community Partners

Key words:, certification, housing counseling, Housing and Urban Development (HUD)

Target audience

Target audience includes housing counselors, financial counselors, credit counselors, and financial education professionals.

Objective/purpose

The purpose of this presentation is to raise awareness about the final rule regarding testing requirements and review exam topics as well as examine potential implications of this requirement for the housing counseling profession.

Description of content and method

The housing counseling statute was amended by the Dodd-Frank Wall Street Reform and Consumer Protection Act to improve the effectiveness of the program. The changes now require that individual counselors, as well as agencies, be certified by the U. S. Department of Housing and Urban Development (HUD) as competent to provide housing counseling services. Counseling programs are geared primarily toward first-time homebuyers, minority families and other populations whose homeownership rates fall below the national average. Housing counselor certification launched in August 2017. The final rule implements statutory requirements that housing counseling required under or provided in connection with all HUD programs must be provided by HUD Certified Housing Counselors by August 1, 2020.

To earn the designation, "HUD Certified Housing Counselor", all individuals working with a HUD approved counseling agency must demonstrate competency by passing an examination. The conference presentation will include a review of exam topics, covering six major areas of housing counseling: financial management; property maintenance; homeownership and tenancy responsibilities; fair housing laws/requirements; housing affordability; and avoidance of, and responses to, rental/mortgage delinquency and avoidance of eviction/mortgage default.

Since many financial capability professionals work with consumers on housing issues, it is important that they be made aware of the rules affecting housing counselors. In the past, only housing counseling agencies had to be HUD certified. As a result of the amendments to the Consumer Protection Act, individual counselors must now be certified based on successfully passing an exam and applying for certification from HUD. The rule mandating that required housing counseling be conducted by HUD certified counselors takes effect in less than a year.

Potential implications of this requirement for the housing counseling profession include:

- Compliance costs for obtaining and maintaining certification which adds a financial burden for nonprofit counseling agencies
- Barrier of entry into the housing counseling profession created by this rule
- Potential reduction of counseling services due to compliance costs
- Additional regulatory burden for agencies that have to follow state guidelines

These potential outcomes will have to be addressed as counseling agencies face the task of ensuring their counselors are HUD certified and determine how to strike a balance between meeting the needs of clientele while maintaining compliance with the new rules.

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Research Papers

#30DaysofSavings: IMPLEMENTATION, IMPACT, INSIGHTS, AND IMPLICATIONS

Barbara O'Neill¹, Rutgers University

Abstract

This paper describes findings and practitioner implications of #30DaysofSavings, a 30-day asynchronous online conversation via Twitter about topics related to saving money. It includes a brief review of literature about savings, a description of the methodology used to collect and categorize data, project impact evaluation results, and insights about saving money gleaned from project participants. Answers to savings questions varied widely. Some participants viewed saving money on expenses and getting good deals as a form of savings, decreased spending as an increase in income, and decreased debt as savings. Five implications for financial counseling, coaching and education practice are provided.

Key words: money, behavior change, debt, financial goal setting, money, savings

Introduction

Many people consider money, along with sex, politics, and/or religion, a taboo topic for conversation both within and outside of their immediate families (Brecht, 2016). A major reason is that money has many symbolic meanings (e.g., power, status, insecurity) beyond the paper bills that it is printed on. This is one reason why married couples and groups of friends with different money mindsets often struggle with awkwardness and/or conflicts around money-related topics. Talking about money in public is often considered gauche (Shin, 2015), resulting in missed opportunities to gain valuable information and insights from people who might otherwise be powerful positive financial role models.

Despite a deep-seated historical reluctance by many people to talk about money, a number of financial education thought leaders have recently sponsored well-publicized public conversations about personal finance. An example is the dozens of *Road to Financial Wellness* tour stops in 2015 and 2016 led by Jason Vitug, author of *You Only Live Once* (2016) and aimed at Millennials. Other examples of public money discussions are the hundreds of personal finance blogs, podcasts, and Twitter chats (e.g., #wbchat and #creditchat) that originated during the past decade. It is fair to say that talking openly about topics associated with money management has become a little less taboo recently, at least in public and online forums. Social media conversations via Twitter can also be archived and be useful as a source of qualitative data for research (O'Neill, Xu, Johnson, and Kiss, 2018).

This paper describes the implementation, impact, insights, and implications of a 30-day asynchronous online conversation via Twitter about topics related to saving money. Called #30DaysofSavings, the project was conducted before and during *America Saves Week* (ASW) 2019 by posting a series of 30 daily questions for anyone in the world to respond to. The paper begins with a brief review of literature about savings. This is followed by a description of the methodology that was used to collect and categorize data (i.e., tweets with or without accompanying visuals), the impact of the project, and insights gleaned from project participants. The paper

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concludes with implications from this 30-day conversation about savings for financial counseling and education practitioners.

Literature Review

This literature summary presents findings about several topics that were included in the 30 daily questions (e.g., emergency funds and savings obstacles). The U.S. household savings rate was 7.60% in December 2018 and is calculated as a ratio of personal income saved to personal net disposable income. U.S. personal savings averaged 8.81% from 1959 until 2018, reaching an all-time high of 17.3% in May of 1975 and a record low of 2.2% in July of 2005 (United States Personal Savings Rate, 2019). Savings data are calculated monthly by the U.S Bureau of Economic Analysis and reported using an updated chart by the Federal Reserve Bank of St. Louis (Personal Savings Rate, 2019).

According to the Federal Reserve *Report on the Economic Well-Being of U.S. Households in 2017* (2018), savings for emergency expenses is sorely lacking for a substantial portion of U.S. households. Four in ten adults would not be able to cover an unexpected \$400 expense without selling something or borrowing money. The December 2018-January 2019 federal government shutdown further illustrated the financial fragility of "paycheck to paycheck" workers struggling to pay household expenses when their income was interrupted. In many cases, federal workers burned through most or all their emergency savings even though federal workers have a higher rate of emergency savings than American workers as a whole (Financial Fragility, 2019).

The Federal Reserve (2018) study, noted above, also found that one-fourth of non-retired adults have no retirement savings or pension whatsoever. Similarly, the 2018 Retirement Confidence Survey (2018) by the Employee Benefit Research Institute found that 26% of workers have less than \$1,000 in retirement savings and 45% have less than \$25,000 saved excluding home value and a pension (Preparing for Retirement, 2018).

Median figures are the best indicator of household finances because means are skewed by high earners with large account balances. The median value of assets held by American households with any type of financial asset was \$23,500 in 2016 (mean: \$340,000) and median net worth was \$97,300 (mean: \$692,100) according to the Federal Reserve (Bricker et al., 2017).

Research by Consumer Federation of America (2017a) found that 48% of respondents saved at least 5% of their income and 23% saved nothing. Almost half (46%) had a savings plan with goals, which has been linked to increased savings rates. Major challenges to savings included "unexpected expenses" (52%), "don't earn enough money" (41%), and "spending on non-essential items" (42%), (Consumer Federation of America, 2017b).

Studies have investigated characteristics of people who save and do not save money and characteristics of motivational savings programs. Fisher and Anong (2012) examined how savings motives are related to savings habits and concluded that precautionary and retirement motives increased the likelihood of saving regularly or irregularly compared with not saving. A long-term planning horizon and higher income also increased the propensity for regular or irregular saving. Wu (2005) found that people who believe they have little freedom and control over their lives are less likely to save.

Hershfield et al. (2011) found that allowing people to interact with age-progressed renderings of the future selves will cause them to allocate more resources for the future (i.e., save money). Hershfield, Shu, and Benzarti (2019) found that framing savings deposits in daily versus monthly amounts quadrupled the number of people who enrolled in a recurring deposit savings program using a financial technology app.

#30DaysofSavings Implementation

The #30DaysofSavings project was funded with a \$1,000 mini-grant to Cooperative Extension/eXtension from the Consumer Federation of America. It was marketed extensively in January 2019 through contact with Cooperative Extension educators and *America Saves* campaign coordinators and via social media. Digital images for the 30 daily questions were created and questions were posted online from February 1 through March 2, 2019 for participants to



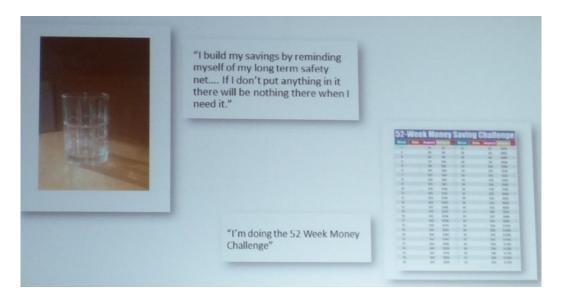
respond to. The final six days of the campaign (February 25 through March 2, 2019) overlapped *America Saves Week 2019*.

The 30 daily questions about savings covered a wide range of topics related to saving money including where and why people save, available savings resources, how to "find" money to save, the benefits of saving money, and what happens when people do not save for emergencies and retirement. Also included were questions about places to go to get the highest interest rates, how to teach children to save money, and whether people should save all or part of their income tax refund.

The 30 daily questions that were posed during the #30DaysofSavings campaign are listed below:

- 1. Why do you save money?
- 2. Where do you save money?
- 3. When do you save money?
- 4. What motivates you to save money?
- 5. Who is your biggest savings role model?
- 6. What is your biggest savings challenge?
- 7. How do you feel when you save money?
- 8. What is your biggest savings success story?
- 9. How are spending money and saving money related?
- 10. How can people "find" money to save?
- 11. What are some hacks to increase income for savings?
- 12. What are some hacks to decrease expenses for savings?
- 13. What happens when people save money?
- 14. What happens when people do not save money?
- 15. How much money should people save for emergencies?
- 16. How much money should people save for retirement?
- 17. What happens when people do not have emergency savings?
- 18. What happens when people do not have retirement savings?
- 19. Should people save all or part of their income tax refund?
- 20. Where can people go to get a high interest rate on their savings?
- 21. Do you save automatically? If so, where (e.g., a 401(k) plan at work)?
- 22. Have you taken (or do you plan to take) the America Saves pledge?
- 23. Have you calculated the savings required to achieve your financial goals?
- 24. Do you save more when your income increases (or vice versa)?
- 25. What steps can people take to save more money than they currently do?
- 26. Where can people go to get information and support to help them save more?
- 27. How can adults teach children to save money? What resources are available?
- 28. Do you save loose change to cash in later? If yes, share a picture of your coins.
- 29. What is your #1 piece of financial advice to help people save money?
- 30. How much money did you save over the last 30 days, including the 30-Day \$100 Savings Challenge?

Two previous financial education projects inspired #30DaysofSavings. The first was 2017 and 2018 Twitter "conversations" about personal finance topics among business education teachers comprised of a series of 12 daily questions that were unified by the hashtag #12DaysTwitter. The second was a workshop at the 2018 AFCPE Symposium (Reuter, 2018) that described the rigorous impact evaluation methodology of a wealth-building program for families with low incomes. This workshop discussed the "Photovoice" methodology of conducting qualitative research. Photovoice is a participatory research method that "has participants use photos and stories about their photos to identify and represent issues of importance to them, which enables researchers to have a greater understanding of the issue under study" (Nykiforuk, Vallianatos, and Nieuwendyk, 2011, p. 103). Two samples of photovoice data points shared at the AFCPE Symposium workshop are shown below (Reuter, 2018).



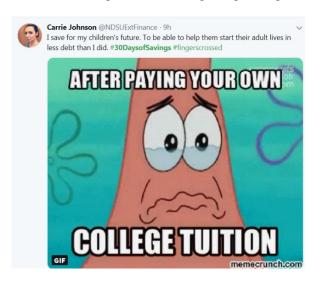
#30DaysofSavings participants were encouraged, but not required, to include visuals (e.g., photographs, clip art, and short animated video clips called GIFs) with their tweeted responses to the 30 daily questions about savings, not only for the photovoice-like research aspect of the project but also because tweets with graphics and video clips have more engagement than text alone (Patel, 2016). According to social media management tool provider, Hootsuite, "every Tweet that you send without an attached image is a missed opportunity" (LePage, 2015, p. 1). Tweets with images get three times more engagement such as likes, retweets, follows, clicks, and comments (Harvey, 2016). In addition, images slow viewers down and capture an extra few seconds of their attention (LePage, 2015).

A new question about a savings-related topic was posed each day for 30 days. Below is a sample of the format in which questions were posed. Questions were scheduled using the Publisher tool in Hootsuite and appeared 24 times a day (once every hour). Thus, over the course of the 30-day project, #30DaysofSavings questions were posed 720 times. Participants were encouraged, but not required, to register their tweets online using a simple online form that included their name, e-mail address, and the unique identifier for their tweet. A drawing for three \$100 gift cards was offered as an incentive.



A total of 255 tweets from 27 unique individuals were registered online over the course of the project and 389 tweets from 42 individuals were located via a daily search of the hashtag #30DaysofSavings. Thus, about a third of tweets that were captured were not officially registered. Fourteen tweets that used #30DaysofSavings for marketing

purposes and did not answer a savings question were excluded from analysis. Each tweet that answered a savings question was captured in a screen shot and became a data point. About a third of the tweets contained some type of visual enhancement. Examples of a creative participant responses using short GIF video clips are shown below.





#30DaysofSavings Impact

Each of the final 375 tweets that were registered online and/or discovered using the #30DaysofSavings hashtag was retweeted by the project director. Reports were pulled at the end of each week to gauge potential audience reach. Conservatively estimated total outreach (extrapolated via free TweetReach partial reports for 100 tweets) for #30DaysofSavings was as follows:

Date and Number of Tweets	Number of Accounts Reached	Number of Exposure Impressions
2/4/19 with 372 tweets	265,678	904,516
2/11/19 with 750 tweets	471,378	1,784,867
2/18/19 with 600 tweets	157,080	1,245,162
2/25/19 with 559 tweets	174,201	1,226,468
3/4/19 with 553 tweets	477,482	1,552,831

Toward the end of each of the project's 30 days, a collage of representative tweets was prepared after digital images of tweeted responses to daily questions were captured via screen shots. The collages included both tweets with text responses only and responses with visual content. Links to the daily photo collages were then tweeted and retweeted using #30DaysofSavings, providing additional exposure for the content. A sample of one of the photo collages can be found below. The daily photo collages were then used to create a YouTube video (3:13) that includes responses to all 30 savings questions set to music. The link to the video was also tweeted using #30DaysofSavings and will be marketed frequently on social media channels to increase viewership over time.



A follow-up evaluation survey was completed by 15 respondents (55% of the 27 online registrants). Of these respondents, 60% (9) took the *America Saves* pledge as a result of participating in the 30-day project and almost three-quarters (73.3%) planned to start or increase their savings as a result of their participation. 30-day savings amounts reported by six participants totaled \$7,960 plus 20% of someone's pay. Feedback was overwhelmingly positive and included the following comments:

- It was fun and practical to be engaged in a daily reminder activity related to saving money.
- It was a great way to regain focus on being smart with money.
- ♦ It helped me learn more about saving.
- ♦ *Great motivation for saving more.*
- Overall, some great questions. There were a few that were a little more of a challenge to answer. I enjoyed the interactions that the discussions created.

#30DaysofSavings Insights

#30DaysofSavings was a month-long asynchronous discussion about various aspects of saving money using the Twitter platform. Originally envisioned simply as an educational outreach mini-grant project for *America Saves Week*, its' potential as a source of qualitative data soon became apparent when each tweet is viewed as a data point.

As noted in the introduction to this paper, money topics are still considered "off-limits" in many social settings. Yet, a small group of people who participated in #30DaysofSavings, presumably mostly strangers to one another, held very authentic money conversations that included sharing their thoughts, successes, challenges, recommendations for others, and details about their lives.

Financial practitioners can use the findings from data collected via tweets submitted for the #30DaysofSavings project to inform their future savings promotion efforts. The following section of this paper summarizes key insights gleaned from the 375 tweets that responded to the 30 daily questions about saving money.

Table 1, below, includes the 30 daily savings questions, the number of responses to each question, a summary of text responses to each question, and a description of the visuals that were used to provide additional content and viewer engagement.

Table 1 Summary of Responses to #30DaysofSavings Questions

Question		Summary of Text Responses	Visual Content		
1.	Why do you save money?	For children (2x) including for children to avoid student loans (1x), for family's future, for a "rainy day," for an uncertain future, to not be dependent on an employer, for adventures, parental influence to save money, to have money when it is needed	Frowning (about debt) character, umbrella and moving rain GIF, smiling child, animal swimming, shrugging child		
2.	Where do you save?	Different places for long- and short-term goals (2x), save loose coins, at a credit union, 401(k) plan, 403(b) plan, savings account (2x), use Digit app, all over (7 different places were listed), through payday allotment, wherever is most convenient to make savings happen	Dancing man, picture of coins in a bowl, playful cat with a stack of money, coin going into a piggy bank, staircase		
3.	When do you save?	As often as possible (3 different times were listed), many ways (5 were listed), the beginning of the month, every pay day (5x), when extra money is received, when comparison shopping for deals, after bills are paid, when using credit card (cashback rewards), when receiving money gifts (2x), when receiving a large lump sum, when enjoying free activities	Happy man, happy woman with a promo code, SpongeBob Square Pants GIF, dollar signs,		
4.	What motivates you to save money?	Interest rates and compound interest, making it a challenge, positive feedback, watching their money grow (awesome feeling), to keep student debt low, sense of security (2x), financial education, goals (education, traveling, retirement), financial stability and money available to splurge, children, thinking about ability to retire, being able to own a home, empowerment to reach for the sky and reach goals	Tall palm trees, action hero person, MilCents link, bowl of popcorn, college building, jars with coins, family picture, two young boys, photo of sky with clouds and the word "goals"		
5.	Who is your biggest savings role model?	Father (3x), spouse, grandparents, parents (2x), mother (2x), never had one (2x) (learned from books, blogs, mistakes), aunt/great-aunt (2x), my future self (to not let her down later)	Man and young daughter, photo of a couple smiling, a big fuzzy doll with a child		
6.	What is your biggest savings challenge?	Seeing wants- not needs-to buy (2x), finding money to save (2x), sticking to a fixed amount [of savings] each month, unexpected expenses, braces for four children, travel expenses (someone who loves to travel), food spending, not buying things, questioning whether their saving is the best way/amount (2x), having a variable income, difficulty with consistency of savings (2x), paying off credit cards, daycare cost, catching up on savings	TV star with the words "challenge accepted," storm clouds, photo of four kids with braces, Homer Simpson GIF saying "Shut up and take my money," man holding \$1, two dogs on a treadmill		
7.	How do you feel when you save money?	Super! (supportive, safer, secure, and sorta special), very excited, proud, safe, and less stressed, an acrostic of the word SAVING, no text with a photo of Superman, responsible with a sense of peace, positive sense of security and achievement but conflicted about people in poverty, like Lionel Richie's "Dancing on the Ceiling",	Cartoon character with thumbs up, smiling child, happy dog on its back with the words "feels good man," chilled out cartoon character, ceiling dancer GIF, picture of calm water		

		secure, happy, hopeful for future, less stressed and more peaceful, lucky and thankful, feel good	
8.	What is your biggest savings success story?	Saving to take family to Disney World, ended frivolous spending, saved more than ever had before, saving a 6-month emergency fund, saving for a house, achieving savings goals for 3 years, paying off debt (3x), saving to buy furniture, saving enough to be self-employed, being able to pay for unexpected expenses (2x), empowerment to choose own path	Smiling family at Disney World, woman counting money, TV actor saying "I gotta get out of here," sunset on a beach boardwalk
9.	How are spending money and saving money related?	Put expenses in a budget so you are more likely to save, pay yourself first, competing demands on money, save more by spending less (2x), you can't spend in the future if you don't save, spend money to save money- buy quality products (2x), a series of 10 hash tagged words (e.g., #habits)	Cat pawing a stack of money, two cats with dollar signs, woman with the words "I spend, but I save"
10.	How can people "find" money to save?	Plan meals every week (2x), save half of unexpected money, be honest about needs and wants (2x), spend intentionally, build up savings tips & tricks, increase income (2x), look under couch cushions (figuratively or literally), small change in habits, have a goal and make a plan, lower thermostat, turn automated expenses into automated savings	Picture of weekly menus, a moving plant grasping outwardly GIF, woman with magnifying glass, picture of bananas in a supermarket, cat under couch cushions, man promoting savings
11.	What are some hacks to increase income for savings?	Extracurricular pay for teachers, don't buy coffee, stopped buying clothes, shoveling snow/shopping for neighbors, pick up curbside trash and sell at flea market, side gigs/jobbies (hobby jobs) (6x), automated savings, lower expenses, ask for a raise/promotion (2x), sell things (2x), continued education (2x)	Consumer Expenditure Survey graphic, cat operating a laptop, a tree with branches, GIF with Dave Ramsey quote, 2 video links, article link
12.	What are some hacks to decrease expenses for savings?	Go to library (2x), consignment shop, carpooling, eating at home (4x), DIY gifts/cards/decorations, comparison shop, use coupons (2x) and promo codes, don't always buy name brands, turn lights off and thermostat down, being neighborly (cooperative arrangements), ask for lower prices (2x), prepare food yourself	Man reading a big book, child with shopping bags, Mr. Rogers GIF, woman saying "pause," picture of \$5 package of brownies and a \$1 brownie mix
13.	What happens when people save money?	Stronger economic system, reduce stress and sleep better, can handle an unexpected expense (3x) or big purchase, money for emergencies (2x) and fun, feel happy, closer to reaching goals, feel empowered, pride, move toward financial independence, plan for loved ones, feeling of freedom, benefit your future self (2x), avoid debt	Picture of a cat sleeping on a \$100 bill, peaceful beach sunset, post-it note that says thank you," man burning a credit card, woman saying "am I right?," minion GIF
14.	What happens when people do not save money?	Don't leave anything for loved ones, less resilient, "what retirement?," side job, stress (2x) and worry, lower financial wellbeing, future problems (3x), little setbacks become big problems, miss important life goals, debt depression	Unhappy man, link to blog post, man blowing into bag, link to Forbes article/cracked eggs, GIF with cats
15.	How much money should people save for emergencies?	3-6 months expenses (4x), more than \$2,000, just save (any amount), participant shared a story about 11 expenses paid with emergency fund, it depends on bills and life events (3x), start with \$500 or \$1,000 and increase over time (3x), 10-15% of monthly income	Graphic about low savings, life preserver graphic, graphic with text, photo of "ducks in a row"

16. How much money shoul people save for retirement?		Graphic for USA.gov reference, rolled up \$100 bill, Bugs Bunny racing, graphic about U.S. savings for retirement, a tipped scale with Baby Boomer and Millennial on the two ends)
17. What happen when people not have emergency savings?		Articles and graphics about Americans' incomes and lack of emergency funds, destroyed bridge photo, falling dominos GIF
18. What happer when people not have retirement savings?		Working man, Magic Genie GIF, dancing man GIF with the words "Happy Retirement," link to a GAO report about U.S retirement system, picture of ducks on snow
19. Should people save all or part of their incorporate tax refund?	portion of refund (3x), save as much as you can after paying down	Tax refund savings graphic (30-40-30 plan), tax refund options graphic, high wire walker photo, GIF of man saying "think about it," graphic of tax refund money
20. Where can people go to a high interestrate on their savings?		Graphic with text response, woman with a magnifying glass, GIF of a closed and open bank safe with money
21. Do you save automatically If yes, where		\$ave! GIF, America Saves graphic about saving automatically, GIF of woman saying "Easy Peasy," young girl GIF,
22. Have you tak (or do you pl to take) the America Sav pledge?	such as "Set a goal, have a plan, make a promise to yourself, and tell someone else about it," "I have certainly taken the pledge, and	Homer Simpson GIF, GIF of a ship at sea, man saying "you can do it," man saying "I get the job done," saluting man GIF
23. Have you calculated the savings	No (not aware of any tools and would love to know more), Yes responses (11x): use basic math for simple goals (4x) and financial advisor for retirement goals (3x), comment about how emergency	Man saying "The calculator does not lie," Star Wars GIF saying "\$1 million!," link to a

	required to achieve your financial goals?	savings helped a Coast Guard member get through the U.S. government shutdown, recommended tools from investment companies/other online sources (4x), including Social Security, Ballpark Estimate, Monte Carlo analyses, and compound interest tools	savings worksheet, GIF of a man with math formulas, Fidelity compound interest graphic, GIF about "the power of math"
24.	Do you save more when your income increases?	Yes (10x): more income equals more savings (4x), save half of each pay raise, try to avoid lifestyle creep/changes (2x), increase goes right into savings, savings will grow faster (2x), pretend you did not get a raise and put "extra" into savings No (but redirected money from paid off student loans goes into savings)	Military Saves Week graphic, link to a NPR article about saving, GIF of a happy woman saying "YES!," water with waves, cute puppy photo, two cute bears with money GIF
25.	What steps can people take to save more money?	Baby steps: extra dollar amounts or percentage of pay (2x), link to 54 Ways to Save Money article, save automatically (2x) (steady income) or regularly (variable income), complete a savings challenge (2x), track/cut expenses and save money instead (5x), start with goal-setting, link to CFPB article about savings, link to U.S. savings rate data, get a side gig to increase income, avoid convenience stores and fancy coffee, 6-step process description starting with making a plan to save	America Saves piggy bank graphic, savings challenge graphic, photo of a calculator and notebook, CFPB graphic, GIF of a dog climbing stairs
26.	Where can people go to get information and support to help them save more?	Personal Financial Managers on military installations, employee assistance program, America Saves (3x), Family and Consumer Sciences teachers, web sites (4x), social media (3x), blogs (2x), books (2x), bank/credit union (5x), <i>Her Money</i> (Jean Chatsky), budgeting apps, Cooperative Extension (3x), members of household/others, CFPB (2x), Jump\$tart Coalition (2x), NEFE (2x), financial advisor (2x), AFCPE/accredited financial counselor (2x), FTC, MFLNPF, @USAgov @natdisability, Council for Economic Education	GIF of a woman saying "That's me," Council for Economic Education logo, GIF of a man with the word "Dozens!!
27.	How can adults teach children to save money? What resources are available?	Teach by positive example (3x), giving an allowance (2x), having kids set goals to save for, being open- rather than secretive- about money, involve kids in decisions when possible, read the book <i>The Opposite of Spoiled</i> (Ron Lieber), opening child's bank account and having child deposit money (2x), start with a piggy bank (2x), discussing needs and wants, use articles, books, and own budget, through story-telling, hands-on activities, find teachable moments	Image of the book <i>The</i> Opposite of Spoiled (Ron Lieber), GIF of a piggy bank being filled, FIF of a man saying "Do you want these or do you want to go to college?"
28.	Do you save loose change to cash in later?	Yes (8x): all kinds of savings help, put loose change in a jug, piggy banks for children, coins in a jar, feeling of satisfaction, can add up to big savings over time, save in car center console, "A penny saved is a penny earned" No (3x): Don't use much cash anymore, buy things online and don't see change, use debit cards and don't get coins	Coins on a counter, picture of two smiling children with piggy banks, picture of a penny, jar of coins (2x), bowl/dish of coins (3x), photo of car console coin savings
29.	What is your #1 piece of financial advice to help people save money?	Track expenses to determine spending on needs and wants (2x), set goals (2x) and share them for motivation, save today (2x), time is on your side, start somewhere/start small (2x), even if \$5 per week, save more than you think you need, think about having a better future, save extra money (above monthly budget), join <i>America</i>	GIF of cartoon character saying "Guys, I want a castle," GIF of a young girl with the word "TODAY!," piggy bank, ocean wave video clip, Military Saves

	Saves, make budgeting part of your routine, always have a plan for your money, no amount [of savings] is too small, try to save money whenever you get some, savings is an important part of self care	graphic, Coast Guard station sign, GIF with woman saying "self care is"
30. How much money did you save over the last 30 days?	Saved 20% of income and met emergency fund and retirement goals, \$1,000, \$400 (not including automatic retirement plan contributions), \$550, \$1,225, \$700, \$4,085 #30DaysofSavings thank you/positive comment tweets (3x)	GIF of a man and the word SUCCESS, America Saves graphic, GIF of man making progress, piggy bank graphic, saved money photo

Table 1, above, succinctly summarizes the wide variety of responses to each question. Many participants had multiple answers to a question and their responses were distributed among several key themes. Some #30DaysofSavings participants made an extra effort to embellish their tweets with visual content that matched the words or underlying emotions of their text response (tweet). Many also provided detailed explanations of their thinking as illustrated in the sample tweets below:

$\textbf{Erin Byrnes} \ @ \textit{RealMrsByrnes} \cdot \textit{7h}$

When to save? Every. Single. Time. Paychecks, gifts, unexpected extras, we save a %. Even if it's "just" a little in a tough week, something is better than nothing. Every raise includes increasing those savings, too! #30DaysofSavings #financialliteracy #solancofcs #SayYestoFCS



BSUFinancialLiteracy @BSUFinLit · 23m

Students and their families are motivated to save in order to keep student debt low. As our wise friend @JohnHupalo says "A dollar saved for college today is better than one borrowed tomorrow." #30DaysofSavings #FinLit @InviteEducation @moneytalk1









Economics Department @BSUECONOMICS · 8h

Without #emergencysavings, the bridge to building future financial security becomes much more precarious. People may have to defer today's essential home maintenance and health care purchases, which can lead to greater costs down the line. #30DaysofSavings #FinLit @moneytalk1







Discussion

#30DaysofSavings, a 30-day asynchronous online conversation via Twitter about topics related to saving money, posted a series of 30 daily questions for participants to respond to. Its research potential as a source of qualitative data became apparent as the project progressed. Thus, AFCPE may wish to rename its new Symposium presentation category and award "Research *and* Practice" instead of "Research *to* Practice" because either component can inform the other in a bi-directional relationship.

This study has several limitations. First, it attracted a number of people who teach or counsel others about personal finance as evidenced by their Twitter handles and profiles. Respondents also had to be savvy Twitter users. Thus, there was definitely sample selection bias. In addition, while every tweet was screen shot, saved, and summarized succinctly in Table 1, this study did not employ a more sophisticated data analysis summary technique using software and n-grams (O'Neill, Xu, Johnson, Kiss, and Buyske, 2019).

Many participant responses aligned with findings from previous studies (Consumer Federation of America, 2017a, 2017b, Hershfield et al., 2011, 2019) and conventional wisdom and expert recommendations about saving money. Some of the more interesting findings were as follows:

- Family members are a key motivator to save for two reasons: concern about a family member's (e.g., child's) financial future and saving as a result of parental teaching and role modeling.
- Some participants viewed saving money on expenses and getting good deals as a form of savings.
- Some participants viewed decreased spending as an increase in income and decreased debt as savings.
- There are many motivations to save money including reaching financial goals and feeling secure.
- There are many positive and negative emotions and results associated with saving and not saving.
- People define savings success very differently (e.g., from making cash purchases to empowerment).
- Savings recommendations for emergencies and retirement included both standard expert recommendations and realistic "whatever you can" and "start small if you have to" themed responses.
- "It depends" was a common reply to the question about saving tax refunds.
- Some participants did not save coins because they do not have opportunities to "make change."

#30DaysofSavings Implications

Following are five implications from the data collected from the #30DaysofSavings project and research:

Present Relevant Options- One of the National Endowment for Financial Education's five key factors for effective financial education (2019) is relevant subject matter. This study found that some people no longer save loose



change. Instead of promoting a now somewhat irrelevant option, reframe the savings recommendation to "Save Coins and/or Round Up" using an app that saves "change" electronically.

Have Participants Define "Success"- Too often, financial education providers determine program success metrics. This study showed that people defined savings success in many ways including debt repayment. Focus evaluation efforts on any sign of progress that is meaningful to participants.

Empower Adults to Teach Children to Save- Participants listed online tools, organizations, and advisors as savings resources but family members as role models, if they had one. This speaks to the need to empower parents with resources to hold financial conversations and capitalize on "teachable moments."

Make Resources Simple and Accessible- At least one respondent wanted to know more about online savings resources. Presumably many Americans who are not as financially attuned as #30DaysofSavings participants can benefit from tools to help them set goals, calculate savings needs, and measure progress.

Tap Into Emotions- Strong emotions were found in both text and visuals related to feelings about saving and not saving. Refer to these in interactions with audiences; for example, show a GIF of a happy saver.

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A Decade Review of Publications in Family Financial Socialization, Young Couples, & Financial Behaviors: 2007 – 2017

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Key words: Asian, couples, financial behaviors, family financial socialization, young adults

Family financial socialization processes – manifested through both parental interactions and parent-child relationships – are recognized as bearing a strong influence on young adults' financial behaviors and outcomes. Research has shown that such processes impact the ways that young people think about money, what they know and understand about finances, the ways that they choose to spend, save, and/or invest money, and how they use credit and/or negotiate debt (Jorgensen, & Savla, 2010; Shim, Barber, Card, Xiao, & Serido, 2010; Xiao, Ahn, Serido, & Shim, 2014). They internalize these foci from their parents through observation and daily family experiences (e.g., shopping for groceries, paying credit card bills, planning on vacation). What they ultimately learn and come to understand about financial matters (e.g., values, norms, behaviors) can have longstanding – sometimes positive, sometimes devastating – impacts on their lives.

When young adults commit to a relationship (e.g., marriage), the two individuals that inhabit that relationship bring with them the respective socialization processes that they gained from their parents. They often have experienced different family backgrounds, however – which can potentially lead to discord regarding attitudes about money (and behaviors that follow). Young couples who have different financial values can struggle a great deal with arguments and/or impasses regarding financial matters. Research has shown that such conflicts are a growing concern of tension in romantic partnerships, and that these sequalae can both lower couples' relationship satisfaction and increase the likelihood of break-up or divorce (Archuleta, 2013; Eiger & Schiavone, 2016; Mao, Danes, Serido, & Shim, 2018). And while parental influence(s) on individuals leading up to this is well-understood, the impact of romantic partners on each other (and/or the combined influence of parents' influence and romantic partners' interactions) remains understudied.

Extant literature regarding financial socialization processes between parents and their young adult children (e.g., college students) has drawn from relatively homogenous – White, Western, middle class – samples. A paucity of scholarship and investigative attention has focused on how these processes play out for groups identifying with different cultural backgrounds. It is to this disparity that the review presented here is oriented – specifically on young adults who identify with Asian communities and groups.

The current review presented here begins to address a gap in current research (2007-2017) by examining the financial socialization influences of both parents and romantic partners on young adults' financial behaviors and, in turn, how these factors affect young adults' perceptions of the couples' overall- and financial- relationship(s). This effort will benefit financial professionals who work with Asian populations, as it will inform and better-equip them to advance the services, education, and counseling that they provide.

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Best Practices in Financial Education: Incorporating Mathematics

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Abstract

We present results from a study that investigates whether placing financial education within a mathematics course can improve results. A sample of high-school students were assessed on both financial and mathematical knowledge, before and after taking a course that combined mathematics and personal finance. Analysis of the results confirms that there is a correlation between mathematical and financial knowledge in high school students, and suggests that a course combining finance and mathematics is an effective approach to financial education.

Key words: finance education, financial literacy, mathematics education

Introduction

There is a pressing need for improved financial knowledge across the US population. Research has shown that financial education programs can be an effective solution to this problem. However, there is wide variability in the success of different education interventions, and the reasons for this heterogeneity are not yet fully understood. A crucial project is to increase our knowledge of best practices in financial education, in order to maximize the benefits participants in future courses receive.

One aspect of this is the role of *mathematics* in a high quality personal finance course, given the well-documented connection between mathematical knowledge and financial literacy. We present results from a study that investigates whether placing financial education within a mathematics course can improve results. A sample of high-school students were assessed on both financial and mathematical knowledge, before and after taking a course that combined mathematics and personal finance. Analysis of the results confirms that there is a correlation between mathematical and financial knowledge in high school students, and suggests that a course combining finance and mathematics is an effective approach to financial education.

We will begin by discussing the research that demonstrates that investigating best practices in financial education is an important project, and that incorporating financial education into mathematics coursework is promising avenue for this. Next we will describe the study we created to investigate this topic, followed by the results of the study. Finally, we will discuss implications for financial education and for future research.

Literature Review

The level of financial knowledge among adults in the US is much lower than it should be, given the complex financial choices people must navigate in modern Western society. A vast body of research demonstrates the breadth and depth of this issue. The successive 'Financial Capability Surveys' (FINRA, 2009, 2013, 2015) show that a large percentage of Americans are unable to answer a number of questions on central financial concepts, and display a lack of knowledge in "fundamental economic principles" (Lusardi, 2011).

Further research backs these findings up: Hilgert, Hogarth and Beverly (2003) used an extensive test of financial knowledge and found similar failings; Lusardi, Mitchell and Curto (2014) found that older people in the US lack financial sophistication; while Lusardi and Mitchell (2011) showed that a lack of essential financial knowledge is widespread in countries around the world.

Of particular concern is the lack of financial knowledge in young people in the United States, given that the country is trending towards placing more individual responsibility on financial planning (Lusardi and Mitchell, 2014), and technological developments promise ever more complex financial instruments will be available in the future. It has been demonstrated that most high-school and undergraduate students fail basic financial literacy tests (Hastings, Madrian & Skimmyhorn 2012; Lusardi, Mitchell & Curto 2010; Mandell 2008; Markow & Bagnaschi, 2005; Shim, Barber, Card, Xiao & Serido, 2010; National Council on Economic Education [CEE] 2005).

Making this even more concerning is the fact that many people are making poor financial decisions, and experiencing negative financial outcomes. One third of Americans in their 50's have failed to develop a retirement

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plan, leaving them with a precarious financial future (Lusardi, 2011). Higert et al. (2003) provide evidence that a significant proportion of adults self-report low scores in financial best practices. Many households fail to diversify their investment portfolios, or fail to refinance their mortgages at opportune moments, creating completely avoidable financial risk and interest expenses respectively (Campbell 2006). In addition, young people are again particularly at risk, being 'heavily reliant on debt' (Brown, Van der Klaauw, Wen, & Zafar, 2016). The flaws in financial decision making have been linked to widespread flaws and biases in our reasoning through research in behavioral economics, showing a theoretical underpinning to the trends observed (Kahneman, 2011; Sunstein & Thaler, 2008; Thaler, 2015).

As a response to this problem, there has been a growth in a range of financial education programs across the county: from state-mandated high school courses, to on-the-job training sessions (CEE, 2016). An essential research project is to assess the effectiveness of such courses. In an influential meta-study, Fernandes, Lynch, and Netemeyer (2013) found that financial education interventions intended to improve later financial behavior were largely ineffective, with a statistically significant but minuscule effect. This has led many to question the value of financial education. Willis (2011) argues that we should abandon the project of trying to provide such education altogether, an idea that has recently penetrated the mainstream discourse (Ogden, 2019).

However, more recent research has offered more nuanced findings. While taking just any financial education course is not guaranteed to improve financial knowledge, the right kind of course can be effective. A pair of comprehensive meta-studies by Tim Kaiser and Lucas Menkhoff (2017, 2018) incorporated the results from a range of studies not examined by Fernades et al. (2013), including many completed after the earlier paper was written. They found that, on the whole, financial education courses did have a significant impact on financial literacy. However, they also found a high level of heterogeneity in the results: some education interventions were much more effective than others

This fits naturally with the work of Urban, Schmeiser, Collins, and Brown (2015), who found that more rigorous state mandates for education in financial literacy had a greater effect on subsequent financial wellbeing than less demanding mandates. Indeed, rigorous in-depth financial literacy courses have been shown to be effective in improving financial wellbeing by a number of researchers (Brown et al., 2016; Walstad, Rebeck, & MacDonald, 2010).

As Kaiser and Menkhoff (2017) note, though, the variance in effectiveness is far from being fully understood "indicating that those offering financial education measures can still learn from best practice experiences, a development that is ongoing". It is to this ongoing project that we aim to contribute.

Mathematics and Finance.

One promising area to explore is the relationship between financial and *mathematical* knowledge. Lusardi (2012) has noted that numeracy is a prerequisite for financial literacy, and she details the troublingly low levels of numeracy in the US. Backing up this observation, research shows that additional courses in *mathematics* improve later financial outcomes. Such coursework has been shown to improve creditworthiness, decrease adverse financial outcomes, lead to significant positive impacts on issues related to student debt, increase the propensity to accumulate assets, increase the propensity to accumulate real estate equity, reduce credit card delinquency and reduce the probability of experiencing foreclosure (Brown et al., 2016; Cole et al., 2014). Further, a study by Cole, Paulson, and Shastry (2016) found that "additional mathematics training leads to greater financial market participation, investment income, and better credit management, including fewer foreclosures."

More generally, as Hastings et al. (2012) note, there is a well-documented relationship between numeracy, and related cognitive abilities, and financial outcomes. Individuals with such attributes tend to have higher levels of financial literacy (Banks and Oldfield, 2007; Gerardi, Goette, & Meier, 2010). Lenard and Huang (2018) showed that there is a strong correlation between math and finance scores in Wake County high school students.

The connection is demonstrated directly in a study by Eisenstein & Hoch (2007). They find that when people are asked to estimate compound interest, they employ one of two methods: one group calculates the value with simple interest, then 'adds on a bit extra'; while the other group uses the 'rule of 72'. The latter method is far more accurate than the former. Understanding why the former method is inadequate requires a conceptual understanding of exponential growth – which suggests that mathematical knowledge can improve the kind of quick estimates that guide many crucial everyday financial decisions. This idea is backed up theoretically by research that shows that

greater numeracy leads to better decision making in general (Peters, Västfjäll, Slovic, Mertz, Mazzocco, & Dickert 2006).

Study Design

Given the evidence suggesting a significant link between mathematics and finance, is there a way to leverage this to improve best practices in financial education? Our study presents research, exploring this topic. Previous studies, such as those cited above, have looked primarily at general trends connecting level of math education or math achievement and financial outcomes. Our aim was to acquire and analyze more fine-grained data. We created an assessment that tests financial knowledge, mathematical knowledge and financial confidence. This assessment was given to high school students taking a course in financial mathematics both before and after the course. Our aim was to gather data measuring the connection between mathematical and financial knowledge directly. In addition, we wanted to examine if the relationship changes after taking a course in financial mathematics, in order to understand if learning math *improves* financial knowledge or if there is just a correlation between the two.

The assessment consists of 37 questions: 6 questions that ask students to self-assess their confidence level about a range of financial skills on a 5 point scale; the remaining 31 questions are either true-or-false or multiple-choice. These questions include the 6 questions included in the FINRA 2015 study, 8 questions on mathematics topics from high school common core state standards, and 17 additional questions on personal finance that we created ourselves.¹

The assessment was given to students in eight high schools in New York City and Long Island: these students were juniors and seniors, and were taking either a semester- or year-long course in financial mathematics. They took the survey once at the beginning of the course, and once at the end (we will refer to these as the 'pre-assessment' and 'post-assessment' respectively). The responses were anonymous, and did not count towards the students' grade. Teachers were instructed to give students 20 to 30 minutes to complete the assessment in one sitting, with use of calculators allowed.

For the pre-assessment n=282, while for the post-assessment n=105. This drop-off was due to some teachers being unable to administer the assessment before students left at the end of the school year. Though there is no evident systematic bias in which students were administered the post-assessment, this issue should be taken into account when analyzing differences between the pre- and post- results.

Results and Discussion

Pre-Assessment Results. Table 1 summarizes the results of the pre-assessment. The overall score in each category (excluding confidence) was in the 30% to 40% range, demonstrating that students' initial knowledge levels were not particularly high in either mathematics or finance. In addition, confidence was 2.5 on a 5 point scale, showing that mediocre scores roughly corresponded to mediocre confidence levels.

Insert Table 1 Here

To assess the validity of our new finance questions, we ran a regression analysis with students' Big 6 score as the independent variable and their finance (original) score, as the dependent variable. The results showed a strong and significant correlation, confirming validity: $R^2 = 0.92^{***}$.

Next, we ran a regression analysis on math scores and finance (all) scores – with math score as the independent variable and finance score as the dependent variable. This showed a modest but statistically significant correlation, with $R^2 = 0.2^{***}$. The results are illustrated by *figure1*, where the regression line has coefficient 0.35^{***} .

Insert Figure 1 here

² Note that here and throughout we use the following notation: * significant at 10%; **significant at 5%; *** significant at 1%. A table of all regression results is provided in *Appendix 1*.



¹ A complete list of questions is provided as an online appendix.

It should be noted that there was also a statistically significant correlation between math score and big 6 score, and math score and finance (original) score when considered separately. For Big 6: $R^2 = 0.09***$, regression line slope is 0.28***. For finance (original): $R^2 = 0.19***$, slope is 0.37***.

These results reinforce previous research, suggesting a link between mathematical and financial knowledge – regardless of prior training.

Post-Assessment Results. Comparing the results from pre- and post-assessment, we find significant improvement across all categories: around 10 percentage points, and 0.4 to 0.6 standard deviations. Information on the improvement levels is presented in table 2.

Insert table 2 here

Looking at the correlation between math and finance score in the post-assessment revealed further interesting results. The regression analysis finds a statistically significant correlation, with $R^2 = 0.54^{***}$. This is illustrated in *figure 2*.

Insert Figure 2 here

A point to note is that the strength of the correlation *increased* from the pre- to the post-assessment, with the value of R^2 going from 0.2 to 0.54. Due to the anonymized results, it is not possible to identify the responses to the pre- and post- assessments made by the same student; therefore, it is not possible to investigate the correlation between improvement in math score and improvement in finance score at an individual level.

The role of confidence. An additional factor in the assessment that has not so far been discussed is the confidence self-assessment; all we've noted is that average confidence level has improved between pre and post assessment. This is worthy of consideration, since, as Lusardi (2011) observes, many people are overconfident in their self-assessment of financial knowledge when tested for confidence and knowledge simultaneously. The current experiment provides an opportunity to further explore this somewhat puzzling phenomena, by looking at how mathematical knowledge affects the relationship between financial confidence and financial knowledge.

First, it can be noted that there is relatively little connection between math and confidence score – in pre-assessment $R^2 = 0.05***$ while in the post assessment $R^2 = 0.2***$. There is however, a significant correlation between confidence and finance score. For the pre-assessment: $R^2 = 0.2***$, and for the post-assessment: $R^2 = 0.44***$. This suggests that even if students are at times over-confident, their confidence level tracks their knowledge level to a limited degree.

The most interesting results come when we run a regression analysis which takes *both* confidence level and math score as independent variables, and finance score as the dependent variable. In the pre-assessment: $R^2 = 0.32^{***}$, in the post assessment $R^2 = 0.69^{***}$. In both cases, the math and confidence score combined explain a greater degree of variation in finance score than either does alone.

Limitations

As we have discussed, the study has limitations which motivate significant follow up work. First, it's important to perform an experiment in which almost all students who complete the pre-assessment also complete the post-assessment, to ensure this is not a source of bias. In addition, it's important to acquire data where pre- and post-responses are matched, in order to examine the correlation between math improvement and finance improvement. Finally, to conclusively establish whether a combined math and finance course is an improvement over alternatives, it is necessary to give pre- and post- assessments to control groups taking either no finance course, or a traditional personal finance course.

Despite these limitations, we believe our results are of significant interest, as nothing about them seems likely to undermine the observed connection between mathematics and finance, especially as they are consistent with previous research on the topic.

¹ "Even though actual financial literacy levels are low, respondents are generally rather confident of their financial knowledge and, overall, they tend to overestimate how much they know. For instance, in the 2009 U.S. Financial Capability Study, 70 percent of respondents gave themselves score of 4 or higher (out of 7), but only 30 percent of the sample could answer the factual questions correctly." (Lusardi, 2011, p. 15)



Conclusion

Our study suggests that incorporating financial education into a mathematics course is a promising avenue for improving financial literacy. Based on our analysis, we speculate that improving mathematical knowledge and improving financial knowledge are mutually reinforcing processes. The students displayed promising improvement levels after taking the course. In addition, the fact that level of correlation between mathematics and finance increased after taking the course suggests that for students with prior mathematical knowledge but little financial experience, such a course is an effective way to allow their financial knowledge to 'catch up' with their mathematical knowledge. Such students could represent a high-impact group for the project of improving financial knowledge. In addition, it appears that math skills bridge the gap between financial confidence and financial knowledge, which suggests that mathematics education is an important factor in addressing over-confidence.

As the limitations section acknowledges, this topic requires additional investigation to fully understand this subject matter. We hope the present study encourages this further research.

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Cash 'n' Careers: Human Capital Investment

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Abstract

We present an individual, customizable approach to address the challenges of human capital investment, including: cost transparency, coordination of information, graduation rates, career comparisons, low financial knowledge, just-in-time coaching, the underdeveloped adolescent brain, variability in discount rates and ability levels, and demographic differences. Our model incorporates eight of these ten factors and suggests that while high-performing students enjoy a positive expected return on investment, marginal students may face a negative return to their human capital investment. We offer guidance for personal financial planners, financial aid officials, and others vested in human capital decisions of young Americans.

Key words: college cost calculator, financial coaching, financial education, financial literacy, return on investment

Introduction and Motivation

Is college always the "right" decision? Or, as Caplan (2018) laments, is "there is way too much education" with "typical students burning through thousands of hours of material that neither raises their productivity nor enriches their lives" (pp. 2-3)? Extant research in this area is growing, yet tends to focus on population-level decision making and is of limited use to guide individuals (e.g. Autor, 2014). Consistent with guidance from the U.S. Financial Literacy and Education Commission (2019), we take a personal financial planning approach and model returns to human capital investment. First, we identify ten different factors relevant to an individual-level human capital investment calculator. Then, we suggest a model that simultaneously compares two different tracks: one requiring a college degree and one career track that is available with only a high school diploma. This model goes beyond the traditional college cost calculator to include oft-overlooked life events and financial issues, encourages students to use appropriate comparisons when considering the decision to invest in human capital, and incorporates research driven practices from financial coaching and cognitive psychology. Motivated by the comprehensive financial counseling approach of Choi, Gudmunson, Griesdorn, and Hong (2016) our model addresses the Avery and Turner (2012) question: how do we use research about the "average" college student to better aid the "individual" college student?

- 1. *Clarity of Costs:* Students are often confused about the true cost of attending college, with 51% of 11th graders responding, "I don't know.", when asked to estimate tuition and fees at their local state school (Velez & Horn, 2018).
- 2. Coordination of Relevant Information: Even if one can identify the true direct cost of attending school, other information is frequently omitted such as opportunity costs for attending school (Abel & Deitz, 2014) or differing unemployment rates for those with a college degree (US Bureau of Labor Statistics, 2019).
- 3. Completion Likelihood By School: Not all colleges are equally good investments. The average student attending a private-for-profit college has a mere 16% graduation rate, while those attending public colleges and private colleges have 63% and 68% graduation rates, respectively (Avery & Turner, 2012; see also McFarland et al., 2018).
- 4. *Appropriate Career Comparisons*: Instead of looking at the "average" high school vs. college graduate, appropriate comparisons might include two careers in the same field with one requiring a college degree and one attainable with only a high school diploma (e.g., a registered nurse and a pharmacy technician).

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- 5. Adolescents don't know what they don't know: Despite high self-confidence in financial literacy, actual knowledge among high-school students is quite limited (Lusardi, Mitchell, & Curto, 2010).
- 6. *Just-in-Time Financial Coaching:* In a meta-analysis of 201 studies of how financial literacy and financial education relates to financial behaviors, Fernandes, Lynch, and Netemeyer (2014) conclude that the effects of these interventions decay over time. Accordingly, "just-in-time" interventions of financial education targeted towards specific behaviors offer greater promise (Carlin & Robinson, 2012; Drever et al., 2015).
- 7. The Underdeveloped Adolescent Brain: Most adolescents are significantly more likely to anticipate negative consequences by the age of 16, instead of merely reacting to negative outcomes (Crone & van der Molen, 2007). This shift is likely due to patterns of development in the adolescent brain where younger adolescents are much more likely to engage the emotional regions of the brain instead of the planning regions (see Figure 3, Casey, Jones, & Hare, 2008; see also Reyna & Farley, 2006).
- 8. *Variability in Discount Rate:* Individual discount rates appear inversely proportion to cognitive ability with those scoring highest on these measures also reporting the lowest discount rates (Kirby, Winston, & Santiestban, 2002).
- 9. *Individual Abilities Predicting Individual Income*: Economic research explicitly links high school grade point average (GPA) to lifetime earnings (French, Homer, Popovici, & Robins, 2015).
- 10. *Don't Forget the Demographics:* Although the average return on investment is high for college attendees, there is significant variation by demographic groups, including black college graduates (Scott-Clayton, 2018) and women (Wilde, Batchelder, & Ellwood, 2010).

Method

Due to space constraints, we refer readers to a detailed description of the models, equations, and parameters in the full working paper (Ross, Wright, & DeMello, 2019). However, we note several aspects that are unique to our model. First, we incorporate 112 customizable parameters. The primary utility of this model lies in the individual-level customization (e.g., what is your student loan rate?). However, each parameter includes a researched default value in the absence of customization (e.g., undergraduate unsubsidized loan rate of 5.05% per US Department of Education, 2019). Second, we incorporate parameters that are frequently overlooked or unacknowledged as one considers the costs and benefits of college, including: differing unemployment rates for college vs. non-college graduates, costs of living and whether one expects to share household costs with a partner, and what age one expects to retire. Third, to the extent practical, we select accessible research-based parameters that to serve as proxies for multiple measures. For example, GPA exhibits a positive relationship with both the likelihood of college graduation and earnings power but an inverse relationship with discount rate. Finally, adolescent brain research suggests that capacity to engage in planning typically increases substantially between the mid and late teenage years. However, planning ahead of major commitments is important so optimal delivery of this model should target students from the junior year of high school through the early years of undergraduate study.

Results

As indicated in Table 1, we address eight of ten factors identified in the motivation section to produce an expected return on human capital for the average high school graduate. This requires the input of 52 individual variables, 36 table variables, and 24 calculated values to deliver an individualized, customized, prognostication. Default model parameters suggest that the average high school graduate should expect a negative net present value (NPV) for a college investment. The non-college track demonstrates a small positive NPV. Both tracks project high debt levels in the decades following high-school graduation. With the cost of children, both college and non-college tracks require nearly 40 years after high school before nominal net wealth crosses into positive territory. Additionally, only about two of three students that begin college actually graduate, resulting in a large downward adjustment of expected annual income for the college track. Contingent upon certainty of college graduation, investment in human capital becomes notably more appealing. Specifically, increasing the graduation rate from a 65% default to 100%

results in increase a negative NPV to roughly \$140,000 for the college-track. This projection suggests the critical importance of internal drive, self-efficacy, and external guidance when considering the college track.

Adjusting high school GPA from the average B- student to a slightly higher "B" student (i.e., 3.00 GPA), results in a positive NPV for both the college and non-college track. However, this projection results in the college track with debt relative to the non-college with savings, a roughly \$50,000 difference at graduation. With only a modest expected gain in after-tax income from the college track, the expected lifetime NPV of the non-college track still exceeds the college track. For exceptional students, however, investment in human capital likely results in substantial lifelong rewards due to the critical influence of GPA. First, earnings power increases for both the college and non-college track, such that a student with a 4.00 high school GPA may expect an 18% earnings premium over the average student. Second, consistent with the inverse relationship between discount rate and cognitive ability, the individual discount may decline by one fifth. Lastly, a higher GPA may boost the likelihood of college graduation by approximately one quarter. The cumulative results of a 4.00 student leveraging a college investment may yield an NPV gain of over \$40,000 relative to direct entry into the workforce.

Finally, we provide appropriate career comparisons in healthcare, finance, and transportation to illustrate these differences. Human capital investment in healthcare (registered nurse versus pharmacy technician) and finance careers (financial analyst versus bank teller) suggest investment in human capital is a wise decision with an expected NPV of \$64,000 and \$134,000, respectively. These contrast with the transportation career pair (logistician versus cargo and freight agent) where the education investment results in an estimated \$37,000 lower NPV compared to the non-college track. Interestingly, logisticians may expect to earn \$1.8 million in this scenario compared to cargo and freight agents who may expect to earn \$1.4 million. However, much of the earnings for the logistician come later in life so are heavily discounted, thus resulting in a lower NPV.

Limitations

This model does not address a number of hard-to-quantify aspects of college and career selection. Social considerations involving college may include positive externalities such as more effective citizenship, greater opportunities for mate selection, or simply having fun. Value based features such as career expenses, employment benefits, or other non-wage consideration are not explicitly included in this model. The model also fails to address a number of non-monetary individual considerations such as working conditions, prestige, self-actualization, and the implications of association with a particular institution. Additionally, we model decision-making only in the United States. Other nations may have substantially different education pathways or pose challenges not typically observed in the US. (see for example, Bönte & Filipiak, 2012). While financial implications are clearly important, there are many other considerations involving education!

Conclusion and Implications

The model demonstrates that for the average student, baccalaureate human capital investment may have a negative net present value. We acknowledge that this finding may be surprising for some readers, especially given the abundance of literature extoling the virtues of a college degree. However, our model takes into consideration aspects that are frequently under-addressed, including the fact that a significant portion of those starting college never graduate but still carry college debt. Another consideration is that a student's high school GPA is predictive of both their future earnings and their discount rate. College investment returns for an above average student with a near certainty of college completion are typically very attractive. Most students, however, by definition, are not above average.

Students and those who advise them are frequently overwhelmed with "average" information, but lack individualized information about what human capital investment may entail for their individual situation. We



address this gap by incorporating eight of ten critical factors into the model. Since many users are likely to lack good parameter benchmarks, we provide 112 referenced default values with the option to customize. This balance of customization and useful default values facilitates comparison of two different futures. We ground exploration of the costs and benefits—in present value—of decisions that otherwise may be made based upon assumptions instead of evidence (e.g., all debt is "bad debt", college is always a good choice, etc.). FinTech company Suprnational LLC and the Sanford Center for Financial Planning and Wellness are developing a web interface for the Cash 'n' Careers model, with financial support from Western Michigan University and the Michigan Strategic Fund. Additional support for the web interface comes from the Michigan Association of State Universities, the Kalamazoo Promise, and the Michigan Credit Union Foundation. The goal of the Supranational (2019) web interface is to provide a just-in-time delivery mechanism for expected financial outcomes associated with education options, thereby assisting individuals in making major career and education investment decisions.

The U.S. Financial Literacy and Education Commission (2019) calls for institutions of higher education to offer financial literacy information and college counseling with the *individual* in mind. Table 1 shows that five of our ten factors directly align with the best practices stated in the report. Unfortunately, however, for many students and many universities, there is a substantial gap between current practice and the stated best practices. Instead, many students tend to rely heavily on only one piece of information when making their college decision: the price of college tuition (LaFave, Kelly, & Ford, 2018). But, it does not have to be this way! Our model allows students to make human capital investment decisions using comprehensive, individual, customizable information instead of just a few average data points. As such, the implications for this tool can be powerful. What if each high school student could access personalized, research-based projections of career paths aligned with their interests? What if underserved populations could access timely and relevant financial information that has historically been the purview of the wealthy, educated, and/or elite. We challenge practitioners, community partners, and parents to ask young Americans: How can you incorporate more "I" into your human capital "I"nvestment decision?

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Table 1
Assessment of the factors critical for individual-level college and career decisions.

	Level of sophistication				
Factor	Does not address	Rudimentary	Adequate ^a		
1. Clarity of costs. ^b			✓		
2. Coordination of relevant information. ^b			\checkmark		
3. Completion likelihood by school. ^b	\checkmark				
4. Appropriate career comparisons.		\checkmark			
5. Adolescents don't know what they don't know	•		\checkmark		
6. "Just-in-time" financial coaching. ^b			\checkmark		
7. The underdeveloped adolescent brain.		\checkmark			
8. Variability in discount rate.		\checkmark			
9. Individual abilities predicting individual incom	e. ^b	\checkmark			
10. Don't forget the demographics. ^b	✓				

^a An adequate level of sophistication does not imply the factor is fully addressed. Rather, we use this term to acknowledge that relative to other college cost calculators and relative to other factors in this model, to the best of our knowledge, these factors are comparable to or better than existing models.

^b Aligns with the U.S. Financial Literacy and Education Commission (2019) best practices.

Appendix 1: Regression Table¹

Regression Type	Assessment Used	Independent Variable 1	Independent Variable 2	Dependent Variable	R- Squared	Intercept	Coefficient 1	Coefficient 2
1. Big 6 vs Finance	Start	Big 6	X	Finance (orginal)	0.92***	0.01	1.05***	X
2. Math vs Finance (Pre)	Start	Math	X	Finance (all)	0.2***	0.29***	0.35***	X
3. Math vs Big 6	Start	Math	X	Big 6 Score	0.09***	0.22***	0.28***	X
4. Math vs Finance (Original)	Start	Math	X	Original	0.29***	0.31***	0.37***	X
5. Math vs Finance (Post)	End	Math	X	Finance (all)	0.54***	0.28***	0.56***	X
6. Math vs Confidence (Pre)	Start	Math	X	Confidence	0.05***	2.25***	0.98***	X
7. Math vs Confidence (Post)	End	Math	X	Confidence	0.2***	2.34***	1.64***	X
8. Confidence vs Finance (Pre)	Start	Confidence	X	Finance Score	0.2***	0.19***	0.08***	X
9. Confidence vs Finance (Post)	End	Confidence	X	Finance Score	0.44***	0.09	0.14***	X
10. Math+Confidence (Pre)	Start	Math	Confidence	Finance Score	0.32***	0.14***	0.29***	0.06***
11. Math+Confidence (Post)	End	Math	Confidence	Finance Score	0.68***	0.08*	0.42***	0.09***

Table 1

¹ Note that here and throughout: * significant at 10%; **significant at 5%; *** significant at 1%.

		Finance	Finance	Finance		
Pre-Assessment	Total	Original	Big 6	All	Math	Confidence
Mean	37%	42%	31%	39%	30%	2.5
Median	35%	41%	33%	39%	25%	2.7
Standard Deviation	16%	19%	21%	17%	22%	1.0
Range	74%	88%	100%	78%	88%	4.0

Table 2

				Standard	
	Beginning	End	Change	Deviation	Change/SD
Total Score	37%	47%	10%	16%	0.63
Finance Score	39%	50%	11%	17%	0.61
Math Score	31%	40%	9%	22%	0.42
Big 6 Score	31%	40%	9%	17%	0.53
Confidence	2.54	2.98	0.44	0.95	0.46

Figure 1

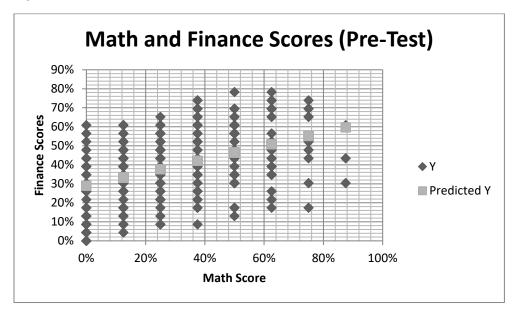
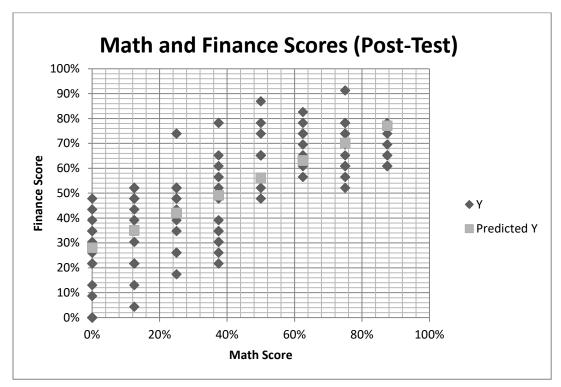


Figure 2



Efforts in Recruiting and Diversity in Financial Planning Undergraduate Programs: An Exploratory Study

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Abstract

This exploratory research examined personal financial planning undergraduate program recruitment efforts and strategies, as well as the gender and racial representation of students in those programs. Using a qualitative, content analysis approach, we uncover that some of the most successful and common strategies for attracting students are academic advisors, feeder courses, word-of-mouth marketing, and events. Women, Black, and Latinx students and faculty are underrepresented in undergraduate financial planning programs. This study provides strategies to employ when recruiting students, particularly women and those from racially diverse groups.

Key words: academic programs, diversity, personal financial planning, recruiting

Introduction

According to the CFP Board, only 1.5% of CFP® professionals are African-American and only 2% are Latinx, which is considerably less than the percentage that either group represents in the U.S. population (CFP Board, 2019). Similarly, fewer than 25% of CFP® professionals are women. As undergraduate academic programs are arguably a crucial aspect of the advisor talent pipeline, it is important to understand whether or not programs are recruiting, how programs are recruiting, and whom they are recruiting. It is also important to know which recruitment efforts are successful. The results of this study shed light on the strengths and challenges present in filling the financial advisor pipeline with students, including females and students from racially diverse backgrounds. In addition, the results suggest actions that can be taken to increase the number of undergraduate financial planning students and, as a result, the number of perspective future financial advisors.

Literature Review

Increasingly, students are pursuing bachelor's degrees in personal financial planning as an entry point into the financial industry. As of August 2019, there are over 135 undergraduate degree programs in financial planning or related programs registered through the CFP Board. There has been a continual increase in baccalaureate programs with 40% more programs registered with the CFP Board in 2014 than in 2010 (Leonhardt, 2014). These programs are most often housed in schools, colleges, or departments of consumer sciences, human ecology, and business.

Despite the growth of CFP Board registered programs, industry professionals have partly blamed the lack of diversity among financial advisors on a lack of candidates (Paikert, 2014). Currently, there is no research outlining the demographics of students enrolled in CFP Board registered programs. Literature on recruiting students into financial planning programs is also rather limited (Goetz, Tombs, & Hampton, 2005; Putnam & Chakravarty, 1998; Pope & Howe, 1991; Chen & Severns, 2016). Some of the articles have examined gender but none have discussed race.

While the literature on diversity and recruitment in academic financial planning programs is scant, researchers have explored this theme in the more general field of family and consumer sciences (Burdette-Williamson & O'Neal, 1998; Firebaugh & Miller, 2000; Ralston et al., 2004; Ralston, Cloud, & Bell, 2005; Smith & Neal, 2000). Prior research in this area provides some insight since financial planning, and related majors, are included under this academic umbrella at many universities. In 2000, Francine Firebaugh and Julia Miller, both deans of schools of

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human ecology at the time, wrote that diversity amongst students in consumer science programs should be a priority to advance the field and to address our increasingly multicultural society's family and consumer issues, which includes financial planning. They also asserted "we need to better understand the underlying causes of our current degree of diversity, to address them systematically, and to commit to effectively increasing diversity" (Firebaugh & Miller, 2000, p. 35).

Methodology

Researchers contacted all 114 programs that were listed on the CFP Board's website as registered baccalaureate financial planning programs as of June 24, 2018. Each school listed a contact person along with his or her contact information. A total of four emails were sent to each program's official contact person asking them to participate in the study over the series of several weeks in July and August 2018. To answer the research questions, a 30-item survey was developed and administered online via Qualtrics with both closed-ended and open-ended questions. Content analysis was used to direct the analysis and interpretation of our open-ended questions.

The survey asked questions related to information about the respondent, their program, their students, as well as recruitment efforts. Thirty-seven respondents started the survey and twenty-eight completed the survey from start to finish. Respondent schools were diverse and reflective of the overall population of CFP Board certified undergraduate programs in geographic location, school type, size of institution, and department where the financial planning program was housed.

Results

Respondents were asked to respond, as best as possible, regarding the gender and racial composition of their faculty in their undergraduate financial planning programs. A total of 28 respondents answered these questions. Of 198 faculty members, women represented 29% and men represented 71%. Interestingly, these numbers are similar to the male/female ratio of CERTIFIED FINANCIAL PLANNERSTM. Of 198 faculty members, 79% were White, 7% were Black, 2% were Latinx, and 11% were Asian. Hawaiians, Pacific Islanders, American Indians or Alaskan Natives accounted for less than 1% combined. None were reported to be two or more races.

Twenty-eight schools reported on the gender and racial representation of their students. Males represented 67% of the students enrolled in financial planning programs while females represented 33% of students. Within the 28 undergraduate financial planning programs responding, 75% percent of the students were White, 7% Black, 10% Latinx, 6% Asian, and less than 2% were two or more races, and combined, less than 1% were Hawaiian, Pacific Islander, American Indian or Alaskan Native.

General Program Recruitment

The majority of the undergraduate programs (71%) stated that they actively recruit students. Of those who did not, the most common reasons cited for not recruiting was that the program was too new, program was already at capacity, or lack of time. When asked how students learn about financial planning at their institutions, the most common response was through academic advisors. The second and third most common responses were through feeder courses, such as personal finance or business 101, and word of mouth respectively.

Programs were asked to describe the strategies they use to recruit students. The most common response was through departmental and campus events, marketing and advertising, and college career education and personal finance classes. In responding to how they feel their recruitment strategies are working, the responses were mixed. About half of the respondents stated that their efforts were working well and five stated that they were not working well. Other respondents were unsure.



Almost 40% of the responses to questions focused on recruitment challenges mentioned at least one of these three issues: (a) a lack of understanding about the major and the financial planning profession, (b) lack of awareness or misconceptions about a financial planning career and/or CFP® certification, and (c) lack of awareness of career opportunities outside of sales. Other responses that were mentioned several times point to competition with other programs, particularly with more traditional business majors like marketing, accounting, and finance; lack of student interest; and time constraints. Competition from traditional business programs was reported for programs both within business schools and in those outside of business schools, such as in human ecology schools or departments.

The themes that arose from asking respondents how they tackle their recruitment challenges included student outreach; building relationships with business schools, students, and faculty; adding a financial planning minor; and inviting program alumni and financial advisors as guest speakers. One respondent mentioned that their program combatted recruitment challenges by purposefully shifting its focus to financial counseling to attract more students:

"Became [an] AFCPE program to focus on value proposition of counseling and serving instead of sales and products."

Recruiting Female Students

Of the financial planning programs surveyed, 53% are making special efforts to increase female representation among students at the undergraduate level. When the remaining 47% were asked why they were not making an effort to recruit female students, there were several themes that emerged including: gender diversity is already high, new or small program (and therefore, overall recruitment is more important), and lack of time.

When asked how well female recruitment efforts were working, 77% percent of the respondents stated that they are either still working on it or are unsure while 18% stated that efforts were working well. Some of the strategies mentioned multiple times by the programs to increase gender diversity included offering female specific scholarships, engaging female guest speakers and influencers, partnering with departments that have more female representation, and using the CFP Board's brochure, "A Great Career for Women," available electronically on the CFP Board website.

Recruiting Racially Diverse Students

When asked if any special efforts are taken to increase racial diversity in their undergraduate financial planning program, 41% replied yes. When asked why the programs were not making special efforts to increase racial diversity, responses included limited racial diversity at the programs' institutions, goal of race neutral recruitment, time constraints, and lack of a need to diversify racially. For the last response, one respondent did not give further detail but others stated that racial diversity was happening on its own or that the school was already racially diverse.

Respondents were asked to comment on any special efforts being taken to increase racial diversity. Practically each of the answers given was different. Two programs noted that they are using financial literacy programming aimed at minorities to attract potential students. Two other programs directly target minority students while marketing their programs. To recruit racial minorities, programs cite using CFP Board resources on diversity, partnering with minority student associations for events, hiring diverse faculty and creating a symposium that brings a diverse group of people together. When asked how their efforts to recruit racially diverse students were working, the majority of the respondents stated that they were unsure. Most respondents mentioned that their efforts were still in progress or too new to determine.

Gender and Racially Diverse Recruitment Compared



Compared to gender diversity, increasing racial diversity seemed to be less of a priority. Unlike with gender diversity, respondents seemed more optimistic about their efforts with racial diversity. Compared to 18% of respondents that said their efforts to increase gender diversity were working well, 34% said that their efforts to increase racial diversity were working well. At the same time, a slightly higher percentage stated that their racial minority diversity efforts were not working well (8%) when compared to gender diversity efforts not working well (5%).

Summary

This study has identified recruitment efforts and strategies of undergraduate financial planning programs responding to an online survey. The survey also collected data on the gender and racial representation of students in those programs. Some of the most successful and common strategies for attracting students are academic advisors, feeder courses, word-of-mouth marketing, and events. Many respondents commented on how students have misconceptions about the financial planning industry including certification, job options, and awareness of the major itself. Programs responded to challenges through outreach and building relationships with faculty, colleagues, and students, adding a financial planning minor, and welcoming financial advisors and alumni into the classroom as guest speakers.

Some programs reported recruiting specifically for females as well as racial minorities with notable success in efforts such as establishing scholarships and engaging in financial literacy in target markets, but there are still challenges. Whether as students or faculty members, women and most racial minorities are underrepresented in undergraduate financial planning programs. Compared to African-Americans, Latinxs are less represented when considering their representation in the general U.S. population. In contrast, Asians are overrepresented as faculty and as students in the financial planning programs that responded to the survey. A greater percentage of programs in this study are focusing on gender diversity rather than racial diversity.

Implications

This study provides academic undergraduate programs some additional strategies to employ when recruiting students, particularly women and those from racially diverse groups. It is evident that financial planning educational programs still have some work to do when it comes to recruiting students and faculty, particularly those identifying as Black, Latinx, or female.

Practitioners, teachers, academics, financial institutions, and career influencers have an important role in demystifying careers in financial planning. When encountering students, parents, and others who are curious about the profession, it can be helpful to offer information about all of the career options within financial planning, including those outside of sales. Practitioners, particularly women or racially diverse professionals, may consider volunteering to speak to college students about their experiences and work. Hearing from someone who shares their background may positively influence students.

Limitations

This research is not necessarily representative of the undergraduate financial planning program population and care should be exercised in generalizing the findings. Respondents were asked to take the survey during the summer months (often vacation time for faculty), which may have negatively impacted the response rate and the person who responded (i.e. program coordinator versus tenured or tenure-track faculty member). Respondents were fully aware of the intent of the study and this may have had an impact on how they responded. Some respondents started mentioning diversity early in their responses before it was asked about. Respondents were asked to identify



themselves using their names, school names, and contact information. This lack of identity privacy may have played a part in how respondents answered and also in who responded to the survey.

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Exploring the Connections Between Self-Regulation, Financial Self-Efficacy, and Financial Management Behaviors

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Abstract

This study explores the relationship between self-control, or self-regulation, and financial self-efficacy and how these two constructs interact and potentially influence financial management behaviors. Self-regulation has been construed as a multiuse executive function that can manifest in many different forms and contexts, including conflict management, mindfulness practices, and self-care. Data from this study are from a sample of participants who had self-selected to register for a couple relationship education (CRE) program. The final sample consists of 693 individuals (n = 391 female) who completed data on the variables of interest. We find strong and significant relationships between self-regulation, financial self-efficacy, and financial management behaviors. Findings suggest that in order to improve financial management behaviors, the practice of broader-based self-care techniques may be beneficial.

Introduction

This research explores the direct and indirect effects of self-regulation and financial self-efficacy on financial management behaviors of individuals enrolled in a relationship education program. Specifically, the question of whether self-efficacy mediates the effects of self-regulation on financial management behaviors is examined. Findings from the study provide valuable insight into mechanisms leading to the adoption or maintenance of positive money management practices.

Literature Review

Baumeister, Heatherton, and Tice (1994) defined self-regulation as one's capacity to manage responses and moods. More recently, Carver and Scheier (2016) provided a more inclusive definition of self-regulation that included the process of self-corrective adjustments being made to achieve a desired outcome. Baumeister and Muraven (2000) provided evidence that repeated activities that require high attention in potentially stress-induced environments lead to depletion of self-regulatory capacity and reduced ability to exercise effective self-regulation on subsequent tasks. Baumeister and Muraven established that when self-regulation was required under one set of "stressful" circumstances, the ability to exert self-regulation in other unrelated situations following the initial stressor was compromised due to ego-depletion. Past research also indicates that individuals with higher self-regulation were more likely to save regularly, feel less anxious about money matters, feel better about their current and long-term financial situation, and were wealthier compared to those with low self-regulation (Liu, Yilmazer, Loibl, & Montalto, 2019; Strombrack, Lind, Skagerlund, & Vastfjall, 2017).

Improving Self-regulation

Improved self-regulation has been achieved through different interventions. For example, regular practice of small acts of self-regulation was found to increase general self-regulatory capacity (Muraven, 2010). Prior research suggested that the amount of self-control exhibited in any practice situation is more important than the context of the self-control exercised (Masicampo & Baumeister, 2007). Mindfulness exercises may provide skills that help improve self-regulation of emotions and problematic behaviors and facilitate self-growth at a personal level, as well as in work and school settings (Ostafin, Robinson, & Meier, 2015). Thus, higher self-regulatory capacity was achieved following daily activities of self-care, such as healthy eating, exercise, and stress reduction techniques.

Financial Self-efficacy

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Bandura's Social Cognitive Theory (1986) notes that general self-efficacy precedes the mechanism of self-regulation as it provides the motivation and internal directive to initiate self-regulatory practices. Baumeister and Muraven (2000) also note that individuals that perceive greater control over their circumstances exhibit more self-regulatory capacity than those who do not perceive they have control (Baumeister & Muraven, 2000). However, high general self-efficacy does not transfer to specific task domains (Bandura 2006). In financial behavior management literature, financial self-efficacy has been defined as one's belief that they can control their own finances (Lown, 2011; Qamar, Khemta, & Jamil, 2016).

Variables of Interest

Dew and Xiao (2011) developed the financial management behavior scale (FMBS) to provide an overall assessment of a household's financial management practices. The FMBS was designed to assess a household's behavior in five domains: cash management, savings and investments, credit use, insurance, and consumption management. Dew and Xiao found that the aggregate score encompassing all five domains was more reliable than separate subscales.

Research Questions

Two key questions addressed in this research study were: 1) whether general self-regulation was associated with a specific area of self-regulation such as financial management behaviors, and 2) how did self-regulation and financial self-efficacy interact (if at all) with each other and what was the combined effect on financial management behaviors.

Methods

Data and Sample

Data were collected from a sample of participants who had self-selected to register for a couple relationship education (CRE) program. Participants were recruited through local child welfare agencies, community events, court referrals, community partner referrals, and word-of-mouth. All participants received the same 8-hour CRE curriculum. Participants were invited to complete a pre-program survey that was given one to four weeks prior to the start of the program. A total of 904 individuals completed the pre-program survey either online on their own time or on a tablet with a field assessor at an in-person group event or individual meeting at their home or a community location (e.g., library). Participants received \$50 for completing the pre-program survey.

The final sample included 693 individuals (n = 391 female) who completed data on the variables of interest. Of these, 320 (46.2%) participated in the program for foster caregivers and the remaining 53.8% participated in the program for parents receiving child welfare support services. The majority of the participants were Caucasian (55.8%), non-Hispanic (89.8%), had completed at least some college (60.7%), worked full time (58.7%), and 43.9% reported an annual household income of less than \$40,000. The majority of the overall sample was married (74.0%). Participants were approximately 36.77 years of age (SD = 10.01) and had been in a committed couple relationship for an average of 11.47 years (SD = 8.25).

Measures

The construct of self-regulation was inferred using three other self-reported behaviors: mindfulness, conflict management, and self-care.

Mindfulness was measured using five items from the Mindful Attention Awareness Scale (Brown & Ryan, 2003). All items were reverse coded so that a higher score indicated a higher level of mindfulness (α = .833). Conflict management was measured using eight items from the Interpersonal Competence Questionnaire (Buhrmester et al.,1988), the Negative Interaction Scale (Stanley, Markman, & Whitton, 2002), and the Communication Patterns Questionnaire (Christensen & Sullaway, 1984). A mean score was computed so that a higher score indicated more positive conflict management (α = .699). Self-care was measured using 8 items from the Individual Functioning Scale (Adler-Baeder et al., 2010). A mean score was computed so that a higher score indicated a higher level of self-care (α = .751). Financial self-efficacy was measured using 5 items from the Financial Self-Efficacy Scale (Lown, 2011). A mean score was computed so that a higher score indicated a higher level of financial self-efficacy (α =



.847). Financial management behaviors were measured using 11 items from the revised Financial Management Behavior Scale (Dew & Xiao, 2011). A mean score was computed so that a higher score indicated more positive financial management behaviors ($\alpha = .870$).

Analytic Plan

Using MPlus Version 8 (Muthén & Muthén, 1998-2019) a structural equation model (SEM) was used to examine the associations between self-regulation, financial self-efficacy, and financial management behaviors. Before testing the model, a confirmatory factor analysis (CFA) was conducted to create the self-regulation construct from three observed variables: mindfulness, conflict management, and self-care. Model fit was established using three goodness-of-fit model indices, including the comparative fit index (CFI), the root mean squared error of approximation (RMSEA), and the chi-square test (Carmines & McIver, 1981). Missing data were accounted for using full information maximum likelihood.

Results

Preliminary Analyses

Descriptive statistics and zero-order correlations for all studied variables are reported in Table 1. On average, participants reported moderate levels of mindfulness (M = 4.16, SD = 1.07), self-care (M = 4.15, SD = .937), financial self-efficacy (M = 3.97, SD = 1.38), and financial management behaviors (M = 3.36, SD = .941) as well as relatively high levels of conflict management (M = 5.15, SD = 8.15). All variables were correlated in the expected directions and all of the planned covariates were significantly correlated with the study variables, indicating a need to add these factors in as covariates.

Model Results

Factor loadings for the indicators of self-regulation were found to be statistically significant. Next, structural equation model analyses were conducted to test the model. First, we examined the direct association between self-regulation and financial management behaviors and found a significant, positive association (β = .605, p < .001). Then, we added financial self-efficacy to the model and found significant associations between self-regulation and financial self-efficacy (β = .595, p < .001) and financial self-efficacy and financial management behaviors (β = .390, p < .001). The final model had acceptable model fit (χ^2 (12) = 51.50, p < .001; RMSEA = .069; CFI = .955). After adding in financial self-efficacy into the model, the estimate of the association between self-regulation and financial management behaviors was reduced and was no longer significant (β = .126, p = .061). Finally, the unstandardized estimate of the indirect effect of self-regulation to financial management behaviors was .379 (p < .001) indicating that the association between self-regulation and financial management behaviors was significantly mediated through financial self-efficacy.

Other significant associations controlled for in the model included sex, race, education, marital status, and household income. Males were more likely to report higher levels of self-regulation and financial management behaviors, while females were more likely to report higher levels of financial self-efficacy. Caucasian individuals were more likely to report more positive financial management behaviors. Finally, higher household annual income was associated with higher levels of self-regulation and financial self-efficacy and more positive financial management behaviors. Overall, self-regulation and financial self-efficacy accounted for 43.6% of the explained variance in financial management behaviors.

Discussion

Consistent with prior research, self-regulation is strongly associated with financial management behaviors. However, this study finds that the process through which self-regulation influences financial management behavior is through financial self-efficacy. Financial self-efficacy mediates the relationship between self-regulation and financial management behavior when controlling for sex, race, marital status, education, and household income.

Findings from this study suggest that once general self-regulatory practices are in place, these practices influence financial management behavior by supporting the acquisition of specific self-efficacy, such as financial self-efficacy. The process of self-regulation influencing financial management practices through financial self-efficacy



may be similar to a physically fit person learning to engage in a new sport. The physical capacity is there, but learning the skills associated with the new sport is an essential element to good performance, and learning those skills is made easier because of the physical fitness of the individual.

While these findings are not generalizable to the overall population due to the nature of the sample, some implications may be gleaned from the results. Clients participating in financial education or planning services may benefit from exposure to other activities that can increase general self-regulatory capacity. These activities could range from general activities, such as daily mindfulness exercises, to specific activities related to personal financial management such as daily tracking of expenses. Both can help increase self-regulatory capacity and may contribute to greater overall improvement.

Factors that influence perceptions about four types of financial professionals: Financial planner, financial counselor, financial coach, and financial therapist

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Abstract

This study utilized qualitative methods to explore factors that influence perceptions about financial professionals held by adults that intended to seek professional financial advice in the next twelve months. Participants (N=12) from working households were interviewed to explore existing knowledge and pre-conceived perceptions about financial planners, financial counselors, financial coaches, and financial therapists. Perceptions were explored again after a two-minute description of each financial professional. Themes that emerged related to: (a) lack of awareness of non-planning professionals, (b) pre-conceived perceptions based on similar words, (c) selection of multiple professionals for help, and (d) concerns about qualifications to offer services. Results suggest that consumers are not aware of counseling, coaching, and therapy models, thereby creating a possible barrier to seeking and receiving appropriate help. Practitioners and professional organizations are encouraged to attempt to remove barriers created by unfamiliarity and misconceptions with pro-active communication efforts.

Keywords: financial coach, financial counselor, financial help-seeking, financial planner, financial therapist, qualitative methods

Note to the reader: Theme analysis still underway and will conclude by the AFCPE® 2019 Symposium presentation session.

Literature Review

Recent financial trends have placed greater responsibility on households for critical financial decisions. Examples include the shift from defined benefit retirement plans to defined contribution plans, reforms in health insurance, increased complexity in financial products, and ongoing daunting market conditions (Collins & O'Rourke, 2010; Ho, Palacios, & Stoll, 2012; Kramer, 2016; Seay, Kim, & Heckman, 2017; Winchester & Huston, 2015). When making financial decisions, consumers can rely on their own financial literacy or seek help from a financial professional (Balasubramnian, Brisker, & Gradisher, 2014; Finke, Huston, & Winchester, 2011; Grable & Joo, 1999). The "magnitude, multitude, and complexity" of financial decisions in the recent financial climate has increased the usage of outside assistance from a financial professional (Robb, Babiarz, & Woodyard, 2012, p. 292).

As the demand for one-on-one financial advice grows, the marketplace is responding with an increase in providers (Balasubramnian et al., 2014). Private practice financial planners have existed in the marketplace for decades, but private practice financial counselors, financial coaches, and financial therapists have emerged recently. Consumers may be confused about, or more likely, are unaware of all types of assistance providers and need clarity on the different types of financial practitioner (Delgadillo, 2014).

The complex and risky nature of financial services makes it difficult for consumers to evaluate providers and services, even after services are received (Smith, Vibhakar, & Terry, 2007). The actual description or title a financial professional utilizes may add to a consumer's confusion in the search and evaluation process. A potentially-flawed selection process influenced by inaccurate perceptions may contribute to an improper selection. Even worse, a consumer may not follow through on the decision to seek help.

Financial help-seeking

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James (2012, p.14) noted that "selecting a financial advisor is complex, multifaceted, and often highly social process". Grable and Joo (1999) developed the Financial Help-Seeking Framework from psychological and sociological models to explain how individuals move through financial behavior and assessment stages before potentially working with a financial professional. In Stage 1, a person exhibits positive or negative financial behaviors. In Stage 2, a person explores the positive or negative consequences of their behaviors. In Stage 3, a person identifies the causes of positive or negative behaviors. Stage 4 is the critical decision juncture when a person decides to seek help or not seek help. If the person decides not to seek help, the process ends at Stage 4 and may lead to a crisis situation.

Once a person moves into Stage 5, a person will evaluate assistance options and make a selection from one or more assistance providers. An individual can seek financial information and assistance from a variety of formal and informal sources (Balasubramnian et al., 2014; Finke et al., 2011; Grable & Joo, 2001; 2003). Informal, non-professional sources include friends, family members, co-workers, and the Internet. However, individuals who seek and implement the advice of a financial professional may achieve more positive financial outcomes (Grable & Joo, 2001). Noting the subjective nature of Stages 2, 3 and 5 in the Financial Help-Seeking Framework, Grable and Joo (1999. p.19) suggested "a qualitative methodology could be used to uncover the hidden motivations and decision making processes involved in these stages."

Benefits from working with a financial professional

Advice from a financial professional is an important assistance option (Gerrans & Hershey, 2016). Financial professionals may help consumers make better decisions (Hira, 2010; Kramer, 2016; Winchester & Huston, 2015), help less sophisticated households with risk diversification (Hackethal, Haliassos, & Jappelli, 2011), improve savings and investment behaviors (Winchester, Huston, & Finke, 2011), and increase economic, social, and emotional well-being (Grable & Joo, 1999). Individuals who implement the advice of a financial professional may achieve more positive financial outcomes than individuals who do not work with a financial professional (Grable & Joo, 2001), including improved savings and investment behaviors (Martin & Finke, 2014; Winchester et al., 2011). The non-typical help-seeker may financially benefit the most from professional advice. Consumers with low perceived behavior control, who would typically obtain financial assistance from informal sources (Olsen & Whitman, 2007), made greater significant progress towards savings, wealth accumulation, and estate planning goals with expert advice (Winchester & Huston, 2014). During times of stress in the household or the economy, working with a financial professional may help reduce financial mistakes (Haslem, 2010).

Barriers to financial help-seeking

Consumers are hindered by a lack of knowledge about the range of professional financial sources to effectively search for professional help. Over a third of Americans (36%) lack a strong understanding of what services a financial advisor provides (American Psychological Association, 2015). If an individual does not understand the types of services provided by advisors, they are not likely to seek professional help (Grable & Joo, 2001; Nelson, 2016). Terms for financial services and financial practitioners are neither regulated nor standardized in the marketplace, which may also hinder the financial help-seeking process with confusion. Martin and Finke (2014, p. 48) noted lack of empirical literature that examines "the inability to distinguish between types of financial advisors" and advocated the importance of research studies to differentiate between the services financial practitioners provide rather than using broad terms for practitioners.

Financial accreditations

A professional accreditation may be a helpful signal to consumers searching for a competent and ethical professional (Lysaght & Altschuld, 1999; Smith et al., 2007). James (p. 4) suggested that "given the breadth of products and services provided within the financial services industry, it is important for consumers...to better understand the advantages and disadvantages of professional certification." A professional that holds a specific voluntary designation or certification is obligated to follow the policies of the administrating body. The administrating body has oversight over the professional's activities and investigates any grievances made to them about a financial

professional. Consumers may trust accredited financial professionals more than financial professionals with no voluntary credentials.

Financial planning. Financial planning is a relatively mature profession in the personal financial services field (Delgadillo, 2014) and is well-established (Archuleta & Grable, 2011). Warschauer (2008) outlines the financial planning areas as cash management, risk management, investments, retirement, tax planning, and estate planning. The CFP Board (CFP – Standards, n.d.) that administers the Certified Financial PlannerTM (CFP®) designation defines financial planning as "the process of determining whether and how an individual can meet life goals through the proper management of financial resources." The Personal Financial Specialist (PFS) is a credential administered by the American Institute of Certified Public Accountants (AICPA) for Certified Public Accountants (CPAs) who specialize in financial planning (AICPA, n.d.).

Financial counseling. Financial counseling is a well-established field (Archuleta & Grable, 2011) with increased relevance due to the financial strain experienced by households (Bolton, Bloom & Cohen, 2011). Bell Carlson (2014, p. 12) described financial counseling as "a collaborative effort between the counselor and their client to help the client identify goals and potential solutions to financial problems." The approach of a financial counselor was categorized by Pulvino and Pulvino (2010) into three forms: remedial, preventative, and productive. The Association for Financial Counseling and Planning Education® (AFCPE®) administers the voluntary Accredited Financial Counselor® (AFC®) designation. The National Association of Certified Credit Counselors (NACCC) administers the designations of Credit Counselor or Accredited Financial Counselor (NACCC, n.d.) that are typically held by those working in credit counseling for-profit or nonprofit agencies.

Financial coaching. Financial coaching is a recent addition to the financial services industry (Collins, 2010; Delgadillo, 2014; Delgadillo & Britt, 2015) with growing demand and popularity (Delgadillo & Britt). The International Coaching Federation (ICF) outlined the key responsibilities of a coach: (a) discover, clarify, and align with the client's goals, (b) encourage client self-discovery, (c) elicit client-generated solutions and strategies, and (d) hold the client responsible and accountable (Delgadillo, 2014; ICF, n.d.). In 2014, the Consumer Financial Protection Bureau (CFPB) formally recognized the financial coaching model as being distinct from financial counseling (Delgadillo & Britt, 2015). The AFCPE® created a training program in 2015 for the Financial Fitness Coach® designation (AFCPE, 2015).

Financial therapy. Financial therapy is a recent addition to the financial services industry with growing popularity (Delgadillo & Britt, 2015). Financial therapy may be delivered by a single cross-trained financial therapist (Gudmunson, 2011) or as a collaboration of multiple practitioners such as a financial planner and marriage therapist that meet either separately or together with a common client (Archuleta et al., 2012; Kahler, 2005). In *Financial therapy: Theory, Research, and Practice* (2015, p. 3), financial therapy is described as an emerging field that includes "the evaluation and treatment of cognitive, emotional, behavioral, and economic aspects of financial health." The Financial Therapy Association website home page (n.d.) describes financial therapy as "a process informed by both therapeutic and financial competencies that helps people think, feel, and behave different with money to improve well-being through evidence-based practices and interventions". A graduate Certificate in Financial Therapy is offered by the Institute of Personal Financial Planning (IPFP) at Kansas State University as the first graduate-level educational training program in financial therapy (IPFP, n.d.). The Financial Therapy Association recently created a three-tier Certified Financial Therapist accreditation, with the first tier of Certified Financial Therapist-ITM officially offered in mid-2019.

Measurements of financial professional usage

The literature that explores consumers' usage of professional financial advice is growing, but researchers and other sources of data do not utilize a consistent operationalization of what constitutes professional financial advice or who qualifies as a provider of professional financial advice. This inconsistency with research questions in national datasets and researcher-defined measurements of professional financial usage may not accurately explore a consumer's financial help-seeking behavior or receipt of a specific type of professional financial advice. In national surveys, the terms of financial advice, financial advisor, financial planner, financial counselor, financial coach, and financial therapist are not part of the inquiry question or the possible responses.

The current literature of financial help-seeking behavior and financial professional usage includes some specific measures of financial planner usage. However, no known research includes usage measurements of the newer financial service of financial counselors, financial coaches, and financial therapists. A majority of the literature on financial professional usages includes broad terms such as *financial advice* or *financial advisor* rather than a specific type of financial professional. Current research on financial counseling and financial coaching is on services offered through nonprofit or community-based programming. The research on the use of financial therapists or financial therapy service models is scarce (Archuleta et al., 2015). Research on private practice financial counseling, financial coaching, and financial therapy practitioners cannot be located by this researcher.

Purpose of the Study

This qualitative study explored how perceptions may play an important role in the selection of a financial professional from among the alternatives of a financial planner, financial counselor, financial coach, and financial therapist. In addition, this study revealed the lack of accurate information consumers may have to draw upon in their search for a financial professional and awareness of current options available for one-on-one professional financial help. The findings from this study contribute to the literature on financial help-seeking behavior and usage of specific types of financial professionals.

Research Questions

This qualitative research study utilized a phenomenological approach to better understand the "meaning, structure, and essence of the lived experience of this phenomenon for this person or group of people" (Patton, 2015, p. 98). A qualitative approach allows examination into specific issues in great depth and is an appropriate method to explore the research questions of this study. The overarching question for this study is, How do consumers' perceptions influence the financial help-seeking process? To explore the immediate impact of new information from a short description of each financial professional, post-description perceptions were also explored. A quota purposeful sample of those intending to seek professional financial advice in the next twelve months was interviewed with a semi-structured interview guide of open-ended questions.

Methodology

Data

This study utilized recorded interviews with twelve participants to qualitatively seek in-depth descriptions of knowledge and perceptions held by individuals. A purposeful sample was recruited from a single metropolitan area in the Midwest of individuals of working pre-retiree adults who intended to seek professional financial advice in the next twelve months, but were not in an active relationship with a financial professional. Study participants were recruited through a snowballing method of Facebook posts, Facebook post sharing by others, LinkedIn articles, and email messages to the researcher's personal network and professional colleagues.

Data Collection

General demographics, basic financial information, recent financial experiences, and financial knowledge were collected via a self-administered an online survey. All interviews were conducted via telephone by a single researcher in the first quarter of 2019. The open-ended interview guide was tested and polished through 20 pilot interviews not included in this study. One week prior to the interview appointment, single page, double-spaced descriptions of each of the four types of financial professionals were mailed to the interviewee, sealed in an envelope within the exterior mailing envelope with instructions written on the interior envelope to not open until directed to do so during the telephone interview.

The four stages of the interview consisted of (a) exploration of past resources for financial help, (b) currently held perceptions and awareness levels of each of the four types of financial professionals, (c) reading and listening to each financial professional's description and follow-up questions, and (d) final questions about selection of a future



financial professional. Completed recorded interviews were professionally transcribed into Word documents, which were verified word-for-word while listening to the recording to verify accuracy. To add rigor to the research methods, summaries of each interview were prepared and sent to each participant to confirm their responses reflected the participant's intended meaning. Each interviewee received \$50 upon confirmation of an accurate interview summary.

Sample Characteristics

A majority of the participants were female (67%), married or engaged to be married this year (92%), received post-high school education (100%), own their home (67%), and support children in the household (58%). All participants indicated a racial category of White/Caucasian. The age of the participants ranged from 23 years old to 51 years old, with the average age being 33 ½ years. Financially, a majority of the participants (67%, 56%) stated household incomes between \$50,000 and \$150,000 annually and household net worth of \$250,000 or below. A quarter of the participants (n=3) preferred not to share household income or household net worth.

Analyses Methods

The data analyses goal for this qualitative inquiry was identification of common themes in the participants' descriptions of their pre- and post-description perceptions of financial professionals. Common theme identification was accomplished by reading through the transcribed interviews and identifying phrases and statements that represent the essence of the shared phenomenon (Patton, 2015). After the initial stages of coding, the code descriptions and categories were reviewed to identify four general themes: (a) lack of awareness of non-planning professionals, (b) pre-description perceptions based on similar words, (c) selection of multiple professionals, and (d) concerns about qualifications to offer services. Verbatim quotes from the written transcribed interviews were identified to serve as exemplary quotes for each major theme.

Results

(Note: Theme analysis and identification of participants' utterances still underway but will be presented at the AFCPE® Symposium)

A consumer's choice of products and services is limited by awareness of available options in the marketplace. If consumers are unaware of the full range of financial helping models and professionals, then consumers may not find an appropriate practitioner to address their financial questions or issues. Although all interviewees (100%) had heard of a financial planner, awareness of the other types of financial professionals was low for a financial counselor (25%), followed by nonexistent awareness of a financial coach (0%) or a financial therapist (0%). Given that a small percentage (17%) of the public engages with a financial advisor (CNBC, 2019), these results may suggest that a majority of the population may not be aware of accessible and affordable financial professionals that can help with a wide-range of financial concerns.

The short one-page description for a financial planner and a financial coach appeared to be least beneficial to interviewees and shifting any preconceived ideas about each professionals. The description appeared to provide the greatest clarity about financial counselors and financial therapists. Overall, the interviewees were curious and interested in knowing more about the types of financial professionals that were unfamiliar to them.

Awareness and perceptions before and after a short-description

Financial planner. All interviewees (100 %) had heard the term financial planner. Some were not certain if a planner was the same as an advisor. The initial reaction to the term financial planner was viewed mostly as positive and brought forth positive connotations of planning for the future.

After reading and hearing the short description of a financial planner, a majority of the interviewees (83%) felt their initial perceptions of a financial planner and the type of help offered by a financial planner were mostly aligned with the description. Half of the interviewees (50%) commented that the description expanded their concept of the range of planning services offered, especially in the areas of insurance and estate planning. Each description briefly noted



a few similarities and differences between the four types of financial professionals. Although reactions were generally positive to the financial planner description, some concerns were expressed about the portion of the description that stated a financial planner may recommend a financial product.

Financial counselor. A low percentage of interviewees (25%) had heard the term financial counselor. A few interviewees questioned what differences might exist from the more familiar (and just previously explored term of) financial planner. Connections to mental health professionals were made.

After reading and hearing the short description of a financial counselor, nearly all interviewees (83%) were more easily able to identify how a counselor might be different than a planner. The main description highlighted was that counselors can work with people in reaction to a financial crisis or problem. Yet, this description resulted in expressed "negative connotation" with multiple interviewees.

Financial coach. None of the interviewees (0%) were confident they had heard of the term financial coach, although one interviewee (8%) thought they possibly had heard the term financial coach. However, that specific interviewee had no knowledge of the services offered by a financial coach. Without any specific knowledge, a majority (83%) associated a financial coach with other types of coaches (i.e. for real estate professionals or for athletes).

Reactions to the description of a financial coach tended to be curious or negative. Some felt like the coaching model placed too much responsibility on the client to generate their ideas about goals and action steps in exchange for a payment. Although the phrase "accountability partner" was not part of the description, a third of the interviewees used that phrase in their responses. Some questioned the need for this type of financial professional.

Financial therapist. None of the interviewees (0%) were familiar with the term financial therapist. Initial perceptions were based on popular media depictions of therapy or associations with psychotherapy, with three interviewees visualizing talking while on a coach. Similar to initial responses to the other three financial professional terms, interviewees are starting to question if differences exist.

Three interviewees (25%) laughed before responding or during initial responses to the term financial therapist. No other laughter reaction was heard when asked about the other three financial professional terms. A quarter of the interviewees (25%) expressed a high level of curiosity about a financial therapist during the pre-description part of the conversation, with one interviewee stating "I'm ready for the good one" and a second interviewee commented, "I'm curious about what they're [financial therapist] doing". Finally, a third interviewee shared, "I'm surprised by their existence and both worried and intrigued."

Post-description helpfulness for future financial professional selection

In the final stage of the interview, each interviewee was asked which type of financial professional would best suit them for their current financial situation or concerns. A financial planner was selected a majority of the time (67%), with explanations of a planner offering "exactly what I am looking for" such as education planning, retirement planning, investment advice, and estate planning. Four interviewees quickly selected a combination of two financial professionals, noting that working with a financial counselor or a financial therapist first might help them be able to better work with a financial planner. Many expressed that it was beneficial to know more about the different types of financial professionals.

Again, because a majority of people tend to turn to friends or family members with a financial question, the impact of this additional information on the current interviewees specifically cannot be measured at this time by the current study. Each interviewee was asked if they would be willing to share their financial help-seeking with the researcher with a follow-up study in a year; all twelve answered in the affirmative. The possibility of an interviewee drawing on this new information to recommend a specific type of financial professional to a friend or family member may be an auxiliary benefit

Consumers receive a significant amount of information about available financial services and providers from media, and experiences of friends and family. Large, national financial advisory firms have advertising power and brand



recognition. Use of emerging financial professionals (i.e., counselors, coaches, and therapists) are increasing, but sharing of experiences might be limited by current clients due to concerns about how they will be perceived for seeking help from a professional using the terms analyzed in this research study. The individual practitioner or small firm needs to build knowledge about their availability and approach from the ground up, without possibly benefiting from reluctant referrals of current or past clients. In the meantime, financial counselors, financial coaches, and financial therapists may remain invisible resources to the public without actions to increase awareness and authentic knowledge about them.

Associations with similar words and terms

In a void of specific knowledge, consumers may draw parallels to terms used by financial professionals and professional accreditations to other types of people from the consumers' past experiences to form their own initial perceptions. A mental health counseling or therapy type of help might be viewed as positive by someone based on their own positive past experiences or those of a friend; therefore, the financial counseling model that helps with financial problems or the financial therapy model that explores the influence of past experiences might then be perceived as a positive resource. If mental health counseling or therapy services are perceived as negative, as an admitted "failure" or associated with someone having problems, then seeking help from a financial counselor or financial therapist might be more difficult to complete.

Associations with other types of counselors were described. One interviewee connected going to a school guidance counselor because you were in trouble as being similar to going to a financial counselor because someone had financial troubles. On the other hand, another interviewee shared they had a "good experience" working with a school guidance counselor and had a positive initial reaction to the term financial counselor. In addition, friends of that interviewee have shared "how helpful" mental health counseling is for them.

Coach is commonly associated with an athletic coach, although a life coach or a specific type of professional coach (e.g., real estate) might also come to mind. Similar to the counselor and therapy terms associated with pre-existing perceptions of, or past experiences with, mental health professionals, a positive or negative response to the term financial coach may be linked to positive or negative past experiences as part of a sports team (McKelley & Rochlen, 2007). Those with positive experiences with athletic coaches might be the most open to the guidance and mentoring of the financial coaching model.

The response to the term financial therapist was the most profound of the four types of financial professionals. Three interviewees (25%) laughed before and during their response to the initial questions. Two interviewees simply stated that the terms financial and therapist did not belong together. One interviewee initially stated that they believed financial therapy was "quack science" and not something that should be offered legitimately. However, after reading and listening to the short description of a financial therapist, this same interviewee stated that they were "ashamed to have jumped to such conclusions and can see the real benefit of working with a financial therapist". This examples highlights the challenge of financial therapists to communicate their legitimacy and service model, but also how a short two-minute description can dramatically change someone's perceptions. Overall post-description, the services offered by a financial therapist were recognized as being beneficial by a majority of the interviewees (83%), even if they themselves did not see the personal benefit for themselves today.

Utilization of multiple types of financial professionals

An interesting theme of the responses from one of the final questions was the selection and collaboration concept of multiple types of financial professionals. One interviewee in the first stage of the interview pictured the benefits of someone collaborating with all four types of financial professionals to "achieve" the next level of financial wealth. Four interviewees (33%), when asked in the last stage of the interview to select the professional best suited for them today, responded that their ideal form of help would be consecutive use of different types of financial professionals. This was interesting because the question was worded to illicit the response of a single selection of a financial professional.

One interviewee felt that their partner would benefit from learning more about the basics from a financial counselor before they together with met with a planner help their partner "get on board with working with a financial planner Finally, a different married interviewee with children has recognized that spending on their children is overcompensating because of their own experiences of growing up poor. This interviewee has tried to stop the overspending and has a strong interest in working with a financial therapist on these behaviors before working on other quantitative financial goals with a financial planner. This same interviewee also shared that their spouse would support this type of financial help because of past conflicts regarding this spending.

Qualifications of a financial professional

Questions regarding the qualifications of individuals to offer financial services were posed about all four types of financial professionals in relation to admissions about not knowing who to trust to delivery these types of financial help. The trust concern related to both qualifications and the professional having the client's best interests at heart with their recommendations. The concerns regarding qualifications align with the literature that consumers do not understand how to evaluate a financial professional's qualifications to offer their services (Smith, Vibhakar, & Terry, 2007). Since the terms financial planner, financial counselor, financial coach, and financial therapist are not regulated (Delgadillo, 2014), anyone can refer to themselves by those terms legally and offer advice services for compensation.

In response to the question about whether the short descriptions might assist selection of a future financial professional, one interviewee stated that the descriptions were not enough to understand how to screen a financial professional to offer quality advice. In regards to whether someone with a passion to help people and some financial knowledge might self-refer to themselves as a financial coach or financial therapist without legitimate qualifications, a different interviewee described a personal trainer friend that is frustrated with losing clients to another trainer in the area that charges less but does not have the training or qualifications. Both are allowed to refer to themselves as a personal trainer and clients do not always understand how to evaluate qualifications. Specifically regarding financial coaches, one interviewee shared, "still kind of sounds like someone who might not necessarily have the training and background...like there's never like set qualifications for you to be a coach [for community sports programs]." Although FINRA, the CFP Board, and other professional and government entities create public messages about how to effectively search for qualified financial professionals, receipt of the message might not be timed to the search stage for an individual consumer.

Implications

These initial findings from this exploratory study are important as lack of awareness and inaccurate perceptions about financial professionals can create a significant barrier to seeking professional help. Although individual financial practitioners have probably experienced the barriers created by lack of awareness, this research study may be the first to truly explore these ideas with rigorous methodology. All twelve participants in this study had heard of a financial planner, although a majority of initial descriptions of services were limited to wealth and investment advising services. Only 33% of interviewees sounded confident in seeking help from a financial planner today. One interviewee did not feel like they were the type of client a planner would want to work with; several interviewees felt like "you have to have money already to work with a financial planner". Emerging financial planning compensation models such as a monthly retainer or membership are increasing for consumers without high net worth, especially through mentorship of the XY Planning Network. The new compensation models face similar challenges of awareness, like the three helping models explored in this study.

A majority of the interviewees had never heard of the assistance model and services offered, with low to nonexistence awareness of financial counselors (25%), financial coaches (0%), and financial therapists (0%). The perceptions of the four types of financial professionals brought forth in the first stage of the interview highlighted that, even without specific knowledge, preconceived perceptions may create barriers to seeking help from a professional simply based on words. Consumers will draw upon past associations to evaluate the financial professional.

A final implication of this research study is highlighting the need for more primary research in measuring consumers' awareness and usage of specific types financial professionals rather than relying on broad terms (e.g., financial advisor) in existing surveys or relying on the survey participant's interpretation of what qualifies as a financial professional or professional financial advice. The time and cost burden of primary research may cause inquiring researchers to defer to existing data sets and the limited measurement of financial advice received based on question wording prior to the evolution of financial counselors, financial coaches, and financial therapist. Even if financial practitioners and researchers do not agree with the short descriptions used in the educational component of this study, those future dialogues may support the need for greater clarity in each type of financial helping model and terminology usage.

Breaking down the barriers of financial help-seeking

Perceptions will form in advance of any accurate information about the services offered by a specific type of financial practitioner. Recognizing the barrier this may create to help-seeking should motivate a financial professional to be pro-active and on the offense when opening a practice in a new community or wanting to reach more clients. The short, two-minute descriptions of a financial professional included in this study provided very brief and basic information; yet these descriptions were sufficient to alter many interviewees' perceptions about these types of financial professional and potential benefits. The exception was the financial coach's description. Financial professionals need to hone the balance between professional jargon and consumer-friendly information to help form a more accurate perception of (a) the financial assistance approach, (b) the types of services offered, and (c) the benefits of working with that type of financial professional. In addition, individual financial professionals also need make an effort to educate the public if they hold a fiduciary standard and the meaning of such standard to overcome fears of product-selling (planners) or a dependency relationship (counselors, coaches, and therapists).

Financial professionals can use their websites and social media pages (e.g., Facebook, LinkedIn, Instagram, etc.) to provide clear descriptions of what services are offered and who might benefit the most from working with them. One interviewee suggested that all four types of financial professionals seek out opportunities in their local communities to talk with social, professional, and civic groups about their business models. Even if someone in the audience did not need that specific type of service, a good chance exists that they might share the information they learn with a friend, family member, or co-worker that might benefit from their services. This aligns with the literature that states most people seek financial help from a friend or family member (Balasubramnian et al., 2014; Finke et al., 2011; Grable & Joo, 2001; 2003). As another interviewee noted, they would much prefer to make a knowledgeable recommendation to a financial professional than try to help a family member with financial problems.

Financial planners. Although the reaction to the term financial planner was mostly positive and many interviewees selected a financial planner as the best suited professional for their situation today (67%), statistics indicate that a small percentage of the population works with any type of financial advisor. The 2019 Invest in Your Savings Survey conducted by CNBS and Acorns (CBNC, 2019), found that "75% of Americans manage their own finances, with no help from a professional or online service... with only 17 percent [stating] they use a financial advisor". One interviewee commented that the television commercials for a large, well-established investment firm did not show people that looked like her – as the professional or as the client. This same interviewee suggested that financial planners use clear language to indicate what types of clients they like to work with and dress in a way that looks like that desired client base.

Related to the idea of a financial professional looking like the clients they wish to work with is the need for greater diversity in financial services firms and among individual financial professionals. Although not a part of this study's responses, a barrier may exist among consumers of non-White racial backgrounds in the comfort level of working with a financial professional that might not share cultural or racial similarities. Efforts are being made in the financial service field to train and recruit new professionals that represent all different types of racial backgrounds, cultural backgrounds, and gender identification to remove a reluctance to work with a professional that different than the client (FPA, n.d.).

Financial counselors. The availability of private practice financial counselors is a fairly recent addition to the financial helper marketplace. Financial counselors may be more likely associated with nonprofit credit counseling programs; these programs sometimes hold the perception of working with clients in dire financial situations including debt collection and bankruptcy. Therefore, the private financial counselor might meet resist from someone seeking services a financial counselor or miss being considered by clients not in a dire situation.

Pulvino and Pulvino (2010) categorized three forms of financial counseling as remedial, preventative, and productive. The challenge to financial counselors may be highlighting the benefits to clients not in a crisis such as increasing financial knowledge, building emergency savings and retirement savings, saving for a large purchase, or paying down debt. Responses in this study indicated that barriers to working with a financial planner include basic financial knowledge that a counseling model can provide. The financial counselor, similar to the financial planner, may look for opportunities to speak with community groups about the types of services offered, benefits of working with a financial counselor, and the fee for services. Depending on the specific professional, the expense of working with a financial counselor might be more affordable for a household that does not have investable assets for basic financial knowledge and goals.

Financial coaches. Based on the reaction of several interviewees to the description of a financial coach, this financial helping might have several challenges in effectively communicating the service model and benefits in order to break down perception barriers. The reaction of three interviewees (25%) both pre- and post-description of wondering why someone would pay for a financial coach highlights a challenge of financial coaching practitioners to (a) clearly identify the type of client that would benefit from working with a financial coach and (b) clearly identify benefits of paying to work with a financial coach. Financial coaching might not be the first type of assistance a consumer seeks when wanting professional advice. That initial service model might need to include more knowledge, skills, and planning from a professional such as a financial planner or financial counselor. This study's responses should not be interpreted as a lack of need or benefits from financial coaching relationship. Perhaps these study participants had not previously worked with any private practice financial professional in the past and may have a more favorable reaction to models that provided knowledge and strong guidance, versus the coaching model that requires greater contribution to goal and action setting.

Delgadillo and Britt (2015) suggested that practitioners would benefit from better clarity on the differences between financial coaching and financial therapy in order to appropriately refer clients to appropriate financial professionals. Financial coaches may benefit from networking with life coaches for cross-referral of clients. For example, clients that have worked successfully with a life coach might be interested in a more niche coaching service from a financial coach.

Financial therapists. The model and benefits of financial therapy were the least understood initially of the interviewees. Three interviewees laughed when asked, "Tell me what comes to mind when you hear the term financial therapist." The visualization of a couch in the therapeutic setting was the only environmental setting described by interviewees and may be a barrier to seeking the services of a financial therapist. Including a static or video image of the session environment might help alleviate this fear or perception. Similar to financial coaches, financial therapists may also benefit from networking with other types of financial professionals and mental health professionals to cross-refer clients.

As noted in this study, consumers might be reluctant to seek help from a financial counselor or financial therapist due to the negative stigma associated with the terms counselor and therapist (Grable, McGill, & Britt, 2010; Moore, 2012). However, younger clients may not hold this same perception since "the stigma attached to psychotherapy has largely dissolved in the new generation of patients seeking treatment" (Drexler, 2019). Drexler's article in the Wall Street Journal went on to quote a clinical psychologist – "The shame of needing help has been transformed to a pride in getting outside advice".

This exploratory primary research project is the first known study to inquire about awareness levels and perceptions of these four specific types of financial professionals. In addition, the experiment of sharing a short description of each financial professional and exploring perceptions with follow-up questions is unique. Current large data sets do not specifically target inquiries about use of financial counseling, financial coaching, or financial therapy. Therefore,



future primary research studies are critical to better understand usage and benefits of working with specific types of financial professionals. These findings add to the growing discussion in the literature on the need for clarity and consistency of financial terms for the benefit of consumers, researchers, policymakers, and practitioners.

Limitations

This exploratory qualitative study has noted limitations. The objective of qualitative research is an in-depth exploration of a purposeful sample of interviewees' perception of a specific phenomenon; therefore, the sample size is small. The perceptions of a small group of respondents from the same geographical area and same racial category may bias the results from being empirically generalizable. In addition, households in this specific geographic region may have limited exposure to some types of financial professionals since some types may not be available or widely advertised in that area.

The educational component of the study (i.e., the two-page description of each tpe of financial professional that was read aloud by the researcher as the interviewee read the description on a paper) towards the end of the interview may bring limitations. The descriptions of each type of financial professional were created based on the researcher's summary of descriptions from the literature and accrediting professional organizations. Descriptions of the four types of financial professionals of interest vary in the literature, and not have standardized definitions or scope-of-service descriptions (Delgadillo, 2014). Therefore, a limitation of these one-page descriptions may be that financial practitioners, researchers, or others within and outside of the financial services field do not agree with the description.

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Financial Stress and Academic Stress: Role of Race, Working Status, and Debt Attitudes among College Students

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Abstract

College years mark a significant transition in life with unique opportunities and challenges. Understanding factors contributing to academic stress can better assist students to succeed in today's college environment. This study examined factors affecting college students' academic stress including demographic, psychological, and financial socialization aspects. The findings from a survey indicate that being African American, working during academic year, having positive attitudes toward debt, and higher level of financial stress were associated with academic stress. The implications for student affairs at higher education institutions and financial educators were discussed.

Key Words: college students, financial stress, academic stress, race, working status, debt attitudes

Introduction

The well-being of college students is an increasing concern as U.S student loan debt has surpassed 1.5 trillion dollars. This becomes worrisome when also considering the effects of other spending tendencies; poor spending tendencies can push students' debt past their existing student loans. Over the past 10-years car and technology companies have flourished, allowing them to broaden their audience and target more people. Enticing lease deals on luxury cars, and low monthly payments on latest technology can introduce college students to an affluent lifestyle at a very young age. This affluent lifestyle that college students may obtain could have negative effects on students' spending tendencies. This study examines the variables related to college students' well-being, which include materialism, financial socialization, and attitudes toward debt.

The spending tendencies of college students appear to be correlated with the level of financial knowledge and literacy students have. This raises concerns of the relationship between college students' financial behavior and overall well-being. Research surrounding the sources of stress students have confirms personal finances play a role in their daily lives (Heckman, Lim, & Montalto, 2014). With personal finances being directly correlated to the well-being of students, financial knowledge and spending habits are stressed. Individuals are a product of their environment, making it one of the key driving forces of the way students spend money. Included in their environment are ideas of materialistic values and parental influence. This study focused on discovering variables that visibly change the spending tendencies of students, and how these tendencies then play a role in their financial and overall well-being. Students' value of material items, borrowing and debt attitudes, and source(s) of financial knowledge are the stressed variables in this study.

This study asks the following questions.

Research Question 1. Which demographic factors explain academic well-being among college students? Research Question 2. How do financial stress, materialism, attitudes toward debt, financial socialization, and compulsive spending explain academic well-being among college students, in addition to the demographic factors?

Method

This study was intended to evaluate how psychological variables and spending habits are related with the academic and financial well-being of college students at a large 4-year public university on the west. Students were asked to complete an online survey that assessed their spending habits, beliefs regarding materialism, attitudes toward debt,

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and sources of financial knowledge. In order to examine the effects of the listed variables, students then answered questions addressing their financial and academic stresses. Throughout the month of May 2018, a link to a Qualtrics survey was sent out to a convenience sample of students at a large, comprehensive public university on the west coast. The incentive was a chance to win one of the two \$25 Amazon gift cards. Out of 563 emails that were sent, 229 participated, resulting in a response rate of 40.7%. Of those responses, 182 were used in the final analysis.

In order to examine our research questions, two regression models were run. The first model included only demographic variables; The variables were age, race/ethnicity, working hours, parental combined income, number of credit cards, and whether or not the students receive allowance. In model 2, financial stress, compulsive spending, materialism, debt attitudes, and financial socialization variables were added to the previous model with demographic variables.

Results

The mean age of the participants was 22.6 years old with the majority of races being Hispanic or Latinx (34.9%); those were followed by non-Hispanic white (29.7%). About 17% of students were not working for pay, but most of students were working either part-time or full-time during academic year. For mother's education level, 23.9% reported a high school diploma, and was followed by a bachelor's degree (19.3%). Father's education level was somewhat higher than that of mother's, with some college being the largest group (22.9%) followed by a master's degree or higher (20.6%). Annual combined household income level mostly reported was between \$50,000 and \$99,000. About four out ten students were receiving allowances from parents, and for working students, weekly income was between \$100 and \$300. The average number of credit cards in this sample was 1.34, with about 30% of students not owning any credit cards. The most frequently mentioned category for credit card balance was less than \$500 (18.8%), followed by greater than \$2000 (16%). Lastly, more than half of the sample reported that they do not expect any student loan debt upon graduation. On average, the level of financial stress and academic stress was neither low nor high, 18.5 out of 28, and 11.7 out of 19, respectively.

Table 1 reports the results of the stepwise regression models. The first regression model explained 18.8% of the variances in academic stress. The results demonstrated race and working hours were significantly associated with academic stress. Specifically, compared to being White, being African American was associated with higher academic stress. Also, working more than 20 hours per week was related to higher academic stress, compared to those not working. In model 2, financial stress compulsive spending, materialism, debt attitudes, and financial socialization variables were added to the previous model with demographic variables. When these variables were added, the adjusted R^2 almost doubled. In this full model, the association between being African American and academic stress was attenuated, while still marginally significant (at $\alpha < 0.10$ level). Similar to the reduced model, working while in school, at any level, was significantly associated with higher academic stress. Among psychological measures, financial anxiety and attitudes toward debt were positively related to academic stress. When controlling for other factors, materialism, compulsive buying, or financial socialization were not significantly associated with academic stress.

Discussion and Implications

This study explored the role of materialism, compulsive buying, attitude toward debt, financial stress, and financial socialization in explaining academic stress in college students. The diverse nature of the student population at the research site enabled researches to dissect racial/ethnic differences in measures unlike other studies done in the past. The findings of the study reinforce the close relationship previous research has displayed between financial stress and academic stress among college students (Baker & Montalto, 2019). The highly correlated concepts make the case for college administration to focus on the financial aspects of student well-being in program development. The fact that African American and Hispanic races are associated with academic stress beyond individual differences continue to point to the persistent racial gaps existing on college campuses.

With the majority of college students working during academic year, it is imperative to understand the impact of working status on academic success and the general well-being of college students. This study found that working longer than 20 hours during an academic year was positively associated with academic stress, and the findings



echoed by other scholars through the relationship between financial stress and academic outcomes (Dwyer, Hodson, & McCloud, 2013). Our findings suggest that financial education efforts can be more effective by targeting racial/ethnic minorities, especially African American college students. This is in line with previous finding related to disproportionately large student loan debt among African American bachelor's degree recipients (Baum & Steele, 2010).

Our data was cross-sectional in nature, so any causal inferences should not be made among variables included in the model. The mechanisms as to how race, work hours, attitude toward debt, and financial stress affect academic stress need to be further studied. Also, why materialism and compulsive spending did not contribute to the academic stress while financial stress, their highly correlated, did is to be carefully explored in the future. Perhaps the large sample not having the credit card may have prohibited students from reckless spending, thus saving from greater anxiety.

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Table 1. Stepwise Regression predicting Academic Stress

	Model 1		Model 2				
Variable	Beta	t	Sig.	Beta	t	Sig.	
Constant		4.780	.000		.249	.803	
Age	.068	.855	.394	005	061	.952	
Hispanic	.200	1.875	.063	.092	.848	.398	
African American	.221	2.690	.008	.160	1.954	.053	
Asian	.112	1.070	.286	.013	.115	.908	
Other	.147	1.731	.086	.064	.759	.449	
Work 1-20 hours	.198	1.962	.052	.230	2.209	.029	
Work 20+ hours	.406	3.849	.000	.384	3.532	.001	
Parent income \$50,000 –	011	118	.906	.044	.481	.632	
149,000							
Parent income more than	090	941	.349	054	561	.576	
\$150,000							
Number of credit cards	059	723	.471	015	181	.857	
Receive Allowance	144	-1.757	.081	147	-1.781	.078	
Financial Stress				.235	2.674	.009	
Compulsive Spending				.137	1.510	.134	
Materialism				063	755	.452	
Debt Attitudes				.226	2.858	.005	
Parental Financial				066	775	.440	
Socialization							
Other Financial				.056	.693	.490	
Socialization							
Adj. R ²		0.188			0.345		

Non-Hispanic White, not working, parental income less than \$50,000 served as reference category.

Financial Transparency and Communication Privacy in Marriage. Can You Have Both?

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Keywords: communication, financial infidelity, financial management, financial secrecy, financial transparency, financial trust, first marriage, marital satisfaction, privacy, self-disclosure

Abstract

To better understand the role of financial transparency as it is related to marital satisfaction, a sample of 183 married individuals in their first 5 years of their first marriage completed an online survey on Amazon Mechanical Turk measuring financial secrecy, financial trust and disclosure, and marital satisfaction. Latent profile analysis (LPA) revealed 3 distinct profiles of marital satisfaction, *high satisfied-financially transparent* class (2.8%) not likely to keep financial secrets or lie, and moderate trust, *low satisfied-financially transparent* class (16.8%), likely to keep a financial secret of lie, showed characteristics of trusting their partner, and *moderate satisfied-financially transparent* (80.4%) somewhat likely to lie or keep a secret, but highest level of trust. Implications for research and practitioners will be discussed.

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Financial well-being and sources of retirement income: Focusing on comparison between current retirees and future retirees

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Abstract

This study focuses on whether having different types of retirement income sources is associated with the level of perceived financial well-being of current retirees and the level of perceived retirement preparedness of non-retirees. Using the data from 2017 Survey of Household Economics and Decision-making, this study found that current retirees perceive their financial well-being higher than non-retirees. Furthermore, the results showed that income from DB/DC, retirement savings account (IRA etc.), and assets were positively related but income from employment and family were negatively related with perceived financial well-being among current retirees. Lastly, the results showed that retirement preparation in the forms of DB/DC, retirement savings account, and assets were positively related but retirement preparation with business was negatively related with perceived retirement preparedness among future retirees. Considering the increasing importance of individual's responsibility in retirement preparation, this study provides insights to financial educators and policy makers.

Key words: financial well-being, retirement preparedness, retirement income, mental accounting

Introduction

As types of retirement plans have become more diversified and retirement period has lengthened, individuals' responsibility today for retirement plans have become more important than in previous decades. However, little is known about the association between retirement income type and perceived financial well-being on the part of retirees and non-retirees. This study focuses on whether having different types of retirement income sources (e.g., social security, job, defined benefit, defined contribution, IRA, other retirement savings, business ownership, assets and investments, family) was associated with the level of perceived financial well-being of current retirees and the level of perceived retirement preparedness of non-retirees.

The research questions were as follows: (i) Do retirees and non-retirees differ in perceived financial well-being? (ii) In what ways are different types of retirement income related to the perceived financial well-being and retirement preparedness in each group? and (iii) How are socioeconomic characteristics associated with such perceived assessment in each group? The results from the analyses using the 2017 Survey of Household Economics and Decision making (SHED) dataset provide a profile of the retiree and non-retirees' perception on own financial well-being and retirement preparedness. This study provides important insights for financial educators, financial professionals, and policy makers who are interested in improving households' perceived financial well-being.

Literature review

Sources of retirement income

OECD's biennial report on pension systems (2017) categorized income sources of older people into (1) public transfers, which includes earnings-related pensions and resource-tested benefits (2) occupational transfers, (3) capital, which includes private pensions and income from the returns on non-pension savings, and (4) work, which includes employment income and income from self-employment. According to 2017 OECD report, average Americans over age 65 received 42.8% of income from public transfers, 8.1% from occupational transfers, 13.9% from capital, and 35.2% from work.

Butrica, Smith, and Iams (2012) categorized retirement income into more detailed categories such as (1) income from assets, (2) earnings, (3) SSI, (4) imputed rental income, which is calculated as a 3 percent real rate of return on home equity, (5) Social Security benefits, (6) DB pension income, and (7) retirement account income. They

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projected the retirement income at age 65 from five 10-year birth cohorts, which are Depression babies (born in 1926-1935), War babies (born in 1936-1945), Leading boomers (born in 1946-1955), Trailing boomers (born in 1956-1965), and GenXers (born in 1966-1975). The results show that most (90%) of the retirees are projected to have income from assets and Social Security benefits across the different birth cohorts. The big differences across the birth cohorts were found in income from DB pension and retirement accounts. In Depression babies cohort, 56% were projected to receive income from DB pension but the percent consistently decreases across cohorts to 25% in GenXers. However, 47% of Depression babies cohort were projected to receive income from retirement account but the percent consistently increases across cohorts to 80% in GenXers. About half of GenXers were projected to have income from earnings in retirement, which is slightly higher than 45% of Depression babies. When looking at shares of each retirement income source from the total income, across cohorts, income from assets consists of the largest portion (33~39% across cohorts), followed by Social Security benefits (20~22% across cohorts) and earnings (17~20% across cohorts).

Mental accounting

According to Thaler (1990), individuals spend income from one source more easily than income from another source because individuals have different marginal propensity to consume for different sources of income. For example, windfall income such as a work bonus or tax refund might be easily spent compared to regular salary (Thaler, 1990; Zhang & Sussman, 2018). Not only that, the affective source of income was found to be related with the use of income. Bland and Chambers (2018) found that the income from fun sources such as game show were more likely to spent on fun expenditures compared to the windfall income from other sources.

Shefrin and Thaler (1988) divided household wealth into three mental accounts of current income, current assets, and future income. The marginal propensity to consume is assumed to be greatest for current income, followed by current assets and then future income (Sherfrin & Thaler, 1988). Based on this key assumption, the authors explained the dynamics among changes in Social Security, pensions, and discretionary savings. As individuals have self-control problems, the cost of willpower matters for retirement savings.

Based on the previous research on life cycle hypothesis, this study expects that the level of perceived financial well-being will differ between retirees and non-retirees. Even if all things are equal, current retirees and non-retirees are in the different accumulation/decumulation phases so their perceptions on financial well-being are expected to be different. Also, based on the previous research on mental accounting, this study expects that the level of perceived financial well-being will differ among retirees by their source of retirement funds and that the level of perceived retirement preparedness among non-retirees by their forms of retirement preparation. For example, some forms of retirement funds such as employment or financial assistance from family are not expected to be regular income for the whole retirement years, they are expected to negatively related with perceived financial well-being. Below are the hypotheses of this study.

- H1: There will be difference in the level of perceived financial well-being between retirees and non-retirees.
- H2: There will be difference in the level of perceived financial well-being by sources of retirement funds among retirees.

H3: There will be difference in the level of perceived retirement preparedness by forms of retirement savings among non-retirees.

Methods

Dataset and sample selection

This study used 2017 Survey of Household Economics and Decision-making (SHED) dataset. The SHED dataset has been released annually since 2013 by the Federal Reserve and provides a range of topics of US households' financial circumstances, attitudes and behaviors including retirement, savings, financial risk, economic frugality, and sociodemographic characteristics.

The original sample size was 12,447. After dropping those who chose "refuse to answer" and "don't know" to the questions associated with our analytic variables, we carefully selected retired household samples and non-retired household samples. Specifically, to better deal with those who did not identify themselves as a retiree consistently,



we used the following criteria to define retirees in this study: (1) those who considered themselves to be "retired" (i.e., *Do you consider yourself to be retired*?); (2) those who chose "retired" in their current employment status (i.e., *not working-retired*); (3) those whose current age is larger than retired age (i.e., *At what age did you retire*?); and (4) those aged over 61 who is thus eligible for receiving social security benefit. Those only met all four criteria were considered retirees. Non-retirees were identified as those who did not choose "retired" in their current employment status. After these sample selection steps, the sample size was reduced to 11,803, with 2,934 retired households and 8,869 non-retired households.

Variables

Dependent variables

This study used two dependent variables depending on the samples. First, financial well-being for both total sample and retirees was measured by the following question: "Overall, which one of the following best describes how well you are managing financially these days?" It was a categorical variable defined as 1=Finding it difficult to get by, 2= Just getting by, 3= Doing okay, and 4=Living comfortably. Second, perceived assessment of retirement preparedness among non-retirees was measured as a binary variable by a question: "Do you think that your retirement savings plan is currently on track?"

Independent variables

Sources of retirement funds: Sources of retirement funds for current retirees were originally measured with 11 questions with following sources: (1) Social Security, (2) I have a job, (3) My spouse/partner has a job, (4) pension with a defined benefit from work, (5) 401(k), 403(b), Keogh, or other defined contribution plan from work, (6) IRA or Roth IRA, (7) savings outside a retirement account such as a brokerage account or savings account, (8) income from real estate or the sale of real estate, (9) income from a business or the sale of a business, (10) relying on children, grandchildren, or other family, and (11) other retirement savings. Also, if the respondents reported that their family members or relatives living outside of their household provide them with regular financial support, they were considered to have retirement funds from (10). For multivariate analysis, these eleven sources were categorized into (a) Social Security (source 1), (b) job (sources 2 and 3), (c) business (source 9), (d) DB/DC (sources 4 and 5), (e) retirement savings account (sources 6 and 11), (f) assets/investments (sources 7 and 8), and (g) family (source 10).

Forms of retirement savings: Eight forms of retirement savings were asked to non-retirees: (1) 401(k), 403(b), Keogh, or other defined contribution plan through an employer or former employer, (2) pension with a defined benefit through an employer or former employer, (3) IRA or Roth IRA, (4) savings outside a retirement account such as a brokerage account or stock holdings, (5) ownership of real estate or land that you plan to sell or rent to generate income in retirement, (6) ownership of a business, and (7) other retirement savings. To make the categories consistent with current retirees' retirement funds sources, these seven sources were categorized into (a) business (source 6), (b) DB/DC (sources 1 and 2), (c) retirement savings account (sources 3 and 7), (d) assets/investments (sources 4 and 5).

Control variables: The set of control variables include: age, education (less than high school or high school diploma, some college, bachelor's degree or higher), employment status (self-employed, salaried worker, no work), race/ethnicity (white, black, Hispanic, other), marital status (married, non-married), gender (male, female), household size, perceived health conditions (excellent, very good, good, fair or poor), homeownership (yes/no), household income, residence region (Northeast, Midwest, South, West), retirement period of retirees (current age minus retired age), amount of retirement savings, and financial management practices. In particular, financial management practice was measured as a sum of all responses to the following question: "People use a variety of methods to manage their finances. Do you use each of the following? (1) Follow a budget or spending plan, (2) Track spending, (3) Review paper bank statements and/or bills, (4) Get account alerts (e.g., via email, text message, or push notification), (5) Automatically set aside long-term savings (e.g., in a college, retirement, or investment account; this item was used only for non-retirees.), (6) Plan and save for periodic expenses (e.g., insurance, vacation, car repair), (7) Sign up for a budget payment plan to make utility or other payments more regular/predictable, (8) Pay some bills automatically (so they won't be late or missed), and (9) other.

Empirical model specification

We used two ordered logistic regression models to analyze the effect of group (i.e., retirees vs. non-retirees) on perceived assessment of finance and investigate the relation between types of income sources and perceived assessment of finance among retirees while controlling for various household characteristics. In addition, we conducted a binary logistic regression to investigate the association between types of retirement preparedness and perceive retirement preparedness among non-retirees.

Results

Descriptive results

Table 1 shows the descriptive results for perceived assessment of their finance, perceived retirement preparedness, financial management practices, and socioeconomic characteristics. To compare retirees and non-retirees, we reported descriptive results for two different samples separately, in addition to the total sample.

Compared to non-retirees, retirees tended to more favorably assess their finance. The results showed that more retirees (48.1%) than non-retirees (29.1%) reported "Living comfortably" in assessment of their finance. The percentage of those who reported either "Finding it difficult to get by" or "Just getting by" among retirees (14.6%) were approximately half of that of non-retirees (30.2%).

The two groups had similar characteristics with respect to education attainment and perceived health conditions, in line with the total sample. The majority of both retirees and non- retirees completed education beyond high school and reported either "very good" or "good" about their perceived health conditions. The region of residence was also similarly distributed across four regions between two groups. However, their race/ethnicity, marital status, homeownership, and gender of the respondent differed; a substantial portion (30.2%) of non-retirees were non-whites while 13.9% were non-whites among retirees. Non-married and non-homeowners were more frequently found among non-retirees, although more than half of the households were married and homeowners in both groups. Female respondents were more commonly found in non-retirees than retirees. In addition, the majority of non-retirees were salaried workers.

The mean age was 72.2 for retirees and 47.3 for non-retirees. Household size, household income, and financial management practice scores also exhibited a difference between two groups. The mean household size (2.6), household income (\$81,823.5) and financial management practice scores of non-retirees (4.4) were higher than retirees (1.9, \$71,564.4, and 4.1, respectively).

[Table 1 about here]

Table 2 provides the descriptive results of retirement funds sources among retirees and retirement savings forms among non-retirees. Social security (94.8%) is the most common source of retirement income of retirees, followed by defined benefit plans (66.0%), other non-retirement savings (62.5%), IRA or Roth IRA (53.6%), and defined contribution plans (48.1%). Also, 21.3%, 15.4%, and 11.9% of current retirees reported income from other retirement savings, real estates, and spouse/partner's employment, respectively. There were few retirees who received income from family (3.8%), a business or the sale of a business (3.2%), or own employment (2.0%). The average retirement period was approximately 10 years.

Among non-retirees, the most common type of retirement plans they are preparing was defined contribution plans (46.5%), followed by other non-retirement savings (38.5%), IRA or Roth IRA (30.0%), and defined benefit plans (23.3%). Also, 14.7%, 8.5%, and 2.5% of non-retirees reported that, for retirement, they are preparing real estates, business, and other retirement savings, respectively. Their mean value of retirement savings including defined benefit, defined contribution, IRA, Roth IRA, and other retirement savings was \$264,393.1.

[Table 2 about here]

Multivariate analyses

Total households

To examine whether retirees and non-retirees differ in perceived assessment of their finance, we conducted an ordered logistic regression that included a dichotomous group variable with non-retirees as a reference group in the empirical model for total sample (N = 11,803). The regression results showed that the coefficient associated with being retired was statistically significant, indicating that all else equal, for current retirees, the odds of having higher perceived financial well-being were 2.8 times greater compared to non-retirees (Table 3).

For the total sample, education (bachelor degree or higher), marital status (married), household size, perceived health conditions, homeownership, household income, and region of residence (Midwest, West) were statistically significant and had a positive effect on perceived assessment of finance, while household size had a negative effect. However, age, race/ethnicity, and gender were not significant.

[Table 3 about here]

Perceived financial well-being among retirees

Table 4 shows retirement income type's effects on perceived assessment of finance for current retirees. Most types of retirement income were statistically significant except income from Social Security and business, while the directions of the effects were either positive or negative. Those having retirement income source from defined benefit/defined contribution, retirement savings account, and assets/investments were more likely to report higher perceived assessment of their finance than those not having these retirement income sources. Specifically, those with retirement income from a defined benefit/defined contribution plan, retirement savings account, and assets/investments had 71%, 83.9% and 137.5% higher odds of reporting higher perceived assessment of finance than those without those income sources, respectively.

However, those with retirement income from either their own job or spouse's job and retirement income from family were less likely to report higher perceived financial well-being than retirees without those income sources. Specifically, those with retirement income from either their own job or spouse's job and retirement income from family had 32.3% and 68% lower odds of reporting higher perceived financial well-being than those without those income sources, respectively. In addition, longer period of retirement was positively related to the likelihood of perceiving their finance higher, while their financial management practice was negatively associated with that likelihood.

Like the results in the total sample, the coefficients associated with education (bachelor or higher), marital status (married), household size, health conditions, homeownership, and household income were statistically significant and had a positive effect on perceived assessment of finance, except for household size which had a negative effect. However, age, race/ethnicity, gender, and region of residence were not significant.

[Table 4 about here]

Perceived retirement preparedness among non-retirees

Table 5 shows retirement savings forms' effects on perceived assessment of retirement preparedness for non-retirees. All types of retirement plans were statistically significant and positive, except those reporting an ownership of a business as their retirement plan which showed negative relationship. Non-retirees reporting an ownership of a business were less likely to feel their retirement savings plan is currently on track compared to those without an ownership of a business, while those having a defined benefit/defined contribution plan, retirement savings account, and assets/investment were more likely to feel their retirement preparedness is on track. For example, those having a defined benefit/defined contribution plan, other retirement savings, and assets/investment had 187.7%, 66.5%, and 38.8% higher odds of perceiving their retirement saving plans is on track, respectively, than those without those types of retirement plan. In addition, the amount of retirement savings and financial management practices were positively related to the likelihood of perceiving retirement preparedness positively.

With respect to sociodemographic characteristics, age, education, and household size were negatively related to the likelihood of perceiving positively retirement preparedness. With a 1-year increase in age and 1-person increase in household size, the odds of perceiving positively retirement preparedness decreased by 3.3% and 7%, respectively. Those who had some college experience and completed bachelor or higher had 27.1% and 36.5%, respectively, lower odds of perceiving positively retirement preparedness compared to those completed high school diploma or



less. On other hand, better perceived health conditions and homeownership were positively related to the likelihood of perceiving positively retirement preparedness. For example, homeowners had 33.3% higher odds of perceiving positively retirement preparedness. However, race/ethnicity, employment status, marital status, and region of residence were not statistically significant.

[Table 5 about here]

Discussion and Implications

Using the 2017 SHED dataset, this study examined determinants related to retirees' perceived assessment of finance and non-retirees' perceived assessment of retirement preparedness. When the total sample was analyzed, current retirees assessed their finance significantly higher than non-retirees. In subsample analyses, for both retirees and non-retirees, households having defined benefit/defined contribution plans, retirement savings account, and non-retirement related assets and investments were positively associated with level of perceived assessment of finance and with the likelihood of perceiving retirement preparedness positively. Findings imply the importance of both specific retirement funds including pension plans and IRA type retirement accounts, and non-retirement specific assets and investments for both retirees and non-retirees. Those types of retirement income sources provide an income stream and a financial buffer, thus, should be properly launched to improve perceived satisfaction of their finance and retirement preparedness.

However, the effect of an ownership of a business differed by groups. While an ownership of a business as a retirement income source was not significant on retirees' perceived assessment of finance, it was negative on nonretirees' perceived assessment of their retirement preparedness. Previous studies found that business owners feel greater responsibility for their own retirement plans and family business owners, in particular, often tend to overlook the importance of retirement preparedness (Kim & DeVaney, 2003; Small Business Administration, 2010; Yuh & DeVaney, 1996). For example, a business-owning family can experience some level of resource exchange (e.g., human resources, financial resources) between the family and the business because of the interdependence structure found in many family businesses (Danes, Stafford, Haynes, & Amarapurkar, 2009). Owners of the business may approach their retirement preparedness issue with greater flexibility in terms of retirement age and available resources either from family or firm (e.g., closing the business when retiring and considering business assets as a retirement income source) (Lusardi & Mitchell, 2007). On the other hand, owner's decision or preparedness to retire itself can bring up an issue of succession or sustainability of the firm (Brockhaus, 2004), thus, it would hinder the owners from planning retirement more actively and from assessing their retirement preparedness positively. However, the dynamics of business ownership seem to work differently for those who already retired. Those identified as "retired" but still claim their ownership of a business could benefit not only from money from business but also from their continuing involvement in the business at certain level, leading to positive assessment of their finance.

With respect to two types of retirement income sources available only for retirees' data, income from their own or spouse's job and from family were negatively related to level of perceived assessment of finance. Retirees who have to work even after the official retirement would make them perceive their financial situation less favorably. This type of retirement income as a current earned income can be classified differently in their mental accounting from the other types of income sources, which of them were either "past earned income" or "current unearned income". On the other hand, this type of retirement income entails financial dependence on earned income from their spouse's job. If this is case for respondents, this income source could be framed with "money from family" (e.g., children, grandchildren, other family members) together in mental accounting approach. The feelings of lack of control and dependence on family members during retirement may not result in positive self-assessment of their financial situation as opposed to the effect of other incomes sources (i.e., defined benefit/defined contribution plans, retirement saving including IRA), which can be framed with their control in retirement income.

Our findings, however, did not show that Social Security benefit as a retirement income source had a significant effect on the perception. Considering that about 95% of the retiree sample (age over 61) received social security retirement benefit, its effect was not pronounced compared to the remaining 5% of those without social security



benefits. Other retirement related variables, such as period of retirement income of retirees and amount of retirement savings of non-retirees were positively associated with the perception. For example, it appears that those with longer retirement period have better adjusted their new financial situations that would have changed after retirement. Studies found that maladjustment to retirement during transition period can result in decreased psychological wellbeing (e.g., depression, life satisfaction) and risky health behavior (e.g., alcohol use) (e.g., Kim & Moen, 2002; Perreira & Sloan, 2001; Wang, 2007). In this sense, financial practitioners and educators can provide more customized services and education programs about financial and psychosocial transition to retirement specifically to those who is about to enter or have recently entered retirement period so that they could go through the transitional successfully.

The effect of financial management practice differed by groups. Financial management practice was positively related to non-retirees' perceived assessment of retirement preparedness, while it was negatively related to retirees' perceived assessment of financial situations. This propensity to manage finances had a positive effect on non-retirees, who have a continuing income stream. When assessing their retirement preparedness, this type of commitment and management mechanism can allow them to review their finances and stick to financial plans and goals, thus, can improve their financial decisions (Lee & Kim, 2016). However, our findings show that these meticulous management practices for retirees with relatively less strong and solid income streams compared to non-retirees did not necessarily bring a positive feedback to perception about their finance. For retirees, greater tendency of the financial management practices may imply their greater financial restrictions and stress levels, contributing to less favorable perception about their current financial situations. Therefore, financial practitioners and educators should approach perception about retirement finance differently between retirees and non-retirees. They can provide more specific assistance to non-retirees in delineating their financial goals, plans, and money management routine to improve their retirement preparedness. They can still help retirees manage their finances in a more productive way that can improve both perceived financial well-being and actual financial situation.

Across groups, those who had better perceived health conditions and were homeowners tend to favorably assess their finance and retirement preparedness, while those with bigger household size was negatively related to the self-assessment. The results show that what factors can possibly contribute to greater financial burdens (e.g., poor/fair health conditions, non-homeownership, family financial responsibility) and how they could work in both current and future retirees' self-assessment about finance. However, some household characteristics, such as education, worked in an opposite way between retirees (i.e., positive) and non-retirees (i.e., negative), resulting from different length of working years and level of retirement preparedness (e.g., the more educated have started preparing for retirement relatively late because of delayed employment).

In addition, older non-retirees tended to perceive their retirement plans are not well established for retirement and more agreed on the importance of retirement preparation. Studies indicated that workers become more involved in retirement planning activities as they approach retirement (e.g., Adams & Rau, 2011; Wang & Shultz, 2010). Adams and Rau (2011) explained that it is because finances become more prominent in life and other life cycle factors make them more carefully review their own finance based on the perceived proximity of retirement (e.g., increased income, decreased debt and childcare expenses). More financial service and educational programs that can address those growing concerns of future retirees relatively closer to retirement from financial practitioners and educators should be provided.

Financial well-being related to retirement depends on the nature and the context of retirement planning which have changed significantly in the past decades. For example, there has been a dramatic shift from defined-benefit pensions to defined-contribution plans, which makes employees take greater investment risk. Retirement planning can be better discussed across different retirement income sources associated with mental accounting framework. The discussion also include a need for a better focus of retirement planning starting sooner in one's life so that non-retirees closer to retirement feel more prepared for retirement and retirees can have a smoother retirement transition period. As Phua and McNally (2008) indicated, retirement planning should differ by changing life stages. With better planning of both current and future retirees' finances, they can perceive their finance and preparedness better; they could be more capable of smoothing consumption level over their lifespan, not by going through dramatic lifestyle changes or experiencing much stress (Wang & Shultz, 2010).

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Table 1. Sample Characteristics

Variables	Total Sample (N=11,803)	Retirees (n=2,934)	Non-retirees (n=8,869)	
Dependent variables:				
Perceived financial well-being:				
Finding it difficult to get by	7.1%	2.8%	8.5%	
Just getting by	19.2%	11.8%	21.7%	
Doing okay	39.9%	37.3%	40.7%	
Living comfortably	33.8%	48.1%	29.1%	
Perceived retirement preparedness:				
Yes	NA	NA	45.5%	
No	NA	NA	54.5%	
Household characteristic variables:				

Financial management practice (mean, median) 3.9 (4) 4 Age 53.5(56) 72 Education: 3.7% 2 Less than high school 3.7% 2 High school diploma 21.3% 2 Some college 33.5% 3 Bachelor degree or higher 41.5% 3 Employment status: 51.3% 3 Self-employed 9.3% 9.3% Not working 14.5% 8 Race/Ethnicity: White 73.8% 8 Black 8.5% 6 Hispanic 12.1% 2 Asian/other 5.6% 3 Marital status:	=2,934) (n=8,869) 1.1(4) 4.4(5) 2.2(71) 47.3 (49) 2.2% 4.3% 25.3% 20.0% 44.8% 33.0%	
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Marital status:	4.6% 14.5%	
	3.3% 6.4%	
M ' 1		
Married 57.2% 6	51.8% 55.6%	
Non-married 42.9% 3	8.2% 44.4%	
Gender:		
Male 49.8% 5	5.8% 47.9%	
Female 50.2% 4	4.2% 52.1%	
Household size 2.4(2.0) 1.	9(2.0) 2.6(2.0)	
Perceived health conditions:		
Excellent 11.2%	8.3% 12.1%	
Very good 38.1% 3	7.8% 38.2%	
Good 36.4% 3	8.3% 35.8%	
Fair 11.9% 1	2.9% 11.6%	
Poor 2.4% 2	2.7% 2.3%	
Homeowner:		
Yes 69.3% 8	63.9%	
No 30.7% 1	4.5% 36.1%	
Household income (mean, median) \$79,273.3 (\$67,500) \$71,564	.4 (\$55,000) \$81,823.5 (\$67,5	500)
Region:	ψοτ,ο=οιο (ψοτ,ο	/
	6 9% 17 9%	
	6.9% 17.9% 24.3%	
West 23.6% 2	6.9% 17.9% 5.2% 24.3% 4.0% 34.4%	

Table 2. Descriptive Results of Retirement Related Variables

	Retirees (n=2,934)	Non-retirees (n=8,869)
	N (%)	N (%)
Retirement funds sources/Retirement savings for	ms	
Social Security	94.8%	NA
Employment	13.6%	NA
Own employment	2.0%	NA
Spouse/partner's employment	11.9%	NA
Business	3.2%	8.5%

DB/DC plans	79.2%	62.1%
Defined benefit plan	66.0%	23.3%
Defined contribution plan	48.1%	46.5%
Retirement savings account	63.2%	31.2%
IRA, Roth IRA	53.6%	30.0%
Other retirement savings	21.3%	2.5%
Assets/investments	66.7%	50.5%
Income from real estate	15.4%	14.7%
Savings outside a retirement		
account (e.g. a brokerage account,	62.5%	38.5%
savings account)		
Family	3.8%	NA
Other retirement related variables		
Retirement period	9.9 (8.0)	NA
Retirement saving amount	NA	\$264,393.1 (\$75,000)

Table 3. Ordered Logistic Regression Results: Determinants of Perceived Financial Well-being, Total Sample (N=11,803)

Variable	Coefficient	Standard Error	P-value	Odds Ratio
Group variable (ref: Non-retired)				
Retired	1.0394	0.0639	<.0001	2.8275
Financial characteristics				
Financial management practice	-0.0182	0.0128	0.1556	0.9820
Income	0.0136	0.0005	<.0001	1.0137
Homeowner (ref: No)				
Yes	0.5966	0.0537	<.0001	1.8159
Sociodemographic characteristics				
Age of respondent	-0.0005	0.0018	0.7582	0.9995
Education (ref: Less than high school/	High school diploma	a)		
Some college	0.0019	0.0547	0.9727	1.0019
Bachelor degree or higher	0.3017	0.0583	<.0001	1.3522
Race (ref: White)				
Black	0.0660	0.0766	0.3888	1.0682
Hispanic	0.0152	0.0709	0.8304	1.0153
Asian/others	0.1577	0.1508	0.2957	1.1708
Marital status (ref: Non-married)				
Married	0.2400	0.0505	<.0001	1.2712
Gender (Male)				
Female	0.0191	0.0431	0.6574	1.0193
Household size	-0.1829	0.0176	<.0001	0.8329
Perceived health conditions (ref: Fair/p	oor)			
Excellent	1.6868	0.0883	<.0001	5.4022
Very good	1.2891	0.0658	<.0001	3.6295
Good	0.6805	0.0632	<.0001	1.9749
Region (ref: Northeast)				
Midwest	0.1958	0.0643	0.0023	1.2163
South	0.1122	0.0610	0.0660	1.1187
West	0.1354	0.0665	0.0418	1.1450
Intercept (ref: Intercept 1: Living comf	ortably)			
Intercept 4: Finding it	-3.4590	0.1593	<.0001	0.0315
difficult to get by				0.0313
Intercept 3: Just getting by	-1.1289	0.1550	<.0001	0.3234
Intercept 2: Doing okay	0.7064	0.1565	<.0001	2.0267

Table 4. Ordered Logistic Regression Results: Determinants of Perceived Financial Well-being, Retirees (n=2,934)

Variable	Coefficient	Standard Error	P-value	Odds Ratio
Sources of retirement funds				
Social Security	-0.0355	0.2127	0.8673	0.9651
Job	-0.3903	0.1405	0.0055	0.6769
Business	0.0966	0.2831	0.7331	1.1014
DB/DC	0.5362	0.1116	<.0001	1.7095
Retirement savings account	0.6091	0.1037	<.0001	1.8388
Assets/investments	0.8650	0.1053	<.0001	2.3750
Family	-1.1395	0.2214	<.0001	0.3200
Financial characteristics				
Period of retirement	0.0216	0.0078	0.0059	1.0218
Financial management practice	-0.1847	0.0304	<.0001	0.8314
Income	0.0132	0.0013	<.0001	1.0133
Homeowner (ref: No)				
Yes	0.3884	0.1314	0.0031	1.4746
Sociodemographic characteristics				
Age of respondent	-0.0067	0.0093	0.4686	0.9933
Education (ref: Less than high school/ H	igh school diploma)			
Some college	0.1607	0.1150	0.1621	1.1743
Bachelor degree or higher	0.4994	0.1299	0.0001	1.6477
Race (ref: White)				
Black	-0.1298	0.1865	0.4864	0.8783
Hispanic	0.0766	0.2068	0.7111	1.0796
Asian/others	-0.3991	0.2783	0.1516	0.6709
Marital status (ref: Married)				
Non-married	0.3688	0.1166	0.0016	1.4460
Gender (Male)				
Female	0.1422	0.0994	0.1526	1.1528
Household size	-0.1655	0.0621	0.0076	0.8475
Perceived health conditions (ref: Fair/po	or)			
Excellent	1.7525	0.2250	<.0001	5.7690
Very good	1.0863	0.1362	<.0001	2.9633
Good	0.6262	0.1294	<.0001	1.8705
Region (ref: Northeast)	4.4-4-	V> -		
Midwest	-0.0411	0.1416	0.7718	0.9597
South	-0.0485	0.1380	0.7253	0.9527
West	-0.1882	0.1476	0.2024	0.8284
Intercept (ref: Living comfortably)				
Finding it difficult to get by	-2.7138	0.7204	0.0002	0.0002
Just getting by	-0.0436	0.7173	0.9515	0.9515
Doing okay	2.2381	0.7257	0.0020	0.0020
Concordance rate	2.2501	81%	0.0020	0.0020

Table 5. Binary Logistic Regression Results: Determinants of Perceived Assessment of Retirement Preparedness, Non-Retirees (n=8,869)

Variable	Coefficient	Standard Error	P-value	Odds Ratio
Forms of retirement savings				
Business	-0.3931	0.1716	0.0220	0.6750
DB/DC	1.0569	0.1251	<.0001	2.8774
Retirement savings account	0.5098	0.0930	<.0001	1.6650
Assets/investments	0.3275	0.0947	0.0005	1.3875
Financial characteristics				
Retirement saving amount	0.0004	0.0009	<.0001	1.0004
Financial management practice	0.0823	0.0251	0.0010	1.0858
Income	0.0004	0.0000	0.6467	1.0004
Homeowner (ref: No)				
Yes	0.2872	0.1099	0.0090	1.3327
Sociodemographic characteristics				·-
Age of respondent	-0.0338	0.0041	<.0001	0.9668
Education (ref: Less than high school/ I		0.00.1		0,7000
Some college	-0.3160	0.1318	0.0165	0.7291
Bachelor degree or higher	-0.4540	0.1337	0.0007	0.6351
Race (ref: White)	0	0.1007	0.0007	0.0001
Black	0.1980	0.1688	0.2409	1.2190
Hispanic	0.1366	0.1423	0.3373	1.1464
Asian/others	-0.2413	0.3562	0.4980	0.7856
Employment status (ref: Self-employed		0.0002	0	0.7000
Salaried worker	-0.1913	0.1790	0.2852	0.8259
Not working	-0.2694	0.2355	0.2527	0.7638
Marital status (ref: Non-married)	0.20) .	0.2000	0.2027	0.7000
Married	0.0021	0.1062	0.9846	1.0021
Gender (Male)	0.0021	0.1002	0.5010	1.0021
Female	-0.0821	0.0888	0.3551	0.9212
Household size	-0.0724	0.0345	0.0361	0.9302
Perceived health conditions (ref: Fair/po		0.03 13	0.0501	0.5502
Excellent	1.1840	0.1953	<.0001	3.2674
Very good	0.8117	0.1596	<.0001	2.2517
Good	0.5612	0.1610	0.0005	1.7528
Region (ref: Northeast)	0.5012	0.1010	0.000	1.7520
Midwest	-0.0633	0.1302	0.6267	0.9387
South	-0.1210	0.1302	0.3313	0.8860
West	-0.0637	0.1384	0.6451	0.9383
Intercept	-0.6504	0.3955	0.1000	0.5218
Concordance rate	-0.050+	82.		0.5210

Student Loans and Families: How Borrowers Make, Negotiate, And Experience Student Loan Decisions Within Family Systems

Julie Miller¹, MSW, PhD, Samantha Brady, MPA, Alexa Balmuth, BS, Lisa D'Ambrosio, PhD, Joseph Coughlin, PhD, MIT AgeLab, Cambridge, Massachusetts

Keywords: debt, family systems, family communication, mixed methods, student loans

Background

Nationally, outstanding education debt has passed the \$1.5 trillion mark represents the second-largest form of household debt in the United States (Federal Reserve Bank of New York, 2018). A growing body of literature points to ways in which large amounts of student loan debt can impact multiple domains of borrowers' lives, ranging from marriage and childbearing (Gicheva, 2011; Nau et al., 2015) to home buying (Arnett, 2004), career choices (Rothstein & Rouse, 2011) and more. However, virtually no research has focused on the manifestation of student loans within family systems, specifically regarding loan-related family communication and overall student loan-related family dynamics.

Financial communication norms within families are important because they can serve as meaningful predictors of individuals' financial attitudes, beliefs, values, and behaviors (Koerner & Fitzpatrick, 2002; Thorson & Horstman, 2014). As individuals live longer lives, he ripple effects of financial decisions within intergenerational family dynamics are perhaps more virtual than ever before (Bengston et al., 1991).

Study Purpose and Aims

With student loans playing an increasingly prominent role in family's financial lives, this study fills a gap in research by exploring ways in which borrowers make, negotiate, and experience decisions about student loans within family systems. Building on previous research, this study situates student loans within multiple aspects of family life, from practical and emotional factors of decisions to take on loans through relational and communication trends during loan repayment. Leveraging family systems framework and Family Communication Patterns Theory (Koerner & Fitzpatrick, 2002), this study also seeks to identify styles of family engagement about student loans during accrual and repayment.

Questions guiding this study are: How do student loan borrowers with loans for their own education: 1) Describe their involvement and conversations with parents about accruing student loans and; 2) Perceive family dynamics as they relate to student loan repayment?

Methods

This mixed methods exploratory study employed a concurrent triangulation design study, utilizing an online questionnaire and in-person focus groups conducted between February and September, 2018. The questionnaire was a 95-item instrument designed to measure the experiences of carrying student loans, how loans interact with people's spending and saving priorities, borrowers' relationships with other family members, and attitudes and behaviors surrounding saving for longevity. Questionnaire data were collected via Qualtrics, cleaned, and recoded for analysis. Focus groups provided an opportunity to investigate the nuances of the participants' perceptions, values, experiences and attitudes and to observe variation across borrowers' characteristics and circumstances. Focus group data were analyzed using qualitative description, focusing on the meaning participants ascribed to phenomena and the contexts in which those meanings were derived (Creswell, 2014; Denzin & Lincoln, 2005).

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To be eligible to participate in the study, participants must have been between the ages of 25 and 75, must have accrued student loans for their own education, and must have had some responsibility for repayment of the loans. The study sample was limited to persons who read and spoke fluent English and to those who had accrued student loans that were used toward a not-for-profit institution in the United States (including public and private schools) from which the student graduated within six years. Of the subset of cases drawn from the overall study, only participants with student loans for their own education (n= 62) were included in this analysis.

Results

The first study question is: How do student loan borrowers with loans for themselves describe their involvement with parents about accruing loans before taking them on? Results suggest that the majority of borrowers perceived themselves as making loan-related decisions with little guidance or support, particularly if they were not sharing loan repayment responsibilities with parents. In addition, participants described in focus groups conversations with their parents leading up to the time at which they accrued loans. From these data, four discrete typologies were identified that were categorized according to Family Communication Patterns Theory. The majority of participants reported sparse often indirect conversations with family members about their student loans during repayment. Ultimately, the ways in which families communicated about student loans during repayment played at least a partial role in how they experienced the loans as part of their overall family dynamics.

The second study question is: How do participants describe family dynamics as they relate to student loan repayment? A slight majority of participants reported that the loans had innocuous effects on their relationships with immediate family members. However, survey results also showed almost half of all participants reported some type of family conflict related to their loans and that if the loans had imposed any effects on family dynamics, they had most often been negative. Focus group data demonstrated that carrying student loans created relational waves rooted most often in resentment, protection, guilt, and gratitude. Finally, results also revealed that repaying loans often negatively impacts borrower's abilities to financially support older and younger family members.

Conclusions and Implications

The main goal of this study was to understand how student loan borrowers make, experience, and negotiate decisions about student loans within family systems. To bolster individual and familial wellbeing, results point to key practice implications for financial professionals working with growing numbers of student loan borrowers and their families. First, results suggest a need for trusted and knowledgeable sources of professional advice for student loan borrowers. Borrowers need reliable information about repayment plans, consolidation options, tax implications, and potential options for student loan relief. Second, results underscore borrowers' needs for professional advice about strategies for communicating effectively with family members about loans leading up to the decision to take on loans and through the repayment process. Third, results demonstrate the value of embedding financial literacy training earlier, across the life course, and in different settings so that individuals and families are more knowledgeable consumers and thus can make better informed decision about saving, spending and borrowing.

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The Relationship between Financial Knowledge, Financial Management, and Financial Self-Efficacy among African American Students

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Abstract

Using data obtained from the 2014 National Student Financial Wellness Study, this study examines the relationships between financial knowledge, financial management, and financial self-efficacy among African American college students. The results show that financial knowledge is not directly nor indirectly associated with financial self-efficacy for African American students. Only the actual act of managing money is significantly associated with increased financial self-efficacy. The findings indicate that financial education based on experiential learning may be effective for the wellbeing of African American students and for African American students who pursue financial counseling and education professions in the future.

Key words: African American students, financial knowledge, financial management, financial self-efficacy, financial education

Introduction

Although skills and knowledge are necessary components of capability, research has shown that one must also possess a confidence, or self-efficacy, in his or her abilities to perform financial management tasks (Bandura, 2006; Henager & Cude, 2016). Financial knowledge, management, and self-efficacy are especially important for traditional college students since they are still in the early stages of the life cycle and able to reap maximum long-term benefit from sound financial decisions (Lin, Heckman, Montalto, & Letkiewicz, 2014). One group of college students that may experience an additional benefit from financial self-efficacy are students with career aspirations of becoming financial counselors, financial educators, and financial planners. By increasing their financial knowledge, financial management skills, and financial self-efficacy, college students may also position themselves for careers, which allow them to confidently be a source of financial information and advice for others. These efforts may also lead to the expansion of more robust peer-to-peer financial coaching programs at the collegiate level.

The personal finance literature has extensively documented the effects of financial knowledge, financial management, and financial self-efficacy for college students (e.g., Lim et al., 2014; Heckman & Grable, 2011; Shim, Barber, Card, Xiao, & Serido, 2010). However, the literature is lacking when specifically addressing African American college students and the roles of financial knowledge, management, and self-efficacy regarding these students' financial decision-making. In addition, particular attention should be paid to African American college students given the racial wealth gap evident in the United States (Shapiro, 2004). The purpose of this paper is to examine (1) the relationship between financial knowledge and self-efficacy and (2) the mediating role of financial management between financial knowledge and financial self-efficacy among African American college students. The results of this study have implications for financial counselors, financial coaches, financial educators, universities, and African American students and their families.

Literature Review

Financial knowledge

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The U.S. population suffers from low levels of financial knowledge (Lusardi & Mitchell, 2011). This is true for college students as the Study on Collegiate Financial Wellness (SCFW) found that on average, college students were only able to answer 3.3 of the 6 basic financial knowledge questions correctly (SCFW, 2017; Montalto et al., 2019). A large part of all financial knowledge acquisition is developed through financial socialization, the process of acquiring and developing values, attitudes, standards, norms, knowledge, and behaviors contributing to financial capability and individual and family well-being (Danes, 1994). However, young adults will repeat patterns of poor financial management if their parents lack the knowledge and skills to pass on healthy behaviors (Allen, Edwards, Hayhoe, & Leach, 2007; Clarke et al., 2005; Muruthi, Watkins, McCoy, White, & Thomas, unpublished manuscript; Sherraden, 2013). Given residuals from historical trauma (e.g. discrimination and institutionalized racism), less wealth, unequal ownership opportunities, and fewer financial experiences (Herring & Henderson, 2016), African American students may be at a disadvantage.

Financial management

Financial management is budgeting, saving, and spending money over time while taking into account future needs, risks, and life events (Henry, Weber, & Yarbrough, 2001). This includes handling credit cards, budgeting to save, control of spending, and understanding tax, insurance, investing, retirement, and estate planning needs (Henry et al., 2001, p. 244). The two most essential aspects of financial management for college students are using credit cards and budgeting.

When it comes to financial management, African American students also may be at a disadvantage. Research has demonstrated that African American students tend to graduate with more debt than their White peers and face more challenges in the management of credit card debt. REAP (Dorrance & McDaniel, 2009) found that 55% of African American students who have student loans graduate with a debt burden that is nearly twice that of White graduates.

Financial self-efficacy

Self-efficacy is an individual's sense of confidence in their ability to perform a certain skill or task to obtain specific outcomes. (Bandura, 1977; Bandura, 2006). Financial self-efficacy is defined as one's confidence in their financial decision-making and management capability (Bandura, 1977; Farrell, Fry, & Risse, 2016). Higher financial self-efficacy is linked to more productive financial behaviors and greater well-being (Amatucci & Crawley, 2011; Danes & Haberman, 2007; Engelberg, 2007; Farrell et al., 2016).

Although race has been included in studies of financial self-efficacy (e.g., Heckman et al., 2014), to the authors' knowledge, no study has been done that directly explored how different racial or ethnic groups vary in financial self-efficacy and the outcomes associated with those differences. Thus, this study will be a valuable addition to the literature.

Theory

Social learning theory serves as an appropriate theoretical lens to understand these phenomena because the theory posits that observational learning and modeling can influence a person's financial knowledge, skills, attitudes, and beliefs (Bandura, 1977). Bandura (1977) stated that didactic teaching can aid in the development of new knowledge, but didactic learning can not be the sole vehicle for learning. Learning a new behavior takes place through observing others performing the behavior and then attempting to model the behavior. Social learning theory helps researchers understand how individuals acquire knowledge, skills, attitudes, and beliefs about finances. For example, the observation and modeling that an individual is exposed to in their early life regarding personal finance can affect their financial outcomes in adulthood (Heckman & Grable, 2011; Lim, Heckman, Montalto, & Letkiewicz, 2014; Qamar, Khemta, & Jamil, 2016; Remund, 2010; Shim, Barber, Card, Xiao, & Serido, 2010).

Hypotheses

H₁: Students' financial knowledge is positively associated with students' financial self-efficacy.

H₂: Financial management is a mediating factor in the relationship between financial knowledge and financial self-efficacy.

H_{2a}: Students' financial knowledge is positively associated with financial management.



H_{2b}: Students' financial management behavior is positively associated with students' financial self-efficacy. Based on these hypotheses, Figure 1 is the suggested conceptual model.

Method

Data and sample selection

This study uses data from the 2014 National Student Financial Wellness Study (NSFWS). This survey is administered to undergraduate students from 52 participating two and four-year public institutions and four-year private higher education institutions across the United States. The original data sample size is 18,795; however, the sample was reduced to 12,670 after removing missing values in the variables of interest.

Measures

The dependent variable, *Financial Self-efficacy* is a latent variable comprised of two statements: "*I am confident that I can manage my finances*," and "*I manage my money well*." Respondents are given four options to answer (1 = strongly disagree, 2 = disagree, 3 = agree, 4 = strongly agree).

The two independent variables are *Financial Knowledge* and *Financial Management*. *Financial Knowledge* is a latent variable consisting of five observed variables. Each variable is measured with a question testing respondents' financial knowledge. Each variable is coded 1 if a respondent provides the correct answer, otherwise 0. For *Financial Management*, respondents are given the statements: "I have a weekly or monthly budget that I follow"; "I track my spending in order to stay within my budget"; "I track all debit card transactions/checks to balance my account"; "I pay my bills on time every month"; "I add to my savings on a regular basis". Respondents are given four options to choose for each statement (1 = never, 2 = sometimes, 3 = frequently, 4 = always). The five items are constructed as a latent variable,

Financial Management.

This study includes three additional variables (years enrolled in post-secondary school, GPA, and major) considered to be related to one's level of financial knowledge. As such, the effects of those variables are included in the model as control variables.

Analysis

Structural equation modeling (SEM) was used to test the relationship among the variables of interest. The model was tested using STATA 15.

Results

A simple model shows us that financial knowledge is significant and positively related to financial self-efficacy. African American students, with the same financial knowledge scores as non-African Americans, have self-efficacy scores that are .074 points less than the comparison group.

The inclusion of financial management in the model mitigates the effect of lower financial efficacy among African American students. Financial management has a stronger relationship with financial knowledge for African American students than for non-African American students. If African American students' financial management scores are low, their self-efficacy scores will be lower than they would if they were non-African American students. On the other hand, if African American students' financial management scores are high, their self-efficacy scores will be higher than they would if they were non-African American students. To increase financial self-efficacy among African American students, one possibility is to concentrate on increasing their financial management experiences.

In SEM, the overall fit of the model is evaluated by several indices. But generally, the model is considered to work well if RMSEA is lower than .06, SRMR is less than .08, and CFI is higher than .90 (Hu & Bentler, 1999; Loehlin, 2004). The indices of the empirical model for overall sample (Figure 2) indicate the model fit is good (i.e., RMSEA = .048, SRMR = .042, CFI = .917).



As shown in Figure 2, all associations in the model are statistically significant at the level of .001. First, financial knowledge is positively associated with both financial management (b = .047, p < .001) and financial self-efficacy (b = .127, p < .001) controlling for the effects of years of enrolled, GPA, and major. Second, financial management is positively associated with financial self-efficacy (b = .127, p < .001). The relationship indicates that financial knowledge has a direct and indirect impact on increasing financial self-efficacy, and financial management acts as a mediation between financial knowledge and financial self-efficacy.

Figure 3 shows the results for the African American students. The model indices indicate the model fit is good (i.e., RMSEA = .042, SRMR = .046, CFI = .935). All associations in the model are statistically significant at the level of .05. However, the relationship between the predictor variables and the outcome variable are differently demonstrated with that of the total sample model. First, financial knowledge does not have any significant association with either financial management or financial self-efficacy. Second, financial management is positively associated with financial self-efficacy (b = .640, p < .001) but does not take the mediator role.

Figure 4 shows the results for non-African American students. The model fit is good (i.e., RMSEA = .048, SRMR = .042, CFI = .918) and all associations are significant at the level of .001. The overall relationships in structural model are similar to the model for total sample. Financial knowledge is positively associated with financial management (b = .043, p < .001) and financial self-efficacy (b = .125, p < .001), and financial management is positively associated with financial self-efficacy (b = .475, p < .001). As a result, financial management is found to be a mediating factor between knowledge and self-efficacy.

Table II shows the direct effect, indirect effect, and total effect of each predictor variable on financial self-efficacy. The results show that financial knowledge has an effect on financial self-efficacy both directly and indirectly. However, its effect is relatively small compared to the effect of financial management. Second, considering the effect of financial management is relatively greater than the effect of financial knowledge, financial management is found to be an important factor to enhancing students' financial self-efficacy. Even though the effect of financial knowledge itself is relatively weak, it can become greater when being mediated by financial management. The role of financial management becomes more significant for African American students because their financial knowledge is not significantly related to financial self-efficacy.

Discussion

The results of the simple model, comparing financial knowledge alone to financial self-efficacy, show two findings. First, students with more financial knowledge have more financial self-efficacy. This result provides support for H_1 . However, this relationship differs when considering the race of the student. Second, the impact of financial knowledge on financial self-efficacy is weaker for African American students than for non-African American students. At the same level of financial knowledge, the African American students have less financial self-efficacy than their non-African American peers.

Introducing financial management into the model adds some clarity to the relationship. For non-African American students, financial knowledge has both a direct and indirect relationship with financial self-efficacy (supports H_1). The direct relationship from the simple model holds true: students with more financial knowledge have more financial self-efficacy. The indirect relationship shows that more financial knowledge is positively related to increased financial management resulting in greater financial self-efficacy. Thus, for the non-African American students, both financial knowledge and financial management are related to their financial self-efficacy in a positive way. This provides support for both H_{2a} and H_{2b} .

This relationship differs for the African American students in the study. Once financial management is introduced, the results suggest that financial management experience is more important for African American students. Financial knowledge is not directly nor indirectly associated with financial self-efficacy for African American students. There is not a significant relationship between financial knowledge and financial self-efficacy (does not provide support for H_1), nor between financial knowledge and financial management (does not provide support for H_{2a}). Instead, the only significant relationship that exists is between financial management and financial self-efficacy for African American students (provides support for H_{2b}). More experience with financial management correlates with increased

financial self-efficacy. Increases in financial knowledge is not associated with increases in financial self-efficacy. Given the results of this study, increases in financial management experience rather than increases in financial knowledge have more effect on the financial self-efficacy of African American students.

Implications

This study has implications for financial counselors, financial coaches and financial educators who work with students from diverse backgrounds. Financial counselors and educators should not assume all students have received the same financial socialization. The different socialization backgrounds may result in different levels of financial knowledge, experience with financial management, and financial self-efficacy among the students. This understanding may help financial counselors, coaches and educators in scaffolding their conversations with students in order to help provide appropriate education for all. Students with limited financial socialization may need opportunities to work with finances to learn through "doing".

Offering a variety of means for students to engage with financial counseling and financial education will make targeted financial outcomes accessible to a broader and more diverse range of students. Financial counselors, financial educators and universities are uniquely positioned to assist African American students with hands-on experience in financial management through peer-to-peer counseling, experiential learning, service learning, and active learning instruction.

Finally, the results have potential implications for Accredited Financial Counselor (AFC) and Certified Financial Planner (CFP) university programs that aim to increase their pool of African American applicants seeking careers as financial counselors and financial planners. By increasing the confidence to manage their own finances, it is possible that more students of color will believe they can serve as a fiduciary for others seeking financial counsel and advice.

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The Young, the Underconfident, the Poor and the Fraud Victim: Financial Capability and Financial Wellbeing of Vulnerable Consumers

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Abstract

This study examines relative contributions of financial capability factors to financial wellbeing among vulnerable consumers. The data set used is from the 2016 National Financial Wellbeing Survey commissioned by Consumer Financial Protection Bureau (CFPB). Results show that among financial capability components, financial behavior contributes the most to financial wellbeing of the whole sample, followed by financial skill and financial knowledge. In addition, group differences are shown when subsamples in terms of age, poverty status, confidence, and fraud victim status are examined. Findings have implications for financial educators when they teach consumers especially those who are vulnerable in socioeconomic statuses.

Key words: financial capability, financial wellbeing, vulnerable consumers

Introduction

Financial capability is a broad concept that includes financial knowledge, resource, access, and habits (Lin et al., 2016). Financial capability sometimes refers to financial literacy (Lusardi & Mitchell, 2014) and its applications (Huston, 2010). Some researchers have defined financial capability as individual ability to manage their finances effectively (Taylor, 2011). As an individual ability, financial capability includes financial knowledge and financial behavior (Xiao & O'Neill, 2016; Xiao & Porto, 2017). Financial skill is also considered a component of financial capability (CFPB, 2017). Associations between financial wellbeing and financial capability factors such as financial knowledge and financial behavior are examined by previous research (Xiao, Chen, & Chen, 2014; Xiao & Porto, 2017). Research on the association between financial skill and financial wellbeing is emerging (CFPB, 2018). However, no previous research examined relative contributions of financial capability factors such as financial knowledge, financial behavior, and financial skill, to financial wellbeing. This study is to fill out this gap. This study examines relative contributions of financial capability factors to financial wellbeing among consumers, paying special attention to vulnerable consumers. Results of this study have direct implications for consumer financial education design and delivery. For example, if we find that financial behavior is a more important contributor than financial knowledge to financial wellbeing, we may focus more on action taking activities besides conveying knowledge in designing and implementing financial education programs.

The Financial Conduct Authority states that "a vulnerable consumer is someone who, due to their personal circumstances, is especially susceptible to detriment" (Coppack, Raza, Sarkar, & Scribbins, 2015). Consumers are diverse in various dimensions such as demographic, economic, psychological, and social. In this study, we focus on four factors that represent these dimensions: age, poverty status, confidence, and fraud victim status. Based on these factors, vulnerable consumers are categorized as the young, the poor, those who lack confidence in achieving their financial goals and fraud victims. These vulnerable groups may require special attention from policymakers and educators to help enhance their financial capability and improve their financial wellbeing. Consumer financial educators, for instance, may need to adjust accordingly to deliver effective programs to vulnerable groups at schools, workplaces, and communities.

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In this study, financial capability is defined as possessing basic financial knowledge, engaging in desirable financial behaviors, and utilizing appropriate financial skills for achieving financial wellbeing. Based on this definition, financial capability has three components: knowledge, behavior, and skill. These components are compared when they are correlated with financial wellbeing and relatively important factors are identified for the whole sample and selected subsamples, especially those who are vulnerable in socioeconomic statuses. The findings have both practical and theoretical implications for consumer financial education.

Previous Research and Research Questions

Financial Wellbeing

Financial wellbeing can be measured in various ways such as objectively vs. subjectively, one-item vs. multi-item measures, etc. (Xiao, 2015). Researchers have proposed various definitions of financial wellbeing (Joo, 2008). CFPB proposed a definition of financial wellbeing (CFPB, 2017), which belongs to a subjective and multi-item measure. The definition is consumer-driven and takes into consideration of present vs. future and security vs. freedom of choice factors. The CFPB definition of financial wellbeing and its scale measurement were both developed after a rigorous process that included consumer interview, multiple rounds of data collection and extensive expert input.

The CFPB also commissioned a research project to study pathways of financial wellbeing. In that study, the conceptual framework of financial wellbeing was proposed suggesting that financial skills and financial behaviors determine financial situation, then financial situations determine financial wellbeing (CFPB, 2018).

Many factors contribute to consumer financial wellbeing, an important element of overall or subjective wellbeing (Easterlin et al., 2010; Rath, Harter, & Harter, 2010). Age, education and financial literacy have been positively associated with financial wellbeing (Lusardi & Mitchell, 2011; Taft et al., 2013). Financial satisfaction is a subjective measure of financial wellbeing. In the wellbeing research literature, financial satisfaction is used as an important indicator of general wellbeing (Diener & Biswas-Diener, 2002). Previous research has found that financial advice (Xiao & Porto, 2016), risk tolerance (Joo & Grable 2004), gender (Hira & Mugenda, 2000), and desirable financial behaviors (Xiao & Porto, 2017) are associated with financial satisfaction. Using the CFPB scale of financial wellbeing, researchers find that desirable financial behavior such as using auto savings for retirement is positively associated with financial wellbeing (Middlewood et al., 2018). Previous research suggest that possible determinants of financial wellbeing are financial capability related factors such as financial knowledge, financial behavior, and perceived financial capability (Xiao, Chen, & Chen, 2014; Xiao & O'Neill, 2016; Xiao & Porto, 2017). In this study, we focus on relative contributions of financial capability related factors to consumer financial wellbeing.

Financial Capability among Vulnerable Consumers

Financial capability can include many components such as knowledge, resource, access, and habits (Lin et al, 2016). In this study, we refer to financial capability as an individual ability. A person who is financially capable has adequate financial knowledge, performs desirable financial behaviors and possesses appropriate financial skills in managing personal finance.

The level of consumer financial capability in the United States is worrisome. Most Americans fail to properly prepare for retirement or financial emergencies (Lusardi, 2011), lack access to appropriate financial products and services (Sherraden, 2013), and lack formal financial education (Xiao & O'Neill, 2016).

Vulnerability is context specific; some people can be expert consumers in one facet of life while being disadvantaged in other situations. Consumers with low financial capability may be vulnerable to make bad decisions in the financial marketplace. For instance, gullible consumers may lack the necessary financial capability to avoid financial frauds in an increasingly complex financial market (Reurink, 2018). Both objective and subjective financial knowledge might help prevent some types of fraud among older Americans, but overconfidence can also lead to poor choices and financial vulnerability (DeLiema et al., 2018).



Young adults scored the lowest in many financial capability components compared to their older counterparts (Xiao, Chen, & Sun, 2015). Young adults also display very limited financial literacy (Lusardi, Mitchell, & Curto, 2010). Financial education helps prevent young adult from using payday lending (Harvey 2019) while subjective financial knowledge guides college students to better financial behaviors (Xiao, Ahn, Serido, & Shim, 2014). People living in poverty are more likely to make bad financial decisions due to cognitive pressure (Mani, Mullainathan, Shafir, & Zhao, 2013). The ability and opportunity to make good financial choices is a building block for financial capability (Sherraden, 2013). Further, there is a strong association between poverty/low income and inadequate financial capability or its components (Walstad et al., 2017).

Confidence on financial knowledge and on making financial choices is another important component of financial capability. Confidence refers to a person's belief in one's ability to succeed in specific tasks (Bandura, 1977). Financial confidence or financial self-efficacy refers to people who believe that they can manage their finance effectively (Lown, 2011). Confidence levels affect consumer financial behaviors. Underconfident consumes are less likely to seek investment and mortgage advice (Porto & Xiao, 2016) and less likely to participate in the stock market (Xia, Wang, & Li, 2014).

In this study, we assume that financial capability has three components: knowledge, behavior, and skill. We examine how each of these factors individually predict consumers' financial wellbeing. In addition, we further our analyses by examining how each distinctive financial capability component contributes to financial wellbeing among subsamples especially those who are vulnerable such as those who are young, poor, underconfident, and fraud victims. Based on the above discussions, we propose following research questions:

- 1. Which component of financial capability financial knowledge, financial behavior, or financial skill is more important for financial wellbeing of the whole sample?
- 2. Which component of financial capability financial knowledge, financial behavior, or financial skill is more important for financial wellbeing of subsamples in terms of age, poverty status, confidence, and fraud victim status?

Method

Data

The 2016 National Financial Well-Being Survey data was used. The data set was commissioned by the Consumer Financial Protection Bureau (CFPB, 2017) and is available for public use. The original data set has a sample size of 6,394. After removing observations with missing values in several key variables such as the financial wellbeing variable, the final sample size used was 6,347. The full sample was used in the analyses first. Subsamples in terms of age, poverty status, confidence, and fraud victim status were then used for further analyses.

Measures

Financial Wellbeing. The financial wellbeing score created by the data owner was used as the dependent variable in the analyses (CFPB, 2017). The score ranged 20-100, in which the higher the score, the better the financial wellbeing.

Financial Capability. The score of financial skills created by the data owner was used. The Knoll/Houts measure was used to measure financial knowledge, which was calculated using the Item Response Theory and provided by the data owner. The financial behavior measure followed the CFPB pathway model approach (CFPB 2018, Appendix D), summarizing the scores of 11 financial behaviors with a score range of 11-55.

Variables Indicating Vulnerabilities. Four variables were used to represent demographic, economic, psychological, and social dimensions, which are age, poverty status, confidence in achieving financial goals, and fraud victim status. These factors were used for further, detailed analyses when subsample differences were explored. For example, using age as an identifying variable, further analyses were conducted among different age groups to see which financial capability factors are more important in predicting financial wellbeing.

Data Analyses

Bivariate analyses were used to explore general patterns. A multivariate OLS regression was used to examine which financial capability factors, knowledge, behavior, or skill is more closely related to financial wellbeing, in which financial wellbeing is the dependent variable, and financial knowledge, financial behavior and financial skill are independent variables. After that, additional analyses in selected subsamples were conducted to examine among different subgroups in terms of age, poverty status, confidence level, and fraud victim status, which financial capability factors are more important for financial wellbeing.

Results

Descriptive Statistics of the Sample

Table 1 presents descriptive statistics of the sample and subsamples that showed interesting group differences. For financial wellbeing, age, poverty status, and confidence showed positive associations, the older, higher than the Federal poverty level, and higher confident, the higher score in financial wellbeing. In terms of fraud victim status, consumers who reported "not sure" expressed a much lower score in financial wellbeing than the "yes" or "no" groups. For the confidence and fraud victim groups, we did not discuss the "refused" group since sample sizes of these groups are small and the results may be less meaningful.

Table 1 Descriptive Statistics of the Sample and Subsamples

	Financial Wellbeing	Financial Knowledge	Financial Behavior	Financial Skill (20-100)	N
	(20-100)	(-2.05-1.27)	(11-55)		
All	56.10	05	41.66	50.77	6347
Age					
18-35	51.20	-0.34	40.05	50.19	1514
36-61	53.80	-0.06	40.97	50.26	2596
62-	62.08	0.16	43.56	51.75	2237
Poverty status					
<100 FPL	45.33	-0.85	37.96	46.65	651
100-199% FPL	49.30	-0.43	39.56	47.36	853
200+% FPL	58.74	0.12	42.53	51.93	4843
200170112		0.12	.2.00	01.70	10.0
Goal confidence					
Refused	50.33	-1.04	36.80	43.13	15
1 not all confident	33.56	-0.54	27.17	33.12	126
2	42.69	-0.36	33.96	39.43	730
3	53.29	-0.13	40.46	47.88	3020
4 very confident	64.73	0.17	46.20	58.64	2456
4 very confident	04.73	0.17	40.20	30.04	2430
Fraud victim					
Refused	50.08	-0.78	37.85	45.77	26
no	56.61	-0.08	41.87	51.20	4138
yes	56.89	0.16	42.47	51.38	1675
Not sure	49.66	-0.49	37.48	45.56	508

The financial knowledge had similar group differences. Age, poverty status, and confidence were positively associated with financial knowledge. The older, higher than the Federal poverty level, and higher confident scored higher in financial knowledge. Interestingly, in terms of fraud victim status, consumers who reported "yes" scored the highest in financial knowledge.

For financial behavior, the oldest group scored much higher than the young and middle-aged groups. The poverty status and confidence were positively associated with financial behavior. For the fraud victim group, the "yes" group had the highest score, the "no" group had the second highest score, and the "not sure" group had the lowest score in financial behavior.

Financial skill showed similar group differences. Age, poverty status, and confidence were positively associated with financial skill, implying the older, richer, and more confident tended to have higher financial skill. In terms of fraud victim status, both consumers who said "yes" and "no" had higher scores in financial skill than the "not sure" group.

Regression Results

In Table 2, regression results show interesting findings. For example, when financial wellbeing is regressed with three financial capability factors, for the whole sample, betas (estimated standardized coefficients) are, in the order from high to low, behavior (.319), skill (.242), and knowledge (.211), implying that on average, behavior contributes the most, skill contributes the second most, and knowledge contributes the least to financial wellbeing. When analyses among several subsamples are conducted, interesting differences emerge. For young adults (aged 18-35) and the mid-aged (aged 36-61), betas of skill are much smaller, while betas of behavior are much larger, compared to older adults (aged 62 or older), which suggest that for the young and middle aged, knowledge and behavior are more important than skill for their financial wellbeing.

Among subsamples regarding poverty status, two factors, knowledge and skill, do not show any statistically significant associations with financial wellbeing among consumers under 100% and at 100-199% FPL (Federal poverty level), while for consumer at 200%+ FPL, all three financial capability factors (knowledge, behavior, and skill) show significant associations with financial wellbeing. The findings suggest that to help improve financial wellbeing of consumers below or near the poverty level, more effective interventions may be to encourage them to perform beneficial financial behaviors instead of enhancing their financial knowledge and skill.

Table 2. Summary of Results of OLS Regressions on Financial Wellbeing

	Knowledge	Behavior	Skill
	beta	beta	beta
All	.211	.319	.242
Age			
18-35	.206	.326	.190
36-61	.151	.383	.189
62-	.173	.167	.438
Poverty status			
<100 FPL	.015 ns	.395	.022 ns
100-199% FPL	.032 ns	.361	.104 ns
200+% FPL	.156	.297	.306
Goal confidence			
Refused	.015 ns	.465 ns	807
1 not all confident	108 ns	.096 ns	105 ns
2	020 ns	.244	078 ns

3	.196	.287	.081	
4 very confident	.281	.103	.275	
Fraud victim				
Refused	242 ns	.309 ns	.248 ns	
no	.204	.330	.241	
yes	.251	.277	.247	
Not sure	.144	.350	.191	

Note: This table summarize results of a set of OLS regressions on financial wellbeing, where "ns" refers to not statistically significant and other statistics are statistically significant at 5% level. Each row reports coefficients estimates of a regression model. For example, in the row of "All," the whole sample is used and estimated coefficients of three independent variables, financial knowledge, behavior, and skill are .211, .319, and .242, respectively, implying that behavior has the largest, skill has the middle and knowledge has the smallest contribution to financial wellbeing. Statistics in other rows can be interpreted in the similar way.

Consumers with different confidence levels also show intriguing patterns in the results. Regarding confidence about goals, among consumers without confidence at all, all three factors do not show associations; among consumers who answered, "not very confident," two factors (knowledge and skill) do not show associations; among consumers who answered "somewhat confident" or "very confident," all three factors (knowledge, behavior, and skill) show associations. The findings suggest that confidence is a critical factor for improving financial wellbeing. If a person has no confidence to achieve their financial goals, all interventions for knowledge, behavior, and skill may not be effective. Professionals working with this type of consumer should first develop strategies to boost their confidence before helping them enhance their knowledge, behavior, and skill.

Finally, the fraud victim status shows some differences. Consumers who said "not sure" had the lowest betas of knowledge and skill, compared to consumers who said "yes" or "no." Consumers who said "yes" had the smallest beta value on behavior. These differences may be used when financial education programs are designed to address different needs of these consumers.

Discussions

This study has used a large scale, nationally representative data in the U.S. to examine relative contributions of three financial capability components to financial wellbeing in the whole sample and several subsamples in terms of age, poverty status, confidence, and fraud victim status. The findings suggest that three components of financial capability in the whole sample have differential contributions to financial wellbeing, in which financial behavior contributes the most, financial skill contributes the second most, and financial knowledge contributes the least to financial wellbeing. The results also show when vulnerable subsamples are examined, relative contributions of financial capability to financial wellbeing are nuanced.

In the oldest age group, financial skill contributes the most to financial wellbeing, while among the young and middle-aged groups, financial behavior contributes the most to financial wellbeing. When poverty status subsamples are examined, only financial behavior contributes to financial wellbeing in all subsamples (the poor, near poor, and not poor groups). In the poor and near poor groups, financial knowledge and skill do not show associations with financial wellbeing. When confidence subsamples are examined, both confident and very confident consumers benefit from three financial capability components on their financial wellbeing while only financial behavior displays a positive association for the least confident group. Finally, in terms of fraud victim status, financial behavior contributes the most to financial wellbeing in the "yes," "no," and "not sure" subgroups.

Limitations of this study should be acknowledged. First, this study used only cross-sectional data that can only be used to examine associations between financial capability factors and financial wellbeing. No causality should be assumed but some interesting patterns may be informative for designing financial education programs to target consumers with diverse needs, especially those who are vulnerable. The second limitation is that the data is from only one country. In future research, data from other countries can be used to confirm or disconfirm some findings of this study.



Results of this study have direct implications for financial education program design and delivery. First, the results suggest that financial behavior may contribute the most to financial wellbeing. As such, when financial education programs are designed, besides effectively conveying knowledge, educators also need to consider adding activities and assignments to encourage students to engage in desirable financial behaviors to help improve their financial wellbeing. Second, financial educators should pay attention to segments of vulnerable consumers such as the poor or less confident consumers and emphasize action taking in education programs. Third, for consumers who are least confident, education programs may emphasize how to raise their confidence as the beginning learning objective before offering other education activities to enhance their knowledge, behavior, and skill. Fourth, educators need consider different educational needs of consumers of different ages. For young and middle-aged consumers, education may focus on financial skill besides enhancing their knowledge and behavior. For older consumers, educators may encourage them to share their financial skills with their peers at similar age or young people. Fifth, our results show that fraud victims have higher financial knowledge and better financial behavior, which means knowledge and behavior of preventing frauds may be different from knowledge and behavior in money management. Educators may need to provide them information about fraud prevention related knowledge and behaviors. Also, the results show that consumers who are "not sure" if they are fraud victims have lower level of financial knowledge, behavior, and skill. Educators may use this fact as a clue to identify people who have lower financial capability and provide special financial education they need.

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Figure 1. Conceptual framework: The relationship between financial knowledge, financial management and financial self-efficacy

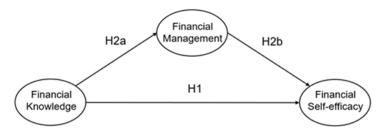
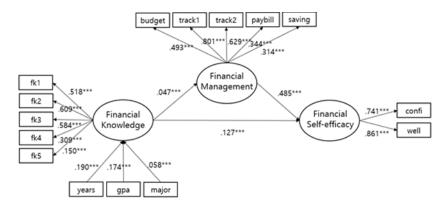
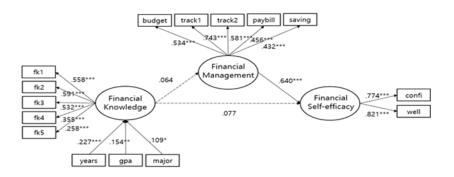


Figure 2. Results for all students



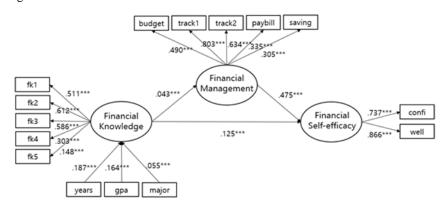
 $N=2,\!378.61,\,df=79,\,RMSEA=.048,\,CFI=.917,\,SRMR=.042$ * p < .05, **p < .01, ***p < .001

Figure 3. Results for African American students



N = 190.92, df = 79, RMSEA = .042, CFI = .935, SRMR = .046 * p < .05, **p < .01, ***p < .001

Figure 4. Results for non-African American students



N = 2,202.99, df = 79, RMSEA = .048, CFI = .918, SRMR = .042* p < .05, **p < .01, ***p < .001 Table I Descriptive statistics of respondents (N = 12,670)

Demographics	African American		Non-African America	an	chi-
	(N = 787)	(N = 11,858)			test/t
					-test
	N	%	N	%	
Gender					***
Male	198	25.22	3,806	32.17	
Female	582	74.14	7,867	66.49	
Other	5	0.64	159	1.35	
Employment Status					***
Full-time	194	24.71	1,985	16,74	
Part-time	387	49.30	6,559	55.33	
Not Employed	204	25.99	3,311	27.93	
Years of Enrolled					
1	160	20.33	2,143	18.07	
	172	21.86	2,299	19.39	
2 3	157	19.95	2,666	22.48	
4	147	18.68	2,455	20.70	
5 or more	151	19.19	2,295	19.35	
Financial Knowledge		-,,-,	_,_,		
fk1(1=correct)	360	45.74	7,178	60.53	***
fk2	586	74.46	9,508	80.18	***
fk3	556	70.65	9,567	80.68	***
fk4	283	35.96	5,327	44.92	***
fk5	299	37.99	4,534	38.24	
IRO	Mean	(Min, Max)	Mean	(Min,	•
	Wican	(Willi, Wiax)	Wican	Max)	
Age	26.59	(17, 70)	23.75	(15, 76)	***
GPA	3.07	(0,4)	3.33	(0,4)	***
Annual Income (self)	5.81	(0, 4) $(1, 12)$	5.43	(0, 4) $(1, 12)$	***
Aimuai meome (sen)	(\$7,500-\$9,999)	(1, 12)	(\$7,500-\$9,999)	(1, 12)	
Annual Income (paranta)	6.27	(1 11)		(1 11)	***
Annual Income (parents)		(1, 11)	6.72 (\$80,000-	(1, 11)	
Education (modern)	(\$80,000-\$99,999)	(1.0)	\$99,999)	(1.0)	***
Education (mother)	3.50	(1, 9)	3.88	(1, 9)	4,4,4,4
	(=att. coll)	(1.0)	(=att. coll)	(1.0)	***
Education (father)	3.81	(1, 9)	4.02	(1, 9)	***
T' 136	(=att. coll)		(=att. coll)		
Financial Management	0.41	74 A	2 40	24 AS	
Havebudget	2.61	(1, 4)	2.60	(1, 4)	•
Trackspending	2.93	(1, 4)	2.93	(1, 4)	•
Trackchecks	3.15	(1, 4)	3.11	(1,4)	
Paybills	3.29	(1, 4)	3.65	(1, 4)	***
Addsavings	2.16	(1, 4)	2.40	(1, 4)	***
Financial self-efficacy					
confidentfinances	3.05	(1, 4)	3.12	(1, 4)	*
managemoneywell	2.89	(1, 4)	3.04	(1, 4)	***

^{*} *p* < .05, ***p* < .01, ****p* < .001

Table II Direct effect, indirect effect and total effect

	Direct effect	Indirect effect	Total effect
Total respondents			
Financial knowledge	.127	.023	.150
Financial management	.485	-	.485
African American students			
Financial knowledge	-	-	-
Financial management	.640	-	.640
Non-African American students			
Financial knowledge	.125	.020	.145
Financial management	.475	-	.475

Can Money Habitudes Make a Difference? An Experiment to Bridge Research and Practice

Kristy L. Archuleta, University of Georgia, Derek Lawson, Kansas State University, Christina Glenn, Fort Hays State University, Joy P. Clady, Kansas State University, Danah Jeong, University of Georgia

Abstract

Bridging research and practice is a key component of building a credible and sustainable profession where practice methods, modalities, tools, and techniques are validated for their use with clients. The purpose of this experimental research was to examine if a practice tool - Money Habitudes® - could make a difference in a number of personal domains (e.g., financial behaviors, financial anxiety, relationship satisfaction, financial cognitions, money goals and values, and couple communication about money) in one's life. Results indicated that playing online Money Habitudes® improved a number of personal domains, especially frequency of couple discussions about money.

Keywords: couple communication; financial anxiety; financial behaviors; relationship satisfaction; shared goals and values

Introduction & Literature Review

Bridging research and practice is a key component of building a credible and sustainable profession where practice methods, modalities, tools, and techniques are validated for their use with clients. The purpose of this research was just that, to examine if a tool used in practice—Money Habitudes®, an online card game designed to create awareness of money habits and attitudes—could make a difference in a number of personal domains of one's life. This online version is the electronic version of the Money Habitudes® cards developed by a practicing financial coach to promote self-discovery of "underlying spending habits and their effects" (Garrison, moneyhabitutides.com). Based on previous research, the current study sought to look at pre- and post-test differences between self-efficacy, financial behavior, financial anxiety, financial knowledge, financial cognition, and couple relationship factors (e.g., relationship satisfaction and communication) among working adults.

Considering the relevant literature, six hypotheses were developed for this experimental study:

- H1: Financial behaviors will improve after playing Money Habitudes.
- H2: Financial anxiety will decrease after playing Money Habitudes.
- H3: Relationship satisfaction will increase after playing Money Habitudes.
- H4: Having similar financial goals and values will increase after playing Money Habitudes.
- H5: Couple communication (i.e. ease, frequency, arguments) will improve after playing Money Habitudes.
- H6: Financial knowledge will not change after playing Money Habitudes.
- H7: Financial cognitions will increase after playing Money Habitudes.

Methodology

Sample

Data was collected as part of a larger study that has three stages, including an initial survey, an online financial game (if randomly selected), and a follow-up survey. To recruit respondents, a team of researchers contacted a variety of employers that had ten or more employees from a mid-western region. Employers ranged from professional to industrial, including employees from banks, agricultural equipment retailers, and educational institutions. Employers who agreed to help with the study were sent an email that outlined the study's expectations



and benefits, along with a statement to invite their employees to participate in the research project. Employers then emailed their employees asking employees to participate. Employees agreed to participate in the study by clicking on the link in the email directing them to the initial survey, which included an informed consent.

There were 236 respondents that completed the initial survey. Fifty percent (n = 118) of the respondents were randomly selected to receive the online financial game, Money Habitudes® (i.e., the treatment group), while the other 50 percent did not receive the online financial game (i.e., the control group). Those that were randomly selected to participate in Money Habitudes® were then sent a link to access Money Habitudes® within one week of completing the initial survey. Of the 118 respondents, 111 completed the Money Habitudes® online game (94% response rate).

Two months after the completion of the Money Habitudes® online game (treatment group) or the initial survey (control group), respondents were sent a follow-up survey. In the treatment group, 99 respondents completed the two-month follow-up survey (89% response rate), while 90 respondents completed the two-month follow-up survey in the control group (76% response rate). In summary, we had 236 participants for the initial survey, creating two groups of 118 each. Of the 118 participants in the treatment group, 111 completed the Money Habitudes online game and 99 completed the follow-up survey; while 90 of the 118 participants in the treatment group completed the two-month follow-up survey. From pre- to post-test, our overall sample size decreased from 236 to 189 total respondents, yielding an overall retention rate of 80%. Respondents who completed all steps to the research project were entered into a drawing for one of ten \$50 gift cards. The current study utilizes only data from those that completed both the pre- and post-surveys (N = 189).

Measures

Financial behavior was assessed using Grable and Joo's (2001) eight-item measure. Each item was assessed on a 4-point scale that ranged from never (1) to always (4). Total scores could range from 8-32. Financial anxiety was assessed using the seven-item Financial Anxiety Scale (FAS; Archuleta, Dale, & Spann, 2013). Each item is assessed on a seven point scale, with total scores ranging from seven to 49.

Relationship satisfaction was measured using Schumm et al.'s (1986) Kansas Marital Satisfaction Scale (KMSS). The KMSS utilizes three items on a seven-point Likert-type scale, ranging from *extremely dissatisfied* (1) to *extremely satisfied* (7). Total scores could range from three to 21. Similar goals and values were two items taken from the Shared Goals and Values scale (Archuleta, 2013; Archuleta, et al., 2013). This scale was adapted from Gottman's Sound Relationship House Scales (Gottman, 1999). Both items were assessed on seven-point Likert-type scale, ranging from *strongly disagree* (1) to *strongly agree* (7). Couple communication was assessed using three separate items, reflecting on the past two months. Each item was measured on a seven-point Likert-type scale, ranging from *strongly disagree* (1) to *strongly agree* (7); the items were evaluated separately for the purposes of this study.

Financial knowledge was tested using a 5-item financial literacy quiz utilized in the 2009, 2012, and 2015 National Financial Capability Study conducted by FINRA Investor Education Foundation. A scale was created using a sum of correct responses to the questions, with scores ranging from 0 to 5. Financial cognition was measured using a sum of responses to three items, with a possible range in scores from 3 to 15 (Archuleta, Glenn, Lawson, Clady & Solomon, under review). Each item was measured on a scale of 1 (*strongly disagree*) to 5, (*strongly agree*). The validity and reliability of the financial cognition scale was tested using factor analysis with results indicating the scale is valid and reliable, having a standardized alpha of .87 and an Eigenvalue of 2.36.

Models

Paired sample t-tests were conducted to determine whether a difference existed between pre- and post-test observations for our key variables of interest: self-efficacy, financial behavior, financial anxiety, relationship satisfaction, similar goals, similar values, frequent discussions with one's partner, easiness of discussing finances with one's partner, financial arguments with one's partner, financial knowledge, and financial cognition. Next, a series of two-sample t-tests were used to examine whether differences in the mean change from pre- to post-test existed between the treatment and control groups for the same set of key parameters as mentioned above.

Results

Paired Sample T-Test Results

The paired sample t-test results indicate that financial behavior was the only parameter that positively increased for both the treatment (μ_1 = 21.56, μ_2 = 22.12, t = 2.51, p < .05) and control (μ_1 = 21.62, μ_2 = 22.38, t = 2.47, p < .05) groups. Key parameters of interest that showed statistically significant results for the treatment group only were: (a) respondents with similar goals (μ_1 = 5.35, μ_2 = 5.63, t = 3.09, p < .01), (b) respondents with similar values (μ_1 = 5.21, μ_2 = 5.49, t = 2.41, p < .05), (c) frequency of financial discussions with one's partner (μ_1 = 4.59, μ_2 = 5.13, t = 3.68, p < .001), (d) easiness of discussing finances with one's partner (μ_1 = 4.65, μ_2 = 4.96, t = 2.34, p < .05), and (e) financial cognition (μ_1 = 11.91, μ_2 = 12.41, t = 2.14, p < .05). Therefore, hypotheses 1, 4, 7 and were supported, while hypothesis 5 was partially supported. For hypothesis 5, arguments about money did not significantly improve; however as stated, frequency and ease of talking about money did significantly improve. Financial knowledge did not significantly improve which was expected (H6).

Two Sample T-Test Results

The only variable of interest that showed a significant difference between the control and treatment groups for mean change between pre- and post-test was that of frequency of financial discussions with one's partner. The mean change for the control group was -.04 (SD = 1.32) while the mean change for the treatment group was .54 (SD = 1.26), resulting in a mean difference between the groups of .58 (SD = 1.29, C.I. = 1.00, .16, t = 2.74, p < .01).

Discussion

The sample was a highly educated and homogenous group from the Midwestern portion of the United States. The results show that individuals subject to the Money Habitudes® game did report improved financial behavior and financial cognition, as well as better relationship-oriented financial outcomes from pre- to post-test. Specifically, respondents reported that they felt like they were more aligned with their significant other in terms of financial goals and values, and that they had increased communication with their significant other as it pertained to their finances. Respondents also indicated that talking about finances with their significant other was easier than before playing the Money Habitudes® game. On the other hand, those in the control group also reported improved financial behavior, perhaps because they were subject to a survey asking questions about their financial behavior and so they may have paid more attention to those behaviors from pre- to post-test.

Finally, when the differences between pre- and post-test scores were compared between the control and treatment groups, the frequency of financial discussions with one's partner was the only thing that differed. Taken together with the paired sample t-test results, the results appear to indicate that the Money Habitudes® game may have a positive influence on an individual's financial behavior and cognition, but seemingly helps those who play the game to have better communication efforts with their significant other around household financial matters. This is significant in and of itself given that research shows that communication around household finances is vital for maintaining healthy relationships (Dew, Britt, Huston, 2012; Britt, Hill, LeBaron, Lawson, & Bean, 2017).

Limitations

As inherent in any study, limitations exist in this study as well. First, generalizability is an issue as this was a sample of working adults in a Midwestern region of the US. A sample more representative of the US may have produced different results. Regardless, this sample helps to reveal how working adults may be impacted by the utilization of an online tool that helps stimulate positive outcomes. Other limitations include that the Money Habitudes® game was only taken by one partner in the relationship. The time between pre-test and post-test was two-months, limiting our findings to short-term changes; therefore, long-term affects cannot be ascertained from the data.

Implications

The significant difference between the control and treatment groups for frequency of discussions with one's partner indicates that simply playing the card game encourages people to talk with their partners more about money. In practice, the results would be used to help facilitate a conversation with a couple to help them explore their similarities and differences around money, promoting an environment where couples can understand each other's points of views and how they make decisions. Future research should explore the relational and financial outcomes when a couples engages in a facilitated conversation by a financial counselor, coach, therapist, or planner after playing the card game. Furthermore, with the insight of playing the game alone prompting significant changes in frequency of conversations, it is important to recognize that the card game likely prompted self-reflection on one's own relationship with money and their relationship with their partner around money. A practitioner could help take a



deeper dive into a couples shared money goals and values, financial behaviors, financial cognitions, and couple communication to facilitate stronger relational outcomes.

Conclusion

The findings of this study indicate that simply playing the online Money Habitudes® game helps to promote awareness about one's relationship with money and encourages couple interactions in regards to money. If this is the case, Money Habitudes® when used in practice by a financial therapist, counselor, or planner could help facilitate discussions among individuals and couples, allowing for further reflection upon their own money attitudes and habits and how they interact with their partner regarding money. Furthermore, this experiment is an example of how researchers and practitioners can collaborate together to build a body of evidence based practices, allowing practitioners to confidently serve clients utilizing tested tools to improve their financial behaviors and well-being. Bridging the gap between research and practice adds validity to tested assessments and helps establish financial counseling, planning, therapy, and education as credible and worthwhile professions.

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The Relationship Between Cognitive Abilities and Financial Help-Seeking Behavior

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Abstract

This study investigates the relationship between cognitive abilities and financial help-seeking behavior. Results show that memory loss is positively associated with general financial help-seeking behavior; however, those who experienced memory loss may avoid seeking financial advice from families. Objective and subjective numeracy are positively associated with financial help-seeking behavior from professionals and families. Other factors including mental and physical health, self-control, and socio-demographic characteristics are significantly related to financial help-seeking behavior. Findings of this study contribute to the literature of cognitive ability and financial help-seeking behavior and provide practical implications for financial professionals and policymakers.

Key words: Cognitive ability, memory loss, numeracy, financial help-seeking behavior

Introduction

This study aims at examining the relationship between cognitive abilities and financial help-seeking behavior. Other antecedents of financial help-seeking behavior, including numeracy, self-control ability, physical and mental health status, and socio-demographic characteristics, are also examined. Findings of this study contribute to the literature of financial help-seeking behavior and deepen the understanding of the associations between cognitive and psychological characteristics and financial help-seeking of U.S. population. Previous research found that although cognitive ability is crucial for financial management capability, many older individuals do not get help even after experiencing cognitive functioning drop (Gamble, Boyle, Yu, & Bennett, 2015).

Cognitive ability is defined as "the ability to perform the mental processes required in a variety of tasks" and can be measured by a variety of tests (Mazzonna & Peracchi, 2018, pp.3). For example, the Health and Retirement Study (HRS) dataset uses self-rated memory, word recall tests (including immediate and delayed recalls), mental status tests (including Serial 7's test, backwards counting, data and object naming, president/vice president naming), and vocabulary questions to measure cognitive functioning (Fisher, Hassan, Faul, Rodgers, & Weir, 2017; Ofstedal, Fisher, & Herzog, 2005). The decline in cognitive functioning is a type of age-related intelligence decline in psychology literature. Memory and processing speed are two examples of the intelligence that are often affected by age (e.g., Mazzonna & Peracchi, 2018; Salthouse, 1996).

Literature Review

Cognitive aging has been linked to different aspects of financial decisions and behaviors. Pak and Babiarz (2018) identified a positive association between cognitive ability and risky asset holding in investment portfolios among the elderly. Other researchers found that the unawareness of cognitive decline may cause negative financial consequences, such as financial losses and poor financial decisions. Additionally, severe memory loss was found associated with out-of-pocket medical expenditure that may influence the overall wealth condition (Mazzonna & Peracchi, 2018). Other studies have also found that cognitive abilities are related with household credit card and home equity loan decisions (Agarwal & Mazumder, 2013), risk preference (Dohmen, Falk, Huffman, & Sunde, 2010; Frederick, 2005), and retirement saving behavior (Banks & Oldfield, 2007).

There has been mixed evidence in terms of the relationship between cognitive ability and financial help-seeking. In a study of cognitive ability of the elderly in US, Kim, Maurer, and Mitchell (2019) used 2016 HRS dataset and found positive relationships between cognitive ability, financial literacy, and help-seeking behavior from financial professionals. Other researchers found no significant relationship between cognitive ability, objective financial knowledge, and financial advice seeking (e.g., Kramer, 2016).

The literature suggests some other factors that may be associated with financial help-seeking behavior including numeracy, health status, distress, and socio-demographic. For example, education, risk tolerance, and financial confidence are negatively associated with financial advice seeking behavior, whereas net worth, age, and trust in



financial experts are positively associated with seeking professional help (Kramer, 2016). Gamble et al. (2015) found that numeracy is highly correlated with cognitive ability declines such as episodic memory loss and a decrease in visuospatial ability. Moreover, memory loss and decrease in cognition are also associated with decrease in financial literacy and self-confidence and impair financial decision making. Furthermore, financial stress has been found significantly associated with financial help-seeking (Lim, Heckman, Letkiewicz, & Montalto, 2014).

Although there are many studies on cognitive abilities and help-seeking behavior, the evidence is mixed and the population of interest are usually older adults. Moreover, the literature is limited in terms of whether physical health conditions and self-control abilities can be associated with seeking financial help. To fill the literature gap, in this study, two aspects of cognitive ability are examined in relation to financial help-seeking behavior of US adults: memory and numeric abilities. We also include mental and physical health status and self-control ability, as well as socio-demographic characteristics as control variables, to understand the above relationship. The hypotheses are as below:

- H1: Memory loss is positively associated with financial help-seeking behavior.
- H2: Numeracy (both subjective and objective levels) is negatively associated with financial help-seeking behavior.
- H3: Physical and mental health is negatively associated with financial help-seeking behavior.
- H4: Self-control ability is positively associated with financial help-seeking behavior.

Methods

Data

This study used the 2017 National Financial Well-Being Survey developed and organized by Consumer Financial Protection Bureau with a mission to educating and empowering consumers' financial lives. This survey collected US adults' information regarding individuals and households' financial behaviors, skills, and attitudes, financial status, and financial experience. The original sample size of this survey was 6,394, but the analytical sample reduced to 6,162 after dropping the observations with missing values in the variables used in this study.

Variables

Dependent variables

This study used two regression models to examine financial help-seeking behavior. In the first model, the dependent variable was the total sample's financial help-seeking behavior. This variable was measured by asking whether the respondents had sought for advice on money matters from nine sources: (1) parent, (2) spouse/partner, (3) extended family, (4) employer, (5) friend/co-workers, (6) community or faith-based organizations, (7) financial institution, (8) professional advisor, planner or counselor/coach, and (9) government. The variable was coded as a binary variable with "1" indicating the respondent had sought for advice from at least one of the nine sources and "0" meaning they had not sought financial advice from the above sources.

The second model was restricted to those who answered "yes" to at least one of the above financial advice providers. Three binary variables were created to further study the financial advice source selections: (a) seeking financial advice/help from professionals was coded as "1" if the respondents selected financial institution and/or professional advisor to seek financial help and "0" otherwise; (b) seeking financial advice/help from families was coded as "1" if respondents reported seeking financial advice from parent, spouse/partner, and/or extended family and "0" otherwise; and (c) seeking financial advice/help from communities was coded as "1" if the respondents chose employer, friend/co-workers, community or faith-based organizations, and/or government for financial advice and "0" otherwise.

Independent variables

The key independent variables of this study were cognitive abilities, physical health, mental health, and self-control. Cognitive abilities included three variables: memory loss, objective numeracy, and subjective numeracy. Respondents were asked if they have experienced memory loss or confusion in the past 12 months. It was coded as "1" if the response was yes, meaning they have had cognitive functioning declines and it was coded as "0"



otherwise. Objective numeracy was measured by summing up the correct responses to two questions. Each of these two questions was coded as "1" if answered correctly and "0" otherwise. Therefore, objective numeracy ranged from 0 to 2. For subjective numeracy, respondents were asked to self-evaluate how good they were at working with percentages, with response options ranging from 1=not good at all to 6=extremely good. Physical health had five categories: poor, fair, good, very good, and excellent, with poor health as a reference category. Mental health was measured with the level of agreement on the following statement: "I have a lot of stress in my life," where 1=strongly disagree and 5=strongly agree.

This study included age, gender, education levels, race/ethnicity, marital status, working status, and income levels as socio-demographic control variables. Age had four categories: less than 35 (reference category), equal to or greater than 35 and less than 55, equal to or greater than 55 and less than 70, and 70 or above. Female and not having Bachelor's degree were used as the reference categories for gender and education levels, respectively. Race/ethnicity had four categories: White (reference category), Black, Hispanic, and others. Those who were married or cohabiting were considered as couples (non-couples was used as the reference category) for marital status. Also, those who were self-employed or working full-time or part-time for employers or military were considered as working (non-working was used as the reference category) for working status. Lastly, household annual income levels included less than \$50,000 (reference category), equal to or greater than \$50,000 and less than \$100,000, equal to or greater than \$100,000 and less than \$150,000, and \$150,000 or above.

Analysis

In order to examine the relationship between cognitive abilities and financial help-seeking behavior, the first logistic regression model was established to test whether the respondents (full sample) had ever sought for advice from any of the nine sources listed in the survey. Among those who had sought for financial advice, this study used the second set of logistic regression models to further study how cognitive abilities and other key factors were associated with three types of financial advice sources: professionals, families, and others. Descriptive analysis was conducted weighted whereas multivariable analysis was conducted unweighted.

Results

Descriptive Results

Among the total sample, about four out of five have sought financial advice from at least one of the sources examined in this study. When taking a closer look at the sources of financial advice, more than 60% respondents have sought financial advice from family members, about 33% from professionals, and about 30% from communities. In regard to cognitive abilities, one out of ten have experienced memory loss or confusion in the past 12 months and the average objective and subjective numeracy scores were 1.42 and 4.21 respectively. About 40% respondents reported their health as very good and the average distress level was 3.23 and the average self-control level was 2.97. The detailed descriptive results are presented in Table 1.

Multivariate Analyses Results

Model 1: Who seek financial advice?

As seen in Table 2, the three dimensions of cognitive abilities showed contradictory results on help-seeking behavior. Objective numeracy was significantly and positively associated with financial help-seeking behavior. Memory loss was marginally and positively associated with financial help-seeking behavior. However, subjective numeracy was not statistically significant in explaining help-seeking behavior. Physical health was found to be a strong indicator of help-seeking behavior. Compared to those who reported poor health, those who had good, very good, or excellent health conditions had 1.710, 1.920, and 2.086 times higher odds of seeking financial advice, respectively. Mental health and self-control were not significantly related with help-seeking behavior.

All of the demographic characteristics were found significantly associated with financial help-seeking behavior, except working status. Compared to those who were younger than 35, others reported lower odds of seeking help, but the gap reduced with age. Men were less likely to seek help than women, but those with college degrees were



more likely to seek help than those without college degrees. Furthermore, Blacks and Hispanics were more likely to seek help than Whites, and married couples were more likely to seek help than their single counterparts. Income was also found to be a strong indicator of financial help-seeking behavior. Those who earned \$150,000 or above had almost 1.5 times higher odds of seeking financial advice compared to those who earned less than \$50,000 annually.

Model 2: From whom individuals seek financial advice?

As presented in Table 3, depending on the sources of financial advice providers, the effects of independent variables vary. First, the relationship between cognitive abilities and help-seeking behavior appeared differently across the three categories of financial help providers. Those who had higher objective numeracy were more likely to seek financial advice from professionals and families and those who had higher subjective numeracy were more likely to seek financial advice from professionals only. Surprisingly, those who experienced memory loss were less likely to seek financial advice from families. Additionally, physical health was positively significant only in the model of seeking financial advice from professionals, while mental health was only significant in the model of seeking financial advice from communities. Specifically, distress was positively associated with seeking help from communities. Furthermore, self-control was positively associated with seeking help from professionals.

Socio-demographic variables showed different relationships across different financial help providers. Older respondents showed higher odds of seeking help from professionals but lower odds of seeking help from families or communities. Male respondents and working respondents showed lower odds of seeking help from families but higher odds of seeking help from communities. Those with Bachelor's degrees were more likely to seek help from professionals or communities but less likely to seek financial advice from families. Compared to Whites, Hispanics were less likely to seek financial advice from professionals, and Blacks were less likely to seek help from families but more likely from communities. Couples were more likely to seek financial advice from families but less likely from professionals or communities. Being employed and working was associated with higher likelihood of seeking financial advice from professionals and communities but was negatively associated with the likelihood of seeking family advice. Lastly, income was significantly and positively associated with seeking financial help from professionals but negatively associated with seeking help from communities.

Discussion

This study extended the understanding of the relationship between cognitive abilities and financial help-seeking behavior. As previously found in the literature, cognitive ability, numeracy, and mental stress, were significantly associated with financial help-seeking behavior (e.g., Gamble et al., 2015; Kim et al., 2019; Kramer, 2016; Lim et al., 2014), this study confirmed the significance of these factors, and additionally, we found significant relationships between physical health, self-control ability, and seeking financial advice. The findings indicated that memory loss could be a sign of the demand of financial advice and those who experienced memory loss may prefer sources other than families to seek the advice. More research is needed to further understand the preference of sources and providers of financial advice that are preferred by this group of individuals. This study also found that objective and subjective numeracy were significantly associated with help-seeking behavior from financial professionals; additionally, those with high objective numeracy may also choose family members when they need financial help.

Mental health was found significantly associated with community-provided financial help. These community-related sources include employers and coworkers, meaning there is room for employers to foster an interactive and peer-to-peer environment when designing financial seminars and workshops for employees, especially for those who are experiencing memory declines and mental distress. Individuals who experienced depression may also rely on the government as a financial advice and help providers. Moreover, those who had higher numeracy, good health, and better self-control ability were more likely to seek financial advice from professionals and financial institutions; whereas younger individuals (younger than age 35) with lower educational and income levels were less likely to hire financial advisors, planners, and financial coaches, or to directly contact financial institutions for financial information, advice, and help. Policymakers and financial service providers can make financial services and information more accessible for younger individuals with limited access to professional service and advice providers and for those who experience memory loss and depression to help them better manage their financial lives.

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Table 1. Descriptive results

	Total sample	Those who	Those who
	1	seek help	do not seek help
	Percentage / Mean	Percentage / Mean	Percentage / Mean
Seeking help			
Yes	81.03%	-	-
Yes, from professionals	32.90%	40.60%	-
Yes, from families	62.74%	77.43%	-
Yes, from others	30.28%	37.37%	-
Cognitive ability			
Memory loss	10.70%	10.69%	10.77%
Objective numeracy (0-2)	1.42	1.44	1.35
Subjective numeracy (1-6)	4.21	4.23	4.11
Physical health			
Poor	2.65%	2.22%	4.44%
Fair	12.79%	11.92%	16.53%
Good	33.89%	33.53%	35.41%
Very good	39.61%	40.62%	35.29%
Excellent	11.07%	11.71%	8.32%
Mental distress (1-5)	3.23	3.23	3.19
Self-control (1-4)	2.97	2.98	2.93
Age			
Age < 35	30.77%	32.58%	23.02%
35 = < Age < 55	32.89%	32.25%	35.64%
55 = < Age < 70	22.97%	22.01%	27.08%
70 = < Age	13.37%	13.16%	14.26%
Male	48.52%	47.37%	53.46%
Bachelor's degree or above	31.12%	33.01%	23.04%
Race			
White	65.01%	64.55%	66.96%
Black	11.65%	11.82%	10.93%
Hispanic	15.26%	15.92%	12.45%
Other	8.08%	7.71%	9.67%
Couple	62.11%	64.12%	53.51%
Working	57.33%	57.92%	54.78%
Household income			
Income < \$50k	38.44%	36.24%	47.83%
\$50k = < Income < \$100k	30.31%	30.55%	29.30%
100k = Income < 150k	16.06%	16.87%	12.59%
150k = Income	15.20%	16.35%	10.27%

Table 2. Logistic regression results on financial help-seeking behavior (Total sample: N=6,162)

	Odds ratio	S.E.	p-value
Cognitive ability			
Memory loss	1.211	0.140	0.098
Objective numeracy	1.148	0.060	0.008
Subjective numeracy	0.975	0.027	0.359
Physical health (ref: poor)			
Fair	1.304	0.267	0.195
Good	1.710	0.341	0.007
Very good	1.920	0.389	0.001
Excellent	2.086	0.474	0.001
Mental health			
Distress	1.044	0.036	0.217
Self-control	0.976	0.068	0.727
Demographic variables			
Age (ref: <35)			
35=< age <55	0.543	0.054	0.000
55=< age <70	0.561	0.058	0.000
70=< age	0.766	0.096	0.032
Gender (ref: female)			
Male	0.762	0.055	0.000
Education (ref: <college degree)<="" td=""><td></td><td></td><td></td></college>			
Bachelor's degree or above	1.293	0.107	0.002
Race/Ethnicity (ref: White)			
Black	1.358	0.157	0.008
Hispanic	1.363	0.146	0.004
Other	0.812	0.115	0.140
Marital status (ref: single)			
Couple	1.746	0.127	0.000
Working status (ref: non-working)			
Working	0.929	0.076	0.367
Household income (ref: <\$50k)			
\$50k =< income <\$100k	1.296	0.110	0.002
\$100k= <income <\$150k<="" td=""><td>1.385</td><td>0.153</td><td>0.003</td></income>	1.385	0.153	0.003
\$150k= <income< td=""><td>1.491</td><td>0.194</td><td>0.002</td></income<>	1.491	0.194	0.002
constant	1.967	0.662	0.044
Pseudo R square: 0.0389			

Pseudo R square: 0.0389

Table 3. Logistic regression results on the sources of financial advice (Among help-seekers: n=5,021)

		From professionals			From families			From communities		
	Odds ratio	S.E.	p-value	Odds ratio	S.E.	p-value	Odds ratio	S.E.	p-value	
Cognitive ability										
Memory loss	0.897	0.098	0.320	0.759	0.085	0.014	1.023	0.109	0.828	
Objective numeracy	1.223	0.062	0.000	1.254	0.068	0.000	1.076	0.054	0.150	
Subjective numeracy	1.119	0.030	0.000	0.983	0.029	0.557	1.040	0.028	0.138	
Physical health (ref: poor)										
Fair	1.438	0.371	0.159	1.090	0.278	0.734	1.006	0.237	0.979	
Good	1.786	0.443	0.019	0.941	0.230	0.803	0.888	0.202	0.600	
Very good	2.060	0.513	0.004	0.955	0.235	0.851	0.952	0.217	0.829	
Excellent	1.729	0.456	0.038	0.945	0.251	0.831	0.910	0.221	0.699	
Mental health										
Distress	1.056	0.035	0.100	0.971	0.035	0.413	1.141	0.037	0.000	
Self-control	1.406	0.096	0.000	0.930	0.070	0.337	1.026	0.068	0.692	
Demographic variables										
Age (ref: <35)										
35=< age <55	1.965	0.178	0.000	0.390	0.044	0.000	0.958	0.079	0.605	
55=< age <70	4.755	0.461	0.000	0.191	0.022	0.000	0.635	0.057	0.000	
70=< age	6.414	0.744	0.000	0.168	0.022	0.000	0.405	0.047	0.000	
Gender (ref: female)										
Male	0.974	0.065	0.688	0.750	0.056	0.000	1.162	0.076	0.023	
Education (ref: <college degree)<="" td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></college>										
Bachelor's degree or above	1.836	0.133	0.000	0.770	0.063	0.001	1.240	0.090	0.003	
Race/Ethnicity (ref: White)										
Black	0.993	0.108	0.948	0.801	0.091	0.050	1.393	0.144	0.001	
Hispanic	0.770	0.078	0.010	0.917	0.101	0.430	0.940	0.089	0.516	
Other	0.870	0.125	0.333	1.113	0.186	0.522	1.219	0.170	0.156	
Relationship status (ref: single)										
Couple	0.793	0.058	0.001	3.614	0.283	0.000	0.592	0.041	0.000	
Working status (ref: non-working)										

Working	1.192	0.094	0.026	0.749	0.065	0.001	1.596	0.120	0.000
Income (ref: <\$50k)									
\$50k=< income <\$100k	1.663	0.136	0.000	0.979	0.088	0.815	0.870	0.071	0.088
\$100k=< income <\$150k	1.819	0.182	0.000	1.166	0.134	0.183	0.797	0.080	0.024
\$150k=< income	1.988	0.223	0.000	1.013	0.128	0.916	0.883	0.098	0.264
Constant	0.015	0.005	0.000	7.234	2.728	0.000	0.355	0.120	0.002
Pseudo R square		0.1381			0.1028			0.0689	